CHRISTOPHER NEWPORT
UNIVERSITY

Standard Operating Procedures (SOPS) to Prevent Stormwater Pollution

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Christopher Newport University (CNU), an agency of the Commonwealth of Virginia, has a permit to operate a Municipal Separate Storm Sewer System (MS4) issued by the Virginia Department of Environmental Quality. This permit authorizes CNU to discharge stormwater pursuant to the Virginia Stormwater Management Program and the Virginia Stormwater Management Act. Since storm drain systems are not connected to a sanitary sewer treatment plant, water traveling through the storm drain system flows untreated directly to local streams, rivers and lakes.

Standard Operating Procedures (SOPS) have been developed to prevent pollution from entering our storm drain system. Each SOP has been written to identify procedures and methods that will prevent illicit discharges. Illicit discharges are not allowed and can result in significant fines and other penalties from regulatory agencies.

The SOPS herein were developed and adopted on June 30, 2016. They will be reviewed annually, before September 1, to make any modifications or additions to the procedures.

Christopher Newport University
Standard Operating Procedures to Prevent Stormwater Pollution
Modification Table

Record of Change	Type	Notes
6/30/2016	Development of SOP	
8/15/2022	SOP Addition	Added Dewatering Utility Construction and Maintenance Activities
9/21/2022	Annual Review, Update and Reformatting	
12/13/2023	SOP Addition	Added Anti-icing and Dicing Application, Transport, and Storage

SOP:	**Equipment Maintenance and Washing**
Purpose of SOP:	**Procedures for the proper management of equipment maintenance and washing.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Grounds, Facilities, Housing, Dining, Catering**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
- Drip pans
- Wash Pad

II. Standard Operating Procedures

1. Equipment Maintenance and Repair
    a. Move leaking equipment indoors or onto impervious surface and under cover.
    b. Use drip pans or absorbent pads under equipment if needed.
2. If equipment is inoperable tag equipment, "**DO NOT USE"**.
3. Perform all maintenance activities (expect for emergencies) indoors.
4. Transfer fluids from drip pans to appropriate waste containers.
5. Routinely check equipment for signs of leaks.
    a. Notify supervisor if a leak is discovered or suspected.
6. Sweep and pick up trash in maintenance and repair areas daily.

III. Equipment Washing

1. Small equipment should only be washed inside at designated washing areas.
    a. Mop buckets and mop water may only be dumped inside at designated areas.
2. Large equipment in good condition, with no signs of leaks, may be washed at the wash pad located at the Grounds Department.
3. Make sure equipment is properly drained of all fluids prior to washing at the wash pad.
    a. In the event of leak or spill, immediately reposition the equipment, and notify your supervisor.
4. Only use approved water-based or detergent cleaners.

SOP:	**Outdoor Events**
Purpose of SOP:	**Procedures for outdoor events to prevent wastes or wastewater from entering storm drains and waterways.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Grounds, Facilities Management, Events, Catering**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Covered waste and recycling containers
- Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
- Storm drain inlet protection (drain covers, booms, berms)

II. Standard Operating Procedures

1. General Stormwater Protection
   a. Do NOT dump any liquids or other materials outside.
   b. Have the proper equipment available to clean-up spills and be ready to clean-up spills immediately.
   c. Ensure that vendors dispose of the wastes in an appropriate manner.
   d. Ensure storm drains have adequate inlet protection.

2. Waste Management and Disposal
   a. Provide an adequate number of receptacles to prevent litter.
   b. Empty waste and recycling containers as needed to prevent overflow.
   c. Waste and recycling receptacles should have a weather proof cover.

3. Cleaning Up After the Event
   a. Clean the area using dry methods (sweeping, absorbents, etc.).
   b. Pick up all litter and garbage and properly dispose. Do not sweep anything into a storm drain.
   c. Discard waste drinks down a kitchen drain.

4. Spills
   a. Refer to SOP: Spill Prevention, Control, Clean Up and Reporting on page 20.
   b. Small spills (<5 gallons) that pose no immediate danger to human life or property notify MS4 Program Manager (4-8700).
   c. Small Spills (<5 gallons) of a hazardous substance that is an immediate danger to human life or property notify CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).
   d. Large Spills (>5 gallons) of any substance report to CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).

