

# **SARS-CoV-2 / COVID-19 CLEANING & DISINFECTING SCOPE OF WORK**

## **Site Information:**

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610 Franklin Street  
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## 1.0 PURPOSE

This document provides a general outline of procedures for cleaning and disinfection (C&D) of surfaces potentially impacted with COVID-19 (C&D Plan). For these processes to be effective, workers should adhere to the cleaning and disinfection recommendations in this document, applicable Center for Disease Control (CDC), Massachusetts Department of Public Health (MDPH), Whitman/Hanson respective Board of Health (W/HBH), U.S Occupational Safety and Health Administration (OSHA), and to instructions on United States Environmental Protection Agency (EPA) COVID-19 approved registered disinfectant labels. These guidelines are focused on commercial settings and are not meant for the general public.

## 2.0 SITE SPECIFIC CONSIDERATIONS

The Whitman Hanson Regional School District (WHRSD) has contracted with a cleaning company to provide for the cleaning and disinfection of the schools and shall implement this specific Scope of Work. It is the cleaning company's responsibility to effectively implement cleaning procedures to attain desired cleaning and disinfection.

Each school's description and minimum areas to be included in the C&D Scope of Work, are as follows:

Schools Included:

- Whitman Hanson Regional High School
- Hanson Middle School
- Whitman Middle School
- Conley Elementary School
- Duval Elementary School
- Indian Head School
- This work is to be segregated into two distinct tasks, based on the areas being cleaned, as follows:
  - TASK 1: Cleaning and disinfection of all student and faculty areas; both High touch and Low touch areas
  - TASK 2: Cleaning and disinfection of all entry and egress areas used by building occupants including both High touch and Low touch areas.
- Task 1 C&D Activities are to take place working from the furthest areas from the egress(s) toward the egress(s).
- All elevators are to be included in the Task 2 C&D work.

The cleaning company shall provide all personal protective equipment (PPE) for all personnel and authorized site visitors, as needed.

## 3.0 DEFINITIONS

Cleaning: The removal of gross contamination, organic material, and debris from the premises or respective structures, via mechanical means such as: High Efficiency Particulate Air (HEPA) vacuuming and the use of water and soap or detergent (wet cleaning). The goal is to minimize organic material so disinfection can be effective. Cleaning does not kill germs, but

by removing organic material and debris, it lowers their numbers and increases the effectiveness of disinfection completed after cleaning.

**Disinfection:** Methods used on surfaces to destroy or eliminate a specific species of infectious microorganism through physical (e.g., heat) or chemical (e.g., disinfectant) means. A combination of methods may be required. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.

**Contact time:** the time that a disinfectant must be in contact with a surface or device to ensure that appropriate disinfection has occurred. For most disinfectants, the surface should remain wet for the required contact time.

**High-Touch:** High-touch surfaces are surfaces that are handled frequently throughout the day by numerous people. Examples of these surfaces include doorknobs, light switches, phones, hand rails, work stations/desks, keyboards, sink faucets, and toys. High-touch surfaces can become contaminated by direct contact with bodily fluids or through indirect contact with other contaminated objects, such as inadequately cleaned rags and sponges or improperly washed hands. Pathogens can remain viable on surfaces for varying amounts of time if they are not properly disinfected.

**Low-touch surfaces:** surfaces that are minimally touched by limited amounts of people throughout the day (e.g., walls, ceilings, floors).

**COVID-19:** Corona Virus Disease 2019 - A mild to severe respiratory illness that is caused by a coronavirus (Severe acute respiratory syndrome coronavirus 2 of the genus Betacoronavirus).

