



SOUTH CAROLINA
MANUFACTURING
EXTENSION
PARTNERSHIP

 **accelerateSC**

RETURN TO WORK

2020 Mitigation Plan Post COVID-19 for Manufacturers

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Introduction

The South Carolina Manufacturing Extension Partnership (SCMEP) offers this Return to Work Plan, as a response to COVID-19, to help guide business and industry in their effort to resume operations. The following plan is based on COVID-19 guidance and best practices as recommended by the Centers for Disease Control and Prevention (CDC), the Occupational Safety and Health Administration (OSHA) and the South Carolina Department of Health and Environmental Control (DHEC). This plan is available to anyone that seeks direction on employees returning to work. SCMEP gratefully acknowledges the Alabama Technology Network for their contribution to the development of this document.

The South Carolina Manufacturing Extension Partnership is a private, non-profit group that serves as a proven resource to South Carolina businesses, providing them with a range of innovative strategies and solutions. We exist to help small and mid-size companies compete, grow and win.

Connect with SCMEP

<https://www.scmep.org/coronavirus-covid-19-updates/>

**Coronavirus Updates & How to Prepare
COVID-19 Emergency Supply Portal to Connect Providers
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Additional Resources/Information**

Legal Disclaimer

The purpose of this document is to suggest ideas you may wish to consider as your business/ industry moves towards reopening in the wake of the COVID-19 pandemic. There is no one size fits all solution. Before implementing any of the ideas suggested in this document you should evaluate and independently determine, with the assistance of your legal counsel, the legality and effectiveness of the potential application of the suggestion to your particular circumstances.

The intent of this document is to provide ideas for your independent consideration only. SCMEP accepts no responsibility for any result, or circumstances, arising from, or related to your decision to put to use or not use any idea suggested herein. This is a living document which is subject to revision or further development at any time.

To educate business and industry on suggested return to work protocols and procedures.

1. Scope

- To set expectations for employee behaviors that will help mitigate risk at work and at home
- To provide information and resources to help mitigate risk in the workplace

2. General Overview

- Objectives
- Resuming Operations
- PPE (Personal Protective Equipment) Disinfection Protocol
- Self-Distancing
- Monitoring
- Procedures for Suspected Infection
- Signage
- References
- Return to Work Checklist

To protect the health and wellness of each employee and visitor.

a. Implement Measures

- Manage shift changes and stagger lunch breaks to allow time to thoroughly disinfect common areas and promote social distancing
- Install hand sanitizing dispensers
- Establish guidelines for frequent cleaning on overly used surfaces and common areas
- Place signage throughout facilities to remind employees of proper preventative measures

b. Establish Disinfection Protocols (Reference Disinfection Protocol on page 12)

- Disinfection measures are put in place based on frequency to disinfect workplace surfaces, chairs, tables, etc. and protect employees (WHO Workplace Ready)
- Completely sanitize and disinfect facilities
- Disinfection protocol will be followed regularly
- Deep-cleaning and disinfection protocol is triggered when an active employee tests positive for COVID-19 by a medical doctor
- Maintain the cleaning standards

c. Establishing Social Distancing Procedures (CDC)

(Reference Self-Distancing on page 13)

- Social distancing is an effective method that helps prevent the spread of the virus
 - Staying at least 6-feet from others
 - Eliminating physical contact with others, such as handshakes, embracing coworkers, visitors or friends
 - Avoid touching commonly used surfaces
 - Avoid individuals that appear ill

d. Establish a protocol to monitor employee wellness and for employees to follow who are feeling ill

- Determine method of determining employee health status
 - o Employee self-screening protocol
 - o One-site wellness check
 - ◆ Establish policy and determine how to handle confidential employee health data
- Determine policy for handling potentially sick employees
- Self-quarantining and Return to Work Protocol
- Visitors and on-site Contractors policy
- Return to Work protocol

If a facility has been vacant for over seven days, the need for a deep clean is minimized. The longest the virus can live on a hard or soft surface is five days. (See diagram below)

