



FALL PROTECTION PROGRAM

For The

CITY OF BURLINGTON

NOVEMBER 3, 2005

**ADOPTED BY THE
CITY OF BURLINGTON
CENTRAL SAFETY COMMITTEE
DATE: DECEMBER 13, 2005**

City of Burlington

FALL PROTECTION PROGRAM

Regulatory References:

General Duty Clause: OSHA Act of 1970, Section 5(a)(1); Section 5(a)(2)

General Industry: 29 CFR 1910 Subpart D (Walking and Working Surfaces)
29 CFR 1910 Subpart F (Powered Platforms and Manlifts)
29 CFR 1910 Subpart I (PPE)

Construction: 29 CFR 1926 Subpart E (PPE)
29 CFR 1926 Subpart L (Scaffolds)
29 CFR 1926 Subpart M (Fall Protection)
29 CFR 1926 Subpart P (Excavations)
29 CFR 1926 Subpart X (Ladders)
29 CFR 1926 Subpart L, Appendix B (Guardrails)
29 CFR 1926 Subpart L, Appendix D (Positioning Devices)

Additional Resources:

APPENDIX A: Fall Protection Definitions
APPENDIX B: Fall Protection Program Checklist
APPENDIX C: Fall Protection Procedures Checklist
APPENDIX D: Inspection Checklist~Walking/Working Surfaces
APPENDIX E: Site Hazard Assessment Form
APPENDIX F: Site Hazard Management Process Form
APPENDIX G: Fall Protection Equipment Inspection Checklist

This Fall Protection Program shall address falls from heights of 6 feet or more.

It takes the average human 2/3 of a second to recognize that he is falling and to react. By then, he's already fallen more than 7 feet vertically and is moving at a speed of 15 miles per hour, making it almost impossible to save himself. In another 1.3 seconds, the person has fallen 65 feet and has reached 44 miles per hour, a speed that usually results in death or serious permanent injury.

In North Carolina every 10th person who dies from a workplace injury does so due to falling. In the United States a third of a million workers are injured every year from falls. Employers have an obligation, both legally and morally, to protect their employees from work-related falls. Employees have an obligation to themselves, their families, their co-workers, and their employers to protect themselves and each other from injuries due to falls. The City of Burlington is dedicated to providing its employees a workplace free of hazards and sources of illness or injury.

The purpose of this Fall Protection Program is to establish guidelines to protect all employees engaged in work activities that expose them to falls from heights of 6 feet or more. This goal will be

accomplished through effective training, engineering and administrative controls, use of fall protection systems, and enforcement of the program.

Due to the complexity of jobs and work sites in the City of Burlington’s various departments, it is impossible for this Fall Protection Program to address every situation in which an employee might be exposed to the hazard of falling. Therefore, this Fall Protection Program will provide the resources needed by each department to identify fall hazards unique to those departments and establish means of addressing those hazards. Each department shall be responsible for identifying and assessing its own specific job hazards, developing written procedures for minimizing or eliminating those hazards, providing appropriate PPE (personal protective equipment), training affected employees in hazard recognition relating to fall protection, use of PPE, and best work practices as defined in City of Burlington policies and local, state and federal regulations.

ELEMENTS OF THE PROGRAM
(See Appendix A)

HAZARD RECOGNITION

Workplace injuries resulting from falls can only be reduced or eliminated by first understanding (recognizing) under what conditions a fall can occur. OSHA measures the potential for injury severity by the height of a worker above a working surface. The following heights are benchmarks recognized by OSHA:

- 4 feet “Every open-sided floor or platform 4 feet or more above adjacent floor or ground level shall be guarded by a standard railing...”
29 CFR 1910.23(c)(1)
- 6 feet “Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet or more above a lower level shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems.”
29 CFR 1926.501(b)(1)
- 10+ feet “Each employee...more than 10 feet above a lower level shall be protected from falling to that lower level.”
29 CFR 1926.451(g); 29 CFR 1926.451(g)(1); 29 CFR 1926.453(b)(2)(v).
- 25+ feet “Safety nets shall be provided when workplaces are more than 25 feet above the ground or water surface, or other surfaces where the use of ladders, scaffolds, catch platforms, temporary floors, safety lines, or safety belts is impractical.”
29 CFR 1926.105(a)
- 25+ feet Steel Erection: “On buildings or structures not adaptable to temporary floors, and where scaffolds are not used, safety nets shall be installed and maintained whenever the potential fall distance exceeds two stories or 25 feet.”
Though City of Burlington employees will not participate in steel erection, departmental managers should be aware of this regulatory requirement as it applies to contractors working in their areas. 20 CFR 1926.750(b)(ii)

SITE ASSESSMENT

Each department shall conduct a site assessment in order to identify existing and potential

slip/trip/fall hazards, including remote sites where employees may be required to perform work.