**SARS-CoV-2:** Severe Acute Respiratory Syndrome Coronavirus 2; the name of the virus responsible for COVID-19 disease.

#### 4.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

- When school personnel, or contractors wear PPE for cleaning, they should be instructed in the proper selection, wearing and use of gloves, safety glasses, etc. Contractors must be fully trained on, medically cleared to use and fit-tested to wear wear tight-fitting or N95 respirators.
- Minimum PPE for personnel engaged in C&D should include safety shoes, nitrile gloves, ventless goggle eye protection (or equivalent), and cloth face covering. Where available, a filtering facepiece respirator may be provided for voluntary use with proper training.
- Additional PPE may be required as listed on safety data sheets (SDS), product instructions, or other manufacturer product documents during the mixing and application of disinfectant solutions. If using concentrated products, prepare dilutions exactly in accordance with manufacturer instructions. Consult the manufacturer's instructions for specific disinfection products used.
- Wear disposable 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 SARS-CoV-2 and should not be used for other purposes, and should be dedicated to one job site.
- Wash hands with soap and water immediately after gloves are removed.

## 5.0 TRAINING REQUIREMENTS

The cleaning company retained by WHRSD is responsible for training their staff who perform cleaning and disinfection activities. The following items are suggested training requirements:

- PPE – Personnel should be properly trained in the proper selection, maintenance, storage and use of all required PPE for this type of work. That training should also include proper decontamination techniques and disposal of used PPE.
- While the exposure to human blood or other bodily fluids is not expected in the scope of work covered by this document, bloodborne pathogens training in accordance with 29 CFR 1910.1030 is recommended.
- SARS-CoV-2 / COVID-19 and/or infectious disease specific awareness training should be provided. This training should consist of potential exposure routes, signs and symptoms of exposure, health effects and specific measures and controls to minimize risk of exposure while conducting cleaning and disinfection.
- Hazard Communication training that includes information on how to read and understand the Safety Data Sheets applicable to this work and any cleaning or disinfection products used should be taken. It should also include the location of the written hazard communication program, and methods to protect oneself from these hazards.
- Where applicable, respiratory protection training in compliance with 29 CFR 1910.134 should be provided. For voluntary use of filtering facepiece respirators (such as N95), this would consist of giving personnel the information contained in Appendix D of this standard.

## 6.0 GENERAL GUIDELINES

- Conduct work in accordance with existing guidelines for cleaning and disinfecting relating to COVID-19 infections, as available by OSHA, CDC, DBH, or other widely recognized guidelines, as applicable.
- Employees who report for duty for C&D, and any contractors who enter a WHRSD school shall have their temperature taken and recorded at or near the entrance.
- All personnel should be trained on basic C&D/virus mitigation procedures, safety protocols, and briefed on the specific aspects of any COVID-19 incidences at the work site.
- Use a two-step process for C&D – i.e., remove surface dirt first, then disinfect.
- Wash surfaces and items with detergent. The washing process helps to further reduce the number of microorganisms and to remove any oil, grease, or biological residues that may inhibit the action of disinfection.
- After washing, all surfaces should be thoroughly rinsed, as residues from cleaners and detergent can inactivate certain chemical disinfectants.
- Alternatively, for items that have already been washed or are generally clean, a spray cleaner may be applied to the surface provided that it is followed by mechanical cleaning methods (e.g., wiping with a cloth).

- After cleaning, apply disinfectant from top to bottom and from back to front. The time a disinfectant is in contact with the surface is important and varies with the type of disinfectant. Carefully follow the specific instructions on the disinfectant label. Reapplication of disinfectant may be necessary to achieve the product label-indicated contact time. Disinfectants must be EPA List N registered, and applied in a manner consistent with the product label. There should be no exceptions to this.
- For soft (porous) surfaces such as carpeted floor, rugs, and drapes, remove visible contamination if present and clean with appropriate cleaners indicated for use on these surfaces. After cleaning, launder items as appropriate in accordance with the manufacturer's instructions using the warmest appropriate water setting for the items and dry items completely or use products with the EPA-approved emerging viral pathogens claims.