HOW LONG COVID-19 LIVES ON SURFACES

<p>Aluminum</p> <ul style="list-style-type: none"> • Soda Cans • Ladder • Computer Parts <p>2-8 Hours</p> <p>2-8 Hours</p>	<p>Cardboard</p> <ul style="list-style-type: none"> • Boxes • Paper Towel Rolls • Toilet Paper Rolls <p>1 Day</p> <p>1 Day</p>	<p>Ceramics</p> <ul style="list-style-type: none"> • Mugs • Dishes • Pottery <p>5 Days</p> <p>5 Days</p>	<p>Copper</p> <ul style="list-style-type: none"> • Coins • Plumbing Parts • Wires <p>4 Hours</p> <p>4 Hours</p>	<p>Glass</p> <ul style="list-style-type: none"> • Windows • Mirrors • Phone Screens <p>Up To 5 Days</p> <p>Up To 5 Days</p>
<p>Metal</p> <ul style="list-style-type: none"> • Doorknobs • Tools • Sinks 	<p>Paper</p> <ul style="list-style-type: none"> • Magazines • Copy Paper • Notepads 	<p>Plastics</p> <ul style="list-style-type: none"> • Elevator Buttons • Hard Hats • Safety Glasses 	<p>Stainless Steel</p> <ul style="list-style-type: none"> • Water Bottles • Refrigerators • Tools 	<p>Other</p> <ul style="list-style-type: none"> • Office Furniture • Doors • Pencils

If a facility has not been closed and/or vacant for seven days, the following surfaces should be cleaned:

a. All hard surfaces including:

- Doorknobs
- Light Switches/Machine Switches
- Tables
- Counter Tops
- Faucets/handles
- Handrails
- Desks
- Keyboards
- Phones
- Tools
- Screens
- Water Fountains
- Toilets
- Sinks
- Towel Dispensers
- Material Handling Equipment
- Machine Controls
- Time Clocks
- Turnstiles
- Common Area Objects
- Vending Machines

b. Soft surfaces such as chairs and carpet

c. HVAC filters should be cleaned, disinfected or replaced

2. The company, or a contract service, should clean with soap and water followed by disinfecting with one of the following:

- Diluted household bleach solution ((1/3 cup bleach to 1-gallon water)
- Alcohol solution that is at least 70% alcohol
- EPA Registered Household Disinfectant (CDC Disinfecting Business Facility)

3. Before work begins, each employee should be informed of the following:

- How the initial cleaning was completed
- How to protect oneself on a daily basis
- How to clean each workspace throughout the day
- Protocol for an employee testing positive for COVID-19 (see CDC guidelines)
- Who to contact if they are feeling ill, or suspect they may be ill.

In addition to the normal everyday PPE, the company should consider additional face, respiratory and/or clothing protection for the following:

1. Respiratory protection/masks issued to: _____

- Deep Cleaning Staff
- First Responders
- Employees with Broad Exposure
- Cafeteria Workers
- Security Guards/Receptionists
- Shipping/Receiving Employees
- Employees Working Closer than 6-Feet (pg. 13)

NOTE: National Institute for Occupational Safety and Health (NIOSH)-approved, N95 filtering facepiece respirators or better must be used in the context of a comprehensive, written respiratory protection program that includes fit-testing, training, and medical exams. See OSHA's Respiratory Protection standard, 29 CFR 1910.134 at www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134.

2. Face Shields _____

- First Responders

3. Gloves made of latex, nitrile or vinyl issued to: _____

- First Responders
- Respective personnel when recommended by the cleaning/disinfecting product being used

NOTE: The CDC has indicated that gloves do not protect individuals against COVID-19 because the virus does not enter the body through the hands. Thorough handwashing is recommended.

4. Disposable gowns issued to: _____

- Deep Cleaning Staff
- First Responders

Guidance for disinfection of hard nonporous surfaces is to use a one-part household bleach to ten-part water solution (10% chlorine bleach solution). You may also use five (5) tablespoons per gallon, or four (4) teaspoons per quart. The solution must be made daily* and left on a surface to clean for a minimum of five (5) minutes. A list of alternative household disinfectants can be found on the Environmental Protection Agency (EPA) website. The EPA manages pesticide registration which includes List N: Disinfectants for the use Against SARS-CoV-2 (COVID-19).