Managers and employees shall combine their knowledge, skills and experience to create a written list of known and potential workplace hazards that could cause an employee to fall either on a walking/working surface on the same level or a vertical distance of 6 feet or more.

Typical work areas requiring a fall hazard assessment and appropriate fall protection measures may include, but are not limited to:

1. Any surface with unprotected sides and edges
2. Work in process
3. Machines and equipment
4. Hoist and loading areas
5. Aerial lifting equipment
6. Open holes
7. Wall openings
8. Ramps
9. Leading edges
10. Excavations
11. Confined spaces

HAZARD ABATEMENT

(See Appendixes C, D, E, F)

Having identified potential sources of workplace injuries due to slips/trips/falls, and having created a written list of those sources, those sources shall either be eliminated by administrative or engineering means or employees protected from those that can not be reduced or eliminated through use of appropriate personal fall arrest or restraint systems.

Those persons responsible for creating departmental fall protection programs and procedures shall comply with regulations contained in OSHA 29 CFR Part 1910 for General Industry and OSHA 29 CFR Part 1926 for the Construction Industry. The City of Burlington Safety Director shall also be available as a reference source to assist as needed.

Departmental Fall Protection Programs shall specifically address, as applicable:

29 CFR 1910 (General Industry)

- Aisles and Passageways (29 CFR 1910.22)
- Dockboards (29 CFR 1910.30)
- Floors, General Condition (29 CFR 1910.22)
- Floor Openings, Hatchways, and Open Sides (29 CFR 1910.23)
- Housekeeping (29 CFR 1910.22)
- Ladders, Fixed and Portable (29 CFR 1910.25, .27)
- Personal Protective Equipment (29 CFR 1910.132)
- Railings (29 CFR 1910.23)
- Scaffolds (29 CFR 1910.28)
- Stairs, Fixed, Industrial (29 CFR 1910.24)

29 CFR 1926 (Construction Industry)

Floor Openings, Open Sides, Hatchways (29 CFR 1926.501)

Fall Protection, General Requirements (29 CFR 1926.760)

Housekeeping (29 CFR 1926.25)

Illumination (29 CFR 1926.56)

Ladders (29 CFR 1926.1051, .1053)

Personal Protective Equipment (29 CFR 1926.28, .106)

Railings (29 CFR 1926.502, .1052)

Safety Nets (29 CFR 1926.105)

Scaffolds (29 CFR 1926.451)

Stairs (29 CFR 1926.1052)

Storage (29 CFR 1926.250, .151)

Toeboards (Floor Openings, Wall Openings, and Stairways) (29 CFR 1926.451, .502)

Walking/Working Surfaces (29 CFR 1926.754)

PPE

Having ascertained that all recognizable slip/trip/fall hazards have been identified, and that every reasonable effort has been made to eliminate the hazard through engineering and/or administrative means, employees must be protected against those workplace hazards that remain.

Conventional forms of personal protective equipment shall be provided at no cost to the affected employees and reissued as needed, and employees shall be trained in the correct use of the issued equipment.

Where slip/trip/fall hazards exist or have the potential to exist that indicate the need for a personal fall arrest system, such equipment shall be selected and provided by management to affected employees at no charge to the employees. Maintenance of personal fall arrest equipment shall be the responsibility of the employee to whom the equipment was issued. Responsibility for ensuring that employees to whom such equipment is issued is being properly maintained lies with the manager who issued the equipment. Should management allow employees to purchase and privately own personal fall arrest equipment for use on City of Burlington worksites, the department manager (“employer”) “...shall be responsible to assure its adequacy and to ensure that the equipment is properly maintained...”.

(29 CFR 1910.132(b))

Competent persons within the department shall create written safety procedures governing use of personal fall arrest systems utilized by the department. These written procedures shall be available at all times to employees who use the equipment in the performance of their jobs. Managers shall ensure that persons who use personal fall arrest systems have been trained to do so by a competent and authorized person prior to the employee using the equipment, and that training has been documented and is available upon request to OSHA Compliance Officers and other authorized persons.

