WORKPLACE SAFETY

PHYSICAL PLANT OPERATIONS

WILLIAM PATERSON UNIVERSITY

SUMMER 2019

WHO WE ARE?

OUR MISSION

WE are committed to providing clean, safe, and comfortable facilities that are conducive to teaching, learning, creativity, and the fulfillment of the University's mission.

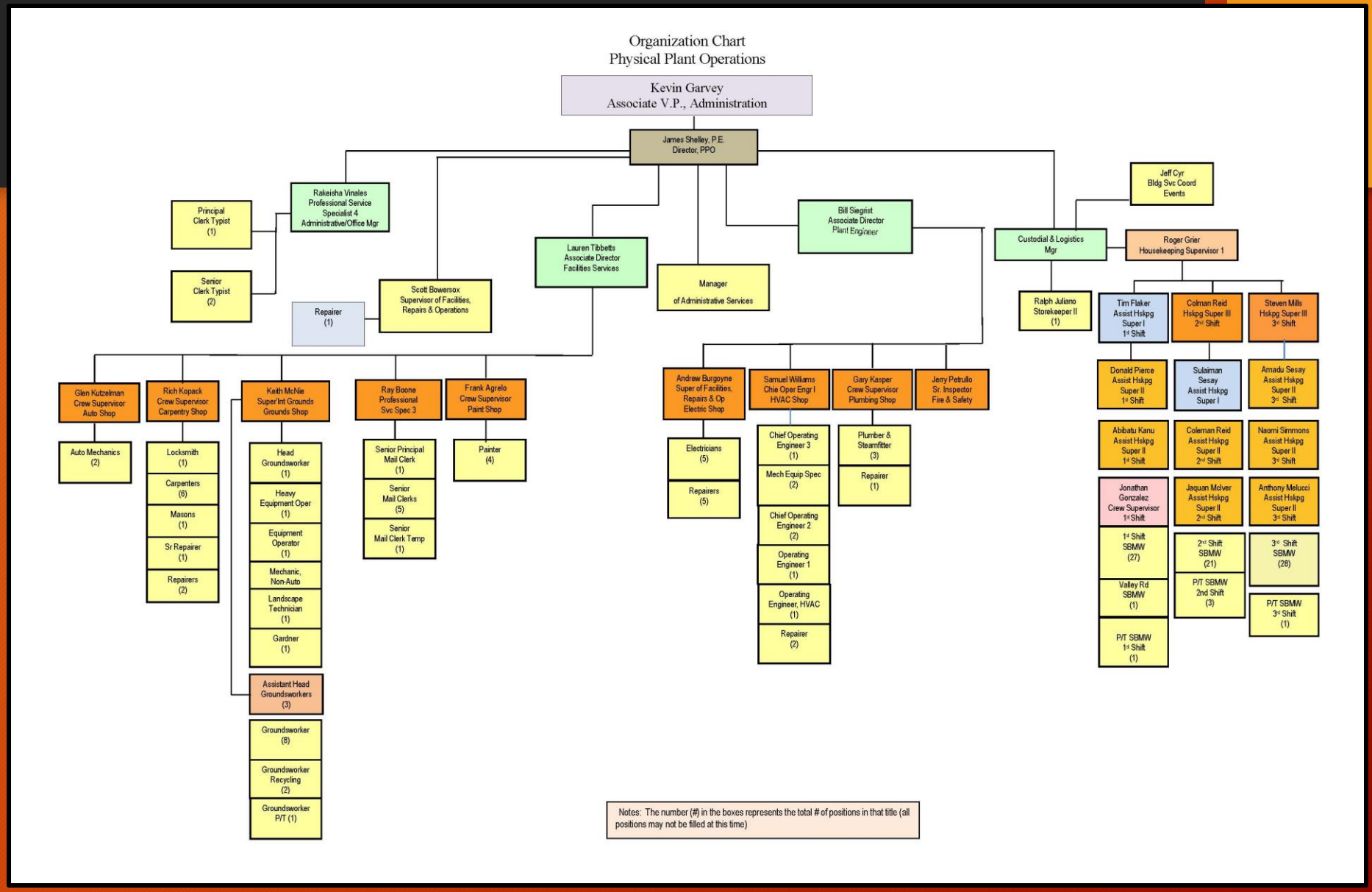
THE Department is a true service organization. It exists to provide services and support to the University to carry out its academic and research missions through maintenance and repair of campus facilities and through the support of campus events.

WE provide support services to approximately 390 acres of land and 2.2 million square feet of conditioned space. Our department’s staff comprises nearly 200 employees serving the campus community 365 days a year.

PRESENTERS

JAMES SHELLEY, Director of Physical Plant Operations
LAUREN TIBBETTS, Associate Director, Facilities Services
BILL SIEGRIST, Associate Director, Plant Engineer
JERRY PETRULLO, Fire & Saftey Inspector
ANDREW BURGOYNE, Electric Shop Supervisor
FRANK AGERLO, Paint Shop Supervisor
RICH KOPACK, Carpentry Supervisor
KEITH MCNIE, Supervisor of Institutional Grounds & Recycling
GLENN KUTZELMAN, Automotive Shop Supervisor
RAYMOND BOONE, Mail Processing Center Supervisor

OUR TEAM


Organization Chart
Physical Plant Operations
Kevin Garvey
Associate V.P., Administration
James Shelley, P.E.
Director, PPO
Principal Clerk Typist (1)
Senior Clerk Typist (2)
Rakeisha Vinales
Professional Service Specialist 4
Administrative/Office Mgr
Repairer (1)
Scott Bowersox
Supervisor of Facilities, Repairs & Operations
Lauren Tibbetts
Associate Director
Facilities Services
Manager
of Administrative Services
Bill Siegrist
Associate Director
Plant Engineer
Jeff Cyr
Bldg Svc Coord
Events
Custodial & Logistics Mgr
Roger Grier
Housekeeping Supervisor 1
Ralph Juliano
Storekeeper II (1)
Tim Flaker
Assist Hskpg Super I
1st Shift
Colman Reid
Hskpg Super III
2nd Shift
Steven Mills
Hskpg Super III
3rd Shift
Donald Pierce
Assist Hskpg Super II
1st Shift
Sulaiman Sesay
Assist Hskpg Super I
Amadu Sesay
Assist Hskpg Super II
3rd Shift
Abibatu Kanu
Assist Hskpg Super II
1st Shift
Coleman Reid
Assist Hskpg Super II
2nd Shift
Naomi Simmons
Assist Hskpg Super II
3rd Shift
Jonathan Gonzalez
Crew Supervisor
1st Shift
Jaquan McIver
Assist Hskpg Super II
2nd Shift
Anthony Melucci
Assist Hskpg Super II
3rd Shift
1st Shift SBMW (27)
Valley Rd SBMW (1)
P/T SBMW 1st Shift (1)
2nd Shift SBMW (21)
P/T SBMW 2nd Shift (3)
3rd Shift SBMW (28)
P/T SBMW 3rd Shift (1)
Glen Kutzelman
Crew Supervisor
Auto Shop
Auto Mechanics (2)
Rich Kopack
Crew Supervisor
Carpentry Shop
Locksmith (1)
Carpenters (6)
Masons (1)
Sr Repairer (1)
Repairers (2)
Keith McNie
Super'Int Grounds
Grounds Shop
Head Groundsworker (1)
Heavy Equipment Oper (1)
Equipment Operator (1)
Mechanic, Non-Auto
Landscape Technician (1)
Gardner (1)
Assistant Head Groundsworkers (3)
Groundsworker (8)
Groundsworker Recycling (2)
Groundsworker P/T (1)
Ray Boone
Professional
Svc Spec 3
Senior Principal Mail Clerk (1)
Senior Mail Clerks (5)
Senior Mail Clerk Temp (1)
Frank Agrelo
Crew Supervisor
Paint Shop
Painter (4)
Andrew Burgoyne
Super of Facilities, Repairs & Op
Electric Shop
Electricians (5)
Repairers (5)
Samuel Williams
Chie Oper Engr I
HVAC Shop
Chief Operating Engineer 3 (1)
Mech Equip Spec (2)
Chief Operating Engineer 2 (2)
Operating Engineer 1 (1)
Operating Engineer, HVAC (1)
Repairer (2)
Gary Kasper
Crew Supervisor
Plumbing Shop
Plumber & Steamfitter (3)
Repairer (1)
Jerry Petrullo
Sr. Inspector
Fire & Safety
Notes: The number (#) in the boxes represents the total # of positions in that title (all positions may not be filled at this time)

WE TAKE SAFETY SERIOUSLY

- 36 workplace fatalities in NJ in 2017
- 62% of all workplace accidents are attributed to slips, trips and falls
- Accidents, they are preventable
- They don’t have to happen

PERSONAL PROTECTIVE EQUIPMENT (PPE)= SAFETY

Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards. Personal protective equipment may include items such as gloves, safety glasses and shoes, earplugs or muffs, hard hats, respirators, or coveralls, vests and full body suits.