   *** Things to Know: What spilled; Where it is located; Estimate of amount of product***

SOP:	**Kitchen Waste: Fats, Oils, and Greases (FOG) Transfer, Storage, and Disposal**
Purpose of SOP:	**Procedures for the management, handling, and storage of kitchen grease to prevent the discharge of pollutants to stormwater.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Dining Services, Catering**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Weather proof and double walled FOG containers
- Tight sealing transfer containers
- Tarps and tie downs
- Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)

II. Standard Operating Procedures

1. Kitchen Management of Fats, Oils, and Greases (FOG)
    a. Scrape, wipe, or sweep off FOG using dry methods (e.g. paper towels) before washing any cooking equipment.
    b. Equipment (including trays, carts, pots, pans, etc.) may only be washed indoors.
    c. Use dry methods (absorbents) to clean up spills in the kitchen.
    d. Mop water may only be disposed of into indoor drains connected to the sanitary sewer.
    e. Empty collection pans or grease recovery devices before they become full.
    f. Collect used oil into transfer container with a sealing lid.

2. Transfer of FOG from Kitchen to Exterior FOG Container
    a. Prepare your route from the kitchen to the exterior FOG container.
        - Eliminate and obstacles that might lead to a slip, trip, fall and potential spill.
        - Ensure that a spill kit is easily accessible in the event of spill.
        - Place absorbent pads in the FOG transfer area.
    b. Use a container with a sealing lid to bring waste FOG outside to the Grease Receptacle. Do not transport waste FOG with pots, pans, trays, or other containers that lack a sealing lid.
        - It is safer to make multiple transfers of smaller volumes than to attempt to handle larger quantities at once.
        - Whenever possible, only transfer to the exterior FOG container when it is not raining.
    c. Using both hands carefully transfer the waste FOG from transfer container to the exterior FOG container. Pour the FOG in such a way to minimize splashes and drips.
        - In the event of a spill notify your supervisor immediately and refer to SOP: Spill Prevention, Clean Up and Reporting.
    d. Ensure that the exterior FOG container is properly covered.
    e. Return transfer container inside and wipe any excess FOG with a paper towel.

3. Contractor Pickup of Exterior FOG Container
    a. The disposal truck driver shall check in with the University upon arrival.

b. The University representative shall ensure that the appropriate spill cleanup and response equipment and personal protective equipment are readily available and easily accessible. Refer to SOP - Spill Prevention, Control, Clean Up and Reporting.
c. The University representative shall verify that the volume of waste FOG in the tank does not exceed the available capacity of the disposal hauler's vehicle.
d. Catch basins and drain manholes are adequately protected during transfer.
e. The truck driver and the University representative shall both remain with the vehicle during the tank draining process.
f. When draining is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
g. The disposal hauler vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
h. The University representative shall inspect the loading point and the tank to verify that no leaks have occurred, or that any leaked or spilled material has been cleaned up and disposed of properly (SOP - Spill Prevention, Control, Clean Up and Reporting and SOP - Pressure Washing and Exterior Surface Cleaning).

SOP:	**Equipment Fueling Activities**
Purpose of SOP:	**Procedures for the proper management of the transfer and dispensing of fuel.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Grounds, Facilities Management, Housing, Building Operations, Athletics**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
- Drip pans

II. Standard Operating Procedures

1. Dispensing of Fuel from Above Ground Storage Tanks (ASTs)
    - Turn off all equipment prior to dispensing fuel.
        - Do not use any mobile electronic devices when dispensing fuel.
    - Ensure that the fuel type is the proper type of fuel.
    - Inspect the fueling hose and dispenser for any signs of cracking or leaking prior to dispensing any fuel.
        - Report leaks in hoses or tanks to your supervisor immediately.
    - Stay with the equipment while dispensing fuel, do not "top off" fuel tanks.
        - In the event of spill use dry methods (absorbents) to clean up the spill (refer to SOP: Spill Prevention, Control, Clean Up and Reporting).
        - Notify your supervisor immediately.