WRITTEN PROCEDURES

(See Appendix B)

Written procedures intended to provide direction to and protection of employees who utilize

personal fall arrest systems shall be easily understood and specific to the type of personal fall arrest equipment deemed appropriate for the task to be performed.

Management shall be responsible for ensuring that the written work procedures are clearly communicated to the person who is to use the personal fall arrest system and that the person understands.

The employee/user's level of understanding shall be measured by either a written test, successfully completed and retained in file until replaced by documented results of subsequent testing, or by an oral examination administered by a competent person that includes a written statement by the instructor as to the content of the test and the grade achieved, or by a practical demonstration of the employee's knowledge accompanied by documentation of the content of the activities demonstrated affirming the employee's training and level of competence in use of the personal fall arrest system as it applies to the assigned task.

INSPECTION OF FALL PROTECTION SYSTEMS (See Appendix G)

The following criteria must be included to ensure that all equipment is maintained in good working condition. Any equipment that is found to be damaged will be removed from service and destroyed.

Full Body Harnesses

Inspect before each use.

- Closely examine all of the nylon webbing to ensure there are no burn marks, which could weaken the material.
- Verify there are no torn, frayed, broken fibers, pulled stitches, or frayed edges anywhere on the harness.
- Examine D-ring for excessive wear, pits, deterioration, or cracks.
- Verify that buckles are not deformed, cracked, and will operate correctly.
- Check to see that all grommets (if present) are secure and not deformed from abuse or a fall.
- Harness should never have additional punched holes
- All rivets should be tight, not deformed.
- Check tongue/straps for excessive wear from repeated buckling.
- Annual inspection of all harnesses will be completed by a *competent person*. Documentation is to be maintained on file.
- Storage will consist of hanging in an enclosed cabinet, to protect from damage.
- Any harness that is involved in a fall will be destroyed.

Lanyards/Shock Absorbing Lanyards:

Inspect before each use.

- Check lanyard material for cuts, burns, abrasions, kinks, knots, broken stitches and excessive wear.
- Inspect the snaphooks for hook, locks, and eye distortion.
- Check carabiner for excessive wear, distortion, and lock operation.
- Ensure that all locking mechanisms seat and lock properly.
- Once locked, locking mechanism should prevent hook from opening.

- Visually inspect shock absorber for any signs of damage, paying close attention to where the shock absorber attaches to the lanyard.
- Verify that points where the lanyard attaches to the snaphooks are free of defects.
- Annual inspection of all lanyards will be completed by a *competent person*. Documentation is to be maintained on file.
- Storage will consist of hanging in an enclosed cabinet, to protect from damage.
- Any lanyard that is damaged will be destroyed.

Snaphooks:

Inspect before each use.

- Inspect snaphook for any hook and eye distortions.
- Verify there are no cracks, pitted surfaces, and eye distortions.
- The keeper latch should not be bent, distorted, or obstructed.
- Verify that the keeper latch seats into the nose without binding.
- Verify that the keeper spring securely closes the keeper latch.
- Test the locking mechanism to verify that the keeper latch locks properly.
- Annual inspection of all snaphooks will be completed by a *competent person*, Documentation is to be maintained on file.
- Any snaphook involved in a fall will be destroyed.

Self-Retracting Lanyards

Inspect before each use.

- Visually inspect the body to ensure there is no physical damage to the body.
- Make sure all back nuts or rivets are tight.
- Make sure the entire length of the nylon strap is free of any cuts, burns, abrasions, kinks, knots, broken stitches, and excessive wear and retracts freely.
- Test the unit by pulling sharply on the lanyard to verify that the locking mechanism is operating correctly.
- If manufacturer requires, make certain the retractable lanyard is returned to the manufacturer for scheduled annual inspections.
- Monthly inspection will be conducted by a *competent person*. Documentation is to be maintained on file.
- Service according to manufacturer specifications (1-2 years).
- Inspect for proper function after any fall.

Tie-off Adaptors/Anchorages

- Inspect for integrity and attachment to solid surface.
- Annual inspection of all tie-offs and anchorages will be conducted by a *competent person*. Documentation is to be maintained on file.
- All tie-offs and anchorages will be destroyed and replaced after a fall.

Articulating Man Lift

Inspect before each use. Service according to manufacturer's guidelines.