TYPES OF PPE

Safety Glasses
Gloves
Shoes
Earplugs or muffs
Hardhats
Respirators
Coveralls
Vest
Chaps
Full Body Suits

FIRE SAFETY

The Senior Fire & Safety Inspector plans and conducts inspections of buildings for compliance with NFPA (National Fire Protection Agency) and Uniform Fire Safety Code of NJ. The Inspector also ensures that exit, emergency signs, fire extinguishers, sprinklers standpipe and fire alarm system are maintained properly, and comply with Fire and Safety Code requirements.

Fire Safety
&
Evacuation Planning

Topics

- *Fire in the United States*
- *Where Fires Occur*
- *Causes of Fires and Fire Death*
- *Who is Most at Risk?*
- *Fire Safety - Off-the-Job*
- *Fire Safety - On-the-Job*
- *Evacuation Planning - Off-the-Job*
- *Evacuation Planning - On-the-Job*

Fire in the United States

- The U.S. has one of the highest fire death rates in the industrialized world. For 2017, the U.S. fire death rate was 15.2 deaths per million population.
- Direct property loss due to fires is estimated at $13 billion annually.
- • In 2017, 3,400 civilians died in fires, an increase of less than 1% from the previous year.
- • Of these, 2,630, or 77% of all fire deaths, occurred in the home, a decrease of 4% compared to 2016.
- • Another 400 civilians died in highway vehicle fires, which represents 12% of all fire deaths.
- • Nationwide, a civilian died in a fire every 2 hours and 34 minutes, and a civilian died in a home fire every 3 hours and 20 minutes.

Where Fires Occur

- **1,795,000 fires in the United States in 1997. Of these:**
  - 40% were Outside Fires
  - 31% were Structure Fires
  - 22% were Vehicle Fires
  - 7 % were fires of other types
- **Fires in the home most often start in the:**
  - Kitchen 29%
  - Bedroom 13%
  - Living Room 7%
  - Chimney 5%
  - Laundry Area 4%

Causes of Fires and Fire Death

- **Cooking** is the leading cause of home fires & injuries in the U.S. Cooking fires often result from unattended cooking and human error, rather than mechanical failure of stoves or ovens.
- **Careless smoking** is the leading cause of fire deaths. Smoke alarms and smolder-resistant bedding and upholstered furniture are significant fire deterrents.
- **Heating** is the second leading cause of residential fires and ties with arson as the second leading cause of fire deaths. However, heating fires are a larger problem in single family homes than in apartments. Unlike apartments, the heating systems in single family homes are often not professionally maintained.
- **Arson** is the third leading cause of residential fires and the second leading cause of residential fire deaths. In commercial properties, arson is the major cause of deaths, injuries, and dollar loss.

Who is Most at Risk?

- Senior citizens and children under the age of five have the greatest risk of fire death.
- The fire death risk among seniors is more than double the average population.
- The fire death risk for children under age five is nearly double the risk of the average population.
- Children under the age of ten accounted for an estimated 18 percent of all fire deaths in 1995.
- Over 30 percent of the fires that kill young children are started by children playing with fire.
- Men die or are injured in fires twice as often as women.

Fire Safety - Off-the-Job

- Do not trap electrical cords next to the wall where heat can build up.
- Take extra care when using portable heaters. Keep combustible items at least 3 feet away.
- Only use lab-approved (UL) electric blankets & warmers.
- Replace mattresses made before the 1973 Mattress Flammability Standard. Newer mattresses are safer!
- Check your smoke detectors routinely and change batteries, at a minimum annually. Replace if > 10 years old.
- Never Smoke in Bed!

HOME

HOME FIRE: CHRISTMAS TREE VIDEO

Fire Safety - On-the-Job

- Keep flammables away from ignition sources
- Utilize flammable storage cabinets
- Know your chemical properties (check the MSDS for flammable/combustible information)
- Do not block fire extinguishers with equipment
- Utilize those with electrical expertise/installations/assistance
- Do not overload outlets - use a track plug
- Practice good housekeeping techniques in the lab/office/work area
- Inspect wires for possible damage and replace as needed

OFFICE

OFFICE FIRE VIDEO

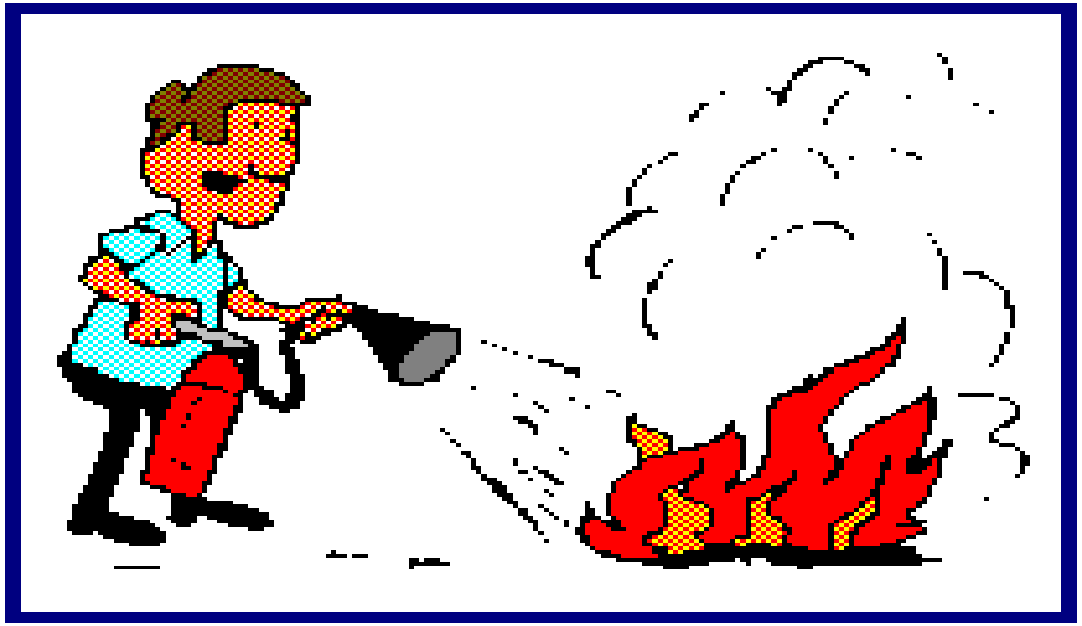
Evacuation Planning - Off-the-Job

- Make sure everyone in your family knows and practices escape routes from every room in your home.
- Remember to escape first, know how to notify the fire department, and when to call for help.
- Never open doors that are hot to the touch.
- Teach your family to stop, drop to the ground and roll if their clothes catch fire.
- Designate a meeting place outside. Try to make it a location away from your home, but not necessarily across the street.
- Teach your family to never re-enter a burning building.

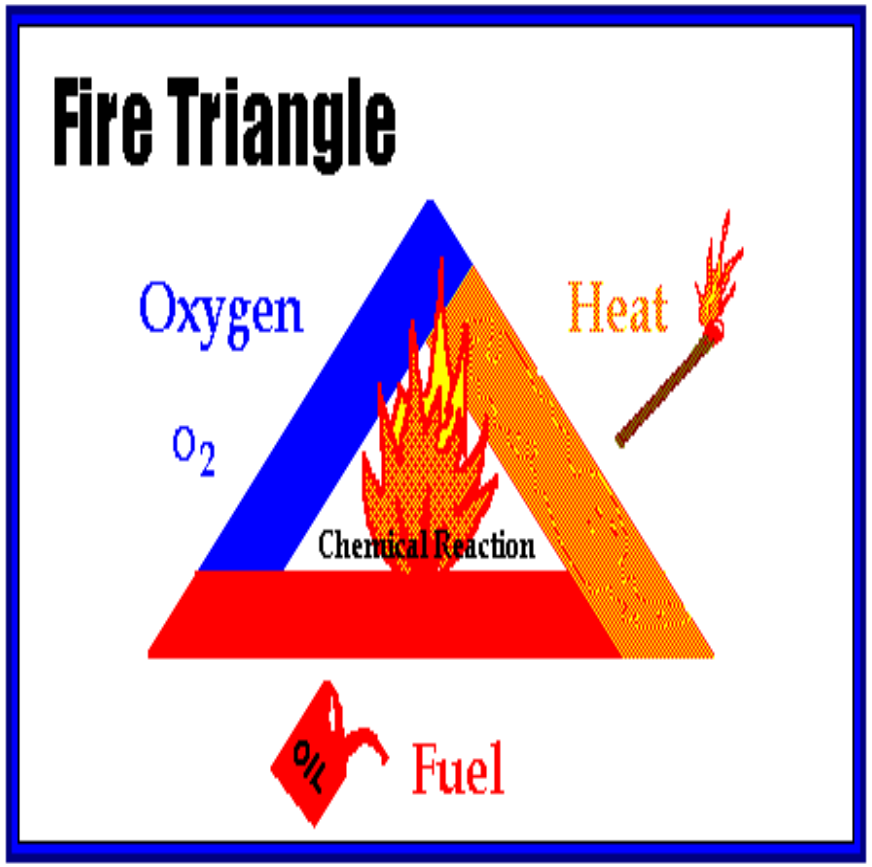
Evacuation Planning - On-the-Job

- Know the way out from your work area.
- Know the location of the closest manual fire alarm station.
- Know the location of the closest fire extinguisher.
- In the event of a fire in a lab or work area dial the emergency number, evacuate the location or pull the manual fire alarm station.
- Review the location of the meeting place for the group in the event of a building evacuation.
- Utilize a check sheet to ensure everyone is accounted for. This re-emphasizes the importance of communication between team members.