2. Dispensing of Fuel from Flammable Containers

    a. Mobile/field fueling shall be minimized. Whenever, practical equipment should be transported to a designated fueling area at Grounds.
    b. When performing mobile/field fueling select an area on concrete at least 25 feet up gradient from a storm drain.
    c. Turn off all equipment
        - Do not use any mobile electronic devices when transferring fuel.
        - If possible, transfer fuel over a drip pan or absorbent pad.
        - In the event of a spill use dry methods to clean up the spill.
        - Notify your supervisor immediately.

3. Maintenance & Inspection

    a. Fueling areas, storage tanks, and transfer equipment should be inspected monthly.
    b. Spill Kits should be inspected and inventoried on a regular basis.
    c. Any equipment, tanks, pumps, piping and fuel dispensing equipment found to be leaking or in disrepair must be repaired or replaced immediately.

SOP:	**Grounds Maintenance**
Purpose of SOP:	**Procedures for grounds keeping maintenance activities.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Grounds**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill kit and equipment for dry clean up (socks, absorbent pads, absorbent materials, broom, and dustpan)
- Storm drain inlet protection devices (drain covers, booms, berms)
- Tarps with tie downs

II. Standard Operating Procedures

1. General Landscaping Maintenance
   a. Remove litter, debris, and trash from the landscape prior to mowing activities. Properly dispose of the materials in a designated receptacle.
   b. During blowing operations take care not to blow clippings, dirt, sand, or debris into storm drains or stormwater conveyance structures.
   c. After mowing or pruning activities, all debris should be disposed of at designated area.
   d. Five-day weather forecast should be checked to avoid fertilizing before heavy rain or during a drought. Fertilizers applications are made during period of maximum plant uptake based on plant species.
   e. Whenever possible, control soil erosion by seeding, sod, mats, mulching, terracing or other approved methods.
   f. Do not apply bark or mulch on top of plastic sheeting unless the area is enclosed. Bark or mulch on plastic is easily washed off by heavy rainfall.

2. Landscaping Materials Storage
   a. All bagged materials (i.e. fertilizer, ice melt, etc.) must be stored indoors whenever possible. If they must be stored outdoors, place them under cover.
   b. All dry materials stored outside should be covered and when possible have secondary containment.
      - When storing stockpiles of sand, salt, dirt, mulch, gravel cover piles with a tarp.
      - Contain stormwater run-off from stock piles using a barrier or berm.
   c. Place containers on paved or impervious surfaces and as far from (or at a lower elevation than) storm drain inlets and drainage ditches as possible.
   d. Provide a spill kit near storage areas.
   e. Clean-up any spills, leaks or discharges promptly.
   f. Inspect all containers stored outdoors regularly.
   g. If a container is found to be leaking, either empty the contents into a leak-tight container or place entire leaking container inside of a larger leak-tight container. Clean up any spills or leaks promptly.
   h. Do not drain accumulated water from secondary containment structures unless approved by a supervisor.

3. Contractors
    a. Contracts should include Stormwater Pollution Prevention language (e.g. The contactor, including any associated subcontractors, shall use the correct controls to ensure that all activities do not cause a condition of pollution at the University).
    b. Ensure that contractors implement proper Best Management Practices (BMPs) to prevent stormwater pollution and know whom to contact in case of spill.

SOP:	**Liquid Materials Loading, Unloading, and Storage**
Purpose of SOP:	**Procedures for the proper management of the loading, unloading, and storage of liquid materials.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Grounds, Facilities Management, Warehouse**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
- Drip pans
- Storm drain pollution control devices (berms or covers)
- Wheel chocks

