**Personal Protective Equipment Program/Facilities Management**

**Revised: 09-23-2003**

**Reference:  29 CFR 1910.132-138**
**Keller’s Official OSHA Safety Handbook**

**Purpose:** To establish procedures for use of and manner of wear of personal protective equipment (known as PPE) for Facilities Management personnel at the University of Maine at Farmington.

**Definitions:**

1.   Guards:  Equipment guards are normally manufacturer supplied.  These devices, when properly installed and used, increase the safety potential of the equipment it was designed for.

2.   OSHA:  Occupational Safety and Health Administration.

3.   MBLS:  Maine Bureau of Labor Standards.

**Discussion:**

1.   Annually, over 2.8 million people suffer serious, non-fatal on-the-job injuries and illnesses.  In addition, an average of 17 workers die each day from injuries sustained on the job.  While it is the responsibility of the employer to take proactive measures to minimize these hazards, it is also the responsibility of each worker to minimize unnecessary threats.  The most effective way to mitigate threats is through proper use of PPE.

2.   In conjunction with these procedures, training and random inspections apply.  Training will be conducted annually for those responsible to the program.  Should an employee observe an instance where facilities personnel are in clear violation of safe work practices through not following PPE guidance, they should advise the individual of the proper procedures.  Future incidents should be brought to the attention of their supervisor.

3.   This PPE program supplements other safety guidance established by the Director of Facilities Management.  (i.e. Confined Space, Control of Hazardous Energy, Hazard Communication, etc..)

4.   This program applies to all Facilities Management personnel and other UMF employees determined to be at risk.  Contractors working on campus shall be made aware of this plan.

5.   This program and these procedures will be reviewed annually against applicable federal and state guidelines for safety and revised as needed.

**Procedures:**

1. These procedures shall cover:

A. Eye Protection

B. Foot Protection

C. Hand Protection

D. Head Protection

E. Hearing Conservation

F. Respiratory Protection

G. Reporting Safety Discrepancies

1.A.  **Eye Protection:**

Of the numerous eye related injuries reported, most victims were not wearing eye
protection.  Regardless of the existing plan, it is only effective if followed.
Facilities Management provides protective eye wear, that meets ANSI guidelines,
for their employees.  This includes training in wear and care if needed.  It is
emphasized, that eye protection is not a guaranteed cure against sustaining an
injury, however eye protection can greatly lessen the severity should one occur.

Common sources of eye hazards include:

Injurious gases, vapors, and liquids

Dusts, powders, fumes, and mists

Flying objects or particles

Splashing metals

Thermal (i.e. heat, glare, UV and infrared rays)

The level of eye protection will vary depending on the scope of work.  This would
include use of one of the following:  equipment guards, wearing safety glasses
(with side shields), goggles, or full-face shields.  Use of eye protection is mandatory
when operating equipment anywhere on the UMF campus.  Ventilation and lighting
can also increase safety measures.  Ventilation can remove sight disabling smoke
and fumes from a work space while proper lighting can help reduce glare and eye
strain.

Should an eye injury occur, eyewash stations are strategically located throughout
the campus.  A locations listing of all eyewash stations is included in enclosure (1)
of this program.  Facilities Management personnel should be familiar with their use
and location.  If severe enough, emergency medical services should be alerted
through the Facilities Management Office.

1.B.   **Foot Protection:**

Foot protection is guarding your toes, ankles, and feet from injury.  Feet are subject
to many types of diseases, cuts, punctures, burns, sprains, and fractures.  However,
sharp or heavy objects falling on the foot are the primary sources of injury in the
workplace.  Other hazards include:

Compression

Electricity

Slipping

Chemicals

Extreme heat or cold

Wetness

Facilities Management personnel shall use footwear commensurate with their job
roles.  This may vary depending on trade from acceptable sneakers to steel toe boots
with steel shank.  While there is no prescribed standard established, all Facilities
Management personnel shall be aware of the unique hazards associated with their
trade and take prudent protection measures to minimize injuries to the feet.

1.C.  **Hand Protection:**

Hands and fingers are the tools most predominately used in the work environment.
Hand protection is vital because hands are exposed to so many different hazards in
the workplace.  Hand protection is crucial to guard against hazards such as skin
absorption, severe cuts, abrasions, punctures burns, and extreme temperatures.