Fire Safety &
Fire Extinguisher Use

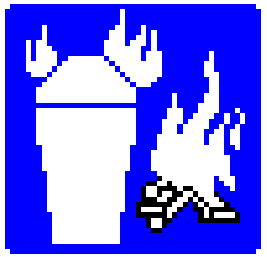


How Does a Fire Work?

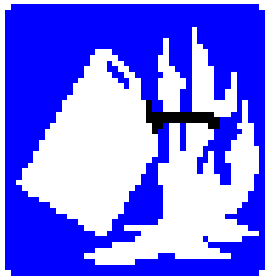


- Three components
- Need all three components to start a fire
- Fire extinguishers remove one or more of the components

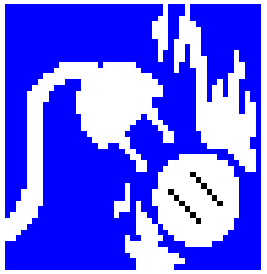
Types of Fires



- **Class A** - Wood, paper,cloth, trash



- **Class B** - Flammable liquids, oil, gas, grease



- **Class C** - Electrical, energized electrical equipment

- **Class D** - Combustible metals

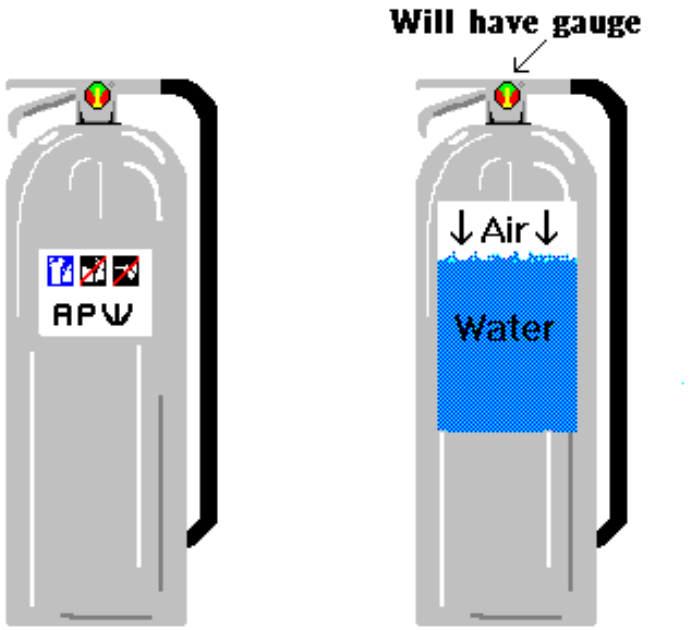
Different Kinds of Extinguishers

The 4 most common fire extinguishers:

- All Purpose Water
- Carbon Dioxide
- Multi-Purpose Dry Chemical
- Dry Powder

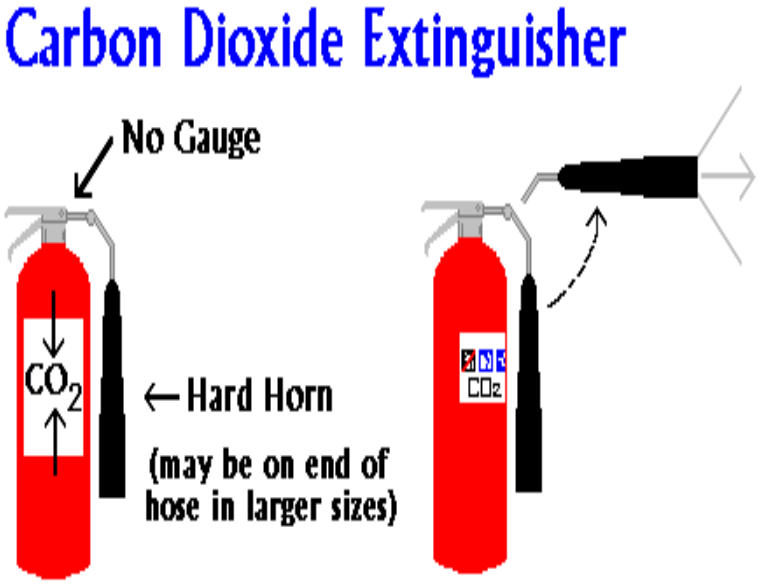
Each kind of extinguisher has a specific use

All Purpose Water



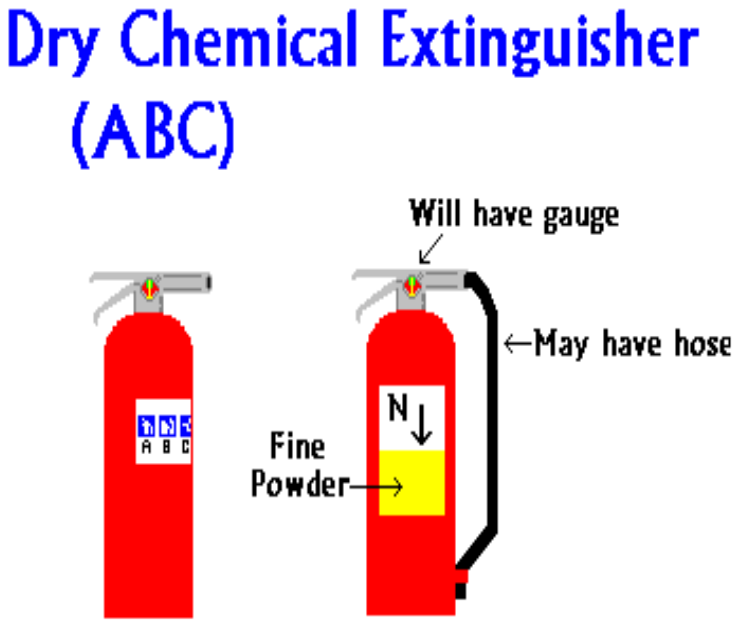
- Use on CLASS A fires
- Pressurized water
- Pressure gauge present

Carbon Dioxide



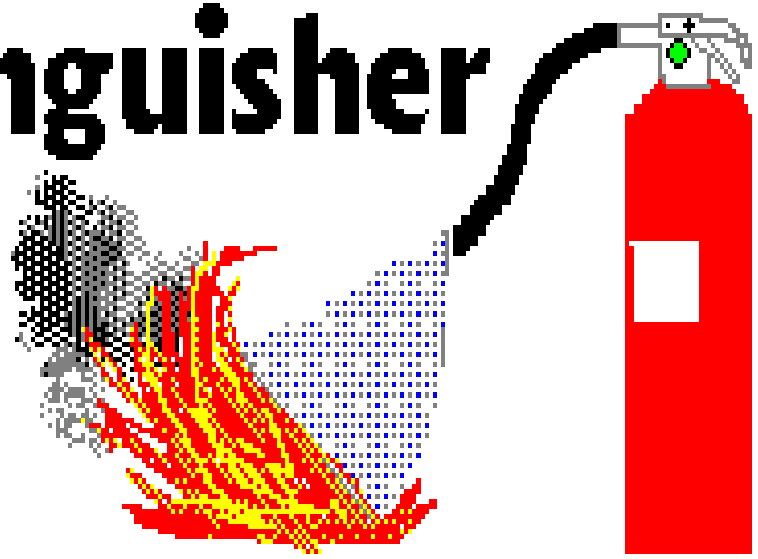
- Use on CLASS B and CLASS C fires
- Hard, plastic nozzle
- No pressure gauge