The following information is provided for each disinfectant: _____

- EPA Registration Number Active Ingredient(s) Product Name
- Company (Manufacturer)
- Directions to Follow for Comparable Virus Type
- Contact Time – Minutes the Surface Should be Treated, Visibly Wet to adequately disinfect.
- Formulation Type
- Surface Types for Use – Porous and Nonporous Use Site – Where the Disinfectant May be Used
- Emerging Viral Pathogen Claim – If yes, it is effective against a harder-to-kill virus than human coronavirus
- Date Added to List N

1. Responsibility of the Employee

- a. To understand expectations, limitations, and processes for the responsibilities for decontamination
- b. Exercise sanitary practices by limiting direct touching of objects, equipment and surfaces in common areas
- c. Practice good personal hygiene
 - Self-clean work areas before break, lunch and end of shift
 - Wash hands multiple times a day with warm water and soap for at least 20 seconds
 - Cover coughs, maintain social distancing and clean items that are touched in common areas

NOTE: Bleach rapidly degrades in the presence of light and when mixed with water, thus the requirement to make fresh disinfectant solutions on a daily basis.

2. Responsibility of the Company

- a. Train employees on decontamination expectations, including frequency, methods and safety precautions
- b. Develop a protocol for decontaminating machinery/equipment, common areas, offices and other occupied areas
- c. Ensure adequate supply of approved decontamination materials and appropriate PPE
- d. Properly dispose of materials and PPE used for decontamination
- e. Clearly define cleaning responsibilities as expected for employees, janitorial staff and contract cleaners.
- f. Prevent shaking of clothes, and appropriate PPE, to reduce the risk of contamination. Wash in accordance with manufacturer’s recommendations using warm water and drying completely. Potentially use a disinfectant from EPA’s List N. Special consideration should be given for certain items, such as flame-resistant clothing.

Sample Cleaning Chart

Area	Designated Responsibility Party	Signature	Decontamination Agent	Contact Time	✓	Frequency	
Desk/Office	Individual Employee		Appropriate diluted bleach solution or another agent from List N (See Above)	List agent corresponding time according to List N		Twice a day, prior to lunch, and end of day	
Work Area	Individual Employee						Prior to breaks and lunch. At end of day.
Common Areas	Cleaning Crew						Before and after occupancy (i.e., meetings, breaks, lunch)
Isolation Area	Cleaning Crew						After each occupancy

3. Emergency Procedures

Reference Procedures for Suspected Infection on page 18

Self-distancing, also known as social distancing, is one of the primary ways to avoid contracting a virus or contamination. It is imperative that employees maintain proper self-distancing, as recommended by the CDC and other health organizations. A minimum of 6-feet (2 meters) should be maintained between employees, at all times, even when workers are wearing protective equipment. Recommendations include to avoid gathering in groups, entering crowded areas, carpooling with others that live outside of the home, hugging, shaking hands, eating face-to-face and similar activities that would put individuals in close proximity and would increase the risk of contamination. (CDC Social Distancing Guidelines)

Prior to resuming operations, duties that require employees to work within 6-feet of each other should be evaluated for potential health and wellness risks, and appropriate steps taken to limit exposure.

The following instructions are established to help maintain proper self-distancing: _____

1. Workstations

- a. When possible, remain isolated
- b. When possible, maintain 6-feet of separation between workers at all times
- c. Companies should ensure that desks are not facing each other unless guarded by a cubicle wall or other similar barrier
- d. When possible, designate one-way walking paths to and from workstations to avoid close proximity of co-workers including offices, warehouses, storage areas or similar area where traffic is common
- e. Duties that require employees to work within 6-feet of each other, or if workstations do not allow 6-feet of separation, consider the following:
 - Use barriers such as plexiglass, cardboard, plyboard or other similar barriers
 - Engineering controls should be considered prior to work beginning, including the option of eliminating duties, if possible, until the outbreak has subsided
- f. Redesigning jobs to allow duties to be completed by one person, introducing tools to assist with jobs that allow 6-feet of distance or any other option that allows work to be completed while maintaining a 6-feet distance
- g. If work cannot be redesigned, employees should be provided with any personal protective equipment that are be deemed essential to protect the health of each employee
- h. Immediately following duties that require work of close proximity, all employees involved should properly remove PPE without touching the outside of the PPE, wash hands thoroughly for a minimum of 20 seconds and, when necessary, wash arms and face. If soap and water are not readily available for handwashing, use a hand sanitizer that contains at least 60% alcohol, covering all surfaces of your hands and rub them together until they feel dry. Avoid touching eyes, mouth and nose with unwashed hands

NOTE: A minimum of 60% and 70% alcohol-based solutions are recommended by the CDC: The 60% alcohol solution is for cleaning hands and personal hygiene, whereas the 70% solution is for cleaning surfaces, equipment, tools and any other work-related area or item.

