MassDEP COVID-19 FAQs for Wastewater Service Providers

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Answers to questions that have been raised by wastewater operators. This list of questions and answers will be regularly updated. This document’s latest questions and answers are highlighted in yellow.

Permit

Question (Permit1): Is there guidance from the U.S. Environmental Protection Agency on compliance and enforcement?
Answer: In a memorandum from Susan Parker Bodine, dated March 26, 2020 https://www.epa.gov/sites/production/files/2020-03/documents/oecamemooncovid19implications.pdf, the EPA describes its enforcement discretion policy for many of its programs. The guidance, which addresses routine monitoring and reporting requirements, applies to the NPDES program, which is administered jointly by EPA and MassDEP. In guidance specifically regarding the NPDES program, EPA states, “EPA will be looking for individuals/facilities to make every effort to comply with their NPDES permits but if, for reasons related to COVID-19, you are not able to sample or analyze samples required by permit, please submit your discharge monitoring reports through NetDMR using the No Data Indicator or NODI code of “3” - “Special Report Attached”. When using the NODI code 3, a facility must provide an explanation in either the comment section of the DMR or in a separate attachment to the DMR. The Explanation should identifies (sic) the specific reasons for the sampling/reporting delay. NODI code 3 will not appear as a violation in the public-facing Enforcement and Compliance History Online (ECHO).” If you have concerns about a Groundwater Discharge Permit, please contact your MassDEP regional office.

Answer Update 7/1/20: On 6/29/20, EPA added an addendum to this memorandum indicating that the application of enforcement discretion under this memo would be ending on 8/31/20. The memorandum also states: “Nothing herein limits the ability of the EPA to exercise enforcement discretion on a case-by-case basis regarding any noncompliance, including noncompliance caused by the COVID-19 public health emergency, before or after the temporary policy is terminated. This includes the situation in which a person or entity makes a reasonable attempt to comply with guidance from the Centers for Disease Control and Prevention or other agencies regarding actions suggested to stem the transmission and spread of COVID-19, which the person or entity reasonably deems applicable to its circumstances.” See the 6/29/20 memorandum here: https://www.epa.gov/sites/production/files/2020-06/documents/covid19addendumontermination.pdf

Answer Update 8/26/20: In March 2020, EPA developed a temporary policy regarding EPA enforcement of environmental legal obligations during the COVID-19 pandemic. The Temporary Policy will end on August 31st, according to the following termination memo. The COVID-19 No Data Indicator Code “Z” will no longer be available for NPDES facilities when reporting discharge monitoring data.


**Question (Permit2):** Is there any intention to end the EPA interim COVID-period enforcement policy any time soon?
Answer: See the updated response to Question (Permit1), above.

**Question (Permit3):** I understand that EPA will be discontinuing its long-time practice of issuing joint permits with DEP and that each agency will be issuing its own permit. Is NPDES permitting at DEP done in Boston, or in the Regional Offices?
Answer: NPDES permitting by MassDEP is done only in Boston. Compliance and enforcement are carried out mostly by the regions.

**Question (Permit 4):** How would this NPDES change affect permits already applied for? Will we need to reapply?
Answer: DEP is seeking clarification on this. Per EPA guidance, a draft permit issued prior to June 21, 2020, that has been through public comment will be completed under the prior joint permitting procedures. If you have already submitted an application, you will not need to reapply. For submittals after June 21, 2020, permittees will apply to both EPA and DEP as was done before, but DEP will issue a state permit as well as a 401 Water Quality Certification for the Federal Permit.

Please see the DEP NPDES webpage for more information:  https://www.mass.gov/info-details/surface-water-discharge-permitting-npdes

**Question (Permit 5):** Will there be some paper notification or email sent regarding the change to NPDES Permitting?
Answer: DEP sent an email to all permittees and has posted information on the DEP website.

**Question (Permit 6):** With regards to the NPDES Permit renewal process, will there be two separate renewal applications to be filled out?
Answer: MassDEP and EPA use two different applications for surface water discharges. We always have, so this is not a change as a result of the end of joint permitting. MassDEP requires submittal of a brief application with a copy of the EPA application.
Question (Permit 7): Will EPA and DEP NPDES permits always be on the same time schedule?
Answer: DEP’s goal is to coordinate with Region 1 to make sure we are as close to the same schedules as possible. We are working to ensure there are no significant gaps between when EPA permits are issued and when DEP permits are issued.

Question (Permit 8): With this increase in COVID-19 cases this fall, water suppliers and wastewater operators may need to go back to the split shifts for staffing (as were used in the spring and summer) and run below typical staffing levels to ensure PWS/WWTP have the minimum staff available to run a plant.
Answer: Systems needing to make staffing changes are urged to speak with their regional MassDEP contacts (see list on pages 2-4), as they did in the spring and summer.