**USE ONLY DISINFECTANT PRODUCTS LISTED ON THE EPA APPROVED LIST, TITLED "List N: Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2".** The most up to date list of approved products can be found at the following website:

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

## 7.0 SPECIFIC PROCEDURES

### 7.1 ESTABLISHING THE C&D WORK AREA

Cleaning personnel should conduct C&D while areas are unoccupied. Use "wet floor" or similar signage where feasible to prevent students and faculty from entering active C&D work areas, including periods required for disinfectant contact time or drying.

### 7.2 CLEANING AND DISINFECTING (C&D)

- General Cleaning Procedures
  - All non-porous surfaces within each work area should be cleaned using a detergent or soap prior to disinfection to ensure disinfectant chemicals are able to fully contact surfaces. Wet mopping methods should be used on floors where possible.
  - Disinfect all surfaces within the schools after cleaning. Disinfection products with EPA-approved emerging viral pathogens are expected to be effective against SARS-CoV-2 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.).
  - Wet rags / towels with approved cleaning product, but do not saturate. Clean surfaces with moderate pressure, repeating process with clean cloths or rags to remove surface residues. Change rags/ towels often through process, do not use dirty rags/ towel as this will just spread / transfer dirt and biological matter from one surface to another.
  - High-touch surfaces should receive special attention. These include, but are not limited to, doorknobs, keyboards, phones, desks, light switches, hand rails, restroom fixtures, vending machines, etc.

- For porous materials such as carpeting and upholstered furniture, first clean utilizing HEPA equipped vacuums. Where necessary, clean porous building materials and furniture utilizing hot-water extraction techniques or steam cleaning when feasible. If hot water extraction is not feasible, the soft surfaces may be sprayed with an approved sanitizer that has EPA approved emerging viral pathogens claims that are suitable for porous surfaces.
- Non-porous surfaces should be disinfected using an approved SARS-CoV-2 – fighting product listed in hyperlink above. This includes a top-down disinfection of all vertical and horizontal surfaces. Surfaces should be clear of any dust, debris, or residue (i.e., pre-cleaned prior to disinfecting).
- Surfaces that are visibly dirty can be cleaned with an EPA-registered product that both cleans (removes germs) and disinfects (kills germs). Be sure to read the label directions carefully, as there may be a separate procedure for using the product as a cleaner or as a disinfectant. Disinfection usually requires the product to remain on the surface for a certain period (i.e. contact time), as specified in the product label directions. Contact time may vary depending on the intended use. Contractor shall ensure that proper contact dwell time is achieved, as specified by product instructions, prior to wiping if necessary.
- It may be helpful to periodically clean HVAC system components as follows.
  - Surface clean and disinfect all diffusers and return vents.
  - Establish a schedule for removal and replacement of HVAC filters.
- Equipment and Supplies
  - Equipment needs will vary according to the specific situation. It will be helpful to establish an inventory of dedicated equipment and supplies that will be stocked for C&D at each school. This may include, but may not be limited to: floor and wall mops, floor cleaning machines, C&D chemicals, PPE and an adequate supply of disposable clothes, sponges, wipes, etc. for surface cleaning.
- Waste Disposal
  - Place all waste materials from cleaning into sturdy waste bags. Twist/tie/close waste bags before removing them from the C&D work area. Cleaning waste will be properly handled and disposed of in the schools waste disposal dumpster each day.
- Deep Cleaning by an Outside Contractor

The contractor is responsible to prepare a site-specific Work Plan. The Work Plan is to be specifically designed to present the means and methods by which the contractor will conduct the work in accordance with this C&D Plan and applicable regulations and guidelines. Contractor C&D Work Plans should specify the equipment and supplies intended to be used. Such equipment may include, but may not necessarily be limited to, the following:

  - Specify the materials, supplies, and equipment necessary to perform the C&D methods recommended in the plan.
  - Identify general equipment and supplies needed for C&D. They are as follows:
    - Steam cleaning. Steam-cleaning equipment, water, as needed.

