Environmental Health & Safety Checklist for Restarting/Continuing Research Activities

The attached checklist is intended to aid research teams as they prepare to restart/continue laboratory operations. This checklist will help to minimize potential disruptions and to ensure safety for all working in a research facility. For specific areas such as Radiation, Biological or Chemical Hazards, be sure to contact the Environmental Health & Safety Office (271-3000) for additional guidance.

- Review any ongoing experiments that were running during the hibernation that could have been affected by loss of electricity, water, or other services.
- Ensure chemical fume hoods are functioning properly.
  - If the fume hoods are on a schedule, confirm everyone in the laboratory understands the schedule.
- Ensure biological safety cabinets are functioning properly.
  - If the biosafety cabinets are on a schedule, confirm everyone in the laboratory understands the schedule.
- Ensure that all refrigerators, freezers, and incubators are functioning properly.
- Ensure any essential equipment that was on emergency power is functioning properly.
- Ensure any sensitive electrical equipment that was shut off and unplug is functioning properly.
- Review equipment operation safety.
  - Review equipment manuals for safe startup instructions.
  - Review equipment state and safely release any stored-up energy sources.
- Ensure any unplugged non-essential electrical devices particularly heat-generating equipment such as hot plates, stir plates, vacuum pumps, or ovens are functioning properly.
- Confirm all chemicals and glassware on the benchtops or stored in cabinets are still secured.
- Confirm that storage of perishable items that used alternate cooling methods (e.g. liquid nitrogen, dry ice, etc.), vulnerable items that were put in storage units that have power backup systems, or items that were stored in duplicate locations are still secured and safe.
- Check containers of chemicals, biohazardous, radioactive materials, and hazardous waste are still properly labeled, closed, and secured in appropriate storage areas.
- Check infectious material and toxins that were put away for storage are still secure.
- Check all gas cylinders to ensure that they are still secured and valves closed.
  - Ensure regulators are still not attached and caps are still in place on cylinders.
  - Ensure natural gas lines in the laboratory are still closed.
- Return any elevated equipment, supplies, electrical wires, or chemicals that were off the floor to protect against flooding from broken pipes.
- If necessary, restore any backed up secure data and turn on non-essential/non-critical computers and equipment.
  - Return stored laboratory notebooks and computers in areas that may have been impacted by possible broken water pipes.
  - Return any secured laptop computers or other easy to remove electronic devices.
- Remove any post of prior "Research Disaster Plan".
- Review safety procedures.
  - Review/update any internal laboratory hazard analysis.
- Survey the laboratory for any unsafe conditions.
  - Chemical leaks, spills, or releases.
  - Biological leaks, spills, or releases.
  - Supplies, equipment, glassware, and other items left out during the hibernation.
  - Manage any expired, outdated, peroxide-forming, self-reactive, or other reagents with a limited lifespan appropriately.
  - Secure, correctly label, and/or request a pickup of any hazardous wastes.
  - Manage any biological wastes appropriately.
- Establish social distancing, wearing of face masks, cleaning, and disinfecting policy and procedures.
  - Shared office spaces.
  - Break areas/food preparation areas.
  - Research laboratories.
  - Field locations.
- Established stagger schedules (AM vs PM, every other day, every other desk, etc.).
- Review any shared facilities, such as microscopy areas, analytical laboratories, etc., for any use restrictions.
  - Delays due to start-up procedures.
  - May have restricted schedules to accommodate social distancing.
- Prepare for supply chain disruptions and limited availability.
  - Recognize that order placement may be slower as the volume of requests increases.
  - Plan for limited sales of high demand items.
  - Plan for limited Personal Protective Equipment availability (including N95s, face shields, and gloves).
  - Plan for some reagents having limited availability.
  - Plan for some consumables having limited availability.