PROACTIVE CLEANING AND DISINFECTION PROTOCOL

BELFOR USA

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Version 1.1

1.0 Background and Scope of Work

BELFOR USA has retained the consulting expertise of CTEH, LLC to develop a cleaning and disinfection protocol to use as a guide for BELFOR USA proactive cleaning and disinfection operations. Please note that this protocol is not intended for use in sensitive areas of any facility which are not normally subject to janitorial services (i.e. semiconductor manufacturing areas or "clean rooms", laboratories, or areas with large amounts of delicate electronic equipment). This protocol is intended to guide cleaning and disinfection operations and should be viewed as a "best practices" document for implementation by individuals trained in appropriate cleaning and disinfection methods. This protocol is intended to combat the potential of viral contamination within the built environment, and does not address the reduction or spread of the virus between or among persons in direct contact with one another. This document relies on communication and administrative controls including social distancing to reduce the opportunity for human-to-human transmission while occupying these buildings.

- In addition to enhanced cleaning procedures, additional measures should be taken to increase awareness of good safety practices including posted advisories that encourage staying home when sick and advisories that highlight cough and sneeze etiquette. Workers are encouraged to practice good hand hygiene in all workplace areas, including but not limited to building entrances, security operation centers, bathrooms, change rooms, corridors, employee work and break areas, and shipping and receiving facilities. Access to hand cleaning soaps and sanitizing dispensers (touchless and ready-to-use bottles), cleaning wipes, and tissues will be increased and maintained in all public and employee areas.

Cleaning crews must comply with Federal, State and Local guidelines when performing cleaning and disinfection. This includes, but not limited to, World Health Organization (WHO), Center for Disease Control (CDC), Occupational Safety and Health Administration (OSHA) Respiratory Protection Standard (29 CFR 1910.134), and OSHA 29 CFR 1910 Subpart I. All porous and non-porous materials are to be routinely cleaned and disinfected with an appropriate disinfectant solution identified in the attached documents from the United States Environmental Protection Agency (EPA), Center for Biocide Chemistry (CBC), or any other product with an EPA label that certifies its effectiveness against human coronavirus (**Appendix A**). BELFOR USA will maintain safety data sheets (SDS) for all products to be used. All accessible surfaces within the work area will be vacuumed (if necessary) and cleaned with prescribed disinfectant solutions.

1.1 Glossary of Terminology

- **General Population:** All individuals without reference to any specific characteristics
- **Hierarchy of Infection Prevention and Control Measures**: SARS-CoV-2 (agent causing COVID-19)-prevention and controls consistent of a combination of measures designed to minimize the risk of transmission within populations. A three-level hierarchy of controls comprising administrative

controls, environmental controls, and respiratory protection will help reduce and prevent risk of transmission.

  - **Administrative Controls:** Administrative Controls are the first and most important level of hierarchy. These are management measures that are intended to reduce the risk of exposure of people suspected-of or confirmed cases of COVID-19.
  - **Environmental Controls:** The second level of hierarchy is the use of environmental controls to prevent the spread of infectious airborne droplets and reduce their concentration.
  - **Personal Protective Equipment**: Also known as PPE. Equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. This includes but is not limited to respiratory protection controls. It is the third level of the hierarchy.

- **Respiratory Protection Program-** Respiratory Protection Program shall be followed in accordance with the BELFOR USA Respiratory Protection Program and 29 CFR 1910.134
- **Air purifier or air cleaner:** A portable electrical indoor device intended to remove, inactivate, or destroy potentially harmful particles from the circulating air.
- **Cleaning:** Refers to the removal of pathogenic viruses, bacteria, dirt, and impurities from surfaces. Cleaning does not kill pathogenic organisms, but by removing them, it lowers their numbers and the risk of spreading infection.
- **Disinfecting:** Refers to using chemicals to kill viruses on surfaces. This process does not necessarily clean dirty surfaces or removes viruses, but by killing pathogenic organisms on a surface after cleaning, it can further lower the risk of spreading infection.
- **Contact Surfaces:** Refers to porous and non-porous material surfaces where direct human contact may be made. **High contact** refers to those surfaces where human contact by hand, face, arm or aerosolized mucous or saliva may contact. These include, but are not limited to, handles, doorknobs, elevator buttons, handrails, keypads, computer mouse, telephone and headsets, thermostats, light switches, desk tops, counters and arm rests. **Low contact** refers to all other material surfaces where human contact may not exist, however, may be proximal to infected or potentially infected persons. These include, but are not limited to, flooring, walls, chairs, tables, stairs and light fixtures.

