

TECHNICAL GUIDELINES

PREVENTING THE SPREAD OF COVID-19
IN MANUFACTURING INDUSTRIES

v 1.0 - 21/05/2020





PURPOSE OF THIS GUIDANCE


The purpose of these COVID-19 guidelines are to highlight additional control measures required to be taken by manufacturing industries/factories in order to promote the safety of their employees, visitors and contractors by adopting suitable prevention and protection measures.

With the rapid spread of COVID-19, it is essential to ensure that the workplace is prepared to be safe enough for entry, as well as for the start of operations without any adverse effect from this viral infection. If the virus is found to be spreading inside the premises, the consequences could be very serious.

OBJECTIVE

The government agencies including the Ministry of Health and the National Operation Centre for Prevention of COVID-19 are drafting and implementing various strategies to reduce the rapid spread of COVID-19. The recent lockdown and partial release/exemptions may bring immediate relaxation to business and domestic requirements. However, stopping the potential spread of COVID-19 is of paramount importance, and calls for strategic control in the prevention of such a spread inside the building or office.

The basic objectives include;

- Providing operational planning guidance for Building Management or the Facility Management in managing the COVID-19 outbreak.
 - Providing appropriate guidelines on infection prevention and control of the building users including occupants, employees, visitors and contractors.
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GENERAL INSTRUCTIONS

The only way to prevent people from getting infected with COVID-19 is to control its spread from one person to another. And that can be done by following proper personal hygiene, social distancing and by disinfecting surfaces and touchpoints.

In addition to this, the instructions listed below will also assist in the conditioning of the workplace.

- Management should form a COVID-19 response team to implement these guidelines and the government advice or guidelines as released from time to time.
- This team should be responsible for identifying key areas, key physical touchpoints where cleaning and disinfection are to be carried out, identify locations of sanitizers such as hand wash with soap, alcohol disinfectants etc., maintain inventory with sufficient safety stock on PPE, disinfectant etc., provide information to workforce, contractors, visitors etc.
- Training and Orientation should be scheduled, delivered and evaluated on the effectiveness towards the prevention of, and protection from COVID-19. Related posters should be prepared, printed and displayed elsewhere suitably.
- The factory should have a gap of one hour between shifts and will stagger lunch breaks of staff, to ensure social distancing.
- Management should revisit the medical insurance of the employees to make sure all are adequately covered.
- The employees should not leave home if flu-like symptoms, such as cold, fever, cough are present and should be in self-quarantine while seeking medical attention immediately.
- If anyone at home has a suspected case of COVID-19, they must strictly follow social distancing and should stay at home in self-quarantine. Immediately call authorities and inform (1390 or 1990).
- Hand wash facility with soap and sanitizer, preferably with a touch-free mechanism should be made available at all entry, exit and common places. Should ensure refilling of the container at frequent intervals. Relevant guiding posters should be displayed at these places.
- The hand sanitizer should contain at least 60% alcohol. Apply the sanitizer and rub together all surfaces of the front and rear of the palm until they feel dry. However, if the hands are dirty, it is recommended to wash the hands with soap first and then use hand sanitizer, if required.
- Wash hands often with soap and water for more than 20 seconds especially after blowing your nose, coughing and sneezing.
- Do not touch eyes, nose and mouth with unwashed hands.
- Give up shaking hands with people. Instead say Ayubowan, Wanakkam or As-salamu Alaykum which is the traditional Sri Lankan greeting.
- Do not touch anyone's belongings.
- Spitting in public spaces should be prohibited.



THE ROLE OF FACTORY MANAGEMENT TO FIGHT THE SPREAD OF COVID-19

Management should ensure below requirements are complied with within the facility. The workers should be adequately made aware on these.

Improving facilities at the factory premises to suit the current requirements.

- Adequate handwashing facility with water & soap facility to be made available. Alcohol-based sanitizer should be made available in addition to washing with water and soap and not as a replacement for washing. This facility should be provided at all entry points, at the entrance of different buildings or sections, cafeteria, washrooms, service areas and utility areas etc.
- Entry should be denied for anyone who shows flu-like symptoms or has a temperature above 37C. Thermal scanning should be done during exit also.
- The number of staff coming to office should be cut down to a minimum as specified by the government regulations or by the management while considering social distancing for every shift.
- Permission for visitor entry should be granted only by section heads.
- Everyone has to sanitize their hands before entering the reception. Sanitizer bottle should be provided at the reception.
- Gathering of staff members or visitors in common areas, such as corridor, entry gate, reception, cafeteria should be prohibited. Suitable guidance posters should be displayed at such places.
- Group discussions should be discouraged. No such discussion should be allowed for more than 5 people. In any gathering, a distance of 1m is mandatory.
- Non-essential travel should be prohibited. All previously said sequences should be applied if anybody goes out and returns to office.
- Remind not to sneeze in their palms, a personal handkerchief or elbow should be used. Posters relating to such guidance should be displayed elsewhere.
- Workstation set up should be redesigned in such a way that there is a 1m distance between two employees every time.
- In the cafeteria, arrangement for individual sitting with a 1m gap should be made. Group lunch or luncheon meetings should be prohibited.
- Lift floor (Inside) should be marked to indicate where people have to stand. Or display notices reminding self-distancing.
- At places where the formation of a queue is unavoidable, for example food counters, security entry gate or at wash room entrances, the floor should be marked to indicate where to stand in order to maintain safe distance.