II. Standard Operating Procedures

1. Transfer of Liquid Materials
   a. Direct delivery and receiving vehicles to park in a designated area where leaks can be contained and where they will not enter a storm drain or ditch.
   b. Only transfer liquids only over paved (impervious) surfaces. Spills on soils are very difficult to clean up.
   c. Do not load or unload materials near a storm drain inlet unless it is equipped with a shut-off valve, drain cover or seal or other method to keep spills out of the storm sewer or the drain is at a higher elevation.
   d. If transfers must take place near a storm drain inlet, place a cover or mat over the inlet to protect it during transfer operations.
   e. Only load or unload a vehicle after it is immobilized (e.g., wheels are chocked) and (if flammable materials are involved) grounding cables are attached. These measures will prevent accidental movement and static build-up.
   f. At least one qualified University representative must attend any transfer operation for the entire duration of the loading or unloading operation.
   g. Place drip pans or buckets under all hose or pipe connections and leave them in- place until the loading or unloading operation is complete. Dispose of any leaked material properly.
   h. Keep loading and unloading areas neat and tidy. Sweep outdoor areas as needed.

2. Contractors
   a. Contracts should include Stormwater pollution prevention language (e.g. The contactor, including any associated subcontractors, shall use the correct controls to ensure that all activities do not cause a condition of pollution at the University).
   b. Ensure that contractors implement proper Best Management Practices (BMPs) to prevent stormwater pollution and know whom to contact in case of spill.

SOP:	**Trash & Recycling Handling, Storage, Transfer, and Disposal**
Purpose of SOP:	**Procedures for the proper management, handling, and storage of waste, trash, or recycling to prevent the discharge of pollutants to stormwater.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Grounds, Facilities Management, Housing, Dining, Catering, Events, Building Operations, Athletics**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the university.

I. Stormwater Protection Equipment and Materials

- Dumpster lids/covers (Tarps with tie-downs are acceptable)
- Storm drain inlet protection devices (drain covers, booms, berms, and/or filter fabric)

II. Standard Operating Procedures

1. Trash & Recycling Handling, Storage, Transfer, and Disposal
    a. All waste and recycle receptacles must be leak-tight with tight-fitting lids or covers.
    b. Place waste or recycle receptacles indoors or under a roof or overhang whenever possible.
    c. Prior to transporting waste, trash, or recycling ensure that containers are not leaking (double bag if needed) and properly secure to the vehicle.
    d. Clean and sweep up around outdoor waste containers regularly.
    e. Clean up any liquid leaks or spills with dry clean-up methods. (See SOP: Spill Prevention, Clean Up and Reporting).
    f. Arrange for wastes or recyclables to be picked up regularly and disposed at approved disposal facilities.
    g. Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster, recycle or trash receptacle.
        - Please contact the Environmental Health Safety Department for information on proper disposal
    h. If any liquid, non-hazardous waste is generated, it must be disposed in the sanitary sewer (if approved), transported to a disposal site that will accept that type of wastewater, or cleaned up using dry methods.
    i. Do not wash out waste containers (trash cans) or recycling containers outdoors or in a parking lot.
    j. Containers, compactors and dumpsters must be returned to the waste disposal contractor for cleaning at the contractor's facility.
    k. When working in the field, place all wastes in appropriate containers near the work site. If no public containers are available, containerize or bag the wastes and bring them back the shop for proper disposal.

2. Dumpster Areas
    a. Locate dumpsters on a flat, paved surface and install berms or curbs around the storage area to prevent run-on and run-off.
    b. Keep lids on dumpsters closed at all times unless adding or removing material.
    c. In the event that a dumpster lid is missing or damaged report it to Facilities Management.
    d. If using an open top roll off dumpster, cover and tie down with a tarp unless adding materials.
    e. Inspect regularly for leaks and correct if there is a problem.
    f. Regularly sweep the area and pick up trash/debris.

3. Compactors
    a. Regularly check the hydraulic fluid hoses and reservoir to ensure there are no cracks or leaks.
        - In the event of leak report it immediately to the compactor service contractor and refer to SOP: Spill Prevention, Clean Up and Reporting.
        - Inspect regularly for leaks and correct if there is a problem.
        - Regularly sweep the area and pick up trash/debris.