2.0 Enhanced Cleaning and Disinfection Procedures

- In addition to our routine cleaning, the following additional measures will be taken to enhance cleaning and disinfection activities areas normally subject to standard cleaning procedures[1].

2.1 High Contact and Low Contact Surfaces

- Regular cleaning of high contact surfaces in frequently inhabited areas should be completed every four hours. These community surfaces include but are not limited to doorknobs, lobby doors and door handles; elevator buttons, elevator car buttons, security desks, computer mice, computer keyboards, desk telephones, etc.
- The cleaning and disinfection staff should wear disposable medical-grade nitrile gloves when cleaning and disinfecting surfaces. Gloves should be discarded after each cleaning. If reusable gloves are used, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other purposes. Consult the manufacturer's instructions for cleaning and disinfection products used. Wash hands with soap and water for 20 seconds immediately after gloves are removed.
- If surfaces are visibly dirty, they should be cleaned using a detergent or soap and water prior to disinfection. These surfaces may include desktops, phone receivers, keyboards, door handles and arm rests on chairs.
- For cleaning and disinfection of high contact surfaces, use clean soft cloths liberally and replace the cloths once visible dirt and soiling has occurred. Do not use cleaning and disinfection cloths interchangeably. Discard as general waste in 6-mil polyethylene bags.
- Cleaning and disinfection of high contact surfaces should be performed in a manner from one starting point in a room and moving to the exit or transition point in the room. Cleaning and disinfection workers should work in teams with a purpose of "moving" across a room or space from one side to the other and clean from top to bottom. High contact surfaces will be cleaned and disinfected first in each room using a hand cleaning motion and ensuring all contact surfaces are adequately touched through the wiping process. Avoid excessive application of disinfecting solution that could damage electronic components, i.e. keyboards, headsets, thermostats, etc. Should the cleaning and disinfection cloths become excessive wet, discard the used cloth and replace with a new unused cloth. On-site industrial hygienist, or a qualified individual, should perform routine inspections of the cleaning and disinfection process to ensure completeness and compliance with the prescribed protocols.

[1] This protocol is not intended for use in sensitive areas of any facility not normally subject to janitorial services such as semiconductor manufacturing areas, server rooms, "clean rooms", etc.

- Cleaning and disinfection of low-contact non-porous surfaces may be performed using an electrostatic sprayer or aerosolized mister for broad application of flooring, walls, furniture and metal, ceramic, concrete and porcelain surfaces. Avoid liberal application of spray applications to prevent damage to electronics or physical damage to sensitive materials, i.e. dyeing fabrics.
- For disinfection, the use of an appropriate product, such as Bioesque Botanical Disinfectant, found in the attached documents from EPA (List N: Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2), Center for Biocide Chemistry (CBC), or any other product with an EPA label that certifies its effectiveness against human coronavirus will be used during the initial disinfection process. Products with EPA- approved emerging viral pathogens claims are expected to be effective against COVID-19 based on data for harder to kill viruses. Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, etc.).
- For soft (porous) surfaces such as fabric or other soft materials, remove visible contamination, if present, and apply an aerosolized spray of disinfecting solution to the fabric or soft materials. Allow a minimum contact time of 10 minutes before applying air movement to evaporate or dabbing with clean soft cloths to remove residual moisture.
    - Launder any linens or small rugs as appropriate in accordance with the manufacturer's instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely or use products with the EPA-approved emerging viral pathogens claims that are suitable for porous surfaces.