- Scrubbing. Brushes, extension handles, nonslip stepladders, detergent, water, mops, pumps, a collection system, and buckets.
- Vacuuming. HEPA vacuums, bags, filters.
- Mopping. Wet mops and wall / ceiling mops; note that mop heads must be discarded and replaced for each new functional area or job site. Chemical disinfection. EPA-registered or exempted disinfectants, mixing apparatus, test strips to measure strength, dispensing equipment, containment system for preventing environmental release of concentrated disinfectants, safety cabinets, tarps, sandbags or booms, pumps, containers, and other equipment required for collecting and properly disposing of used disinfectant solution.
- Provide the Safety Data Sheets (SDS) and product specimen label for the EPA registered products selected for use on this project. Substitution of alternative products is not permitted without authorization.
- Other equipment. Plastic sheeting (> 2 millimeters thick), long-handled scrubbing brushes, sponges, buckets, towels, heavy-duty plastic garbage bags, framing materials, sump pump, power supply, and drums.
- Identify means for acquiring difficult-to-obtain equipment.

### 7.3 DECONTAMINATION

- Equipment Decontamination: With the potential contamination of C&D equipment, wipe the equipment clean with detergent and water followed by sanitizer wipes on a routine basis and prior to removal from the C&D work area(s).

### 8.0 THIRD-PARTY VERIFICATION OF CLEANING ACTIVITIES

- TRC shall periodically conduct a visual inspection of the work area for visible dirt and residue, which will be re-cleaned by the Custodian/Janitorial staff where necessary to pass the visual inspection.
- ATP is a molecule that is present in all plant, animal and microbial cells where it is involved in cell processes. The ATP testing devices utilize an enzyme, called luciferase, which produces a bioluminescent light when it comes in contact with ATP. The amount of light produced is directly proportional to the amount of ATP present on the sampled surface. The amount of light produced is expressed numerically on the screen of the device in Relative Light Units (RLU).
- The linear relationship between the RLU reading and the amount of ATP present allows surfaces to be evaluated for cleanliness. A properly cleaned surface will have less ATP resulting in a lower RLU reading than a surface which was not cleaned or was cleaned improperly.
- By comparing RLU readings from various surfaces where swab samples are collected, evaluations of cleanliness can be made by comparing against pre-determined RLU limit criteria.
- ATP testing of representative high-touch and low-touch surfaces should be performed within functional spaces of restricted work area(s) for verification of general effectiveness of surface cleaning.



- Where possible cleaning verification testing of representative surfaces should occur after the cleaning step and before the disinfectant step of the overall process.

## 9.0 DISCLAIMER

The ability to detect and mitigate the spread of the virus COVID-19 is developing. TRC uses the latest technology in performing its testing services and developing recommendations. However, TRC does not warranty or guarantee that any test results can conclusively determine the complete decontamination of biological material from any areas tested or that the negative results of such testing will prevent exposure to biological contaminants. TRC shall not be liable for any losses, damages or liability of any kind arising from the test results, the use of the test results, or from biological contamination discovered after any testing done by TRC. Outside contractors are responsible for all OSHA and other local, state or federal regulatory compliance and no part of this scope of work may be construed as substituting for any applicable health, safety or environmental regulation. Any recipient of this document accepts sole responsibility and risk for the use of the information in this protocol.

## 10.0 REFERENCES

TRC utilized the following as guides in formulating the remediation recommendations provided in this report:

- Occupational Safety and Health Administration, *Guidance on Preparing Workplaces for COVID-19*, 2020
- Center for Disease Control and Prevention, *Coronavirus Disease 2019 (COVID-19) | CDC*
  - <https://www.cdc.gov/coronavirus/2019-ncov/index.html>
  - <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html>
  - <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html>
- Environmental Protection Agency, *Coronavirus Disease 2019 (COVID-19) | EPA*, <https://www.epa.gov/coronavirus>