- Use of an articulated arm man lift at a height equal to or greater than 10 vertical feet requires use of a personal fall arrest system. Scissors lifts do NOT require use of a personal fall arrest system.
- Forklift, scissors lifts, and safety nets (if used) are to be inspected at the beginning of each shift in use.
- Structural integrity of forklift work platform will be checked at the beginning of each shift in use.
- Annual inspection of forklift work platform will be completed by *competent person*. Maintain documentation on file for 1 year, then destroy inspection records older than 1 year.

Horizontal Lifelines

- **Inspect before each use** for structural integrity of line and anchors.
- Annual inspection by *competent person*, with documentation maintained on file.

Guardrails

- Temporary systems - Daily visual inspection will be completed by a *competent person*.
- Temporary systems - Weekly, a complete structural inspection will be completed by a *competent person*.
- Permanent Systems - Annual structural inspection will be completed by a *competent person*.

STORAGE AND MAINTENANCE OF FALL PROTECTION EQUIPMENT

- Never store personal fall arrest equipment in the bottom of a tool box, on the ground, or outside exposed to the elements (i.e., sun, rain, snow, etc.).
- Hang equipment in a cool dry location in a manner that retains its shape.
- Always follow manufacturer recommendations for inspection.
- Clean with a mild, nonabrasive soap, and hang to dry.
- Never force dry or use strong detergents in cleaning.
- Never store equipment near excessive heat, chemicals, moisture, or sunlight.
- Never store in an area with exposures to fumes or corrosives elements.
- Avoid dirt and build-up on equipment.
- Never use this equipment for any purpose other than personal fall arrest.
- Once exposed to a fall, remove equipment from service immediately.

TRAINING

“Employers must provide a fall prevention training program for each employee who might be exposed to fall hazards.”

29 CFR 1926.503

The training program must include recognition of the hazards of falling and procedures to follow to minimize these hazards. Training materials must be reviewed to verify that each employee has been trained, as necessary, by a *competent person* qualified in the following areas:

- The nature of fall hazards in the work area;
- The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used;
- The use and operation of guardrail systems, personal fall arrest systems, safety net systems (if used), warning line systems, safety monitoring systems, Controlled Access Zones (if used), and other protection to be used;
- The role of each employee in the safety monitoring system when these systems are used;
- The limitations on the use of mechanical equipment during the performance of roofing work on low sloped roofs (City of Burlington contractors);
- The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection (City of Burlington contractors);
- The role of employees in fall protection plans;
- Understanding and following all components of this fall protection program and identifying the enforceable Department of Commerce/OSHA standards and ANSI standards that pertain to fall prevention.

Employers must maintain a written certification record for employee training. The record must contain the following information:

- The name or other identity of the employee trained;
- The date(s) of the training; and
- The signature of the person who conducted the training or the signature of the employer.

Training conducted by a former employer shall not be accepted by the City of Burlington in lieu of training following employment by the City of Burlington, unless the employee provides the Department Manager sufficient written documentation of training by a competent person within a 12 month period prior to employment by the City of Burlington.

OSHA requires that when an employer has reason to believe that any affected employee (newly hired or currently employed) who has already been trained does not have the understanding and skill required by 29 CFR 1926.503(a) , the employer must retrain that employee. Retraining is required at least in the following circumstances:

- Changes in the workplace render previous training obsolete;
- Changes in the types of fall protection systems or equipment to be used render previous training obsolete; or
- Inadequacies in an affected employee's knowledge or use of fall protection systems or equipment indicate that the employee has not retained the requisite understanding or skill.

ENFORCEMENT

Any employee who knowingly violates safety procedures pertaining to the fall protection program shall be subject to the City of Burlington's personnel policy 2-400 governing unsafe behavior that could lead to endangerment of life or property and misconduct that might affect the safety of persons or property, resulting in disciplinary action up to and/or including termination of employment.

Any employee who unwittingly violates safety procedures pertaining to the fall protection

program shall be considered to have an inadequate knowledge or use of fall protection systems or equipment and shall be retrained in those areas of the program in which his knowledge is deemed inadequate, prior to his further use of a personal fall arrest system . Written documentation of retraining shall be retained in departmental files.

RESCUE PROCEDURES

In the unlikely event that a fall arrest occurs, affected employees will be rescued by on-site personnel using appropriate equipment immediately available.

If, in the judgment of an on-site *competent person*, immediate rescue is not possible without further endangerment of other personnel, an authorized person will contact emergency services by dialing 9-911(or 911 if appropriate).

If possible, the person who contacts emergency services should remain in contact with them until their arrival in order to direct them to the rescue site without delay.

Upon arrival at the rescue site, the emergency service's Incident Commander shall assume command and direct rescue activities. Departmental personnel shall stand in reserve to assist if requested to do so.

FALL INVESTIGATION

All fall investigations shall be conducted immediately after the affected employee has been rescued and has received appropriate medical treatment following a fall incident.

The investigation shall be conducted by the Supervisor and/or Department Director, the City of Burlington Safety Director, and other personnel as appropriate.

The following documentation shall be completed as part of the fall investigation:

- Interviews with co-workers and witnesses, if any;
- An injury/accident report completed by the affected employee;
- A Supervisor's injury/accident report; and
- If possible, photographs shall be included.

Following completion of the investigation, recommendations shall be made that will result in prevention of similar incidents in the future.

The Department Manager shall document corrective action taken and copies of the documentation shall be placed in files maintained by the City of Burlington Safety Director.

PROGRAM EVALUATION

This fall protection program will be evaluated periodically to determine effectiveness. The following criteria will be used to evaluate its performance:

- Accident reports and the number of accidents;
- Management/employee compliance with program components;
- Management/employee feedback and interviews.
- Periodic on-site inspections/observations;

CONTRACTORS

All outside contractors working in or on the premises of any City of Burlington facility will be required to follow the guidelines set forth in this fall protection program. Contractors shall be informed by the departmental managers of these requirements prior to beginning work, as well as any other on-site construction safety rules that apply.

Departmental managers shall be responsible for ensuring that outside contractors comply with applicable safety rules while working in or on the premises of their department.

APPENDIX A

Definitions

Authorized Person: A person approved or assigned by the employer to perform a specific type of duty or duties or to be at a specific location or job site, i.e., building maintenance, roof repair, etc.

Competent Person: A person capable of identifying existing and predictable hazards in the surroundings or working conditions which are hazardous or dangerous to employees and who has the authorization to take prompt corrective action to eliminate them.

Qualified Person: An individual, who by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problem relating to the subject matter, work, or project.

Anchor Point: A secure point of attachment for lifelines, lanyards, or deceleration devices. An anchor point must be capable of supporting at least 5,000 pounds (3,600 pounds if engineered/certified by a qualified person) per person and must be independent of any anchorage being used to support or suspend platforms.

Full Body Harness: Webbing/straps which are secured about an employee's body in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest, and shoulders with means for attaching it to other components of a personal fall arrest system, preferably at the shoulders and/or middle of the back.

Connector: A device that is used to couple (connect) parts of the personal fall arrest system together.

Deceleration Device: Any mechanism, such as a rope grab, rip-stitch lanyard, a specially woven lanyard, tearing or deforming lanyards, automatic self-retracting lifelines/lanyards, etc., which serves to dissipate a substantial amount of energy during a fall arrest.

Deceleration Distance: The additional vertical distance a falling employee travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of an employee's body harness attachment point at the moment of activation of the deceleration device during a fall, and the location of that attachment point after the employee comes to a full stop.

Free Fall: The act of falling before a personal fall arrest system begins to apply force to arrest the fall.

Free Fall Distance: The vertical displacement of the fall arrest attachment point on the employee's body harness between the onset of the fall, and just before the system begins to apply force to arrest the fall. Free fall distance must not exceed 6 feet. **This distance excludes deceleration distance and lifeline/lanyard elongation distance.**

Total Fall Distance: The maximum vertical change in distance from the bottom of an individual's feet at the onset of a fall, to the position of the feet after the fall is arrested - including free fall distance and deceleration distance.

Guardrail System: A barrier erected to prevent employees from falling to lower levels. This system includes a midrail and toeboard able to withstand 200 pounds applied to the top rail in any direction.

Lanyard: A flexible line of rope or strap that has self-locking snaphook connectors at each end for connecting to body harnesses, deceleration devices, and anchor points.

Leading Edge: The edge of a floor, roof, or other walking/working surface, which changes location as additional floor, roof, etc., is placed or constructed. A leading edge is considered an unprotected side or edge when not under active construction.

Lifeline: A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.

Low-slope roof: A roof having a slope of less than or equal to 4 in 12 (vertical to horizontal). Approximately a roof with a 19.5 degree slope or less.

Personal Fall Arrest System: A system used to arrest (catch) an employee in a fall from a working level. It consists of an anchorage location, connectors, a body harness, and may include a lanyard, deceleration device, lifeline, or any combination of the before-mentioned items.

Rope Grab: A deceleration device, which travels on a lifeline and automatically, by friction, engages the lifeline and locks to arrest the fall of an employee.

Roof Work: The hoisting, storage, installation, repair, and removal of materials or equipment on a roof.

Safety Monitoring System: A safety system in which a competent person is responsible for recognizing and warning employees of fall hazards. All other fall protection systems must be deemed “infeasible” (through infeasibility study/review) to select/use a safety monitoring system.

Snaphook: A connector comprised of a hook-shaped member with a closed keeper which may be opened to permit the hook to receive an object and when released, automatically closes to retain the object. Snaphooks must be self-closing with a self-locking keeper which remains closed and locked until unlocked and pressed open for connection or disconnection, thus preventing the opportunity for the object to “rollout” of the snaphook.

Steep Roof: A roof having a slope greater than 4 in 12 (vertical to horizontal). A roof with a slope greater than 19.5 degrees.

Toeboard: A low protective barrier that will prevent the fall of materials and equipment to lower levels, usually 4” or greater in height.

Unprotected Sides and Edges: Any side or edge of a walking or working surface, e.g., floor, roof, ramp, runway, etc., where there is no guardrail at least 39 inches high.

Warning line system: A barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge, and which designates an area in which work can be conducted without the use of guardrails, personal fall arrest systems, or safety nets to protect employees in the area. This

will be utilized on any roof greater than 50” wide and in conjunction with a safety monitor only where the other forms of fall protection have been deemed infeasible to use.

**APPENDIX B
FALL PROTECTION**

Program Checklist

	Yes	No
Has a written program for fall protection and training been established?		
Is the program reviewed on an annual basis?		
Are fall injuries tracked for program improvement?		
Have individual control procedures been developed for each known hazard?		
Has a fall hazard protection inventory of the facility been conducted?		
Are the individual fall hazard procedures reviewed on an annual basis?		
Do authorized employees inspect fall protection equipment?		
Do the procedures outline techniques to be used for fall protection?		
Is training routinely conducted before job assignment?		
Employees instructed in the purpose & use of the fall protection procedure?		
Does training include recognition of fall hazards?		
Is retraining required whenever there is a change in job assignments?		
- A change in fall protection requirements?		
- A change in the fall protection procedures?		
- When employee proficiency is in doubt?		
- When accidents or close calls occur?		
Are fall procedures shared between department managers and contractors?		
Are contractor safety considerations discussed during training?		
Do contractors notify affected employees of the hazards involved in work?		

**APPENDIX C
FALL PREVENTION**

PROCEDURES CHECKLIST

	Yes	No
Does all fall protection equipment meet or exceed the appropriate American National Standards Institute (ANSI) standard?		
Is fall protection used if ladders, walkways, work platforms, and open-sided floors do not comply with Occupational Safety and Health Administration (OSHA/COMM) regulations?		
Have all personnel exposed to a potential free fall greater than six feet received fall protection training?		
Are lanyards attached to prevent a free fall of six feet or more?		
Are approved attached points established and marked in areas where lifelines and lanyards are used regularly?		
Lifeline attach points are capable of supporting a load of 5,400 pounds.		
All fall protection equipment is being visually inspected for defects prior to each use. If there is evidence of excessive equipment wear or deterioration or if mechanical malfunction is detected, the item is being removed from service.		
Fall protection equipment and assemblies are being inspected according to the manufacturer's recommendations. Each belt and lanyard bears manufacturer identification marks.		
Personnel requiring the use of fall protection equipment employ the "Buddy System" or have an observer to render assistance when and if required.		
Is a trained observer present when personnel are performing work involving confined space entry?		
Stepladders are fully opened and the spreaders locked. The top two rungs are not being used for standing or sitting.		
Defective ladders are being tagged-out -"Out of Order" or "Do Not Use."		
All ladders are kept in good condition and inspected regularly.		

Appendix D

CHECKLIST FOR INSPECTING WALKING-WORKING SURFACES

Please enter a check mark ✓ for “yes”, or an X for “no”.

General Work Environment

<input type="checkbox"/>	Is a documented, functioning housekeeping program in place?
<input type="checkbox"/>	Are all worksites clean, sanitary, and orderly?
<input type="checkbox"/>	Are work surfaces kept dry or is appropriate means taken to assure the surfaces are slip-resistant?
<input type="checkbox"/>	Are all spilled hazardous materials or liquids, including blood and other potentially infectious materials, cleaned up immediately and according to proper procedures?
<input type="checkbox"/>	Is combustible scrap, debris and waste stored safely and removed from the worksite properly?
<input type="checkbox"/>	Is all regulated waste, as defined in the OSHA bloodborne pathogens standard (1910.1030), discarded according to federal, state, and local regulations?
<input type="checkbox"/>	Are accumulations of combustible dust routinely removed from elevated surfaces including the overhead structure of buildings, etc.?
<input type="checkbox"/>	Is combustible dust cleaned up with a vacuum system to prevent the dust from going into suspension?
<input type="checkbox"/>	Are covered metal waste cans used for oily and paint-soaked waste?

Walkways

<input type="checkbox"/>	Are aisles and passageways kept clear?
<input type="checkbox"/>	Are aisles and walkways marked as appropriate?
<input type="checkbox"/>	Are wet surfaces covered with non-slip materials?
<input type="checkbox"/>	Are holes in the floor, sidewalk or other walking surface repaired properly, covered or otherwise made safe?
<input type="checkbox"/>	Is there safe clearance for walking in aisles where motorized or mechanical handling equipment is operating?
<input type="checkbox"/>	Are materials or equipment stored in such a way that sharp projections will not interfere with the walkway?
<input type="checkbox"/>	Are spilled materials cleaned up immediately?
<input type="checkbox"/>	Are changes of direction or elevation readily identifiable?
<input type="checkbox"/>	Are aisles or walkways that pass near moving or operating machinery, welding operations or similar operations arranged so employees will not be subjected to potential hazards?
<input type="checkbox"/>	Is adequate headroom provided for the entire length of any aisle or walkway?
<input type="checkbox"/>	Are standard guardrails provided wherever aisle or walkway surfaces are elevated more than 30 inches above any adjacent floor or the ground?
<input type="checkbox"/>	Are bridges provided over conveyors and similar hazards?

Floor and Wall Openings

<input type="checkbox"/>	Are floor openings guarded by a cover, a guardrail, or equivalent on all sides (except at entrance to stairways or ladders)?
<input type="checkbox"/>	Are toeboards installed around the edges of permanent floor openings (where persons may pass below the opening)?
<input type="checkbox"/>	Are skylight screens of such construction and mounting that they will withstand a load of at least 200 pounds?

	Is the glass in the windows, doors, glass walls, etc., which are subject to human impact, of sufficient thickness and type for the condition of use?
	Are grates or similar type covers over floor openings such as floor drains of such design that foot traffic or rolling equipment will not be affected by the grate spacing?
	Are unused portions of service pits and pits not actually in use either covered or protected by guardrails or equivalent?
	Are manhole covers, trench covers and similar covers, plus their supports designed to carry a truck rear axle load of at least 20,000 pounds when located in roadways and subject to vehicle traffic?
	Are floor or wall openings in fire resistive construction provided with doors or covers compatible with the fire rating of the structure and provided with a self-closing feature when appropriate?

Stairs and Stairways

	Are all stairways having four or more risers equipped with standard stair rails or handrails?
	Are all stairways at least 22 inches wide?
	Do stairs have landing platforms not less than 30 inches in the direction of travel and extend 22 inches in width at every 12 feet or less of vertical rise?
	Do stairs angle no more than 50 and no less than 30 degrees?
	Are step risers on stairs uniform from top to bottom?
	Are steps on stairs and stairways designed or provided with a surface that renders them slip resistant?
	Are stairway handrails located between 30 and 34 inches above the leading edge of stair treads?
	Do stairway handrails have at least 3 inches of clearance between the handrails and the wall or surface they are mounted on?
	Where doors or gates open directly on a stairway, is there a platform provided so the swing of the door does not reduce the width of the platform to less than 21 inches?
	If stairs or stairways exit directly into any area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees stepping into the path of traffic?
	Do stairway landings have a dimension measured in the direction of travel, at least equal to the width of the stairway?

Elevated Surfaces

	Are signs posted, when appropriate, showing the elevated surface load capacity (mezzanines, above-office storage, etc.)?
	Are surfaces elevated more than 30 inches 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 4-inch toeboards?
	Is a permanent means of access and egress provided to elevated storage and work surfaces? (Ladders are not permanent means of access and egress.)
	Is required headroom provided where necessary?
	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 rail cars (if applicable)?