At work, hands are exposed to three basic types of hazards:

**Mechanical Hazards:** Present wherever machinery is used.

**Environmental Hazards:**Factors like extreme heat or cold, electricity and
materials handling.

**Irritating Substances:** Reaction to chemicals and biological agents.

Engineering controls and safe work practices can make the environment safer and
should never be altered or removed (i.e. machine guards).  Good housekeeping
practices and personal cleanliness are also an important part of a preventative plan
for hand protection.  Good housekeeping applies to tools, equipment, and work
areas.

Gloves are the most commonly used type of PPE for hands.  They provide
protection to fingers, hands, and often wrists and forearms.  Gloves should be
selected to protect against specific hazards for the job being performed and fit the
wearer appropriately.  Gloves that are too small or too large can create as much
danger to the individual as if they were not wearing any hand protection.

UMF Facilities Management shall supply appropriate and ample supply of gloves
for the types of duties the department performs.  Should additional types be needed,
the Director of Facilities Management or the department’s authorized representative
will ensure they are available prior to commencing work.  It is the responsibility of
the specific trades to identify unique glove requirements for their role.

When working in situations where biological contaminants maybe present, gloves
shall be worn.  The type of glove and training required will be approved by the
Assistant Director of Facilities responsible for that work.

Issues pertaining to hand protection shall be brought to the attention of the
appropriate Assistant Director for Facilities Management.

1.D.  **Head Protection:**

Use and wear of hard hats at UMF, although infrequent, is required under certain
work conditions.  Hard hats are designed to resist the penetration and absorb the
shock from a blow and provide protection from electrical shock and burn.

UMF Facilities Management personnel shall maintain access to a hard hat specific
for their sole use.  Wear is mandatory when working in an area where there is a
potential danger of head injury from impact from falling or flying objects, or where
there is a risk of electrical shock and burns.

When head dangers are highly possible, a safety supervisor will be assigned, this
person will mandate use of head protection and establish the danger area where hard

hat use will be required.

Hard hats used at UMF shall be either Type 1 (Full Brim) or Type 2 (no Brim, but
with a peak over the eyes) and employ a six-point suspension system with ratchet
closure.   Hard hats used by electricians shall be that of a Class B (offering
protection from exposure to high voltage).

UMF Facilities Management will maintain a small auxiliary supply of hard hats to
ensure personnel safety during short duration work evolutions where an additional
work force is required.

1.E.   **Hearing Conservation:**

Noise is unwanted or unpleasant sound.  In a work environment, people are exposed
to noise daily.  How people are affected by sound depends on several factors
(loudness, frequency of sound, length of exposure, and even age and health).  There
are three types of noise:

Wide Band: Noise distributed over a wide range of frequencies. (i.e. internal
combustion engine)
Narrow Band: Noise restricted to a narrow range of frequencies (i.e. power
tools and fans)
Impulse Noise: Composed of temporary beats that occur in on-and-off
patterns. (i.e. jack hammers and punch presses)

Sound is measured by frequency and intensity.  Intensity that exceeds 85 dB over an
eight-hour day may cause hearing loss.  While OSHA standards stipulate that
workers may not be exposed to more than an average of 85 dB over an eight-hour
period without hearing protection being provided.  UMF Facilities Management
personnel shall wear hearing protection any time the noise level during operation
exceeds 85 dB.

Facilities Management will supply hearing protection devices to shop personnel.
Hearing protection will be one of two types:

Earplugs: Also known as aurals, will be in self-contained packaged sets,
formed by the user and disposable.  These will be kept in ample supply and
immediately available for use.  Earplugs shall maintain a minimum noise
reduction rating (NRR) protection of 29 decibels (dB).

Earmuffs: Protection that fits over the entire ear to seal out noise.  These will
be supplied by Facilities Management for those unable to wear earplugs
and/or when additional hearing protection is needed.  Earmuffs shall maintain
a minimum noise reduction rating (NRR) protection of 21 decibels (dB).
Electrician needing earmuffs shall be provided dielectric earmuffs that have
metal parts to reduce risk of hazards from high voltage.