SOP:	**Parking Lot, Streets, and Roads Maintenance**
Purpose of SOP:	**Procedures for general maintenance of parking lots, parking garages, elevated parking structures, streets, or roads.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Grounds, Facilities Management**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill kit and equipment for dry clean up (socks, absorbent pads, absorbent materials, broom, and dustpan)
- Storm drain inlet protection devices (drain covers, booms, berms, and/or filter fabric)

II. Standard Operating Procedures

1. General Maintenance
   a. Clean leaves, trash, and other debris from parking lots and garages including stormwater conveyance systems regularly.
   b. Sweep parking lots with a street sweeper annually.
      - Sweeping should occur after sanding/deicing events.
      - Sweeping should occur after special events or construction.
   c. Use dry clean-up methods (e.g. absorbents) to clean up any automotive spills/leaks and dispose of them properly.
   d. Ensure any storm drains/catch basins are marked with a stormwater medallion.

2. Paving, Patching, Re-surfacing, and Concrete Projects
   a. Re-seal, pave, or patch on dry days when no rain is expected and stop paving activities well before rainfall is expected.
   b. Use cold patch products when possible.
   c. Pre-heat, transfer, or load hot asphalt far away from storm drain inlets.
   d. Protect or block nearby, downstream, storm drain inlets from debris from maintenance work (asphalt cap, chip sealing, concrete breaking, or saw cutting). Leave inlet protection in place until the job is complete. Clean up debris from around inlets and dispose of properly.
   e. A concrete wash-out area shall be designated at each capital construction site and managed by the project superintendent for the duration of the project. For all university projects, the washout site shall be next to the Ground Department off University Place. It shall include, at a minimum:
      - A concrete wash-out bag or other leak-proof container/settling basin.
      - A pool or containment system that holds the bag to prevent any seepage into the ground or overflows due to inadequate sizing or precipitation.
      - The bag can be disposed of properly after the material has dried in a manner consistent with the handling of other construction wastes. Liquid concrete wastes shall not be discharged to surface waters.

3. Painting and Striping
   a. Schedule painting, marking, and striping projects during dry weather only. Cease all activities when rain threatens.
   b. Set-up a preparation area on a tarp/drop cloth to catch any drips or spills.

c. Block nearby storm drain inlets (within 25 feet and down gradient of project) when painting or striping.
d. Take care not to paint over storm drain medallions.
e. Properly clean painting supplies at your shop, do not wash out paint to the storm drains.

4. Contractors
   a. Contracts should include Stormwater pollution prevention language (e.g. The contactor, including any associated subcontractors, shall use the correct controls to ensure that all activities do not cause a condition of pollution at the University).
   b. Ensure that contractors implement proper Best Management Practices (BMPs) to prevent stormwater pollution and know whom to contact in case of spill.

SOP:	**Pressure Washing and Exterior Surface Cleaning**
Purpose of SOP:	**Stormwater pollution prevention procedures for the cleaning of exterior surfaces such as sidewalks, building exteriors, and graffiti removal.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Facilities Management, Housing, Building Operations, Athletics**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill kit and equipment for dry clean up (socks, absorbent pads, absorbent materials, broom, and dustpan)
- Wet vacuum and holding tank
- Storm drain inlet protection devices (drain covers, booms, berms)

II. Standard Operating Procedures

1. General Surface Cleaning and Pressure Washing
    a. Use dry clean-up methods prior to any pressure washing. Use absorbents (kitty litter, rags, sand, etc.) to clean up spills, sweeping, vacuuming, and scrapping off dried debris. The waste material should be disposed of as solid waste.
    b. Pressure wash with minimal water.
    c. If you do not use any chemicals or detergents and are only cleaning surfaces of ambient dust, then you may direct the wastewater to nearby landscaping or vegetated area or contain it onsite and allow it to evaporate.
    d. When discharging wash water to landscaping, make sure water is absorbed into vegetated or permeable surfaces (gravel, porous pavement) and does not cause erosion or run off into a storm drain or paved area.
    e. All other wash water must be captured for proper disposal.
    f. Solids should be removed from the area prior to pressure washing and a filter bag or similar filtration device should be used to remove suspended solids from the wastewater.
    g. A visible sheen must not be evident in the discharge. Use an absorbent pad or boom to eliminate any oil from the discharge.
    h. Do not pressure wash an entire building. Spot clean, steam clean, or scrape dirty areas rather than pressure washing the entire structure.