Managing the risk of COVID-19 spreading while the employees commute from their home to the factory.

Concerns on commuting in company-provided vehicles:

- One attendant should be dedicated for each vehicle to ensure the practice of Safe Distancing and health surveillance of travellers.
- The attendant should be provided with protective equipment, such as surgical masks and disposable gloves.
- Attendant should take the reading of the temperature of staff prior getting in the vehicle.

- In case anyone shows flu-like symptoms (fever, cold and cough) and has a temperature above 37C, they should be denied entry into the vehicle. Commuting employees are expected to cooperate on this and not to indulge in argument.
- The sitting chart should be displayed inside the vehicle, which indicates how many people are allowed inside the vehicle and which seats should be occupied.
- All people should maintain a safe distance of 1m from one another while getting in/out of vehicle.

- During the journey, the travellers should be continuously reminded not to touch their face, eyes or mouth.
- After getting down, all should be reminded to sanitize their hands.

Other transport methods:

- Should adhere to the guidelines given by the government on travel in public transport.
- Should not forget to wear a suitable face mask and refrain from touching their face, nose or mouth.

Entry to Buildings – Important Things

- Clear instructions and facilities should be available to clean hands, shoes and vehicle tires at the entrance.
- Everybody including Visitors and Contractors should fill the COVID-19 self-screening checklist (to be available at the reception). The declaration should also include family members' health status. The forms should be prepared, printed and placed with the receptionist.
- Forbid anybody, entry of visitors and contractors (also workmen) who have had known exposure to

persons with COVID-19 within the past 14 days, or who are exhibiting symptoms of illness consistent with those of COVID-19. The isolated person should be referred to the nearest hospital for preliminary screening immediately.

- All the persons entering should be permitted inside with surgical or suitable masks only.
- All should be instructed to maintain social distancing of 1m at all times (site meeting, tea time, lunchtime, gate entry time and drinking water or in service areas).

- Wash hands with soap for a minimum of 20 seconds. Hand Sanitizers (alcohol-based) should be made available at all entrances.
- Evaluate feasibility of providing disposable shoe covers while entering the premises or disinfecting the shoe soles with a 1% sodium hypochlorite solution. If shoe covers are used, care should be taken not to get the users contaminated while removing or changing the cover.

Attendance System

Bio-metric swiping (Finger scan) for attendance should be temporarily discontinued.

Alternate arrangements for attendance registration should be made.



At the working area or the working spot

- Hand wash and hand sanitizing facilities should be available.
- Work at your work-station or the spot only.
- Do not let anyone else use your computer, workbench or work station.
- Chair should be assigned to individuals. Do not exchange with anyone.
- Everyone has to disinfect his/her desk, keyboard, chair handle, drawer with disinfectant solution provided. Disinfection should be done every 2 hours or as frequent as possible and if potential droplet dispersion occurs upon cough or sneeze.
- Wash hands frequently.
- Do not touch face or eyes.
- Avoid group gatherings in the office or factory.
- For any meeting, ensure a distance of 1m.
- Group lunch should be prohibited in the cafeteria. Use your place in individual sitting arrangements to have your food.

Change Rooms

- Adequate water to wash hands with soap to be made available. Alcohol-based sanitizer should be made available in addition to washing hands with soap and the sanitizer should not be considered as a replacement.
- Restrict the time of access during Entry and Exit time.
- Re-assign lockers to ensure distancing by each employee groups' start time.
- Ensure proper social distancing during shift changes. Posters could be displayed on this requirement at the vicinity of the locker room and changing area.

Safety of Field Operations

- Adequate wash hand facility to be made available. Alcohol-based sanitizer should be made available in addition to washing hands.
- In addition to mandatory and typical PPE, be concerned to avoid oral droplets falling onto nearby employees and ensure respiratory hygiene at all times.
- Avoid or minimize in-person communication, use walkie-talkies or the PA system instead.
- Ensure social distancing wherever more than one operator or technician is required.
- Sanitize common touchpoints (e.g. valve handles, control switches, walkie-talkies, PA systems, telephones, electrical switches, door handles & hand-rails etc.) as frequent as possible using a suitable disinfectant.
- All handheld tools, equipment, machines and other facilities with employee contact (e.g. Material handling equipment) to be disinfected and cleaned before & after operation.
- Limit maintenance activities only to the most required and critical equipment and essential repairs required to ensure reliability and safety. Use risk-based inspection and analysis programs to prioritize preventative maintenance activities.
- Encourage the use of smart devices and cameras to monitor in-field conditions considering the limited number of onsite personnel. Such monitoring should be done by responsible staff members.
- Always manage the workload without causing fatigue in the limited workforce available. So decide on the most critical activities rather than trying to do everything.



Control Room and factory office safety

- Alcohol-based sanitizer should be made available in addition to washing hands with soap.
- Wear at least a surgical mask to avoid oral droplets onto nearby employees and ensure respiratory hygiene at all times.
- Disinfect the laptop/desktop/control stations before and after every shift operation.
- Try to arrange seats with an adequate social distance (1m).
- Minimize shift overlap period.
- Use own cups and water bottles - avoid common water bottle/cups /glasses etc. Do not touch other tables or chairs unnecessarily.
- Disinfect common touchpoints (e.g. tables, desktop, keyboard, walkie-talkies, printer, telephone, electrical switch, door handles & similar things) frequently.
- Encourage the use of smart permits in place of paper-based permit system with strict vigilant maintained on field conditions. Android or similar OS based apps could be developed to apply to above requirement.
- In wake of online access to information and virtual communication, ensure barriers are in place against cybersecurity threats and are monitored periodically.
- Anticipate employees being on sick-leave or unavailable due to 'self-isolation' and identify back-ups for key roles. Consider how people in self-isolation can work remotely on other tasks to take the workload off those that are at the job site.
- Team quarantine conditions could also be anticipated and a replacement plan should also be prepared.

When the staff is ready to leave

- Their work-station should be disinfected.
- They should wear their mask.
- They should not touch the face or eyes during the return journey.
- They should sanitize their hands after getting down from the vehicle.
- Before entering their home, they need to wash/sanitize their hands.

Using Common Areas – Restrooms, parking areas etc.

- Encourage social distancing in these places and display more posters relevant to COVID-19 safety in this area.
- Consider having adequate alcohol-based hand sanitizers in restrooms to encourage hand hygiene among building occupants. Put up posters about hand washing in bathrooms and other common areas as appropriate.
- Engage authorized waste contractors to remove refuse daily.
- Encourage replacing of mops and cleaning wipes frequently.
- Cleaning and Disinfection should be done as frequent as possible and records of the same should be maintained in a chart.
- Consider closing common food court, gym and other indoor recreation or game areas until the pandemic is over.
- Avoid gathering of people in veranda, balcony, parking and other common places.

Use of Staircase

Staircase and handrails should be cleaned and sanitized and records should be maintained in the form of a chart.

Consider posting “a guide to avoid contamination” near staircase landing.

At the Cafeteria

Reduce seating capacity to 50% of its size. This is basically to allow social distancing of 1m gap.

Consider closing self-service food counters to avoid cross-contamination.

Ensure food preparers and handlers are wearing all necessary PPE without any compromise.

Consider posting guiding posters to avoid contamination in the lunch hall.

Use of Toilets/Washrooms

The workers should be educated on the following:

- While entering the restroom, open the door using your elbow or arm (do not use your palm or fingers).
- While using urinals, use alternative urinals to maintain social distance.
- While waiting for urinals, maintain social distance. Do not enter inside if it is crowded.
- While using commodes, wash commodes with water before and after using it. Remove the water by using tissue papers.
- Toilets should be flushed with the lid closed in order to minimize the release of droplets and droplet residue from entering the air.
- After using urinals and toilets, wash your hands as per the guidelines, with soap and water for at least 20 seconds. Maintain social distance while waiting to wash.
- While coming out from the toilet, open the door using your leg, elbow or arm (do not use your palm). If not possible, use clean paper towels to open doorknobs.



THE SUPPORT OF CLEANING WORKERS

The work of the cleaning staff should be guided with the following instructions in addition to what they used to do.

- Encourage the use of appropriate PPE (face masks, gloves, goggles) when carrying out cleaning works and handling waste. Never share the PPE with others.
- **Supervise cleaning and disinfection and there should be records on their work.**
- Orient them on personal hygiene and not to touch their exposed body parts such as eyes, nose, face and arms with soiled gloves or unwashed hands.
- **Ensure refuse bins are covered at all times and cleared daily. Tie refuse contained in plastic bags properly before disposal.**
- Should clean up any refuse spillage immediately.
- **Wash and disinfect all refuse bins or the containers.**
- Discard the disposable cleaning materials (gloves, mop and wiping cloth) in appropriate bags after cleaning and disinfecting. Wear a new pair of gloves and fasten the bag.
- **Change and wash clothes regularly.**
- Toilets should be flushed with the lid closed in order to minimize the release of droplets and droplet residues from entering the air.
- **Keep toilet ventilation 24/7 in operation.**
- Avoid opening windows in toilets to assure the right direction of ventilation.



UTILITY SERVICING

Ventilation and AC systems

- As far as possible, air conditioning should be avoided, and natural ventilation should be used.
- Facility management should make sure building ventilation systems are working correctly and maintained as per standard requirements for optimal indoor air quality. If feasible, enhance ventilation in common areas and increase the amount of outdoor air that is coming into the building.
- A relative humidity level of 40% to 70% to be maintained which is considered to be the most suitable environment for humans & decreases problems from pathogens.

- Evaporative coolers must draw fresh air from outside to ensure good ventilation.



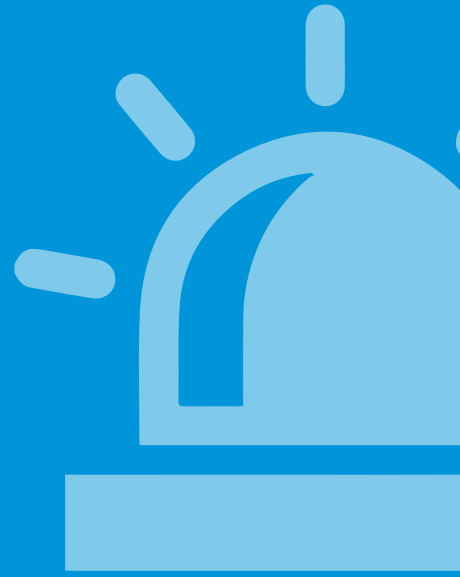
Sewage Treatment Plant - STP and Water Treatment Plant - WTP

- Facility management should make sure building water treatment systems are maintained with appropriate biocide dosing as per standards. Additional attention should be paid on improving the treatments to avoid COVID-19 spreading.
- Increase biocide treatment and testing with suitable standards to avoid conditions that could lead to an outbreak of Legionnaires' disease and potential COVID-19, before operating cooling tower circulation and other water main system.
- Bad fume generation from any water source such as in Sewage Treatment Plant should be avoided.
- The team carrying operations and maintenance of STP or WTP should wear personal protective equipment such as N95 masks, goggles, gloves and safety shoes. Each individual should have their own PPE kit.
- The maintenance team carrying operations and preventive maintenance of panel room/pump room should wear personal protective equipment such as nose masks, goggles, gloves and safety shoes. The individual should have their own PPE kit.
- Sanitize machine parts that require multiple changes of hands. Ensure electrical safety precautions when using disinfectant.



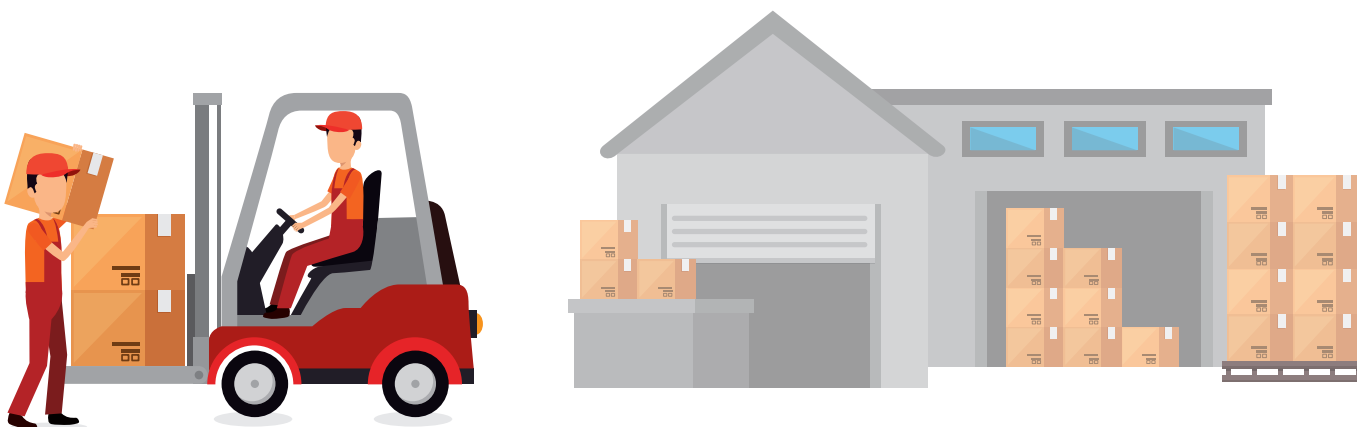
In case of emergency

- The occupants should follow the building's standard procedures if there is a fire alarm ringing, and fire safety should not be compromised.
- Fire doors should not be kept open always.
- Encourage occupants to practice physical distancing and maintain at least a 1m distance from each other as they evacuate the building during such an incident.
- Maintain physical distance at assembly points too.



Warehouse or stores - Material in/Material out:

- Building occupants should maintain physical distancing when getting packages or mail, deliveries and contractors attending the workplace.
- If any transport drivers or accompanied assistants show signs or symptoms for an infectious disease, the vehicle should not be allowed inside the premises.
- The vehicle tires and body should be disinfected with a 1% sodium hypochlorite solution spray.
- Material handling equipment such as Hand pallet truck, stacker and forklift should be disinfected on the regularly touched surfaces.
- Deliveries and other contractors who need to enter the workplace should be given clear instructions of social distancing requirements while they are onsite.
- Minimize the number of workers attending to deliveries and contractors as much as possible. Make alcohol-based hand sanitizer available for workers after physically handling deliveries.
- Direct visiting drivers to remain in their vehicles and use contactless methods such as mobile phones to communicate with your workers wherever possible.



FOOD SAFETY

Food preparing workers: physical distancing in the work environment

- Employers should implement physical distancing as far as possible. Suitable posters on physical distancing practice measures should be displayed in the canteen.
- Provide PPE such as surgical face masks, hair nets, disposable gloves and clean overalls recommended for COVID-19 safety.



Precautions for food handlers

Good practices include:

Proper hand hygiene.

Good respiratory hygiene (cover mouth and nose when coughing or sneezing; dispose of tissues and wash hands).

Frequent cleaning/disinfection of work surfaces and touchpoints such as door handles.

Using clean utensils to handle cooked and ready-to-eat foods, and not touching the food directly.

Avoiding touching your nose, mouth and hair.

Precautions in staff canteens

- Workplace canteens need to remain open where there are no practical alternatives for staff to obtain food. High standards of the public health measures for hand washing and respiratory etiquette need to be maintained in work canteens. Operational standards staff canteens should include:
 - **Maintaining a physical distance of at least 1m between an individual and other workers, including in seating arrangements.**
 - Staggering staff work and break times to reduce staff numbers in the canteen at any given time.
 - Restricting non-essential physical contact as much as possible.
- Visible notices/posters for staff, promoting hand hygiene and physical distancing.
- **Cleaning and disinfection procedures for equipment, premises, contact surfaces/high touchpoints e.g. counter tops/tongs/service utensils/open self-service displays/door handles.**

Housekeeping/Refuse Management

- Assign a team of staff to carry out cleaning and housekeeping daily. Teach them the safety requirements in connection with COVID-19 safety.
- Goods must be properly stored and stacked above floor level to facilitate the cleaning of the premises.
- Provide sufficient refuse pedal bins lined with plastic bags with tight covers in the kitchen.
- Ensure refuse bins are covered at all times and cleared daily.
- Clean up any refuse spillage immediately.
- Engage licensed waste contractors to remove waste daily.
- Wash and disinfect all refuse bins and litter bins at the end of each business day.



PROTECTING YOURSELF AND OTHERS FROM THE SPREAD OF COVID-19



Clean your hands often with soap and water for at least 20 seconds or with an alcohol-based hand sanitizer.



Wear a mask when leaving home.



Avoid touching your eyes, nose and mouth.



Avoid close contact with anyone displaying cold or flu-like symptoms.



If you are sick, stay at home and avoid crowds and contact with others.



Cover your mouth and nose with your bent elbow or use a tissue when you cough or sneeze. Throw used tissue into a closed bin immediately after use.



Do not shake hands. Greet people with a wave, a nod or bow instead.



If you have a fever, cough and difficulty in breathing seek medical care early and share previous travel history with your healthcare provider.

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Disclaimer: The guidelines outlined in this document are meant to safeguard you and your loved ones from COVID-19. Seek professional advice if you wish to clarify any section of this document or take any action based on this document.

This document has been developed based on the information published by CholaMS Risk Services.