Requests for other specialized hearing protection will entertained on a case-by-case
basis pending medical recommendation supporting those requests.  Audiometric
testing will be provided if UMF Facilities Management determines that the
employee is or will be exposed to noise limits that exceed OSHA standards.

1.F.   **Respiratory Protection:**

Facilities personnel at UMF are, at times, required to work in or around spaces
where atmospheric conditions (quality and contaminants) dictate the need for
respiratory protection.  For most uses, a particulate dust mask is effective for

provided appropriate respiratory protection.  In cases where a dust mask is not
effective, air purifying respirators shall be used.  Regardless of the situation, the
Assistant Director of Facilities will be advised any time respiratory protection is
required or being used to enter a space.

UMF has numerous locations identified as a confined space (Refer to the Confined
Space Program for details on confined space entry and procedures).

When accessing a confined space, in addition to following confined space
protocols, respiratory protection is required.  Respiratory protection is also required
when working in other spaces where the oxygen level is below 18.5 and/or levels of
other toxic substances are at or above threshold levels established by the National
Institute for Occupational Safety and Health (NIOSH).  Respirator use is also
required when an atmosphere is questionable as to its safety conditions.  Prior to
and during a hazardous space entry, atmospheric testing will be conducted and the
results reviewed or monitored by the Assistant Director of Facilities.

Workers requiring use of a respirator in the performance of their roles, shall:

1.F.1.  Be medically cleared to wear a respirator

1.F.2.  Have been fit tested by a qualified individual

1.F.3.  Be trained in the proper use, cleaning, and care of respirators, to

include cartridge selection

Training, either initial or refresher, will be conducted annually.

Should the atmosphere be deemed Immediately Dangerous to Life and Health
(IDLH), access with an air purifying respirator is not authorized.  A self-contained
breathing apparatus (SCBA) is needed, or a combination full face piece pressure
demand supplied-air respirator (SAR) with auxiliary self-contained air supply is
required.  UMF Facilities Management does not maintain SCBAs or supplied-air
respirators.  No UMF Facilities Management personnel will enter the area.

For protection against gases and vapors, personnel using respirators shall ensure the
cartridges being used will protect against and must be approved for the hazards.
Cartridges have a service life, no open cartridges will be used if the service life is
unknown.  Air purifying respirators can also protect against particulates.  NIOSH
Type 100 certified filters or NIOSH certified High Efficiency Particulate Air
(HEPA) filter offers protection from some of the most hazardous particulates.
Other types of filters are approved for use with various types and sizes of
particulates.

Respirators shall be treated like any other piece of life safety equipment.  Routine
care and maintenance shall ensure it is ready should it be called on for use.
Respirators are to be stored so that it is protected from damage, dust, sunlight,
extreme temperatures, and excessive moisture.  If face pieces or other parts can be
permanently deformed if smashed out of shape during storage.  Once deformed, the
respirator may not fit anymore.

Respirator checks will be conducted prior to each use.  This will include a visual
check of the apparatus for face piece integrity, strap conditions, diaphragm
operation, and a positive and negative pressure check.  During use, if a
breakthrough is detected or there is a change to breathing resistance, the occupant
shall leave the space with their entry partner.  After going through established
decontamination, inspect the respirator and cartridge.  Only certified technicians
shall service respirators.

1.G.  **Reporting Safety Discrepancies:**

Safety on campus is everyone’s responsibility.  However, due to the nature of their
mission, Facilities Management addresses more issues pertaining to campus safety
than most other departments.  The Facilities Management Department considers
students, faculty, and staff their paramount mission.  Work requests to resolve or
correct discrepancies to Life Safety Equipment, Systems, and Policies takes priority
over routine work orders.

Facilities Management personnel need to lead by example.  Often, it may be a
simple case of advising an individual of a safe work practice.  Should they not be
able to address the issue, it should be brought to the attention of the Assistant
Director of Facilities for follow up.  Should they be made aware of a safety issue
and it is within their trade specialty, they are to take immediate corrective action.
If the safety issue falls outside of their trade specialty, they should contact the
Facilities Management Office to initiate corrective measures.

A safety session will be included in general meetings to ensure all work is being
performed in a safe and efficient manner.