2.2 Re-usable Dishes, Utensils, or other Non-Porous Items

- Wear disposable gloves when handling dirty dishes and utensils and then discard after use. If using reusable gloves, these gloves should be dedicated for the cleaning and disinfection of surfaces. Wash hands for 20 seconds immediately after gloves are removed.
- If possible, don't aggressively remove excess material from the dish/utensil. When possible, submerge the dish or utensil in a hot soapy water bath to rinse all particles off.
- Once rinsed, wash the dish or utensils in accordance to applicable food sanitation requirements.

2.3 Re-usable Linens, Clothing, Uniforms, etc.

- Wear disposable gloves when handling dirty laundry or uniforms. If using reusable gloves, those gloves should be dedicated for cleaning and disinfection.
- Wash hands for 20 seconds immediately after removing or changing gloves.
- If possible, do not shake dirty laundry. This will minimize the possibility of dispersing the virus through the air, if present.

- Launder items as appropriate in accordance with the manufacturer's instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely. Dirty laundry from an infected person(s) can be washed with non-infected items.

2.4 HVAC System and Associated Ductwork

- Perform an initial cleaning and disinfection of all accessible return air intakes and grilles, supply-air diffusers and vents.
- Replace any air filters at the inception of this project with appropriate MERV-rated filters (if possible). Filters should be replaced every two weeks as a best practice.
- Clean the evaporator coils and condensate drain pan initially using an appropriate and approved coil cleaner to remove any accumulated debris, organic matter and sediment.

3.0 Personal Protection Equipment (PPE)

- All personnel cleaning under normal conditions will wear the appropriate PPE as required for the task and in accordance with the cleaning and disinfectant SDS. All applicable cleaning personnel shall be trained on the use and care of the PPE as required by the SDS.
- Cleaning and Disinfection staff should have the following PPE for proactive cleaning efforts in areas where no COVID-19 contamination is expected:
    - Medical-grade nitrile gloves
    - Goggles and/or clear face shields
    - Appropriate footwear that may be disinfected at the completion of each session.
    - Workers should follow BELFOR USA Respiratory Protection guidelines, and wear N-95 or equivalent protection at a minimum. However, half or full-face respiratory protection with P100 or HEEPA filtration is suggested.
        - All disposable N-95 respirators should be discarded at the completion of each cleaning and disinfection session
        - All non-disposable respirators (half and full-face) shall be cleaned prior to and after use using appropriate respirator cleaning wipes. P100 and HEPA cartridges shall be discarded at the completion of each cleaning and disinfection session
- Workers required to use PPE must be trained. This training includes when to use PPE; what PPE is necessary; how to properly don (put on), use, and doff (take off) PPE; how to properly dispose of or disinfect, inspect for damage, and maintain PPE; and the limitations of PPE. Applicable standards include the PPE (29 CFR 1910.132), Eye and Face Protection (29 CFR 1910.133), and Hand Protection (29 CFR 1910.138)

4.0 Special Considerations

- No third-party verification or oversite is required for implementation. This protocol is intended to provide guidance for proactive cleaning and disinfection efforts
- BELFOR USA must obtain a Certificate of Satisfaction from the customer to confirm work was executed in accordance to this protocol
- This document DOES NOT APPLY to suspected or confirmed COVID-19 cases at any facility. If COVID-19 is suspected or confirmed a site-specific protocol will be required.
- Bioesque Botanical Disinfectant Solution is an approved cleaning and disinfectant and can be found on thee CBC document in Appendix A

5.0 External References

- OSHA COVID-19
- CDC: Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 219 (COVID-19), February 2020
- OSHA COVID-10 Control and Prevention
- EPA Disinfectants
- Center for Biocide Chemistry