SOUTH PORTLAND FIRE DEPARTMENT
STANDARD OPERATING GUIDELINES

SOG #:	6.635	**Effective Date:**	5/10/2012
Title:	Sample Gathering for Unknown Substances	**# of pages:**	4
Category:	Hazardous Materials Response	**Classification:**	Red

1. PURPOSE: To standardize sampling procedures for any unknown substances

2. PROCEDURES:

Overview:
In the event that SPFD is called to a scene for an unknown substance there is a chance the substance will not be readily identifiable with the testing equipment possessed by the SPFD. In this instance the sampling kit provided by the 11th CST to SPFD (which is carried on HM-2) will be used to collect a sample of the substance, which will then be shipped to the State lab in Augusta for further testing and identification.

The SPFD Haz Mat team will not normally gather samples that will be used as evidence in criminal matters unless no other collection options are available. Trained evidence technicians should be called in to obtain or assist in obtaining the sample. If this is not possible or feasible then the following procedure will be followed exactly and all chain of evidence paperwork completed to ensure the sample is processed correctly.

LIQUID SAMPLING

- Locate sample site
- Monitor Area (Meters/RAD)
- Photograph site prior to doing anything
- Place **sample cards** at site(s) and photograph
- Kill and rinse hands
- Conduct any tests (i.e. protein, white powder, ph, M-8, Radiological, etc.)
- Kill and rinse hands prior to any sampling
- Setup clean surface and prepare area for type of sample.
    - Remove liquid sample pouch and organize on clean surface
        - Pipette aid filter
        - 6-60 ml syringes
        - Syringe weight
        - 1-1ml bulb syringe
        - Ph paper
        - M-8 paper
- Collect sample with appropriate device (no more than ¼ full)
- Place sample into 2oz primary container **do not cross contaminate**
- Standard collection amount is not greater than 10ml
- Apply cover
- Kill and rinse and dry gloves and container

- Para film the lid
- Place label on glass, **not lid**
- Photograph primary container and sample #
- Call sample # back to command for documentation
- Place primary container into secondary 8 oz container with absorbent material to prevent movement
- Apply the second label on container
- Flip **sample card** over to show "DONE"
- Photograph sample area again after completion
- Inform Command/Operations that you have finished collecting sample, exit hot zone and proceed to deacon.

SOLID SAMPLING

- Locate sample site
- Monitor Area (Meters/RAD)
- Photograph site prior to doing anything
- Place **sample cards** at site(s) and photograph
- Kill and rinse hands prior to any sampling
- Conduct any tests (i.e. protein, white powder, ph, M-8, Radiological, etc.)
- Setup clean surface and prepare area for type of sample.
    - Remove solid sample pouch and organize on clean surface
        - 2" X 2" sterile gauze pads (or other sterile pad)
        - Sterile swaps
        - Metal scoop spatula
        - Metal scoop spatula wooden handle
        - Large spoon
        - Plastic scoop spatula
        - Hemostats
        - Micro scoop spatula
        - Blue tweezers
- Collect sample with appropriate device
    - Wipe sampling
        - This is the sampling method of choice when there is limited contamination present
        - Use 4 sterile gauze pads in 4 separate areas (one each in close to the same location as possible) that are each 12" X 12"
        - The pads are **DRY**
        - Rub pad over area vertically from top to bottom then left to right
    - Swabs
        - This is the sampling method of choice when there is a fine powder visible on a surface or in a container.
        - Use 4 sterile gauze swabs
        - The pads are **DRY**
        - Rub pad over area vertically from top to bottom then left to right
        - Break the stem of the swap off after placing in the primary container
    - Scoops/Spoons

        - For granular or non-fine powders
        - Fill container no more than ¼ full
        - If powder aerosolizes with movement use swabs
    - Scissors/Forceps
        - Vegetation cloth or paper shall be collected with these.
        - Samples should appear to have contamination on them (wilted vegetation)
        - Use forceps to hold while small samples are cut with scissors
        - Fill container no more than ¼ full
- Place sample into 8oz primary container **do not cross contaminate**
- Apply cover
- Kill and rinse and dry gloves and container
- Para film the lid
- Place label on glass, **not lid**
- Photograph primary container and sample #
- Call sample # back to command for documentation
- Place primary container into secondary container with absorbent material to prevent movement
- Apply the second label on container
- Flip **sample card** over to show "DONE"
- Photograph sample area again after completion
- Inform Command/Operations that you have finished collecting sample, exit hot zone and proceed to deacon.

SAMPLE DECONTAMINATION

- The sample will pass through the contamination reduction corridor (CRC) or commonly known as the decon line
- Bleach will be used to decon the secondary container unless otherwise stated
- Keep container in **upright** position at all times
- Rinse with water 3 times
- Dry completely with paper towels
- Monitor with M-8, PID, and radiation meter.
- When sample is confirmed clean by decon officer it is packed in a "Saf-T-Pak" container along with the chain of custody (see next page)

SAMPLE PACKAGING

- All samples will be packaged for transport before leaving the incident to ensure that there will be no cross contamination or product release
- Do not use bleach or water on samples that are bleach/water reactive. Indicate on Chain of Custody (CoC) if sample is water or bleach reactive.
    - Primary Containers will be deconed with bleach, rinsed with water, dried completely, sealed with Para film, and labeled with a specific # that corresponds with CoC packet
    - Secondary Containers
        - Will contain enough absorbent to prevent movement of primary container and be able to absorb 100% of spillage of specimen.

        - It will be deconed with bleach, rinsed with water, dried completely, and labeled with a specific # that corresponds with CoC packet
        - It will also have a tamper seal attached, initialed and dated
    - Outer Containers
        - Will be "Saf-T-Pak system STP-100
        - 1 piece of bubble wrap will be placed on the bottom of the orange covered container, 1 will be wrapped around the secondary container, and a third piece placed on top before closing
        - Mark the sample # on the top and side of box
        - Close box tabs
        - Secure with supplied tape on flap
        - Place name, address and phone # on side of box
        - The box must accompany the CoC at all times
        - All #s must correspond
        - The Maine State Police Transport # will be written on the outer container.

NOTIFICATION OF SHIPMENT

- Sampling agency will contact the MSP (1-800-452-4664) to secure MSP sample # and to coordinate with the MSP for transport of the sample.
- The MSP # will be annotated below the CoC # on the box and the CoC form
- Sampling agency will also contact HETL (Health and Environment Testing Lab) prior to shipping
- HETL M-F 8-5 287-2727 / Afterhours 1-800-821-5821 ask for HETL duty officer

3. REFERENCES:
    - None

By Order Of:

Kevin W Guimond

Kevin W. Guimond
Fire Chief