- i. Discourage workers from using other worker's phones, desks, offices or other work tools and equipment, when possible
- j. When equipment is shared, such as powered industrial trucks, ladders, rolling carts, copy machines and computers, the operator should be required to properly disinfect equipment using the Disinfection Protocol on page 11
- k. Prior to shift changes, the employee should be required to properly disinfect the workstation and all components prior to leaving the work area, using the Disinfection Protocol on page 11
- l. Maintain the 6-feet of distance with outside personnel, including: those making deliveries, such as truck drivers, parcel workers, post office personnel, contractors or other individuals coming on-site. To maintain proper distancing, the following instructions should be followed:
 - Do not receive items directly from delivery personnel. Rather, allow the driver to place items down and back away prior to pick up
 - If the use of a dolly or hand truck is required by delivery personnel within the facility, ensure it is disinfected properly and thoroughly using the Disinfection Protocol on page 11
- m. During training, or meetings, a minimum distance of 6-feet should be maintained by employees
- n. Employees should not sit directly across from one another

2. Break Rooms

- a. Employees should maintain proper self-distancing
- b. Employees should not sit directly next to, or across from, one another
- c. Minimize the need for touching objects such as vending machines, coolers, refrigerators and other commonly shared breakroom items
- d. If a breakroom item is touched, the employee should wash hands and/or use hand sanitizer
- e. Maintain proper breakroom cleanliness per the Disinfection Protocol on page 11
- f. When possible, use separate doors to enter and exit the breakroom to avoid close proximity with other employees

3. Lunch Area/Cafeterias

- a. Breakroom guidelines apply
- b. Food service personnel should wear masks and approved gloves at all times while serving
- c. Self-service of buffet-style foods should not be allowed

4. Restrooms

- a. Social distancing guidelines should be maintained in restrooms, including waiting in line
- b. All employees should thoroughly wash hands when finished
- c. Restrooms cleanliness should be maintained, including the disposal of paper products and completely flushing toilets
- d. If possible, restroom doors should be kept open to avoid repeated contact by employees
- e. If possible, restrooms should have pathways designated to avoid putting employees in close proximity with one another

5. Shift Changes

- a. Employees should not congregate in parking lots or other areas prior to or after work shifts
- b. Facilitate 6-feet of distance between employees while entering and exiting the facility
- c. If possible, one-way entry and exit pathways are recommended to avoid face-to-face encounters
- d. The entry and exit doors, as well as any other interior doors deemed necessary, should remain open during shift changes to avoid employee contact
- e. Avoid directly touching the time clock, use items such as gloves or personal-use stylus (stylus or ink pen with stylus tip, assigned to the employee only for his/her use)

One of the difficulties with COVID-19 is the long incubation phase - the period from initial infection until the onset of symptoms. An individual can be harboring the virus inside his or her body and not know it; during which time, it is possible to spread the virus to others. (CDC Protecting Yourself and Others)

1. Self-Screening at Home

One of the most vital aspects of detection involves self-screening. In order to adequately communicate these procedures to employees, the employer may issue a self-screening checklist for all employees for voluntary, home self-screening prior to returning to work. (CDC Guidance for Business Plan and Response)

The screening should consist of the following questions:

1. **Do you have a temperature of 100.4 Fahrenheit or greater?**
2. **Do you have a cough?**
3. **Are you experiencing a shortness of breath?**
4. **Are you having difficulty breathing?**
5. **Are you experiencing unusual fatigue?**

If the answer to any of these questions is “Yes”, employees are requested to stay at home until ALL THREE of the following are true:

- It has been at least seven days since their symptoms first appeared,
- They have been fever-free (temperature less than 100.4 Fahrenheit using an oral thermometer) for at least 72 hours (three full days) without taking medication such as acetaminophen or aspirin to reduce fever
- Other symptoms such as cough or shortness of breath are gone

NOTE: Employers should not require a positive COVID-19 test result or a healthcare provider’s note for employees who are sick to validate their illness, qualify for sick leave, or to return to work. Healthcare provider offices and medical facilities may be extremely busy and not able to provide such documentation in a timely manner.