Question (Permit 9): Can EPA and DEP comment on the inclusion of PFAS testing that is starting to appear on draft NPDES permits?
Answer: Massachusetts promulgated a drinking water standard for PFAS in October 2020. Currently, there is no Surface Water Quality Standard, but MassDEP is gathering information on PFAS concentrations in surface water discharges through sampling. MassDEP is also working with EEA’s Office of Technical Assistance (OTA) to assist industries that use PFAS and discharge to directly to surface waters or to a municipal wastewater system. MassDEP is also working with USGS to sample ambient waters.

Since July 2020, draft surface water discharge permits in Massachusetts require quarterly PFAS monitoring of the influent, effluent and biosolids for 6 PFAS compounds. Sampling is required to begin when the analytical method for laboratory analyses of wastewater for PFAS becomes available from EPA or 2 years from the permit’s effective date, whichever is sooner. For discharges upstream of a drinking water supply, sampling is to begin 180 days after the effective date of the permit.

There are currently no discharge limits for PFAS in wastewater.

Question (Permit 10): Will the state have an approved PFAS wastewater analysis method before EPA?
Answer: EPA has stated that it expects to finalize its methodology in 2021. In the meantime, MassDEP has been approving the standard operating procedures that describe the analytical methods proposed for use by individual laboratories.

Question (Permit 11): At the beginning of the COVID crisis in spring the EPA had a waiver/extension program if you had a legitimate compliance issue. That
waiver/extension program has ended. As the number of infections increases, is there any plan to reinstate that program?

Answer Update 12/2/20: EPA Region 1 has not heard any indication from EPA’s Office of Enforcement and Compliance Assurance that they plan on issuing another policy related to the exercise of enforcement discretion due to COVID-19. However, if any operators of wastewater treatment plants have issues related to their compliance with monitoring or reporting obligations due to COVID-19 they should contact Doug Koopman at EPA Region 1. His contact information is: Koopman.Douglas@epa.gov, (617) 918-1747.

Re-opening

Question (Reopening 1): On May 11th, the Governor released an outline for the “COVID-19 Update: Phased Reopening, Workplace Safety Standards,” in which he indicated, “…the Reopening Advisory Board is developing Sector Specific Safety Protocols and Best Practices that will detail how particular industries should operate upon reopening.” Absent any Water/Wastewater Sector representation on the Reopening Advisory Board, is the Commonwealth developing a Water/Wastewater Sector Specific “Safety Protocols and Best Practices that will detail how the Water/Wastewater industry should operate upon reopening”? What will MassDEP’s role be in this process? Answer: The Workplace Safety Standards developed by the Reopening Advisory Board can be found here: https://www.mass.gov/info-details/reopening-mandatory-safety-standards-workplaces. These standards apply universally to all places open during Phase 1, including wastewater and water treatment facilities and are designed to reduce the risk of the transmission of COVID-19. MassDEP has provided additional guidance in response to specific safety and operational issues raised by the industry, and that information is summarized on in Questions Safety 3, Safety 4, Safety 5, and Safety 15, below.

Question (Reopening 2): Does the available Safety Protocol Guidance cover the cleaning/disinfection/social distancing regarding locker rooms and showers? Answer: The Reopening Advisory Board is developing Sector specific safety protocols which will potentially provide an answer to this question. Please check this site: https://www.mass.gov/info-details/reopening-mandatory-safety-standards-workplaces#sector-specific-safety-protocols for updates to the Sector specific protocols. Also, there is CDC guidance related to this here: https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html. If more guidance is needed, then Commissioner Suuberg will escalate this question to the Command Center.
Question (Reopening 3): Is there any training available that will address the Governor’s reopening of Massachusetts requirements to provide training to employees on social distancing and hygiene protocols?
Answer: The best resource for this information is the COVID-19 webpage on mass.gov: https://www.mass.gov/info-details/covid-19-updates-and-information. Here there are both general guidance and sector specific protocols being posted as they are developed: https://www.mass.gov/info-details/reopening-massachusetts#additional-guidance-

Question (Reopening 4): Are facilities bringing back full staffing? Are any facilities open to the public? How are facilities getting back to “normal” operation?
Answer: Several facilities responded to this question during Commissioner Suuberg’s weekly COVID phone call with wastewater operators. On that call, none of the facilities that responded were open to the public. Some facilities were at full staff and had been for a few weeks. A couple of facilities responded that they were fully staffed, but maintaining split shifts. Two other facilities are planning to be at full staff or close to it starting June 14th. Facilities are utilizing social distancing, PPE, email and electronic file sharing to carry out necessary operations, inspections and public communications.

Question (Reopening 5): Could MassDEP provide an update on the status of MassDEP getting back to in-person inspections, processing permits, and conducting other work that may require staff to access the office?
Answer: While its employees are still working remotely, MassDEP is getting mail delivered regularly and we are retrieving that mail, following all protocols and safeguards. For inspections, we had some success with virtual inspections and are working to get back to normal inspections. We will keep you updated as health guidance changes.

Safety

Question (Safety1): If there is no response from regional staff, should I call the state emergency line?
Answer: Call the MassDEP 24-hour emergency line 888-304-1133.

Question (Safety2): Does MEMA arrange for personal protective equipment for this type of emergency?
Answer: MassDEP is not aware of a program currently operating to provide PPE for wastewater systems but has raised this with authorities., and we encourage work with your local emergency management authorities. Visit this page for more information: https://www.mass.gov/info-details/guidance-for-requesting-personal-protective-equipment-ppe.

Answer Update 5/11: MA WARN, several water and wastewater utilities, state and regional water and wastewater associations, MassDEP, and EPA Region 1, coordinated on a proposal to FEMA to secure a supply of reusable cloth masks to water supply and wastewater operations.

MassDEP published a survey for two weeks to identify which utilities need the cloth masks. If more masks become available, the survey will be re-published. Several water/wastewater utilities, MA WARN, and MassDEP and are coordinating with other utilities on the distribution of the masks, which began arriving in Massachusetts last week.

Finally, EPA’s Region 1 has been emphasizing to EPA headquarters and FEMA the importance of water and wastewater services and that these workers are essential.

Answer Update 6/5/20: Over a four-week period, the federal government shipped 60,500 cloth masks to Massachusetts for water and wastewater operators. MassDEP is coordinating with EPA, Massachusetts Water Works Association, Massachusetts Water Environmental Association, NEIWPCC and a group of distributors (MWRA – Chelsea and Southborough; Greater Lawrence Sanitary District; Upper Blackstone; Springfield Water and Sewer Commission; City of Brockton; Barnstable DPW; and New Bedford DPW) on the distribution of these new masks. Based on results of the first survey, approximately 30,000 cloth masks were distributed. The remaining masks will be distributed in June based on results of a second survey.

Answer update 7/1/20: Nearly 60,000 masks were distributed to over 400 facilities. (At 10 masks per person, that is almost 6,000 DW/WW operators who received masks.) DEP would like to thank everyone involved in hosting the distribution:

MWRA
GLSD
Upper Blackstone
Springfield Water & Sewer
Barnstable
Brockton
New Bedford

DEP would also like to thank the other organizations and utilities who volunteered:

MA Water/ Wastewater Agency Response Network (WARN)
MA Water Environment Assn
New England Water Environment Assn
NEWIPCC
Answer Update 8/12/20: EPA has been notified of 60,000 N95 masks to be made available nationally for facilities that operate at less than 10,000 customers. To sign up to receive masks go to:
https://share.hsforms.com/1ffPE_qJCQVa7183nrijpxw35n1x?utm_medium=email&utm_source=govdelivery.

Answer Update 10/7/20: MassDEP and its partners successfully distributed over 56,000 cloth masks received through FEMA and EPA at the beginning of the coronavirus pandemic in May and June 2020 for essential Public Water System (PWS) and Wastewater operators in need. Thanks to the generosity of the state of New Hampshire who had extra inventory, a third round of cloth mask distribution is being offered again to continue supporting safe operations. Systems in need of cloth masks should complete this survey: https://www.mass.gov/forms/drinking-water-and-wastewater-sector-personal-protective-equipment-ppe-distribution-survey by November 6, 2020. Please submit only one survey response per utility or contract operations firm. MassDEP will provide details about distribution plans after collecting survey results.

Answer Update 11/4/20:
In the summer, MassDEP delivered 60,000 cloth masks to water suppliers and wastewater operators. Thanks to the generosity of the state of New Hampshire, a third round of cloth mask distribution is being offered again to continue supporting safe operations. MassDEP is currently distributing an additional 20,000 cloth masks from New Hampshire.

Answer Update 12/30/20: Nearly all of the additional 20,000 plus cloth masks received from New Hampshire were distributed to drinking water and wastewater operators via 10 distribution centers. Contact Kristin Divris if you need are in need of masks:
kristin.divris@mass.gov

MassDEP thanks each of the distribution pods who were essential to this effort:
Greenfield DPW, Springfield Water & Sewer Commission, Leominster DPW, Franklin DPW, Greater Lawrence Sanitary District, Burlington DPW, Boston Water & Sewer Commission,
Norton Water & Sewer Department, Fall River Water Department, Barnstable DPW, Brewster Water Department and Edgartown Water Department.

**Question (Safety3):** We know MassDEP is strongly encouraging the continuation of discharge monitoring. When should an operator not enter a facility to monitor or inspect? What are best practices that the wastewater service providers should follow?

**Answer:** Careful implementation of best work practices should always be a priority for employees involved in wastewater management operations, including those at wastewater treatment facilities. This should include using the engineering and administrative controls, safe work practices, and PPE required for work tasks when handling untreated wastewater (https://www.osha.gov/SLTC/covid-19/controlprevention.html#solidwaste). These should also be carefully applied when working in areas where splashing, aerosols, airborne particles or droplets of untreated sewage may be present.

Workers who handle human waste or sewage may be at increased risk of becoming ill from a number of waterborne diseases, potentially including SARS-CoV-2, the causative agent of COVID-19. Although the World Health Organization has indicated that “there is no evidence to date that COVID-19 virus has been transmitted via sewerage systems, with or without wastewater treatment” (https://www.epa.gov/coronavirus/coronavirus-and-drinking-water-and-wastewater) emerging data indicates that active virus may be present in fecal matter from some infected individuals. Thus, in the current pandemic, with increased disease rates in the community, SARS-CoV-2 may be present in untreated sewage.

Best practices for protecting the health of workers at wastewater treatment facilities should be followed. Workers should wear appropriate personal protective equipment (PPE), which includes protective outerwear, gloves, boots, goggles, a face shield, and a mask; they should perform hand hygiene frequently; and they should avoid touching eyes, nose, and mouth with unwashed hands.

The CDC “Guidance for reducing health risks to workers handling human waste or sewage” (https://www.cdc.gov/healthywater/global/sanitation/workers_handlingwaste.html) provides additional information on Basic Hygiene Practices for Workers and Personal Protective Equipment (PPE). Note that while CDC calls for use of a “protective face mask or splash-proof face shield”, use of both is recommended to provide additional protection against potential splashes or other airborne droplets in areas where splashing, aerosols, airborne particles or droplets of untreated sewage may be present.

According to the CDC (https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html), “coronaviruses are susceptible to the same disinfection conditions in community and healthcare settings as other viruses, so current disinfection conditions in wastewater treatment facilities are expected to be sufficient. This includes conditions for practices such as oxidation with hypochlorite (i.e., chlorine bleach) and peracetic acid, as well as inactivation using UV irradiation.”
Question (Safety4): Any additional guidance for best practices?
Answer: OSHA 3990-03 2020: Guidance on Preparing Workplaces for COVID-19

The Occupational Safety and Health Administration (OSHA) developed this COVID-19 planning guidance based on traditional infection prevention and industrial hygiene practices. It focuses on the need for employers to implement engineering, administrative, and work practice controls and personal protective equipment (PPE), as well as considerations for doing so.

This guidance is intended for planning purposes. Employers and workers should use this planning guidance to help identify risk levels in workplace settings and to determine any appropriate control measures to implement. Additional guidance may be needed as COVID-19 outbreak conditions change, including as new information about the virus, its transmission, and impacts, becomes available.

Question (Safety5): What are the dangers of aeration and mixing? Does COVID aerosolize?
Answer: If present in untreated wastewater, it is possible that active viral particles could get into aerosols or airborne droplets if they are generated from wastewater treatment activities. The CDC and several other organizations have issued information on this issue and guidance for workers relating to SARS-CoV-2 in wastewater and sewage. The current CDC Information is found at https://www.cdc.gov/coronavirus/2019-ncov/php/water.html. This guidance, and the additional safety recommendation to use both a protective face mask AND splash-proof face shield as noted under Question 3, should be carefully followed in situations where exposures to aerosols and airborne droplets of untreated sewage may occur.

Information on the Aerosolization of COVID-19 (Aeration tanks, pumping, septic tanks) has also been published in the University of Minnesota – Water Resource Center (Wastewater and Coronavirus (COVID-19): What are the risks? Published 3/20/20 and can be found here: https://septic.umn.edu/wastewater-and-covid19. This publication includes work practice and PPE information.

Secondary treatment aeration processes would be the most likely to expose wastewater treatment facility staff to airborne pathogens. While, in some cases, these are enclosed processes where there is no exposure, in most cases, these are open-air tanks with coarse or fine bubble air diffusers at the bottom of the tank to create aerobic conditions in the tank. Paddle mixers (less frequent, but still present in some facilities) used for aeration will kick up more wet spray than the bottom-of-tank diffusers. Trickling filters, where the wastewater is sprayed over rock media, could also create airborne pathogens. Operations staff will normally need to monitor operations in these tanks by collecting samples to measure suspended solids and to check dissolved oxygen levels (sometimes there are DO probes installed permanently in these tanks, but they would need occasional operation and maintenance [O&M]). As such, these would be intermittent, short-duration tasks. There may be a few plants with dissolved air
floatation for sludge processing, but this process would not create the same risk – the biggest risk for airborne pathogens will be in the aeration process. Of course, PPE would minimize any risk (see Question (Safety11)).

While perhaps not presenting the same airborne risk, there are many other WWTP operations which may routinely expose staff to wastewater/solids, including sampling and analytical activities, process monitoring (e.g. sludge depth testing), equipment O&M. These would expose the operators to wastewater and wastewater residuals, so there could be a high risk of skin contact if they are not wearing appropriate PPE. Note that exposure to unbroken skin other than mucus membranes does not present any direct risk of infection but may increase the potential for secondary exposures attributable to hand-to-face contact or from secondary contamination of other surfaces.

Question(Safety6): Is smoking in wastewater treatment facilities a concern?
Answer: First, there are inherent hazards in smoking in some areas of wastewater treatment works, in that there can be both fire and explosion hazards from sewage gases and/or chemicals used (e.g. methanol), so smoking should be avoided if not prohibited in areas at and near the treatment works. With the onset of the Covid-19 concerns, there could be increased potential of contact through contact with wastewater and then contact with the face/mouth while smoking. MassDEP suggests following MassDPH, WHO, and CDC best protocols to avoid contact.

Question(Safety7): What about safety concerning septic systems and hauling?
Answer: Educate yourself and your staff about the virus, basic hygiene practices, proper use of personal protective equipment (PPE) and social distancing (both on and off the job – to reduce community spread, do not go to work if you are sick). Recommended PPE includes water-repellent gloves, goggles, rubber boots, and hand sanitizer (60% alcohol or greater). This basic PPE should be provided to all staff who are in the field or who potentially will come into contact with septage. Below are links to guidance on worker exposure and PPE. Please contact MassDEP with any questions.

- [https://www.osha.gov/SLTC/covid-19/controlprevention.html](https://www.osha.gov/SLTC/covid-19/controlprevention.html)

Question(Safety8): A Board of Health Agent received a call from an electrician who wires aeration units on Innovative/Alternative (I/A) Title 5 systems. He is concerned that the blowers on these I/A systems may create aerosols from sewage and therefore spread Covid-19. Can MassDEP provide any information and guidance on this topic?
Answer: The aeration units for I/A systems are contained within the tanks underground. This would contain most of the aerosols that may be generated. Additionally, it is important to note that for operational purposes the aeration units of these systems should be set at a low enough rate that it minimizes the potential creation of any aerosols. The Department is not considering any directive to shut these systems down. The Department does recommend maintaining a safe distance from any vents to these systems as a precaution.

Question (Safety 9): Are there any plans for precautionary testing of critical water and wastewater employees in order to prevent spread of COVID-19 throughout our workforce? Also, is MassDEP considering issuing guidance for isolated operation of our Water Pollution Control Facilities while employees are infected. This could become an issue with smaller WPCFs.

Answer: MassDEP is not issuing guidance on the testing of operators. Facilities should work with a healthcare provider for any testing they believe is warranted. MassDEP is not issuing guidance for isolated operation if employees are infected. Facilities should work with their town or company and have an emergency plan in place. For any staffing changes, please notify the MassDEP Regional Office or your EPA facility contact. General guidance on testing is available on Mass.gov at https://www.mass.gov/info-details/frequently-asked-questions-about-covid-19#should-i-be-tested?

Question (Safety 10): I have always completed a walk-through of a customer’s house as part of a Title V Inspection. With the pandemic of Coronavirus, this is not possible. What should I do?

Answer: UPDATE 5/11: Answer: Although it is considered good practice to enter the premises to confirm the number of bedrooms for occupied homes and gather other information that might affect the performance of the system, as a temporary measure to facilitate Title 5 system inspections during social distancing associated with COVID-19, MassDEP advises that for occupied residential homes an inspector may be able to gather such information by other means. Inspectors can and should access all available information online where feasible, such as Assessor’s records, which typically will indicate the bedroom count. Additional information can also be gathered by directly contacting the Board of Health via phone or email and arranging for file copies of the property to be mailed or picked up. If either the inspector or homeowner has concerns about public health risk during the Covid-19 pandemic, an interior tour of the residence may be done by the homeowner over a video conferencing application that would allow the inspector to ask about and determine the presence of a garbage grinder, presence of water filtration unit, presence of sump pump, verify if laundry discharge is on a separate line, look for signs of sewage backup and verify number of bedrooms. Inspectors should make best efforts to meet the minimum requirements of the system inspection as stated in the Inspection Guidance at: https://www.mass.gov/guides/guidance-for-the-inspection-of-on-site-sewage-disposal-systems#-minimum-requirements-for-an-inspection.

MassDEP recommends that the inspector provide documentation on the Title 5 Inspection form of the sources of the information gathered. Documentation could include review of an interior plan of the building and/or the video walkthrough of the building by the current occupant. Any
information that is not available should be noted on the form and the inspector should put a comment on the front of the inspection report stating, “Due to COVID-19 issues, the inspector did not enter the premises.”

**Question (Safety11): Are there any recommendations for minimizing risks of contracting COVID-19 from wastewater operations, particularly from those wastewater treatment elements which may create more airborne risks, such as aeration tanks, weirs, flumes, sludge processing areas, and confined space areas which may be subject to turbulent flows?**

Answer: Recognizing that personal protection equipment supplies may have been exhausted and are difficult to come by, which may limit some facilities ability to implement the safety recommendations noted under Question 3, MassDEP recommends that operational activities in areas where airborne exposure risks are higher be curtailed or modified to the extent feasible, but remain sufficient to retain adequate operating conditions in the plant. Modifications may include: relying on permanent dissolved oxygen (DO) probes in aeration tanks; reducing process control sampling temporarily; observing aeration tank conditions remotely where possible; collecting samples at locations with less risk of airborne pathogens (such as effluent channels from aeration tanks), where sampling is needed; using sampling poles to provide more remote sample collection, and avoiding downwind areas proximate to the aeration tanks at the treatment works. Always notify the appropriate MassDEP Regional Office or EPA contact of any changes to your operations and sampling processes.

**Question (Safety12): Can operations and activities be modified to reduce exposure potential? For example, should sampling be conducted at different locations or at reduced frequencies and should there be operational changes during sampling to reduce aerosols?**

Answer: Facilities could do all the suspended solids sampling from the effluent conduit from the aeration tanks, which would be subject to less agitation and hence, create fewer airborne pathogens. However, for dissolved oxygen, if they do not have DO probes, they would likely want to take a DO measurement near the tail end of the tank. They could reduce aeration to reduce the intensity of any airborne pathogen spray, but they would need to ensure that doing so would still retain the minimal DO concentration needed to support secondary treatment (generally > 2.0 mg/l). Facilities must notify the appropriate MassDEP Regional Office or EPA contact of any changes to their operations and sampling processes.

**Question (Safety13): Should staff be trained in and follow CDC procedures for protecting against exposure to pathogens?**

Answer: Licensed wastewater operators have already received training in personal protection and reducing the risk of exposure to pathogens given the nature of their work, so they should be fully aware of the needed safety measures. We have provided the links to OSHA, CDC, and Water Environment Federation (wastewater industry organization) guidelines in this document. MassDEP recommends that staff be reminded to carefully implement all safety measures (see Q3 and Q11).
**Question (Safety14): Is there an aerosol hazard from Covid-19 working with wastewater samples in the laboratory, chiefly from agitating and pouring the sample?**

**Answer:** Workers who handle human waste or sewage may be at increased risk of becoming ill from a number of diseases, potentially including SARS-CoV-2, the causative agent of COVID-19. This would include laboratory staff handling such materials. Although the World Health Organization has indicated that “there is no evidence to date that COVID-19 virus has been transmitted via sewerage systems, with or without wastewater treatment” ([https://www.epa.gov/coronavirus/coronavirus-and-drinking-water-and-wastewater](https://www.epa.gov/coronavirus/coronavirus-and-drinking-water-and-wastewater)), emerging data indicates that active virus may be present in fecal matter from some infected individuals. Thus, in the current pandemic, with increased disease rates in the community, SARS-CoV-2 may be present in untreated sewage. Best practices for protecting the health of workers at wastewater treatment facilities, and laboratory staff, handling samples that may contain untreated wastewater should be followed.

Laboratory staff handling samples of untreated sewage should carefully follow all lab safety protocols. Among other requirements these protocols should include use of nitrile gloves, lab coats and eye protection; prompt decontamination of potentially contaminated surfaces; and removal of all lab coats and other protective equipment before leaving the lab.

Laboratory procedures that may generate aerosols or airborne droplets of sewage that has not been effectively treated for pathogens should be conducted using appropriate Biological Safety Level 2 practices established by the CDC and use of a Class I or Class II biological safety cabinet, fume hood or other lab containment equipment. *OSHA Laboratory Safety Guidance* and *OSHA Workplace COVID-19 Guidance* provide additional information.

**Question(Safety15): Are current PPE for working with wastewater still considered adequate?**

**Answer:** MassDEP recommends that all staff handling materials containing untreated sewage carefully follow all safety recommendations by the Centers for Disease Control and Prevention (CDC). These can be found at “Guidance for reducing health risks to workers handling human waste or sewage” ([https://www.cdc.gov/healthywater/global/sanitation/workers_handlingwaste.html](https://www.cdc.gov/healthywater/global/sanitation/workers_handlingwaste.html)). MassDEP recommends one additional safety step related to PPE. While CDC calls for use of a “protective face mask or splash-proof face shield”, use of both is recommended to provide additional protection against potential splashes or other airborne droplets in areas where splashing, aerosols, airborne particles or droplets of untreated sewage may be present. Careful implementation of best work practices should always be a priority for employees involved in wastewater management operations, including those at wastewater treatment facilities. This should include using the engineering and administrative controls, safe work practices, and PPE required for work tasks when handling untreated wastewater. ([https://www.osha.gov/SLTC/covid19/controlprevention.html#solidwaste](https://www.osha.gov/SLTC/covid19/controlprevention.html#solidwaste)).
Question (Safety16): I am reaching out to find out if MassDEP has had any discussions in-house or with any cities or towns on possibly making up a disinfectant solution which can be applied by a water tanker or something similar to areas such as streets. I understand MS4 and other rules which apply to the waters, streams and rivers would require a de-chlor treatment after application, but we are not living in normal times at this moment. Are there any thoughts or guidelines on if we were to think about doing this in special areas?
Answer: The EPA does not recommend use of fumigation or wide-area spraying to control COVID-19. In addition to the MS4 permit, outdoor spraying of disinfectant could be subject to the federal Pesticide General Permit (https://www.epa.gov/npdes/pesticide-permitting-2016-pgp) which covers spraying of chemical biocides that could get into waters of the U.S. Outdoor spraying might also be subject to the state’s pesticide requirements.

Question(Safety17): Have there been any COVID-19 cases traced back to a Wastewater Treatment facility?
Answer: MassDEP has not heard of any such cases.

Question (Safety18): If a worker at a wastewater facility tests positive, what is the quarantine procedure/protocol for the other employees at the facility? Will there be contact tracing? Who does it? Will the employer be notified if an employee tests positive? Facilities cannot afford to lose half their staff to quarantine.
Answer: Contact your local Board of Health right away for protocols for other employees and whether there will be contact tracing as well as guidance on other actions to be taken. We also refer you to the Commonwealth’s “Non-Healthcare Essential Service Worker Exposure Guidance” at: https://www.mass.gov/info-details/covid-19-state-of-emergency.

Question (Safety 19): I am curious about the number of wastewater treatment professionals that have become ill with Covid-19 so far.
Answer: MassDEP has not been tracking this and has not conducted such a survey. MassDEP is aware of two facilities at which operators have become ill due to the coronavirus and five facilities that have had staff shortages due to COVID-19 related issues. Four of these have returned to full staffing.

Question (Safety 20): What have you heard about fraudulent Personal Protective Equipment (PPE) offers?
Answer: Due to the high demand for PPE, critical infrastructure sectors have experienced a number of fraudulent offers falsely promising PPE in order to capitalize on the coronavirus pandemic. The Federal Bureau of Investigation issued an industry alert to warn government and health care industry buyers of rapidly emerging fraud trends. The alert, along with some recommendations to protect yourselves, is here: https://www.fbi.gov/news/pressrel/press-releases/fbi-warns-of-advance-fee-and-bec-schemes-related-to-procurement-of-ppe-and-other-supplies-during-covid-19-pandemic

MassDEP highly recommends all utilities exercise due diligence with emailed or other types of PPE offers, and extreme caution when dealing with vendors with whom they are
unfamiliar. Please continue to work with your local Emergency Management Director (EMD) for PPE needs. If you do not know your local EMD, you can find them here: https://www.mass.gov/find-your-local-emergency-management-director-emd.

Question (Safety 21): With a possible issuance of PPE by the federal government, we are hoping that both municipal wastewater systems and private wastewater systems will be eligible to receive supplies. Any clarification?
Answer: All wastewater utilities are eligible - both publicly and privately owned.

Question (Safety 22): We need gloves, in addition to masks.
Answer: MassDEP notes this need and will share this feedback with the Command Center. We recommend that you also continue to identify these needs to your local emergency management authorities.

Question (Safety 23): Have you heard anything about wastewater treatment operators being tested for the corona virus or antibodies?
Answer: There is no independent medical testing of wastewater treatment operator program. If there is a need for a medical test for the virus and you cannot get one through your Board of Health or your care provider, please let DEP know (kathleen.baskin@mass.gov). MassDEP will work with the Command Center to determine what resources may be available.

Question Update 10/7/20: On the Commissioner’s 10/7/2020 call with wastewater operators, an operator asked other participants on the call if any facilities were conducting routine COVID testing of non-symptomatic employees. Two facilities responded no. One facility said all staff had been tested once.

Question (Safety 24): Can health information on individuals be shared? For example, a utility did an inspection at a customer’s home then learned afterward the resident was ill. How broadly can this information be shared?
Answer: MassDEP has consulted with its liaison to the Command Center. Boards of Health cannot share this information beyond first responders and emergency personnel.

Question (Safety 25): Can you list the actual requirements for a face covering as mandated by the state?
Answer: The Commonwealth’s on-line info for the general public (see https://www.mass.gov/news/wear-a-mask-in-public) states that "you can use anything that covers your nose and mouth", and goes on to say "A face covering can include anything that covers you nose and mouth, including dust masks, scarves and bandanas." There is no state guidance specific for wastewater workers. CDC guidance calls for use of face shield OR face mask and does not specify type of mask. However, in cases where wastewater is aerosolized, MassDEP recommends the use of both face shield AND face mask.
Question (Safety 26): What’s the difference between “KN95” and “N95”?
Answer: N95 is a certification issued by US authorities. Masks that have similar effective properties as N95 masks go by different designations in different countries and are evaluated based on their certification systems (see https://accumed.com/blog/kn95-mask-vs-n95-mask/). KN95 testing parameters are quite similar, but not identical to, those applied in the US to N95 masks (see https://multimedia.3m.com/mws/media/1791500O/comparison-ffp2-kn95-n95-filtering-facepiece-respirator-classes-tb.pdf).

Question (Safety 27): Are there quarantine and contact tracing requirements for a confirmed case among our staff of wastewater operators? If there is a case, must or should all staff on that shift quarantine?
Answer: If you have such a situation, you should contact your Board of Health for protocols to follow.

Question (Safety 28): Can I get COVID-19 from wastewater or sewage?
Answer: EPA has a COVID-19 website with a frequently asked question section found here: https://www.epa.gov/coronavirus/frequent-questions-about-wastewater-and-septic-systems-and-coronavirus-covid-19. EPA’s posted answer to this question is, “there is no evidence to date that COVID-19 virus has been transmitted via sewerage systems, with or without wastewater treatment.” EPA’s COVID-19 site includes a link to a World Health Organization “technical brief” which addresses wastewater worker safety: https://www.epa.gov/coronavirus/can-i-get-covid-19-wastewater-or-sewage. The brief is dated late April 2020, so it reflects current research. In addition to citing studies on virus viability in wastewater, the World Health Organization technical brief also has suggestions to keep wastewater workers safe.

Question (Safety 29): Does DEP have any thoughts on preparation for a 2nd wave of COVID this fall?
Answer: MassDEP is in close communication with the Command Center (including the Department of Public Health), which is following trends carefully. We recently saw that Governor Baker slowed down the state’s reopening in response to an increase in reported COVID illness. MassDEP is already working remotely and the agency intends to do so through the end of 2020. Both DEP and EPA have already developed a number of COVID-related tools and guidance for the wastewater sector, including guidance on remote inspections and a nearly 50-page Q&A document related to the impacts of COVID on the sector. Perhaps most importantly, we have established a close communication channel – through these calls – which we can increase or decrease in frequency, depending on conditions. While we certainly hope not to see a second wave, MassDEP is already prepared and we will continue to develop tools to increase preparedness and support the wastewater industry.

Question (Safety 30): Research indicates that the coronavirus can survive in a person’s stool and fragments of the virus have been found in raw sewage. What
is the protocol for wastewater personnel to protect them from possible contraction of the virus from contact (breathing or through the skin)? Throughout our wastewater plant, there are vapors from the sewage and without full protective suits and breathing apparatus I’m concerned for the team in providing complete protection for them.

Answer: We have addressed this issue in our Q&A and refer you specifically to Questions Safety 3, Safety 4, Safety 5, and Safety 15, above. The answers to these questions provide advice on PPE for operators of wastewater treatment plants and also discuss the risk of aerosolization of wastewater.

In general, MassDEP recommends that all staff handling materials containing untreated sewage carefully follow all safety recommendations by the Centers for Disease Control and Prevention (CDC). However, MassDEP recommends one additional safety step related to PPE. While CDC calls for use of a “protective face mask or splash-proof face shield”, MassDEP recommends the use of both face masks and face shields to provide additional protection against potential splashes or other airborne droplets in areas where splashing, aerosols, airborne particles or droplets of untreated sewage may be present. Careful implementation of best work practices should always be a priority for employees involved in wastewater management operations, including using the engineering and administrative controls, safe work practices, and PPE required for work tasks when handling untreated wastewater.

Question (Safety 31): The state submitted its proposed COVID-19 Vaccination Plan to the CDC and the priority is:

- Healthcare personnel (HCP) likely to be exposed to or treat people, with COVID-19
- People at increased risk for severe illness from COVID-19, including those with underlying medical conditions and people 65 years of age and older
- Other essential workers

The “other essential workers” category is broad. Please comment on any more recent conversations that you have had with the Command Center about priority access for water/wastewater operators.

Answer: MassDEP raised this issue with the Command Center.

Answer Update 12/2/20:
Answer: MassDEP raised this issue with the Command Center and will let the Command Center know that this continues to be a concern to the water/wastewater utilities. MassDEP is advocating for water/wastewater workers to be a priority group. There is also advocacy by AWWA and others to have FEMA prioritize water/wastewater utility workers for COVID vaccinations.

Answer Update 1/6/21: DEP has an update on how vaccines will be prioritized for water utility representatives. According to the MA Vaccine Plan, water and wastewater utility staff are
included in Phase 2 and are expected to receive the vaccine in February and March (https://www.mass.gov/info-details/when-can-i-get-the-covid-19-vaccine#phase-2).

Question (Safety 32): Essential workers who travel for leisure are not exempt from travel restrictions; they must quarantine or produce a negative result from a COVID-19 test to return to work. Would MassDEP please contact the Command Center to have this policy reconsidered or can the state provide rapid testing for essential workers coming back into the state after leisure travel?
Answer: MassDEP raised this issue with the Command Center.

Question (Safety 33): MassDEP has been made aware of a cyber-attack on a utility. MassDEP wants to make facilities aware of this and provide these recommended actions for other utilities to take immediately:
Answer: WaterISAC continues reminding members to plan/prepare for the worst and hope for the best. When it comes to ransomware, regularly:

- Revisit, review, and discuss ransomware and data breach playbooks/policies/procedures, and keep them up-to-date. The CISA/MS-ISAC Ransomware Guide is a valuable resource to be used for prevention and response best practice guidance.
- Keep a reputable incident response firm on retainer before an incident occurs.
- Evaluate cyber insurance policies to confirm proper coverage.
- Send out security awareness reminders to all staff on how phishing is a very common initial infection vector for ransomware.
- Remind staff not to open attachments or click on links contained in emails, even if the email looks like it is from a trustworthy source. And if they already have received and/or actioned a suspicious email, encourage them to report the event now.
- Check device and network logs and events for potential intrusions, and consider configuring alerts for changes to files.
- Test backups and restore procedures before you need them and make sure you have a valid tested copy stored offline.
- Report ransomware incidents to authorities (and WaterISAC).

Additional resources on Egregor ransomware:

- Cybersecurity incidents should be reported to the DHS Cybersecurity and Infrastructure Security Agency at: https://us-cert.cisa.gov/report

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Question (Safety 34): