FACILITIES MANAGEMENT
SPECIFIC OPERATIONS

A. Introduction:

1. The following are safety rules for the topics that relate primarily to Facilities Management operations. It is important however, that all UNE personnel know about and understand such rules.

B. Responsibilities:

1. Environmental Health and Safety Department:

a. Provide training materials for all topics covered in this section.

b. Provide all permits required for confined space entry, hot work, etc.

c. Review policies and procedures annually or as needed.

d. Help Supervisors to ensure all policies and procedures are being followed properly.

2. Facilities Managers/Supervisors

a. Make sure all employees have been trained in specific Facilities Operations areas.

b. Assist in the permitting of Facilities activities and be aware of all permit required work being performed.

c. Supervise all Facilities operations to make sure all safety protocol is being followed and provide disciplinary action and training if they are not.

d. Ensure PPE is available to all employees and is being worn as required.

3. Facilities Employees

a. Attend all required training sessions.

b. Adhere to all safety policies and procedures as set forth by EHS.

c. Report any problems or suggestions regarding policies, procedures, and equipment.

d. Protect themselves and co-workers from unnecessary safety hazards.

e. Obtain the proper permits for confined space entry, hot work, etc. when needed.

C. Policies, Practices, and Procedures:

1. Welding/Cutting Operation:

a. Fire protection (extinguisher) will be immediately available on all operation.

b. When operating in a hazardous area containing flammable liquids, gases, or solids, a fire watch will be posted and will have been trained in how to use all fire equipment.

c. All gas cylinders will be handled in accordance with Chapter 10.

d. Flash shields will be used wherever possible.

e. Eye protection will be used by welder/cutter and helper.

f. Frames of all Arc welding/cutting machines will be grounded and all cables will be completely insulated and flexible, capable of handling maximum current requirements.

g. Welding is prohibited in the following areas:

i. Areas not authorized by management.

ii. In sprinkled buildings while such protection is impaired

iii. In the presence of explosive atmospheres (mixtures of flammable gases, vapors, liquids, or dusts with air), or explosive atmospheres that may develop inside uncleansed or improperly prepared tanks or equipment which have previously contained such materials, or that may develop in areas with an accumulation of combustible dusts.

iv. In areas near the storage of large quantities of exposed, readily ignitable materials such as bulk sulfur, baled paper, or cotton.

h. Where practical, all combustibles shall be relocated at least 35 feet (10.7 m) from the work site. Where relocation is impractical, combustibles shall be protected with flame-proofed covers or otherwise shielded with metal or asbestos guards or curtains.

i. Ducts and conveyor systems that might carry sparks to distant combustibles shall be suitably protected or shut down.

j. Cutting or welding on pipes or other metal in contact with combustible walls, partitions, ceilings or roofs shall not be undertaken if the work is close enough to cause ignition by conduction.

k. Advise all contractors about flammable materials or hazardous conditions of which they may not be aware.

l. No welding, cutting, or other hot work shall be performed on used drums, barrels, tanks or other containers until they have been cleaned so thoroughly as to make absolutely certain that there are no flammable materials present or any substances such as greases, tars, acids, or other materials which when subjected to heat, might produce flammable or toxic vapors. Any pipe lines or connections to the drum or vessel shall be disconnected or blanked.

m. Welding Equipment and Confined Spaces:

i. When arc welding is to be suspended for any substantial period of time, such as during lunch or overnight, all electrodes shall be removed from the holders and the holders carefully located so that accidental contact cannot occur and the machine be disconnected from the power source.

ii. In order to eliminate the possibility of gas escaping through leaks or improperly closed valves, when gas welding or cutting, the torch valves shall be closed and the gas supply to the torch positively shut off at some point outside the confined area whenever the torch is not to be used for a substantial period of time, such as during lunch hour or overnight. Where practicable, the torch and hose shall also be removed from the confined space.

n. A welder or helper working on platforms, scaffolds, or runways shall be protected against falling. This may be accomplished by the use of railings, safety belts, life lines, or some other equally effective safeguards.

o. Welders shall place welding cable and other equipment so that it is clear of passageways, ladders, and stairways.

p. Helmets or hand shields shall be used during all arc welding or arc cutting operations, excluding submerged arc welding. Helpers or attendants shall be provided with proper eye protection.

q. Personal Protective Equipment:

i. Goggles or other suitable eye protection shall be used during all gas welding or oxygen cutting operations. Spectacles without side shields, with suitable filter lenses are permitted for use during gas welding operations on light work, for torch brazing or for inspection.

ii. All operators and attendants of resistance welding or resistance brazing equipment shall use transparent face shields or goggles, depending on the particular job, to protect their faces or eyes, as required.

iii. Eye protection in the form of suitable goggles shall be provided where needed for brazing operations.

iv. Helmets and hand shields shall be made of a material which is an insulator for heat and electricity. Helmets, shields and goggles shall be not readily flammable and shall be capable of withstanding sterilization.

v. Helmets and hand shields shall be arranged to protect the face, neck and ears from direct radiant energy from the arc.

vi. Helmets shall be provided with filter plates and cover plates designed for easy removal. All parts shall be constructed of a material which will not readily corrode or discolor the skin.

vii. Goggles shall be ventilated to prevent fogging of the lenses as much as practicable. All glass for lenses shall be tempered, substantially free from striae, air bubbles, waves and other flaws. Except when a lens is ground to provide proper optical correction for defective vision, the front and rear surfaces of lenses and windows shall be smooth and parallel. Lenses shall bear some permanent distinctive marking by which the source and shade may be readily identified.

r. Protection from arc welding rays:
Where the work permits, the welder should be enclosed in an individual booth painted with a finish of low reflectivity such as zinc oxide (an important factor for absorbing ultraviolet radiations) and lamp black, or shall be enclosed with noncombustible screens similarly painted. Booths and screens shall permit circulation of air at floor level. Workers or other persons adjacent to the welding areas shall be protected from the rays by noncombustible or flameproof screens or shields or shall be required to wear appropriate goggles.

s. Screens:
When welding must be performed in a space entirely screened on all sides, the screens shall be so arranged that no serious restriction of ventilation exists. It is desirable to have the screens so mounted that they are about 2 feet (0.61 m) above the floor unless the work is performed at so low a level that the screen must be extended nearer to the floor to protect nearby workers from the glare of welding.

t. Ventilation:
A source of ventilation must be utilized if there is a risk to harmful fumes. How much ventilation is required will depend on the substance and the size of the work area. See EHS for assistance if ventilation is needed.

2. Ladders:

Design and use of ladders (manufactured or job-made) will conform to 29CFR 1910 and ANSI Standard A14. 1-1968 (both available from EHS). Listed below are some of these requirements.

a. Portable Ladder-Manufactured: Stepladders longer than 20 feet shall not be supplied. There are three types of stepladders:

i. Type I - Industrial stepladder, 3 to 20 feet for heavy duty, such as utilities, contractors, and industrial use.

ii. Type II - Commercial stepladder, 3 to 12 feet for medium duty, such as painters, offices, and light industrial use.

iii. Type III - Household stepladder, 3 to 6 feet for light duty, such as light household use.

b. Metal Ladders: Metal ladders carry a high risk of electrocution if near power sources. Please follow all guidelines to alleviate the risk of electrocution when using metal ladders:

i. Metal Ladders will not be used while welding or where they can come in contact with electrical conductors.

ii. In most cases wooden or fiberglass ladders are preferable to metal.

iii. Make sure the ladder is clean and dry.

iv. Carefully check the location of all overhead wires before using a ladder. Any power line can permit electricity to flow into a piece of metal or other object, such as a wet tree branch, that touches it. **Note:** Power lines and phone lines often appear similar. Assume all overhead wires carry electricity.

v. Lower the ladder when carrying or moving it, to avoid touching an overhead wire.

vi. Never work on a windy day; a gust of wind can cause the ladder to shift and touch an overhead wire.

vii. Never place a ladder where it could slide into an overhead line. Make sure the distance to the nearest overhead line is at least twice the length of the ladder.

viii. Place the ladder's feet on solid, level ground before climbing it. When the ground is not level or is soft, put a flat piece of wood under one or both feet of the ladder to provide a solid, level base.

ix. If the ladder should start to fall into an overhead line, let it go. Never try to move it. Do not leave the ladder unattended so that no one will unknowingly touch it. Have someone call the power company and ask them to cut off electricity to the line before you move the ladder.

c. Wooden Ladders:

i. All wood parts shall be free from sharp edges and splinters; sound and free from accepted visual inspection from shake, wane, compression failures, decay, or other irregularities. Low density wood shall not be used.

ii. A uniform step spacing shall be employed which shall be not more than 12 inches. Steps shall be parallel and level when the ladder is in position for use. The use of ladders with broken or missing rungs or steps, broken or split side rails, or other faulty or defective construction is prohibited.

iii. The minimum width between side rails at the top, inside to inside, shall be not less than 11 1/2 inches. From top to bottom, the side rails shall spread at least 1 inch for each foot of length of stepladder.

iv. Ladder feet will be placed on a substantial base and areas around the top and bottom will be kept clear.

v. Ladders will be pitched so that the horizontal distance from the top support to the foot is no more than 1/4 the working length of ladder.

vi. Side rails will extend not less than 36" above the landing. Grab rails should be installed when this is practical.

vii. A metal spreader or locking device of sufficient size and strength to securely hold the front and back sections in open positions shall be a component of each stepladder. The spreader shall have all sharp points covered or removed to protect the user. For Type III ladder, the pail shelf and spreader may be combined in one unit (the so-called shelf-lock ladder).

d. General Ladder Safety: Ladders shall be maintained in good condition at all times, the joint between the steps and side rails shall be tight, all hardware and fittings securely attached, and the movable parts shall operate freely without binding or undue play.

i. Metal bearings of locks, wheels, pulleys, etc., shall be frequently lubricated.

ii. Frayed or badly worn rope shall be replaced.

iii. Safety feet and other auxiliary equipment shall be kept in good condition to insure proper performance.

iv. Ladders shall be inspected frequently and those which have developed defects shall be withdrawn from service for repair or destruction and tagged or marked as "Dangerous, Do Not Use."

v. Rungs should be kept free of grease and oil.

vi. Portable rung and cleat ladders shall, where possible, be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is one-quarter of the working length of the ladder (the length along the ladder between the foot and the top support). The ladder shall be so placed as to prevent slipping, or it shall be lashed, or held in position. Ladders shall not be used in a horizontal position as platforms, runways, or scaffolds.

vii. Ladders for which dimensions are specified should not be used by more than one man at a time, nor with ladder jacks and scaffold planks where use by more than one man is anticipated. In such cases, specially designed ladders with larger dimensions of the parts should be procured.

viii. Portable ladders shall be so placed that the side rails have a secure footing. The top rest for portable rung and cleat ladders shall be reasonably rigid and shall have ample strength to support the applied load;

ix. Ladders shall not be placed in front of doors opening toward the ladder unless the door is blocked upon, locked, or guarded;

x. Ladders shall not be placed on boxes, barrels, or other unstable bases to obtain additional height;

xi. Short ladders shall not be spliced together to provide long sections;

xii. Ladders made by fastening cleats across a single rail shall not be used;

xiii. Ladders shall not be used as guys, braces, or skids, or for other than their intended purposes;

xix. Tops of the ordinary types of stepladders shall not be used as steps;

xx. No ladder should be used to gain access to a roof unless the top of the ladder shall extend at least 3 feet above the point of support, at eave, gutter, or roofline.

xxi. If a ladder is involved in any of the following, immediate inspection is necessary:

- If ladders tip over, inspect ladder for side rails dents or bends, or excessively dented rungs; check all rung-to-side-rail connections; check hardware connections; check rivets for shear.
- If ladders are exposed to oil and grease, equipment should be cleaned of oil, grease, or slippery materials. This can easily be done with a solvent or steam cleaning.
- Ladders having defects are to be marked and taken out of service until repaired by either maintenance department or the manufacturer.

e. Ladder Use

i. A simple rule for setting up a ladder at the proper angle is to place the base a distance from the vertical wall equal to one-fourth the working length of the ladder.

ii. Portable ladders are designed as a one-man working ladder based on a 200-pound load.

iii. The ladder base section must be placed with a secure footing.

iv. The top of the ladder must be placed with the two rails supported, unless equipped with a single support attachment.

v. When ascending or descending, the climber must face the ladder.

vi. Ladders must not be tied or fastened together to provide longer sections. They must be equipped with the hardware fittings necessary if the manufacturer endorses extended uses.

vii. Ladders should not be used as a brace, skid, guy or gin pole, gangway, or for other uses than that for which they were intended, unless specifically recommended for use by the manufacturer.

3. Scaffolding: Use of scaffolding will comply with 29 CFR 1910. A detailed explanation can be found in the OSHA Safety and Health Standards, General Industry Section (available from EHS). The following are some of these requirements:

    a. Footing or anchorage for scaffolds will be sound, rigid and capable of carrying the maximum intended load without settling.

    b. Guard rails and toe-boards will be installed on all open sides and ends of platforms over 10 feet in height.

    c. Guard rails will be of 2" x 4" lumber (minimum) approximately 42" in height.

    d. Supports should be a minimum of 8 feet apart.

    e. Toe-boards will be a minimum of 1"x4" lumber.

    f. When work is required to be done or workers can pass under the scaffold, a wire mesh screen will be installed between the toe-boards and the guardrail or the area under the scaffold must be barricaded.

    g. Scaffolds and their components will be capable of supporting at least four times the intended load. Platform planks will be 2" x 10" minimum.

    h. All planked platforms will be overlapped 12" (minimum) or secured from movement.

    i. An access ladder or equivalent will be provided.

    j. Scaffold planks will extend over end supports between 6" and 12".

    k. Scaffolds will be secured to buildings/structures at intervals not to exceed 30' horizontally and 26' vertically.

4. Manually Propelled Mobile Scaffolds:

    a. On free-standing towers, the height will not exceed four times the minimum base dimension.

    b. All casters will be provided with a positive locking device.

5. Guardrails, Handrails & Covers: All floor openings, holes, open sided floors, platforms and runways where the danger of employees or material falling through exists, will be protected by a standard railing. Smaller floor holes will be protected by covers.

    a. Covers: Floor holes may be guarded by a cover of standard strength and construction that is secured against accidental displacement. When the cover is not in place, the floor hole will be protected by a standard railing.

b. Standard Railing: A standard railing will consist of a top rail, an intermediate rail and a toe board.

i. Top Rail: the top rail will be of 2" x 4" (min.) lumber, 42" vertical height with vertical supports not more than 8 feet apart and must be capable of withstanding 200 lbs. Pressure with a minimum of deflection.

ii. Middle Rail: The intermediate rail must be made of at least 1" x 6" lumber.

iii. Bottom Rail (Toe-Board): the toe board must be 4" in height. It may be made of any substantial material.

6. Hot Work: The following procedures are to be used to control operations using flames or producing sparks, and to provide better protection against fire from welding and other hot work in all buildings at UNE. Exempted areas include the automotive shop, outdoors, maintenance shop, or boiler rooms. All hot work jobs require a fire watch:

a. A Hot-Work Notification form will be used as a means to document hot work operations and to notify effected personnel, and the department of Safety and Security. This form must be completed prior to the start of work. A copy of the Notification form will be submitted to EHS and Security once work is completed.

b. The employee and his assistant will check the work area for smoke and heat detectors. If smoke and/or heat detectors are present the employee will notify the Department of Safety and Security and inform them of the location of the work area and that there is a possibility of an alarm activation in that location.

c. "Caution-Work Area" floor signs will be placed near the work area to inform the public of the hazard.

d. The employee and assistant will check the work area to determine if the following precautions to prevent fire have been taken:

i. All flammable and combustible materials removed from the work area.

ii. All floor openings covered to prevent sparks and other hot debris from entering the openings.

iii. Carpets covered with a fire resistive blanket to protect them from sparks and other hot debris from burning them.

e. The employee will begin the job.

f. The assistant will standby with a fire extinguisher to ensure fire safety and keep all unauthorized persons from entering the hot-work area.

g. Upon completion of the hot-work assignment, the employee and his assistant will inspect the area for signs of fire, smoke, or smoldering in the hot-work area.

h. After the hot-work area is deemed safe from fire, the employee will contact the Department of Safety and Security to inform them that the job has been completed.

i. The employee or his assistant will remove all equipment and floor signs from the work area.

j. Fire extinguishers that were used will be returned to the stockroom for recharging or servicing.

k. The employee will turn in the Hot-Work Notification from at the end of the day to their supervisor, who will file all permits for record purposes.

7. Drilling and Blasting:

   a. Drilling:

      i. In no case will drilling be started in the bootleg of a previous hole.

      ii. The operator of a drilling machine will be supplied with and will use a hard hat, hearing protection and eye protection.

      iii. Dust controlling measures will be provided for both the operator and the immediate area.

      iv. All air lines between compressor and air drill will be equipped with safety fasteners at all couplings.

   b. Blasting: All blasting performed at UNE will be done by a licensed and certified contractor. All UNE employees will follow the written procedure of the contractor.

8. Trenching and Excavating: At times it is necessary to excavate or trench areas on campus. All trenching operations will be conducted by staff or contractors.

   a. Hazard Removal: All surface impediments that are located so as to create a hazard to employees will be removed or supported, as necessary, to protect employees.

   b. Underground Utilities: should estimated location impact underground utilities, effected utility companies will be contacted, advised of the proposed work, and asked to establish the location of the underground utility prior to the start of actual excavation. If the utility company cannot respond or the exact location of the utilities cannot be established, the contractor may proceed after using detection equipment.

   c. Dig-Safe: Dig-Safe (1-800-225-4977) must be called 72 hours before digging.

   d. Egress: If a trench or excavation is four or more feet in depth, then a means of egress (stairways, ladders or ramps) will be located so that there is no more than 25 feet of travel to the means of egress.

   e. Exposure to Vehicle Traffic: Employees will be provided with and will wear warning vests.

   f. Exposure to Falling Loads: No employee will be permitted under loads handled by loading or digging equipment.

   g. Confined space entry: See Chapter 4 for confined space entry requirements.

h. Water Accumulation: Employees will not work in excavations in which there is accumulated water or in which water is accumulating, unless steps have been taken to protect the employees from hazards posed by water accumulation.

i. Undermining: Sidewalks, pavements or structures will not be undermined unless a support system or other method of employee protection is provided.

j. Excavated Material: Excavated material must be placed at least two feet from the edge of the excavation.

k. Inspections: Daily inspections of excavations and the surrounding areas will be made by a competent person before the start of work for evidence of possible cave-ins, failure of the protection system, hazardous atmosphere or other conditions.

l. Barricading: All remotely located excavations will be barricaded. Upon completion of exploration or similar operations, the excavation will be back-filled immediately.

m. Soils Classifications:

i. Stable Rock: Solid blasted ledge

ii. Type A: Clay, sandy clay, clay loam, hardpan

iii. Type B: Angular gravel, crushed rock, silt, loam, previously disturbed soils, dry rock that is not stable

iv. Type C: Gravel, sand, submerged soil, wet soil

n. Required Sloping of Walls to Provide Protection:

i. Stable Rock: Vertical

ii. Type A:

- 5-12 feet deep
- Open less than 24 hours
- Slope is 1/2: 1, decrease slope if signs of distress

ii. Type B:

- 5-20 feet deep
- Open less than 24 hours
- Slope is 1 1/2: 1, decrease slopes if signs of distress

iii. Type C:

- 5-20 feet deep

- Open less than 24 hours
- Slope is 1 1/2: 1, decrease slopes if signs of distress

9. Outdoor Safety:
    a. Fall/Winter: General Winter Safety
        i. Employees will be taught the environmental and workplace conditions that lead to potential cold-induced illnesses and injuries such as hypothermia and frostbite so that they may be avoided.

        ii. Employees will be taught the signs and symptoms of cold-induced illnesses/injuries and what to do to help those who are affected.

        iii. Proper clothing will be selected and provided for cold, wet, and windy conditions.

        iv. It is suggested that employees layer clothing to adjust to changing environmental temperature, wear a hat and gloves, in addition to a warm coat.

        v. Employees will take frequent short breaks in warm dry shelters to allow the body to warm up.

        vi. Employees will be encouraged to perform work during the warmest part of the day if the need to be outside in cold conditions.

        vii. Exhaustion and fatigue will be avoided because energy is needed to keep muscles warm.

        viii. Employees are encouraged to use the buddy system (work in pairs).

        xi. Employees should drink warm, sweet beverages (sugar water, sports-type drinks). Avoid drinks with caffeine (coffee, tea, or hot chocolate) or alcohol and eat warm, high-calorie foods like hot pasta dishes.

    b. Walking Safely on Snow and Ice

        i. Employees will wear the proper footwear when walking on snow and ice. A pair of well insulated boots with good rubber treads is a must for walking during or after a winter storm.

        ii. When walking on an icy or snow-covered walkway, employees should take short steps and walk at a slower pace so they can react quickly to a change in traction.

iii. Employees should be on the lookout for vehicles which may have lost traction and are slipping towards them and be aware that approaching vehicles may not be able to stop at crosswalks or traffic signals.

iv. The Facilities Department is responsible for snow removal and salting/sanding in winter storms.

c. Snow blower and Snow Removal Safety

i. Employees will be properly and thoroughly trained before attempting to do any work with the snow blower.

ii. Before the snowblower is operated, the area that is to be cleared will be inspected. Debris and other obstacles the snowblower might strike or throw, as that may cause injury or damage to the snowblower will be removed.

iii. The snowblower will be inspected before operation and any damage will be repaired and malfunctions corrected before operation. If an obstacle is hit while operating the snowblower, the engine will be stopped immediately, and checked for damage.

iv. The snowblower will not be used when visibility is poor. Under conditions of poor visibility, there is a greater risk of striking an obstacle or causing injury.

v. The snowblower will not be used to clear snow from a gravel road or driveway, as rocks may be picked up and ejected.

vi. The discharge chute will be adjusted to avoid hitting the operator, bystanders, windows, and other objects with ejected snow and employees should stay clear of the snow discharge chute while the engine is running.

vii. The snowblower will not be used to remove snow from roofs.

viii. The operator will understand the operations of all controls and be able to stop the machine in an emergency.

ix. No one will be authorized to operate the snowblower without proper instruction. If people suddenly appear in front of the snowblower while it is in operation, immediately release the auger and drive clutch levers to stop the snowblower and avoid possible injury from rotating auger blades.

x. If the snow discharge chute becomes clogged, the engine will be stopped and use a wooden stock to unclog it. Hands will never be put into the snow discharge chute while the engine is running; serious personal injury could result.

xi. Refueling will occur in a well-ventilated area with the engine stopped. The fuel tank is not to be over filled, and the filler cap is to be closed securely after refueling.

xii. The engine will never be run in an enclosed or confined area, due to exhaust containing poisonous carbon monoxide gas that can cause loss of consciousness and may lead to death.

xiii. The muffler will not be touched while it is hot.

xiv. Any employee operating the snowblower will hold the handle firmly, and walk, not run and is required to wear suitable winter boots that resist slipping.

xv. Equipment will be in good operating condition with regular preventative maintenance.

xvi. All guards and shields are to remain in place.

xvii. Face, eye, and hearing protection may be required to operate the snowblower.

xviii. Snow will never be cleared across the face of a slope; instead the operator will turn toward the down side, when turning on a sloped area.

xix. Hands, feet, and clothing will be kept away from the snowblower and discharge chute when the auger is turning.

xx. Appropriate clothing and footwear is required.

10. Spring/Summer

a. General Outdoor Safety when working in hot weather conditions: the combination of heat and humidity can be a serious health threat during the summer months. When working outside employees are at increased risk for heat related illness and must take the proper precautions. The following actions will be taken to ensure the employee's safety in the summer months:

i. Drinking small amounts of water frequently.

ii. Wearing light-colored, loose-fitting, breathable clothing such as cotton.

iii. Wearing long sleeves; tucking pant legs into socks or boots.

iv. Wearing high boots or closed shoes that cover feet completely.

v. Wearing a hat.

iv. Taking frequent short breaks in cool shade.

vii. Eating smaller meals before work activity.

viii. Avoiding caffeine and alcohol or large amounts of sugar.

ix. Working in the shade when possible.

x. Finding out from health care provider if medications employee may be taking and heat don't mix.

xi. Knowing that equipment such as respirators or work suits can increase heat stress.

xii. Using tick repellants, but not on the face.

xiii. Showering after work. Washing and drying work clothes at high temperature.

xiv. Examining the body for ticks after work and removing any attached ticks promptly and carefully with fine-tipped tweezers by gripping the tick.

x. Apply a strong sunscreen on all exposed areas of the body.

b. Heat Related Illness: Workers will be trained of the dangers of heat-related illnesses, what causes them and what procedures are in place to prevent them. Risk factors of heat related illness include but are not limited to high temperature and humidity, low fluid consumption, direct sun exposure (with no shade) or extreme heat, limited air movement (no breeze or wind), physical exertion, use of bulky protective clothing and equipment, poor physical condition or ongoing health problems, some medications, pregnancy, lack of previous exposure to hot workplaces, and previous heat-related illness.

If workers show any signs and symptoms of heat exhaustion, heat stroke, heat cramps, or heat rash, the employee should immediately discontinue their outdoor work and report back to their supervisor. The employee should seek medical attention if necessary. Such signs and symptoms may include: confusion, loss of consciousness, seizures, headaches, nausea, dizziness, weakness, irritability, thirst, heavy sweating, muscle pains, or skin rash.

11. Interior Painting Safety.

1. Painting will be scheduled for dry periods in the fall or spring, when windows are more easily left open for ventilation.

2. Fresh air must be provided anywhere interior painting is taking place. All doors and windows to the outside should be opened when painting (not to hallways). Curtains

and blinds should be pushed back so that there is nothing blocking the airflow to ensure cross-ventilation. A box fan should be placed securely in the window blowing out to ensure air movement. The fan should not be pointed directly at someone else's space. The fan should be secured in the window frame so that it cannot fall out of the window. If it rains or snows, fan should be turned off and removed from the window to avoid an electrical shock hazard. An air conditioning unit should not be substituted for the use of a fan. In addition, bathroom/kitchen exhaust fans do not always vent out-of-doors and should not be relied upon to increase ventilation. If fans cannot be used, make sure that rooms being painted have adequate cross-ventilation.

3. Windows should be kept wide-open, as weather permits, for about 2 to 3 days after painting to avoid unwanted exposure to paint vapors (and to return to acceptable indoor air quality). Fresh air should be supplied after painting.

4. Provide advance notice to neighbors in adjacent units that painting is to begin.

5. Employees should take frequent fresh air breaks while painting and avoid freshly painted rooms for 2 to 3 days, whenever possible. Individuals with breathing problems should be kept away from freshly painted rooms. An employee should leave painted areas if experiencing eye watering, headaches, dizziness, or breathing problems.

6. All employees shall read and follow all the instructions and safety precautions on the label and not assume they already know how to use the product. The hazards may be different from one product to another and some ingredients in individual products may also change over time.

7. Paint can directions will be followed for the safe cleaning of brushes and other equipment. Latex paint usually cleans up with soap and water. For alkyd paints, specific products may need to be used as listed on the label. Never use gasoline to clean paint brushes, as it is extremely flammable. Read the label to find out if the paint cleaner is flammable. All flammable products should be used away from ignition sources such as water heaters, furnaces, electric motors, fans, and stored according to Hazardous Materials regulations.

8. All workers must don the appropriate PPE depending on the substance being used. This could include but is not limited to: respiratory protection, gloves, safety glasses, steel toed shoes, aprons, etc.

12. Exterior Painting Safety:

1. All ladder rules and regulations shall be adhered to when using ladders for exterior painting use (see ladder safety section of this document).

2. Examine the outdoor area to be painted for bee/wasp/hornets nests and other potential hazards before beginning the painting process and remove any hazards that may cause a potential problem.

3. Never paint outdoors in adverse weather conditions (thunderstorms, heavy rains, snow, etc).

4. All workers must don the appropriate PPE depending on the substance being used. This could include but is not limited to: respiratory protection, gloves, safety glasses, steel toed shoes, aprons, etc.

5. Signage will be posted in areas of high foot traffic to warn that painting is taking place and "wet paint" signs will be utilized until paint is fully dried.

D. Training:

1. All new hires in the Facilities Department will be required to review the contents of this chapter.

E. Record Keeping:

1. The Department of Safety and Security will maintain copies of all Hot Work Permits for a period of one year.