

SOP-643 (Ver. 2)

Personal Hygiene

Standard Operating Procedure (SOP)

Effective: 1/25/2022 Supersedes: 11/02/2020

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I. Purpose

The Orange County Sanitation District (OCSD) is committed to providing a safe and healthy work environment for employees. Personal hygiene is a critical element in the success of OCSD's overall safety program.

The goal of this program is to promote good hygiene practices to prevent the transmission of diseases from source to susceptible hosts. Employees who practice good personal hygiene can prevent the spread of germs and disease.

The OCSD has developed the Personal Hygiene program in accordance with California Occupational Safety and Health Administration (CALOSHA) general safety orders, Article 9 Sanitation and Article 10 Personal Safety Devices and Safeguards.

II. Applicability

This program applies to OCSD employees and Contractors working in occupied buildings and all work areas within the treatment plants, pump stations, collections system and supporting facilities. In certain circumstances, such as a pandemic, more restrictive personal hygiene rules may apply under separate policy.

III. Definitions

Antimicrobial Soap – Soap containing an antiseptic agent at a concentration sufficient to inactivate microorganisms and/or temporarily suppress their growth. The detergent activity of such soaps may also dislodge transient microorganisms or other contaminants from the skin to facilitate their subsequent removal by water.

Bacteria – Any group of microscopic single-celled organisms that live in enormous numbers in almost every environment on the surface of Earth.

Cleaning – removal of visible soil (e.g., organic, and inorganic material) from objects and surfaces and normally is accomplished manually or mechanically using water with detergents or enzymatic products. Thorough cleaning is required before disinfection because materials that remain on the surface interfere with effectiveness of the processes.

Detergent – Compounds that possess a cleaning action. They are composed of hydrophilic and a lipophilic part and can be divided into four groups: anionic, cationic, amphoteric, and non-ionic. Although products used for handwashing or antiseptic handwash in health care represent various types of detergents, the term "soap" will be used to refer to such detergents in these guidelines.

Disinfection – Process that eliminates many or all pathogenic microorganisms, except bacterial spores, on inanimate objects. Objects are disinfected by liquid chemicals.

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Helminth – a parasitic work: a flue, tapeworm, or nematode.

Microorganism – an organism too small to be viewed by the unaided eye, as bacteria, protozoa, and some fungi and algae.

Pathogens – A disease-producing agent, especially a virus, bacterium, or other microorganism.

Protozoan – A diverse group of eukaryotes, of the kingdom Protista, that are primarily unicellular, existing singly or aggregating into colonies, are usually non-photosynthetic, and are often classified further into phyla according to their capacity for and means of motility, as by pseudopods, flagella, or cilia.

Virus – Small infectious agent that can replicate only inside the living cells of an organism.

IV. Roles and Responsibility

A. Risk Management

- 1. Prepare and maintain a written program which complies with the requirements of applicable CALOSHA standards.
- 2. Assist with providing training materials and training potentially impacted employees and their supervisors on causative agents, modes of transmission and prevention and sanitary control measures.

B. Supervision

- 1. Promote good hygiene practices with staff.
- 2. Monitor the compliance of their staff in adherence to this program.
- 3. Responsible for the effective use of this procedure in the work group and to see that all required procedures are followed in every instance.

C. Employees

- 4. Carry out good personal hygiene as per this program.
- 5. Report near misses and illnesses to supervisor and Risk Management.

V. Microbial Pathogens

A. Occupied Buildings

- 1. Most illnesses, including colds and flu, are transmitted through the air.
- 2. When someone sneezes or coughs, water or mucous droplets filled with viruses or bacteria scatter in the air or end up in the hands where they spread on surfaces.
- Many airborne diseases are common and can have mild or severe symptoms.
- B. Treatment Plants, Pump Stations, Collections System and Supporting Facilities
 - 1. There are a wide range of microbial pathogens that can be present in wastewater, with the type and number present being highly variable.
 - 2. Airborne concentrations are typically highest wherever sewage is agitated.
 - 3. Surfaces associated with plant equipment (e.g., pumps, motors, piping, valves) and structures (e.g., floors, walls, guardrails) should be considered contaminated. Excluded are electrical rooms, battery rooms, control rooms and break rooms within the treatment plants and pump stations.

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- 4. Majority of the pathogens are enteric in origin, which means they are excreted in fecal matter, contaminate the environment, and then gain access to new hosts through ingestion (i.e., fecal-oral route).
- 5. Exposure may potentially result in disease, or in a carrier state where an infection does not clinically manifest itself in the individual but can be spread to others.
- 6. Microbial pathogens present in wastewater are divided into three groups: viruses, bacteria, and pathogenic protozoan/helminths. Potential pathogens for each group are provided in the Table below. Bacteria is the most common microbial pathogen found in wastewater.

Table. Potential Microbial Types in Wastewater

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|--|--|--|--|--|
| Microbial Type | Major Disease(s) | | | |
| Virus | | | | |
| Enterovirus | Gastroenteritis, heart anomalies, meningitis | | | |
| Echovirus | | | | |
| Coxsackievirus | | | | |
| Hepatitis A virus | Hepatitis | | | |
| Adenovirus | Respiratory disease, conjunctivitis | | | |
| Norwalk virus | Gastroenteritis, diarrhea, vomiting, fever | | | |
| Rotavirus | Gastroenteritis | | | |
| Astrovirus | | | | |
| Coronavirus | Fever, respiratory illness, pneumonia, death | | | |
| Bacteria | | | | |
| Vibrio cholerae | Cholera | | | |
| Salmonella typhi | Typhoid, Salmonellosis | | | |
| Enteropathogenic E. coli | Gastroenteritis | | | |
| Campylobacter jejunei | | | | |
| Shigella dysinterae | Dysentery | | | |
| Protozoa / Helminths | | | | |
| Giardia intestinalis | Giardiasis | | | |
| Cryptosporidium parvum | Diarrhea, fever | | | |
| Entamoeba histolytica | Amoebic dysentery | | | |
| Ascaris lumbricoides | Ascariasis | | | |
| Ancylostoma spp. | | | | |
| Trichuris trichiura | Trichuriasis | | | |

VI. Modes of Transmission

A. Direct Contact

- 1. Droplet spread occurs when coughing, sneezing, or speaking with another person when in proximity.
- 2. Person-to-person contact spread occurs when an infected person touches or exchanges body fluids with someone else.

B. Indirect Contact

- 1. Eating or drinking contaminated or poorly prepared food and drinks.
- 2. Handling or touching contaminated surfaces and then rubbing or touching your nose, eyes, or mouth.

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- 3. Handling or touching contaminated surfaces and then eating, drinking, smoking, or applying cosmetics.
- 4. Exposure via airborne transmission or contact with open cuts and wounds.

VII. Control Measures

A. General

- 1. Wash hands with soap and water for 20 seconds before eating, drinking, smoking, or applying cosmetics.
- 2. Wash hands with soap and water for 20 seconds before and after using the restroom.
- 3. To avoid transfer of pathogens from hands into the body, do not touch eyes, mouth, and nose.
- 4. Use a tissue, or cough and sneeze into your arm, not your hand. Turn away from other people.
- 5. Use single-use tissues where possible and dispose of the tissue immediately, then wash your hands.
- 6. Avoid sharing cups, glasses, dishes, cutlery or food and drinks with others. Wash all dishes with soap and water after use or use disposable utensils and discard them afterward.
- 7. Avoid chewing or sucking on pens and pencils, as these items are commonly shared.
- 8. Keep fingernails short and avoid biting nails.
- 9. Avoid going to work if you have signs and symptoms (e.g., vomiting, diarrhea, cough, runny nose, fever, etc.) of an infection.
- 10. Avoid other sick people.
- 11. Clean workstations (e.g., keyboard, mouse, phones) and other commonly touched objects (e.g., doorknobs, printers, sink faucets) with disinfecting wipes.
- 12. Discard single use cups after first use.
- 13. If refilling reusable cups, avoid direct contact with the cup and the water dispenser spigot.
- 14. Cover open sores, cuts, and wounds with clean, dry bandages.
- 15. Toilet facilities shall be kept clean, maintained in good working order and be always accessible to employees.
- 16. Break areas shall be kept clean, orderly and in a sanitary condition.
- B. Treatment Plant, Pump Stations and Collection System
 - 1. Wash hands thoroughly with soap and water or after direct contact with sewage. If soap and water are not available, use an antiseptic hand rub (hand sanitizer foam or gel).
 - 2. If you get sprayed or splashed with sewage or sewage residues, disrobe, take a shower, and change your uniform.
 - 3. To avoid direct contact with wastewater, always wear impervious gloves and protective clothing, including safety eyewear.

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- 4. Remove work clothing in a manner that would minimize further contamination to yourself or areas around you.
- 5. If a uniform becomes contaminated with chemicals, wastewater, or wastewater byproducts (i.e., sludge, effluent, etc.), the uniform must be cleaned by the professional uniform service. If it is reasonable to suspect that a uniform has not been contaminated, employees may also take uniforms home for washing. Any uniforms washed at home must be washed separately from other clothes. Arc flash rated uniforms must always be washed by the professional uniform service.
- 6. Decontaminate boots at boot wash areas prior to entering vehicles or occupied buildings.
- 7. Showers are recommended at the end of shift. Wear shower sandals when in shower. Do not share bar soap, towels, or razors. Shower facilities shall be maintained in good working order and sanitary.
- 8. Disinfect radios, cell phones, and reusable PPE frequently.
- 9. Do not drink or wash hands and face with plant water or reclaimed water available from taps in plant process areas. Bottled water is provided for these purposes.
- 10. Consume food in approved break and lunch areas.
- 11. Consume liquids only in approved break and lunch areas, control rooms, electric carts, and vehicles. Liquid containers in electric carts shall have a closeable lid and be secured to prevent displacement.
- 12. Avoid chewing tobacco or gum.
- 13. Do not place hard hats, gloves, or footwear on eating surfaces.
- 14. Do not store food in refrigerators or cabinets intended for chemicals or samples.

VIII. Eating and Drinking in the Workplace and Process Areas

- A. Eating and drinking is acceptable in all areas where PPE is not required including:
 - 1. Lunchrooms
 - 2. Maintenance and administrative work areas.
 - 3. Controls rooms at Plant 1, Plant 2, and Pump stations
 - 4. In carts and vehicles
 - 5. Contractor laydown areas
- B. Please refer to the P1 and P1 Non-PPE Locations map in the Maps Library on MyOCSD.

IX. Hand Washing Technique

- A. Wet hands with warm running water.
- B. Apply soap to hands.
- C. Vigorously rub hands together for at least 20 seconds, covering all surfaces of hands and fingers.
- D. Rinse hands thoroughly with warm water and with hands angled down in the sink.
- E. Dry hands thoroughly with a disposable towel(s).

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- F. Use disposable towel to turn off the water.
- G. Discard disposable towel in trash receptacle.

X. Potable Water System

- A. Although the piped potable water at OCSD meets all water quality standards, OCSD does not recommend it for human consumption based on an abundance of caution.
- B. The ongoing construction, maintenance, and renovation taking place at OCSD makes our potable water system susceptible to a cross-connection or backflow event.
- C. A backflow occurs when drinking water piping is inadvertently damaged or connected to equipment or processes. If improperly protected, contamination can result when contaminates flow from the equipment/process back into the drinking water piping.
- D. Minimizing and preventing possibility of backflow events at OCSD:
 - Annual testing of existing backflow prevention devices
 - 2. Regular inspection of new backflow prevention devices
 - 3. Monthly laboratory testing of potential contaminants in the potable water system
- E. Potable water should not be used for drinking, coffee making, food rinsing, brushing teeth or ice making (consumption). Bottled water is provided for these purposes.

XI. Recordkeeping

All records created or generated during this procedure shall be legible and stored in a way that they are readily retrievable in facilities or electronic document/content management systems that provide a suitable environment to prevent damage, deterioration, or loss. Records may be in the form of any type of media, such as hard copy or electronic media. The OCSD Records Retention Schedule is the official procedure governing the retention, retirement, and destruction of District records. Document owners should use these schedules to determine the item and series that best fit their records. Document owners are responsible for ensuring that documents are properly marked, indexed, and filed for their projects or area of responsibility.

XII. References

Title 8, California Code of Regulations (CCR), Subchapter 7, Group 2, Article 9, Section 3362, General Requirements

Title 8, CCR, Subchapter 7, Group 2, Article 9, Section 3363, Water Supply

Title 8, CCR, Subchapter 7, Group 2, Article 9, Section 3364, Sanitary Facilities

Title 8, CCR, Subchapter 7, Group 2, Article 9, Section 3366, Washing Facilities

Title 8, CCR, Subchapter 7, Group 2, Article 9, Section 3367, Change Rooms

Title 8, CCR, Subchapter 7, Group 2, Article 9, Section 3368, Consumption of Food and Beverages

Title 8, CCR, Subchapter 7, Group 2, Article 10, Section 3387, Sanitation

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XIII. Revision History

| Version | Date | Ву | Reason |
|---------|------------|-----------------|------------------------------------|
| 1.0 | 08/25/2020 | Hachim, Sabrina | New |
| 2.0 | 12/13/2021 | Spencer, Case | Periodic Update – Refer to Program |

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