<https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>

2. Observations of Symptoms at Work

If an employee observes a coworker exhibiting symptoms of the virus, the symptomatic employee should be instructed to report to the designated individual per the company's policy. The employer may:

- Send the employee home and ask them to self-monitor for fever, symptoms and seek medical assistance if needed

3. Monitoring by Employer

Many companies have begun to monitor employee health at the facility's entrance. Should you plan to implement such a practice, consult with your legal council and develop a written protocol that includes the following:

- a. Who will be responsible to monitor symptoms of individuals entering the facility
- b. How to monitor/screen employees
- c. How to secure employee health data

Employers should assess hazards that employees may be exposed to; evaluate the risk of exposure; and select, implement and ensure employees use controls to prevent exposure. Control measures may include a combination of engineering and administrative, safe work practices and PPE.

1. Identification & Isolation

a. Identification and isolation of potentially infectious individuals is the critical first step in protecting workers, visitors and others. If an employee is confirmed to have COVID-19 infection, employers should inform fellow employees of their possible exposure to COVID-19 in the workplace but maintain confidentiality as required by the Americans with Disabilities Act (ADA). The employer should instruct fellow employees about how to proceed based on the CDC Public Health Recommendations for Community-Related Exposure

<https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>

- b. Immediately isolate individuals suspected of having COVID-19, which may be any location away from others, ideally an isolated area with closed door
- c. In a watercraft, aircraft or other confined space, without compromising safety, move potentially infectious individuals away from passengers and crew
- d. Take steps to limit the spread of the individual's infectious respiratory secretions, including providing a facemask or other facial covering
- e. Restrict the number of individuals entering isolation areas
- f. Protect employees in close contact with sick individuals by using additional engineering and administrative controls, safe work practices and PPE

2. Following Isolation

Isolated individuals should leave the work site as soon as possible depending on the severity of the individual's illness.

- o May be able to return home
- o May choose to seek medical care

3. PPE for Responders

Guidance for PPE use for medical response personnel is addressed by the CDC for personnel in medical facilities. (CDC Guidance) Any reusable PPE should be properly cleaned, decontaminated and maintained after and between use. Facilities should adopt procedures and perform a job safety analysis for addressing COVID-19 exposure. The PPE recommended when caring for an individual who has tested positive or is suspected to have COVID-19 includes:

- Respirator or Facemask: If the company has an OSHA compliant respirator program, a N95* respirator, higher-level respirator, or facemask should be worn before entry into an isolation area. Higher level respirators include other disposable filtering facepiece respirators, PAPRs or elastomeric respirators.
 - o Reusable respirators should be cleaned and disinfected according to manufacturer's reprocessing instructions prior to reuse
 - o Cloth face coverings are not PPE and should not be worn for the care of sick individuals.
- In the event that the company's safety program does not include respirators, then disposable facemasks or face shields are recommended at a minimum.
- Disposable respirators and facemasks should be removed and discarded after exiting the isolation area and closing the door
- Perform proper hand hygiene after removing the respirator or facemask or shield.

NOTE: See guidelines for respirator use under Respiratory Protection on page 10.

a. Eye Protection

- Use eye protection that covers the front and sides of the face upon entry to the isolation area. Personal eyeglasses and contact lenses are not considered adequate eye protection
- Remove eye protection upon exiting the isolation area
- Reusable eye protection should be cleaned and disinfected according to manufacturer's reprocessing instructions prior to reuse. Disposable eye protection should be discarded after use unless there is a shortage of PPE and protocols are in place for extended use

b. Gloves

- Use clean gloves upon entry into the isolation area change gloves if they become torn or heavily contaminated
- Remove and discard gloves when exiting the isolation area, and immediately perform proper hand hygiene

c. Gowns

- Use a clean gown upon entry into the isolation area. Change gown if it becomes soiled. Remove and discard gown in a dedicated waste container exiting upon
- Disposable gowns should be discarded after use. Cloth gowns should be laundered after each use
- Facilities should work with their health department and healthcare coalition to address shortages of PPE. The CDC website also addresses extended use of equipment due to PPE shortages

4. Environmental Cleaning and Decontamination

Maintaining base standards of cleanliness is of paramount importance. When individuals touch a contaminated surface and then touch their own eyes, nose or mouth, they may expose themselves to the virus.

