

**VA NORTHEAST OHIO HEALTHCARE SYSTEM
Louis Stokes Cleveland DVAMC
Medical Research Service
Subcommittee on Research Safety Policy**

Effective Date: SEPTEMBER 14, 2022

SOP Title: UTILITY FAILURE POLICY

SOP Number: SRS--006

SOP Version: .10

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1. **PURPOSE:** To establish procedures to follow in the event of a partial or total utility failure.
2. **POLICY:** It is the policy of the Louis Stokes Cleveland Department of Veteran Affairs Medical Center (Louis Stokes VAMC) to have procedures in place in the event of a utility failure that affects Medical Research Service. SRS policies 014 – Emergency Protocol for the Animal Research Facility and 019 – Emergency Preparedness provide additional information in the event of utility failures.
3. **DEFINITIONS:**
 - a. ACOS: Associate Chief of Staff/Research
 - b. ARF: Animal Research Facility
 - c. HVAC: Heating Ventilation Air Conditioning
4. **RESPONSIBILITIES:** All personnel in Medical Research Service must adhere to the following procedures:
5. **PROCEDURES:**
 - a. **ELECTRICAL FAILURE**
 - (1) Upon discovering an electrical failure, notify Engineering Services at extension 64164, M-F 8:00 am - 4:30 pm. At any other time, notify the Boiler Plant at extension 64180.
 - (2) Notify the Research Office at extension 64263.
 - (3) Ensure that critical equipment is plugged into red emergency power outlets (i.e., freezers, incubators). Turn off equipment that was running at the time of the outage. Unplug equipment that may be affected by a power surge when the electrical power resumes.
 - (4) If there is enough light and ventilation for you to do so, continue working; adjust work to fit the available power.
 - (5) Reduce the number of times the freezers, refrigerators, and incubators are opened to maintain internal temperatures.
 - (6) If lighting is unavailable, secure the safety of the laboratory (i.e., turn off gas flame, close open bottles, etc.) and evacuate to an area of the medical center that has power.

(7) Resume normal operations when electrical power is restored.

b. DOMESTIC WATER SUPPLY OUTAGE

(1) Upon discovering a water supply outage, notify Engineering Services at extension 64164, M-F 8:00 am - 4:30 pm. At any other time, notify the Boiler Plant at extension 64180.

(2) Notify the Research Office at extension 64263.

(3) Shut off sources of water (i.e., faucets) and systems requiring water cooling (i.e., stills).

(4) Use an alternate water supply, such as the distilled water system or de-ionized water, sparingly until water service is restored.

(5) Run water for 2-3 minutes to clear the lines of contaminants when the water service has been restored. Replenish stored water supplies.

c. DISTILLED WATER OUTAGE

(1) Upon discovering a distilled water outage, notify Engineering Services at extension 64164, M-F 8:00 am - 4:30 pm. At any other time, notify the Boiler Plant at extension 64180.

(2) Notify the Research Office at extension 64263.

(3) Shut off distilled water sources (taps).

(4) Use alternate water sources (i.e., domestic water supply, deionized water) when available.

(5) When distilled water service is restored run water for 2-3 minutes to clear the air from the line.

(6) DO NOT LEAVE WATER TAPS ON OVER AN EXTENDED PERIOD OF TIME (i.e., do not Rinse pipettes overnight).

d. VENTILATION FAILURE

(1) Upon discovering a ventilation failure, notify Engineering Services at extension 64164, M-F 8:00 am - 4:30 pm. At any other time, notify the Boiler Plant at extension 64180.

(2) Notify the Research Office at extension 64263.

(3) Air Conditioning:

(a) Use fans when available. Contact the HVAC Shop, Engineering Services, at extension 65029 for additional fans. Place fans to circulate the air, blowing towards a fume hood. Do not place fans to blow across the work surface; this will spread contaminants.

(b) Unplug unnecessary, continuous running equipment to prevent heat build-up.

(4) When normal ventilation returns, return borrowed fans to their original owners.

e. GAS/AIR/VACUUM LINE FAILURE

(1) Upon discovering a Gas, Air, or Vacuum line failure, turn off all open lines that are open.

(2) Notify Engineering Services at extension 64164, (M-F 8:00 am – 4:30 pm). At any other time, notify the Boiler Plant at extension 64180.

(3) Notify the Research Office at extension 64263.

(4) Bleed valves before resuming normal operations when gas, air, and/or vacuum lines are restored.

f. FLOODING

(1) Upon discovering a flood, find the source (if possible) and shut it off. If you cannot, notify Engineering Services at extension 64164, M-F 8:00 am - 4:30 pm., or the Boiler Plant at extension 64180.

(2) Call Environmental Management Service (extension 64270) to mop up and/or use Wet-Vac.

(3) Notify the Research Office at extension 64263.

(4) Determine the extent of the damage and report it to your supervisor and/or the ACOS/Research.

g. STEAM

(1) Upon discovering a steam outage, users of autoclaves and the ARF cage washer should turn off the device(s) and check whether the cycle has been completed.

(2) Notify Engineering Services at extension 64164, M-F 8:00am - 4:30 pm. At any other time, notify the Boiler Plant at extension 64180.

(3) Notify the Research Office at extension 64263.

(4) When steam has been restored, continue the ARF cage washer cycle from where it left off. Restart autoclaves from the beginning cycle to ensure sterility.

h. ELEVATOR

(1) Upon discovering that an elevator is not working or is working incorrectly, notify the Engineering Services at extension 64164, M-F 8:00 am - 4:30 pm. At any other time, notify the Boiler Plant at extension 64180.

(2) Notify the Research office at extension 64263.

(3) Place signs by the elevator on each floor, which read "Elevator under repair, please use stairs."

(4) Use the stairs until it is repaired.

(5) When the elevator has been repaired, remove the 'repair' signs from each floor.

i. OXYGEN

(1) Upon discovering that oxygen service has ceased, place all animals requiring oxygen on bottled oxygen.

(2) Notify Engineering Services at extension 64164, M-F 8:00am - 4:30 pm. At any other time, notify the Boiler Plant at extension 64180.

(3) Notify the Research office at extension 64263.

(4) Maintain animal(s) on bottled oxygen until oxygen service is restored or oxygen is no longer necessary.

(5) When oxygen service is restored, bleed valve for 40 to 50 seconds to remove impurities.

j. MEDICAL GAS/MEDICAL AIR/MEDICAL-SURGICAL VACUUM SYSTEMS

(1) The loss of these utilities will not impact Medical Research Service.

6. REFERENCE: SRS Policy 014 – Emergency Protocol for the Animal Research Facility and SRS Policy 019 – Emergency Preparedness.

7. RESCISSION: Medical Research Policy SRS-006. The rescission date of this policy is September 13, 2027.

8. FOLLOW-UP RESPONSIBILITY: Research Safety Coordinator/Chemical Hygiene Officer