1. Heat Transfer Equipment and HVAC Equipment Cleaning
    a. HVAC or chiller condenser tube flushing liquid must be captured and disposed of properly.

2. Storm Drain Protection
    a. Prior to pressure washing, identify where all storm drains are located; wash water must not be allowed to flow down gutters or enter storm drains.
    b. Block or cover all storm drains with booms and weighted storm drain covers before pressure washing.
    c. Determine where water will pool for collection. Use a wet vacuum up the wastewater or allow water to evaporate.

3. Disposal of Wash Water
    a. Use a wet vacuum to collect water for disposal to the sanitary sewer.

b. Once water is collected, dispose of it properly. Check with CNU Grounds to see if collected wash water may be disposed of into a sanitary sewer drain.

4. Contractors
    a. Contracts should include Stormwater pollution prevention language (e.g. The contactor, including any associated subcontractors, shall use the correct controls to ensure that all activities do not cause a condition of pollution at the University).
    b. Ensure that contractors implement proper Best Management Practices (BMPs) to prevent stormwater pollution and know whom to contact in case of spill.

SOP:	**Dewatering Utility Construction and Maintenance Activities**
Purpose of SOP:	**Procedure for disposal of water pumped during maintenance or construction operations.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Facilities Management, Capital Outlay**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Drum (55 gallon)
- Sediment bag
- Storm drain inlet protection devices (drain covers, booms, berms)
- Vegetated Swale
- Silt Fence
- Straw bales

II. Standard Operating Procedures

1. Tunnels, Vaults, Electrical Manholes, and other Structures
    a. Visually inspect the water to be removed. Determine if there are visible pollutants in the water to be pumped and the potential sources of those pollutants on site.
    b. Water collected in vaults or tunnels often results from rainwater or groundwater infiltration. If there is no reason to suspect the water has become contaminated as determined by the visual inspection and lack of potential pollutant sources, clear water can be pumped into a nearby vegetated area and allowed to infiltrate. The dewatering procedure should be monitored to ensure the pumped water does not travel from the vegetated area or cause localized erosion. If a suitable vegetated area is not available, the pumped water can be discharged to the sanitary sewer or hauled off from site for disposal at an appropriate treatment facility.
    c. Water that is suspected of having chemical or biological contamination or to contain anything other than pure rain or groundwater should be evaluated for proper disposal options by Environmental Health and Safety (EHS) or MS4 Program Coordinator. Proper disposal options could include discharging the water to the sanitary sewer, hauling it to an off-site permitted disposal facility, or if it is deemed appropriate, to the surface.

2. Excavations
    a. CNU staff and/or the contractor are encouraged to take appropriate measures to restrict the flow of water from the surface into an excavation if possible.
    b. Visually inspect the water to be removed. Water in excavations usually results from groundwater infiltration or rainfall. Determine if the water is laden with sediment or shows visible signs of any other contaminants.
    c. Sediment laden water may be allowed to settle to remove suspended solids prior to dewatering. Once the water is clear, the water can be pumped into a nearby vegetated area to promote infiltration and filtration.
    d. Sediment laden water that needs to be removed immediately must be pumped through an appropriately sized sediment bag following manufacturer's specifications. Discharge water from the sediment bag should be directed into a vegetated area, wherever possible, but is allowed to discharge into stormwater conveyances after passing through the sediment bag. The sediment bag must be routinely inspected during the pumping operation to make sure that it is

functioning properly and has not become clogged. If muddy water is being released from the sediment bag, additional measures may be needed to minimize impacts from the discharge. This could include surrounding the bag with silt fence and straw bales or placing the bag on a gravel pad.