APPENDIX E

Department

FALL PROTECTION PROGRAM

Site Assessment
For

Location

The following hazards have been identified as possible sources of injury resulting from slips, trips, or falls either on a walking/working surface on the same level or from a vertical height of 6 or more feet:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____



APPENDIX G

FALL PROTECTION PROGRAM

Equipment Inspection Checklist

Department _____

Full Body Harness		
YES	NO	CONDITION
		Burn marks on nylon webbing
		Torn, frayed, broken fibers, pulled stitches, or frayed edges anywhere on the harness
		Excessive wear, pits, deterioration or cracks on D-ring
		Buckles not deformed, cracked, and are operating correctly
		Grommets (if present) secure and not deformed from abuse or a fall
		Harness has additional, punched holes
		Rivets are tight and not deformed
		Excessive wear from repeated buckling on tongue and straps
		Annual inspection of harness by competent person last done on / / (date).
		Documented annual inspection is on file.
		Harness stored by hanging in an enclosed cabinet to prevent damage.
NOTE: If this harness has been involved in a fall, it must be destroyed.		

Lanyards & Shock Absorbing Lanyards		
YES	NO	CONDITION
		Cuts, burns, abrasions, kinks, knots, broken stitches, excessive wear
		Snaphooks: hook, lock or eye distortion
		Carabiner: excessive wear, distortion, or locking incorrectly
		All locking mechanisms seat and lock properly
		Once locked, locking mechanism prevents hook from opening
		Shock absorber, especially where it attaches to lanyard, is damaged
		Points where lanyard attaches to snaphooks are free of defects
		Annual inspection of lanyard by competent person last done on / / (date).
		Documented annual inspection is on file.
		Lanyard(s) stored by hanging in an enclosed cabinet to prevent damage.
NOTE: If this lanyard has been involved in a fall, it must be destroyed.		

Snaphooks		
YES	NO	CONDITION
		Hook and/or eye is distorted.
		Cracks, pitted surfaces, and eye distortions present

		Keeper latch is bent, distorted or obstructed.
		Keeper latch seats into the nose without binding.
		Keeper spring securely closes the keeper latch.
		Keeper latch locks properly.
		Annual inspection of snaphook by competent person last done on / / (Date).
		Documented annual inspection is on file.
NOTE:	If any snaphook has been involved in a fall, it must be destroyed.	

Self-retracting Lanyard(s)		
YES	NO	CONDITION
		There is visible, physical damage to the body of the lanyard.
		All back nuts or rivets are tight.
		The entire length of the nylon strap is free of any cuts, burns, abrasions, kinks, knots, broken stitches, and excessive wear, and the lanyard retracts freely.
		The unit has been tested by pulling sharply on the lanyard to verify that the locking mechanism is operating correctly.
		MONTHLY inspection of harness by competent person last done on / / . (Date)
		Harness stored by hanging in an enclosed cabinet to prevent damage
NOTE:	If this harness has been involved in a fall, it must be checked for proper functioning. If the manufacturer requires it, the lanyard must be returned to the manufacturer for an annual inspection.	

Tie-off Adaptors and Anchorages		
YES	NO	CONDITION
		Have been inspected for integrity and attachment to a solid surface.
		Excessive wear from repeated buckling on tongue and straps
		Annual inspection of tie-off adaptors and anchorages by competent person last done on / / . (Date)
		Documented annual inspection is on file.
		Harness stored by hanging in an enclosed cabinet to prevent damage
NOTE:	If this tie-off or anchorage has been involved in a fall, it must be destroyed and replaced.	

Articulating Man Lift		
YES	NO	CONDITION
		If used with the personnel work platform at a height equal to or greater than 10 vertical feet above a walking/working surface (including the ground or floor), a personal fall arrest system has been inspected, anchored and being correctly worn.
		If using a forklift, scissors lift, or safety net, an appropriate, documented safety inspection has been conducted prior to use and was performed at the beginning of the current work shift.
		The structural integrity of a forklift personnel work platform, if in use, has been inspected and documented by a <i>competent person</i> within the past 12 months.

Horizontal Lifelines		
YES	NO	CONDITION
		PRIOR TO BEING USED, the structural integrity of lines and anchors has been inspected.
		Annual inspection of horizontal lifelines by competent person was last done on / / . (Date)
		Documented annual inspection is on file.

Guardrails		
YES	NO	CONDITION
		PRIOR TO USE, a DAILY visual inspection has been completed by a <i>competent person</i> .
		A WEEKLY, complete structural inspection was last conducted by a <i>competent person</i> on / / . (Date)
		If the guardrail(s) in use are part of a PERMANENT system, list the date of the most recent annual inspection by a <i>competent person</i> : / / . (Date)