Signage is an inexpensive measure that can be used to help convey important information. Below are some ideas on how to create your own signs and examples of signs that you can print for free. Signs in multiple languages are available for downloading on the CDC website.

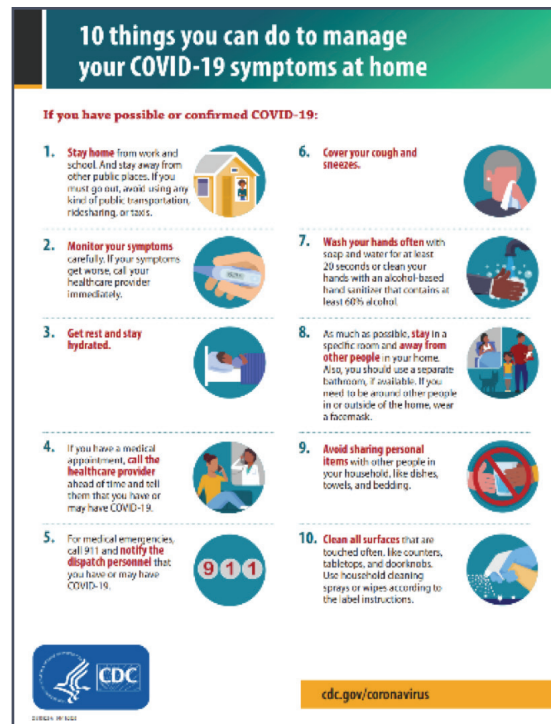
1. Facility Sign Type

- a. Letter size
8.5" x 11" /A4
Orientation portrait (vertical)
Material: regular paper
- b. Poster Size
30" x 40" /76cm x 100 cm
Orientation portrait (vertical)
Material: foam core

2. Location Suggestions

- a. Outside exterior doors
- b. Cafeteria entrances
- c. Inside exterior doors
- d. Outside bathroom doors
- e. Inside bathrooms
- f. Any traffic area

3. Signage examples from online-sign.com, printablesigns.net and the CDC



- <https://www.cdc.gov/coronavirus/2019-ncov/downloads/10Things.pdf>
- <https://www.cdc.gov/coronavirus/2019-ncov/downloads/sick-with-2019-nCoV-fact-sheet.pdf>
- <https://www.cdc.gov/coronavirus/2019-ncov/downloads/2019-ncov-factsheet.pdf>
- <https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs.pdf>

South Carolina Department Health and Environmental Control (DHEC)

<https://www.scdhec.gov/environmental-regulatory-assistance-covid-19>

Centers for Disease Control and Prevention (CDC):

<https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>

<https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/disinfecting-your-home.html>

Environmental Protection Agency:

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

Online Signs:

CDC Printable flyers: https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html?CDC_

www.printablesigns.net

Occupational Safety and Health Administration (OSHA):




<https://www.osha.gov/Publications/OSHA3990.pdf>

WebMD:

How Long Coronavirus Lives on Surfaces: <https://www.webmd.com/lung/how-long-covid-19-lives-on-surfaces>

World Health Organization (WHO)

Advice For Public: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>

-  Cleaning crew received training about the disinfection method and frequency
-  10% chlorine bleach solution (sodium hypochlorite solution) made daily, used when appropriate
-  Cleaning conducted on all common work surfaces, offices, and conference rooms
-  Cleaning conducted in break areas (dispensers, vending machines, etc.)
-  Cleaning conducted in all company vehicles and equipment
-  Cleaning conducted on floors, walls, multi-use areas, and restrooms
-  Clean, disinfect or replace HVAC filters
-  Social distancing protocol in place to prevent close proximity of employees