SOP:	**Spill Prevention, Control, Clean Up and Reporting**
Purpose of SOP:	**Procedures for spill prevention, control, clean up and reporting.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**All**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
- Storm drain inlet protection (drain covers, booms, berms)

II. Standard Operating Procedures

1. Spill Prevention
    a. Whenever possible, liquid or hazardous materials should be handled, used, stored, re-packing, and transferred indoors or under cover.
    b. Deliveries of bulk liquids should be supervised. Down gradient storm drain inlets should be covered during deliveries.
    c. Cover and contain containers, materials, and wastes.
2. Spill Kit Maintenance
    a. Spill kits are located at each high priority area identified in the SWPPP.
    b. Each department manager is responsible for spill kit(s) inventory and the reordering of supplies.
3. Spill Clean Up and Storm Drain Protection
    - Clean up minor spills (< 5 gallons) immediately.
    - Block any down gradient storm drains with berms, covers, absorbent socks or “pigs”.
    - Never hose down spills or leaks.
    - Always use “Dry Clean-up Methods” for clean-up of liquid spills (gasoline, diesel, paint, kitchen grease).
    - Absorbents (loose absorbents, sheets, pillows, pigs, or socks) on the spill.
    - Spread Sweep up or pick up the absorbed materials.
    - Dispose of wastes properly and in accordance with all regulations.
    - If fluids are leaking or have spilled on an impermeable surface, such as a roadway, locate nearest down gradient storm drain and dike or berm the drain to prevent fluids from entering it.
    - After clean up, be sure to sweep up the contaminated absorbent and remove the berm or dike at storm drain.
    - If fluids are leaking or have spilled on a permeable surface, such as gravel, soil or grass, mark the area and report the spill your supervisor.
4. Internal Reporting of Spills

    For Employees (Non-supervisors)
    a. Notify your direct supervisor immediately
        - What spilled, Where it is located, Estimated amount of product

    For Supervisors
    a. Small spills (<5 gallons) that pose no immediate danger to human life or property notify MS4 Program Manager (4-8700).
    b. Small spills (<5 gallons) of a hazardous substance that is an immediate danger to human life or property notify CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).

c. Large Spills (>5 gallons) of any substance report to CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).

5. Regulatory (External) Reporting of Spills
    a. If a spill or leak is of a hazardous substance that exceeds 1 pint or is of an unknown substance of any amount, call **CNU PD.**
        - Notify the **Virginia Department of Environmental Quality.**
        - If spill occurs during *nights, weekends, or holidays* notify the **Virginia Department of Emergency Management's 24-hour hotline.**
        - **Notify the National Response Center.**
        - Any spill or discharge of any pollutant (ex: oil, paints, fuels, hazardous liquids, sediment, or super-chlorinated water) that reaches storm drains or enters "Waters of the State" must be reported to the Virginia Department of Environmental Quality (757-518-2000) within 24 hours of the release or suspected release.
    b. If the spill is more than 25 gallons of a petroleum product from a regulated storage tank or delivery truck or any amount that causes a sheen on nearby surface water, it must be reported immediately to:
        - **Virginia Department of Environmental Quality.**
        - **National Response Center.**

SOP:	**Anti-icing and Deicing Agent Application, Transport, and Storage**
Purpose of SOP:	**Procedures for anti-icing and deicing agent application, transport and storage.**
SOP Administrator:	**Grounds Department**
Responsible Department:	**Grounds Department**

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- All anti-icing and deicing agents applied must be free of urea or other forms of nitrogen and phosphorus
- Tarps with tie downs

II. Standard Operating Procedures

1. Application
    a. If anti-icing or deicing agents are spilled or overapplied during application, excess material should be swept and disposed of immediately.
    b. Bulk products are to be applied to roads and parking lots by means of truck spreader.
    c. Bagged products are to be applied to sidewalks by means of push spreader or mechanized spreader attached to the back of utility carts.
    d. Product should be applied at rate specified by manufacturer.
2. Transport
    a. Whenever possible, anti-icing and deicing agents should be transported under cover.
3. Storage
    a. Whenever possible, bagged anti-icing and deicing agents should be stored, indoors or under cover.
    b. Whenever possible, bulk anti-icing and deicing agents should be stored in concrete containment with tarp cover.
        - Excess bulk material left after a storm event should be bagged and stored indoors. This material should be used prior to new bulk material.