Multi-Purpose Dry Chemical

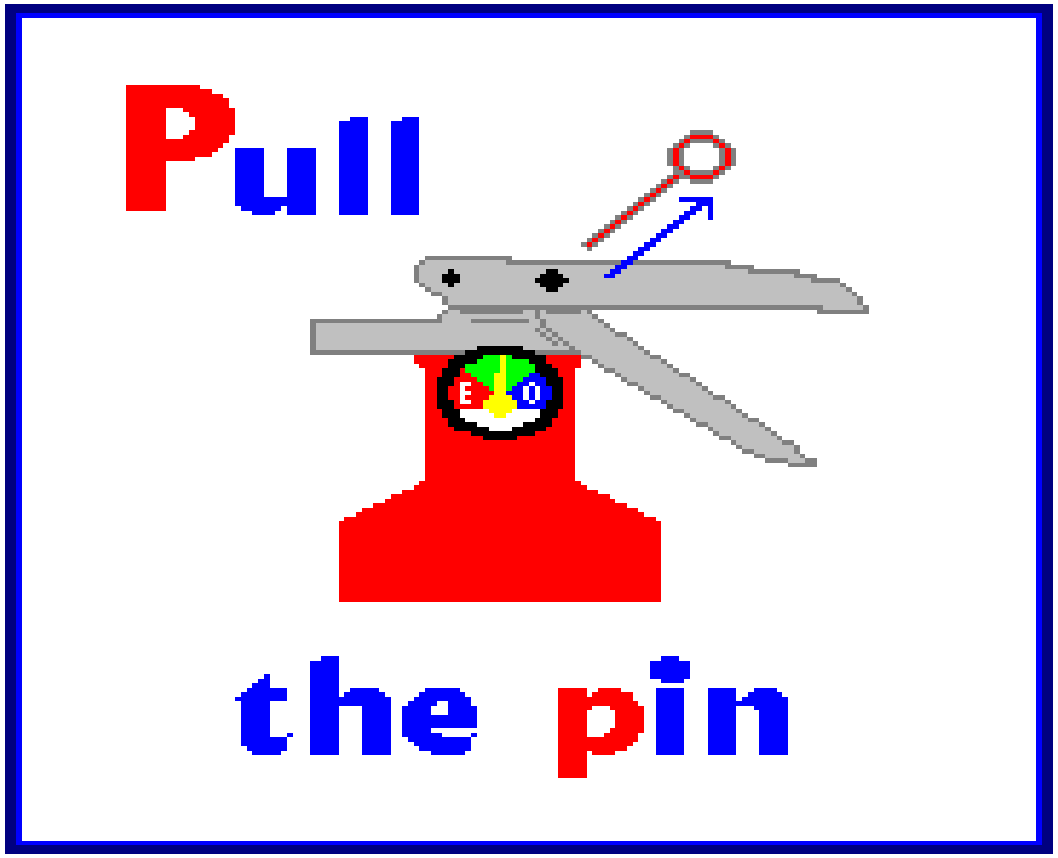


- Use on CLASS A, CLASS B, and CLASS C fires
- Fine powder under pressure
- Pressure gauge present

How to Use a Fire Extinguisher



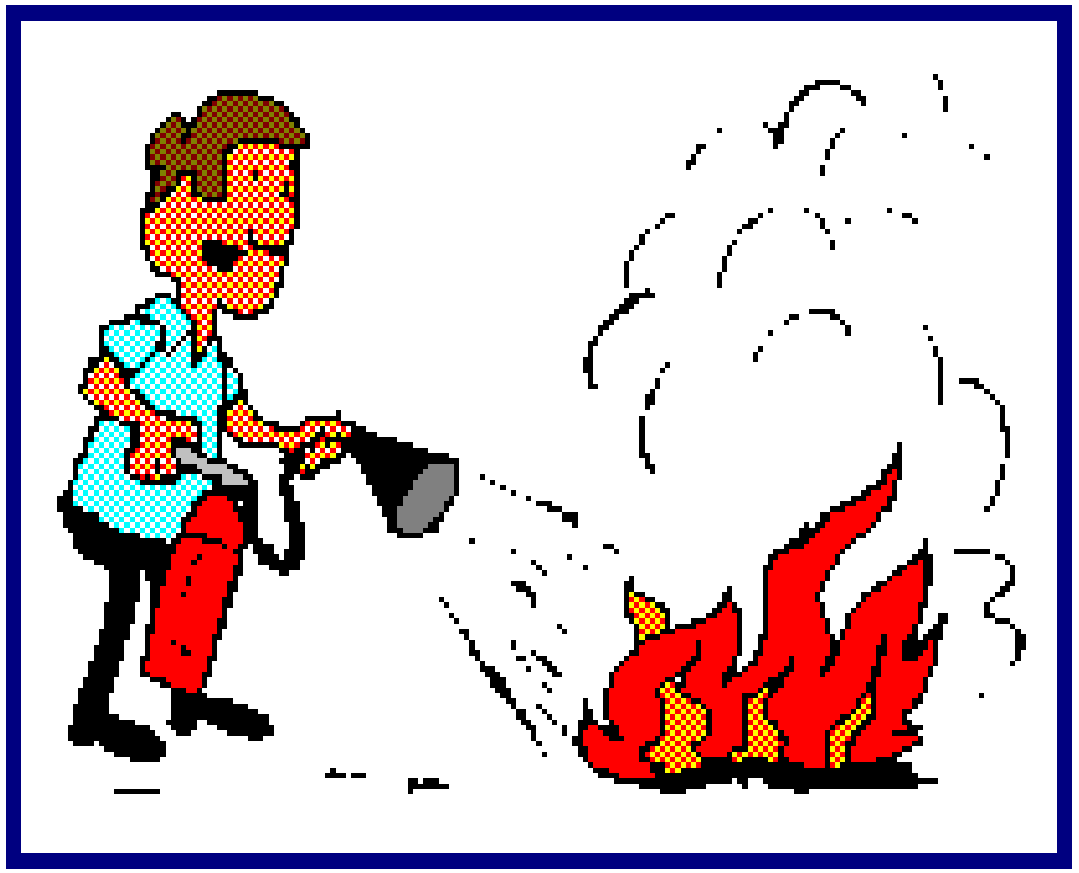
P.A.S.S. Method



Pull the pin

This will allow you to squeeze the handle in order to discharge the extinguisher

P.A.S.S. Method

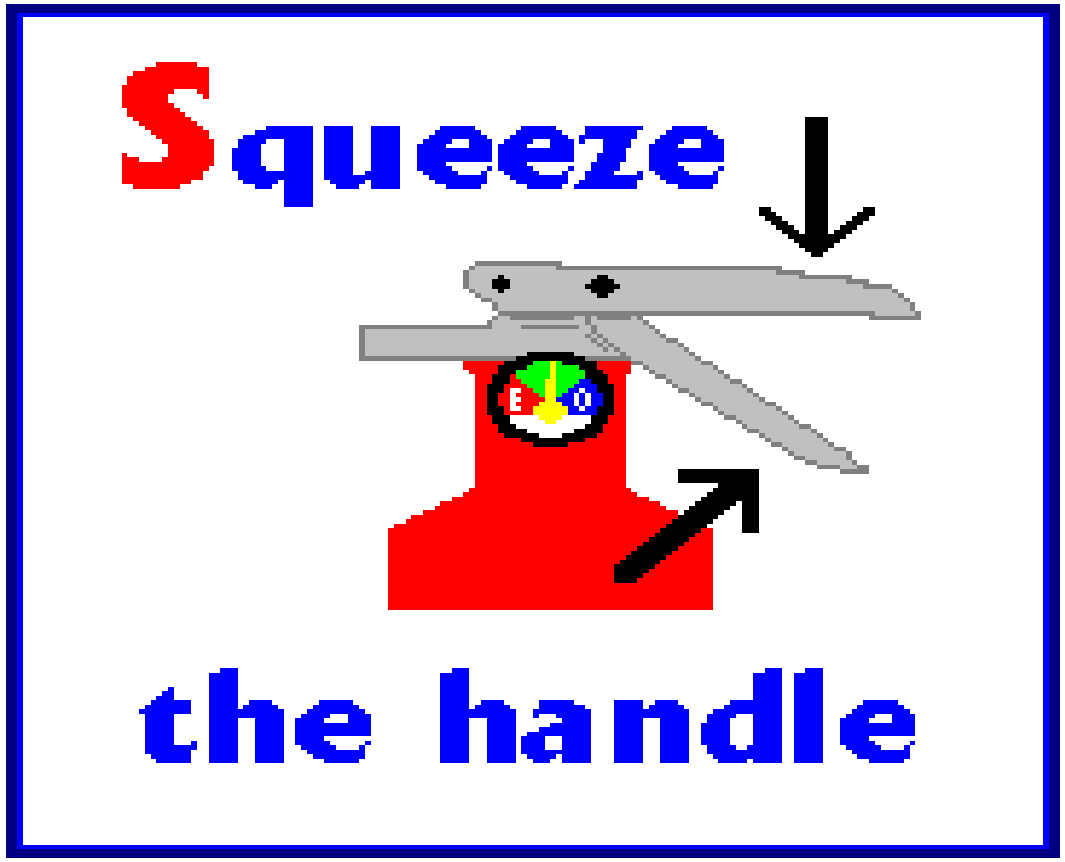


Aim at the base of the fire

Aiming at the middle will do no good.

The agent will pass through the flames.

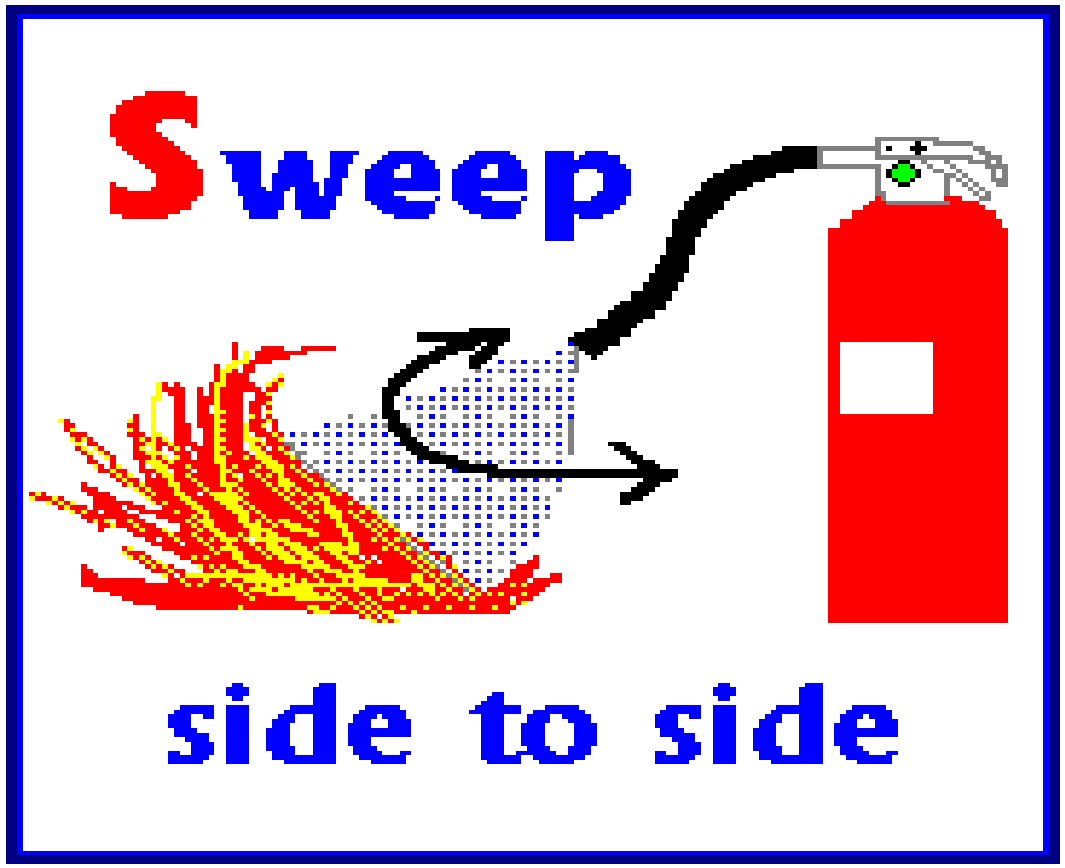
P.A.S.S. Method



Squeeze the handle

This will release the pressurized extinguishing agent

P.A.S.S. Method

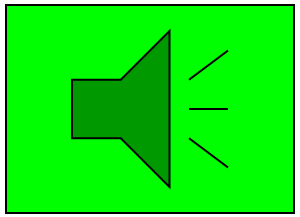


Sweep side to side

Cover the entire area that is on fire. Continue until fire is extinguished. Keep an eye on the area for re-lighting.

When NOT to Fight a Fire!

- Remember to keep an exit to your back
- Only fight a fire in the incipient stage



Most Important Slide

NEVER fight a fire if any of the following apply:

- Don’t have the proper extinguisher or equipment
- Fire has spread beyond its point of origin
- Your instincts tell you GET OUT

Emergency Procedures

In the Event of Fire

- Pull nearest alarm station
- Immediately exit the building

If you hear an alarm

DO NOT

assume it is a drill,

your life may depend on it!

Emergency Procedures

Building Evacuation

- Proceed to nearest exit in an orderly fashion
- Assemble at least 100 feet from building
- Provide emergency crews with information about people still in the building
- Provide information to emergency crews about the reason for evacuation
- Never re-enter a building until instructed to by the police department, fire department, or EHS staff.

SMOKE ALARMS

NATIONAL FIRE PROTECTION ASSOCIATION

The leading information and knowledge resource on fire, electrical and related hazards

https://www.nfpa.org/

SMOKE ALARM VIDEO

HOW TO PROTECT YOURSELF FROM CARBON MONOXIDE

CARBON MONOXIDE VIDEO

- Each year over 200 people die from CO poisoning and over 5000 are injured.
- CO causes more accidental poisonings than any other chemical in the U. S.

Facts about CARBON MONOXIDE

- ***It is totally undetectable by human senses.***
- ***It is HIGHLY TOXIC .***
- ***It is the leading cause of accidental poisoning in America.***
- ***Inadequate ventilation is a major contributor to Carbon Monoxide poisoning.***

- **Because Carbon Monoxide is COLORLESS, ODORLESS, and TASTELESS it is virtually impossible for humans to be aware of its presence. The most effective, and often only way to know if CO is present is to obtain a detector.**

- **CO can act on the body quickly in high concentrations, or slowly over long periods of time.**
- **It takes several hours to remove CO from your body, low concentrations can gradually build up in your blood, causing anything from headaches, nausea, to even coma’s and death.**

Why ?

- During the winter, when doors and windows tend to be closed, the potential for CO buildup increases.
- Fuel based heaters are used frequently with little to no VENTILATION.
- **Little awareness or education about the danger.**

- **Carbon Monoxide can be formed when using equipment improperly or using malfunctioning equipment.**

- **It is aggravated by constructional improvements that limit the amount of fresh air flowing into homes and structures.**

HOW CARBON MONOXIDE AFFECTS THE BODY.

- **When oxygen is inhaled in your lungs, it combines with hemoglobin in your blood to form oxyhemoglobin, which is then transported to the body's cells to sustain life.**

- **When CO is inhaled it combines with hemoglobin to form carboxyhemoglobin. Once combined, that hemoglobin is no longer available for transporting oxygen. Your body is deprived of the oxygen it needs to live. The chemical bond for the CO hemoglobin is 200 times stronger than that of the oxygen's bond with hemoglobin. This also makes it difficult to eliminate CO from your bloodstream.**

- ***So basically carbon monoxide inhibits the blood's ability to carry oxygen to body tissues. This includes vital organs such as the heart and brain.***
- ***The half life of carboxyhemoglobin is approximately 5 hours, so it will take about 5 hours for its levels in the blood to drop to half of its current level after exposure was terminated.***

- ***Your nervous system, brain, heart and lungs become oxygen deprived.***

- ***Symptoms such as headaches, fatigue and flu like nausea can occur with a CO saturation level of only 10 to 30%.***

- ***At 30 to 50% you experience severe headaches, nausea, increased pulse and respiration, possible death.***

- ***Above 50% you lose consciousness, convulsions, become comatose and die.***

Sources of Carbon Monoxide

- Poorly maintained furnaces, gas heaters and appliances.
- Fireplaces.
- Cigarette smoke.
- Automobile exhaust.
- Dirty/plugged chimneys.
- Gas engines (lawn mowers, blowers)
- ANYWHERE Combustion takes PLACE

Carbon Monoxide results from the incomplete combustion of Carbon based fuels. Basically anything you would burn for heat or use to power an engine can release Carbon Monoxide. This includes:

- **Kerosene**
- **Natural Gas**
- **Propane**
- **Butane**
- **Wood, paper**

- **The less efficiently these fuels are burned, the more CO released by the burning process.**

- **Regular maintenance in your home on anything that could potentially produce carbon can significantly reduce your chances of being exposed to toxic CO levels.**

WHAT CAN YOU DO?

THREE SIMPLE WORDS

- EDUCATION
- DETECTION
- FRESH AIR

- **EDUCATE your entire family on the dangers of Carbon Monoxide poisoning!**

- **Obtain a DETECTOR…..**

- **Keep your windows cracked open to allow FRESH AIR into your home when using heaters, appliances that operate with combustion...**

More Common Sense stuff....

- Keep your butane/kerosene heaters in good working order.
- Have your central heater checked. Change your filtars.
- Don’t run gas motors in enclosed spaces.

Don’t take chances. Play it safe. Carbon Monoxide poisoning has tragically caused hundreds of deaths throughout the nation. With colder weather on the way and an increase use of heaters and other appliances, its absolutely vital to obtain a detector and educate yourself and your loved ones about this...

SILENT KILLER.

ELECTRICAL

Involved in the installation, inspection, repairs and maintenance of electrical equipment & circuits. Also responsible for the maintenance and installation of interior and exterior lighting.

ELECTRIC- WHAT WE DO

ELECTRIC SHOCK PREVENTION

PREVENT ELECTRIC HAZARDS VIDEO

OVERLOADED POWER STRIPS

ELECTRIC- WHAT YOU CAN DO

PLUMBING SHOP

Responsible for installation, repair and maintenance of hot and cold water lines, steam and condensate lines, drinking fountains, sewer, drains, sinks, showers, toilets, hot water heaters, etc. Attend to emergencies such as clogged toilets, sinks, drains & waste lines.

HVAC

Committed to provide a comfortable climate controlled environment to the University community. Responsible for the repairs and maintenance of HVAC equipment/systems which are monitored year round through Energy Management System, also a great tool to conserve energy.

Written Indoor Air Quality Program

William Paterson University

300 Pompton Road

Wayne, NJ 07470

May 23, 2011

Policy and Administration

PAINT SHOP

Performs scheduled painting of interior and exterior campus buildings on a continuous rotation basis to keep them in excellent condition. This department is also responsible for completing work requests for our customers and striping of parking lots and roads as needed.

PAINTS & FINISHES

What are VOCs?

- Volatile Organic Compounds' (VOCs-) are emitted as gases from certain solids or liquids.
  - A variety of chemicals, some of which may have short- and long-term adverse health effects
  - Organic chemicals are widely used in products such as :
    - paints, paint strippers and other solvents
    - wood preservatives
    - aerosol sprays

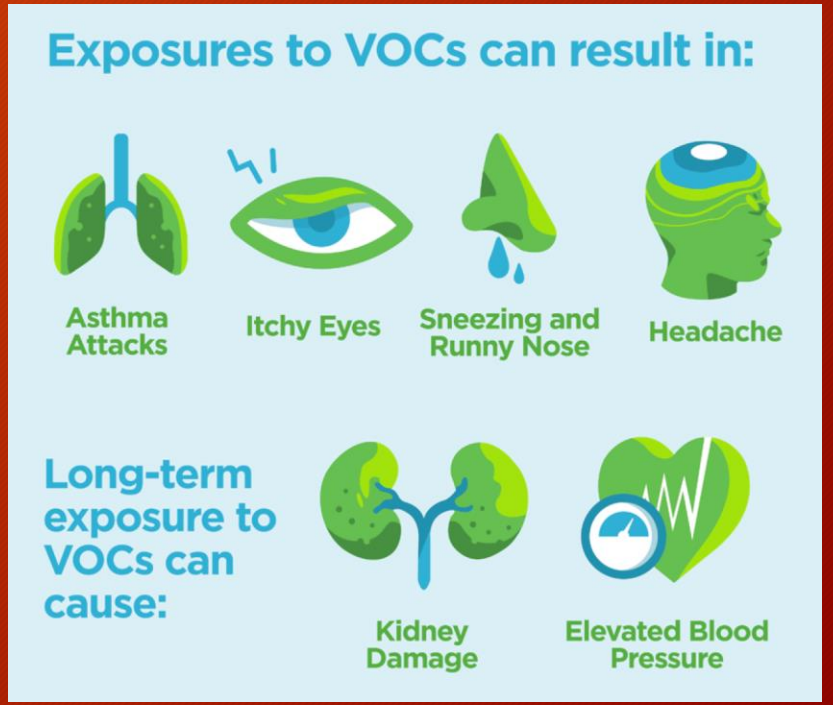
SIDE EFFECTS OF VOC's

Health effects may include:

- Eye, nose and throat irritation
- Headaches, loss of coordination and nausea
- Damage to liver, kidney and central nervous system
- Some organics can cause cancer in animals, some are suspected or known to cause cancer in humans.

Key signs or symptoms associated with exposure to VOCs include:

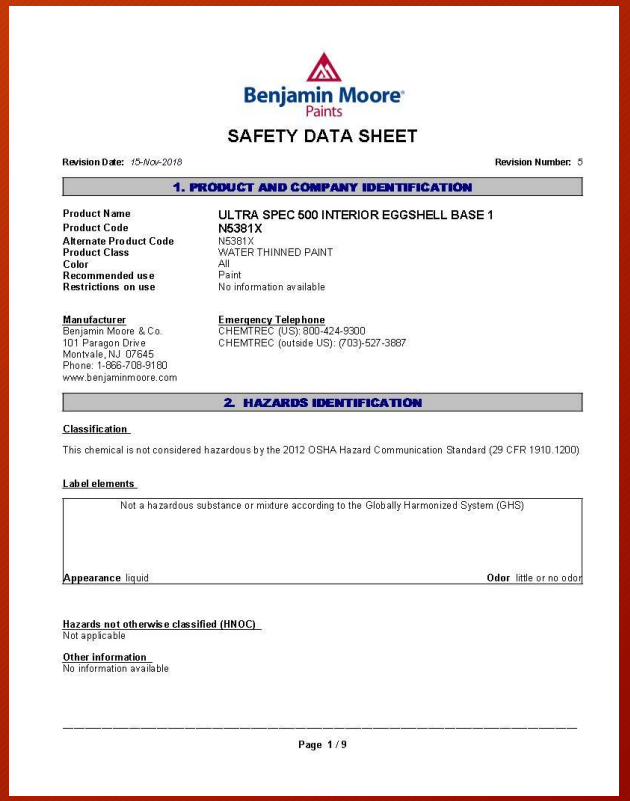
- conjunctival irritation
- nose and throat discomfort
- headache
- allergic skin reaction
- dyspnea
- declines in serum cholinesterase levels
- nausea
- emesis
- epistaxis
- fatigue
- dizziness



PAINT & FINISHES

WHAT **PHYSICAL PLANT OPERATIONS** DOES TO LIMIT EXPOSURE:

- Reduced use of paints and finished containing VOC
- We use LOW-VOC and ZERO VOC latex paints and finishes indoors PAINT & VOC VIDEO
  - Ex: Benjamin Moore and Sherwin Williams
  - We review SAFETY DATA SHEETS (SDS)



Benjamin Moore Paints

SAFETY DATA SHEET

Revision Date: *15-Nov-2018* **Revision Number:** 5

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	ULTRA SPEC 500 INTERIOR EGGSHELL BASE 1
Product Code	N5381X
Alternate Product Code	N5381X
Product Class	WATER THINNED PAINT
Color	All
Recommended use	Paint
Restrictions on use	No information available

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 1-866-708-9180
www.benjaminmoore.com

Emergency Telephone
CHEMTREC (US): 800-424-9300
CHEMTREC (outside US): (703)-527-3887

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Appearance liquid **Odor** little or no odor

Hazards not otherwise classified (HNOC)
Not applicable

Other information
No information available

Page 1 / 9

SAMPLE OF SDS SHEETS

CUSTODIAL SERVICES

Strives to maintain the optimum level of cleanliness, safety and productivity in all campus buildings and facilities.

What is Green Cleaning?

Cleaning to protect health without harming the environment

What is Cleaning for Health?

Removing contaminants

- Particulates (dirt)
- Bacteria & viruses
- Control moisture that causes mold
- Reduce the need for products containing harmful chemicals
- Safe pest control

Why not use Traditional Cleaners?

Many Traditional Cleaners contain toxic chemicals that can cause

- Respiratory problems
- Reproductive health problems
- Skin and eye irritation
- Harm to the environment

Why is Green Cleaning Important?

1. Helps students stay healthy and learn
2. Protects the health of custodial staff
3. Increases the lifespan of facilities
4. Preserves the environment

Why Green Cleaning?
Helps Students Stay Healthy & Learn

Healthy environments boost staff and student performance—teachers teach well and students learn well.

Why Green Cleaning?
Helps Students Stay Healthy & Learn

Asthma

- Leading cause of student absenteeism due to a chronic disease
  - **14 million school days are lost annually**
- Green Cleaning has shown to reduce the number of times asthma medication was needed.
- If kids are not in school, they can't learn

Why Green Cleaning?
Preserves the Environment

Green cleaning products preserve the environment through:

- Production cycle that is less harmful
  - Cleaning industry uses 6 billion pounds of chemicals
- Packaging that reduces waste
  - 4.5 billion pounds of paper, 35 million trees
- Products and waste streams are not hazardous to water supplies

Green Clean is *Quick and Easy*

- Not an all or nothing proposition
- Marketplace changes are making it easier
- Government regulation already has begun

WPU started using Green Cleaning Products in 2013

Use Green Seal (GS) EcoLogo (EL) or US EPA Design for the Environment (DfE) products to ensure your products do **NOT** contain:

- Toxic compounds
- Carcinogens
- Reproductive toxins
- Combustible ingredients
- Skin or eye irritants

Step 5: Share the Responsibility

Key to green cleaning success:

- Promote Stewardship – involves administrators, teachers, students, vendors
- Increase Institutional Commitment - green cleaning plans, policies, and evaluating results

CARPENTRY SHOP

Carpenters, masons & locksmiths in this department are responsible for the repairs and maintenance of doors, windows, screens, floors, ceiling, roofs, sidewalks, curbs, steps, showers, etc. The locksmith repairs and replaces locks, cuts keys and attends to emergencies. The department also fabricates and installs building and room signage.

TOOLS- THE IMPORTANCE OF PROPER USE

PROPER CARE AND MAINTENANCE

1. Use tools for their intended purpose only.
2. Clean the tools immediately after use.
3. Keep tools organized
4. Always cover sharp pointed tools.
5. Be sure tools and equipment are in good working order before use
6. Handle all tools and equipment with care and caution.
7. Wear personal protective equipment

ROOF AND GUTTER CARE

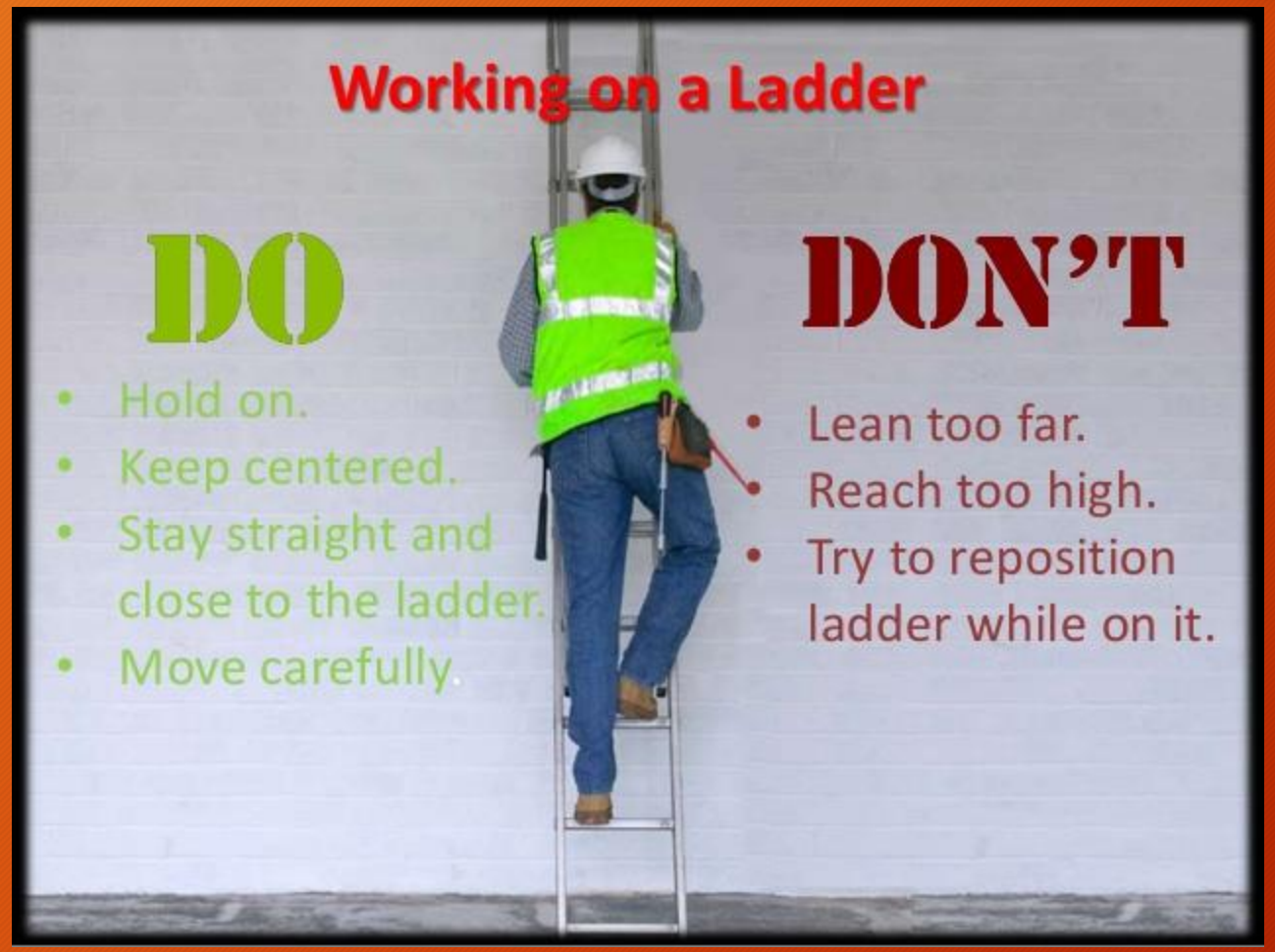
ROOF

1. Check shingles regularly:
   - Missing
   - Curling
   - Cracked
2. Look for leaks in attic & ceiling
3. Wash roof
4. Trim overhanging branches
5. Patch chimney

GUTTER

1. Regular cleaning
2. Clear away accumulated debris
3. Check for leaks and have then repaired
4. Practice strict ladder safety

LADDER SAFETY



BASIC LADDER SAFETY VIDEO

GROUNDS

What WE do…

The grounds keeping staff is responsible for lawn care, flowers & shrub maintenance, litter and refuse pickup (regular trash & recyclable). Snow and ice removal to ensure the clean up and salting of campus roads, parking lots, stairs and walkways to maintain an accessible and safe campus environment. Minor road maintenance such as pothole repairs, removal of debris and sweeping of roads, parking lots, sidewalks, etc. Responsible of preparation and maintenance of athletic fields.

SAFE EQUIPMENT OPERATION

SNOWBLOWERS

SNOWBLOWER SAFTEY VIDEO

LAWN MOWERS

According, to the Consumer Product Safety Commission more than 80,000 people go to the emergency room each year due to lawn mower injuries.

Each year, 800 children in the US alone, are run over by riding mowers or small tractors and more than 600 of those incidents result in amputation; 75 people are killed, and 20,000 injured; one in five deaths involves a child. For children under age 10, major limb loss is most commonly caused by lawn mowers.

LAWN MOWER SAFETY VIDEO

TICKS: Tick-Borne Diseases

Three species of ticks transmit disease in New Jersey.

This includes the **blacklegged (deer) tick**, *Ixodes scapularis* (right), the **lone star tick** (*Amblyomma americanum*, center) and **American dog tick** (*Dermacentor variabilis*, left).

Tick-borne diseases are transmitted through the bite of an infected tick.

While Lyme disease (transmitted by blacklegged ticks) is the most common and well-known, there are several other diseases of concern:

- **Anaplasmosis (blacklegged ticks)**
- **Babesiosis (blacklegged ticks)**
- **Ehrlichiosis (lone star ticks)**
- **Rocky Mountain Spotted Fever (American dog ticks)**
- **Powassan virus (blacklegged ticks, woodchuck ticks)**

TICKS: Prevent tick bites

Tick exposure can occur year-round, but ticks are most active during warmer months (April-September). Know which ticks are most common in your area.

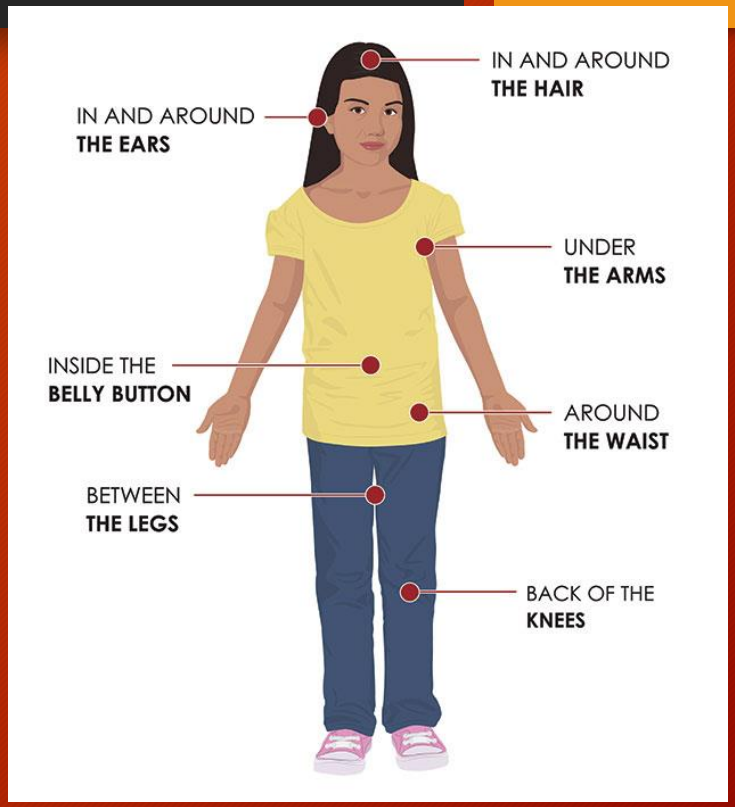
Before You Go Outdoors

- **Know where to expect ticks.** Ticks live in grassy, brushy, or wooded areas, or even on animals. Spending time outside walking your dog, camping, gardening, or hunting could bring you in close contact with ticks. Many people get ticks in their own yard or neighborhood.
- **Treat clothing and gear** with products containing 0.5% permethrin. Permethrin can be used to treat boots, clothing and camping gear and remain protective through several washings. Alternatively, you can buy permethrin-treated clothing and gear.
- **Use** Environmental Protection Agency (EPA)-registered insect repellentsExternal containing DEET, picaridin, IR3535, Oil of Lemon Eucalyptus (OLE), para-menthane-diol (PMD), or 2-undecanone. EPA's helpful search toolExternal can help you find the product that best suits your needs. Always follow product instructions.
  - Do not use insect repellent on babies younger than 2 months old.
  - Do not use products containing OLE or PMD on children under 3 years old.
- **Avoid Contact with Ticks**
  - Avoid wooded and brushy areas with high grass and leaf litter.
  - Walk in the center of trails.

TICKS: After You Come Indoors

- **Check your clothing for ticks.** Ticks may be carried into the house on clothing. Any ticks that are found should be removed. Tumble dry clothes in a dryer on high heat for 10 minutes to kill ticks on dry clothing after you come indoors. If the clothes are damp, additional time may be needed. If the clothes require washing first, hot water is recommended. Cold and medium temperature water will not kill ticks.
- **Examine gear and pets.** Ticks can ride into the home on clothing and pets, then attach to a person later, so carefully examine pets, coats, and daypacks.
- **Shower soon after being outdoors.** Showering within two hours of coming indoors has been shown to reduce your risk of getting Lyme disease and may be effective in reducing the risk of other tickborne diseases. Showering may help wash off unattached ticks and it is a good opportunity to do a tick check.
- **Check your body for ticks after being outdoors.** Conduct a full body check upon return from potentially tick-infested areas, including your own backyard. Use a hand-held or full-length mirror to view all parts of your body. Check these parts of your body and your child's body for ticks:

• In and around the ears	• Back of the knees	• Between the legs
• Inside belly button	• In and around the hair	• Around the waist



AUTOMOTIVE SHOP

Provides repairs and maintenance service on all of the university's vehicles and ground equipment.

SIX BASICS OF CAR CARE

1.Fluid levels.

Check and, if needed, top off oil, transmission, brake, power steering, radiator and windshield-washer fluids.

2. Tires.

Check tread (at least 2/32 of an inch) and pressure (specifications are usually in the door frame or owner's manual). Over-inflation leads to skidding in wet conditions; under-inflation causes sloppy handling and premature wear. Don't forget the spare tire!

3. Wipers.

Inspect them for cracks and separation. Wiper blades should be soft and pliable, and they should be replaced every year.

4. Lights.

Test all turn signals, brake lights and headlights, and replace burned-out bulbs if needed. Check headlights' alignment to make sure they don't blind oncoming drivers.

5. Battery.

Carefully remove corrosion around battery posts to help ensure top performance.

6. Hoses and belts.

Check for proper fit, and replace anything with signs of blistering, fraying or splitting. Summer heat speeds rubber breakdown.

TIRE CARE

TIRE SAFETY VIDEO

MAIL PROCESSING CENTER

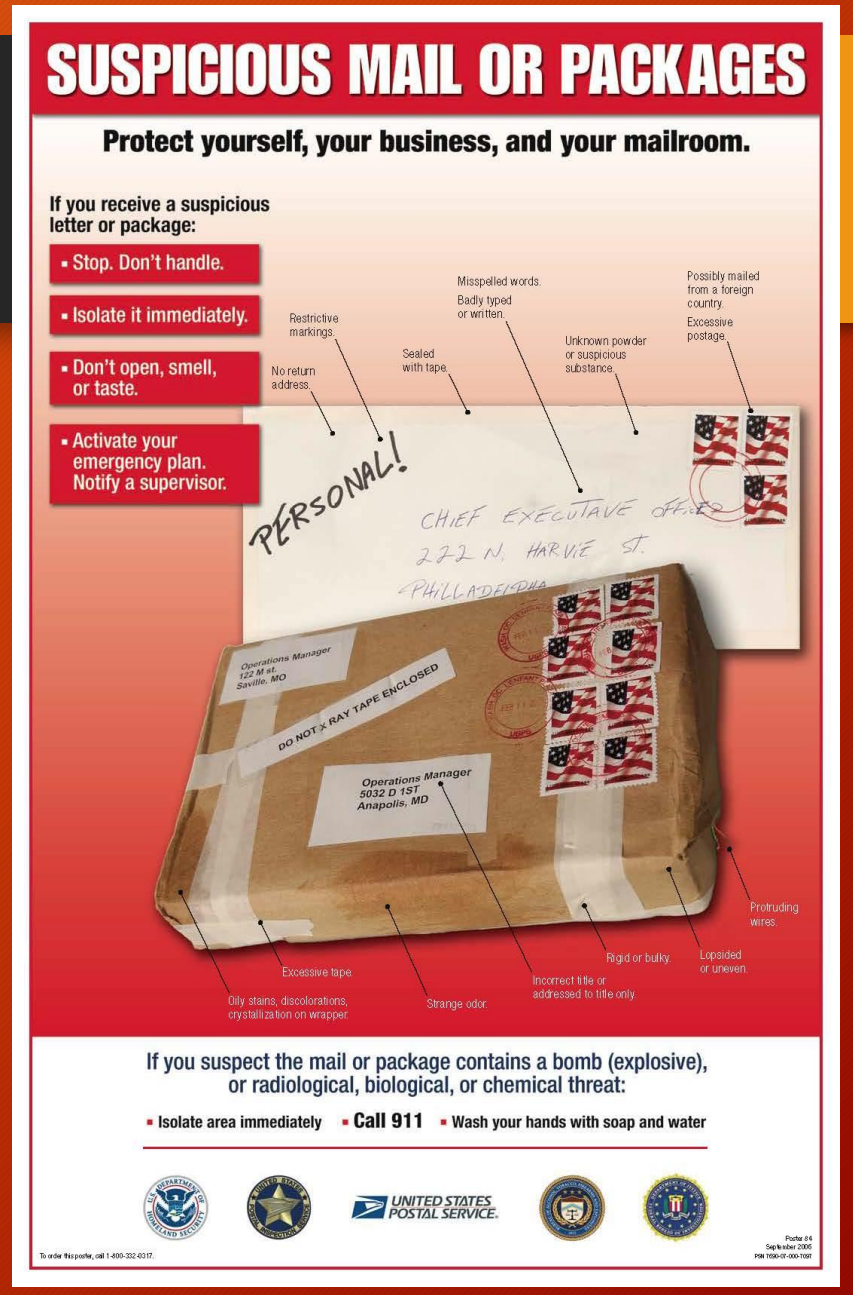
Provides effective and efficient mail services to approximately 152 department's campus wide. Offers assistance in all aspects of mail processing such as domestic and international mail handling, parcel service, expedited mail and inter office correspondence.

MPC- SAFETY

Mail Safety in MPC

1. Maintain a neat and clean mail distribution center
2. Check for broken boxes upon delivery from carriers
3. Identify mail that with unrecognizable recipient
4. Handle chemical and perishables with care
5. Ensure mail services staff is properly trained on all mail equipment, such as inserters in order to prevent harm to operator.

SUSPICIOUS MAIL OR PACKAGE



What are characteristics of suspicious mail?

Under certain circumstances, you should exercise more caution if you are concerned about the receipt of suspicious items. Be alert to mail pieces which are unexpected or sent by someone unfamiliar to you.
The following characteristics may also dictate caution when handling an unknown mail piece:

- Items addressed to someone no longer with your organization or otherwise outdated.
- Items that are handwritten and have no return address, or have one that can't be verified as legitimate.
- Items containing restrictive endorsements, such as "Personal" or "Confidential".
- Items of unusual weight relative to their size, or that are lopsided or oddly shaped.
- Items which are sealed with excessive amounts of tape.
- An item containing a postmark which does not match the return address or bears an excessive amount of postage.
- Mailpiece is leaking an unknown powdery substance.

What do I do with a suspicious piece of mail?

If you receive a suspicious mail piece, do not handle it, shake it, bump it, or sniff it. Follow these steps:

1. Isolate the mail piece.
2. Evacuate the immediate area.
3. Wash your hands thoroughly with soap and water. This also applies to everyone that has handled the mail piece.
4. Notify local law enforcement immediately.

You should exercise **CAUTION** and **COMMON SENSE** when dealing with the mail. When in doubt, call local law enforcement authorities.

Q&A

WORKPLACE SAFETY

PHYSICAL PLANT OPERATIONS

WILLIAM PATERSON UNIVERSITY

SUMMER 2019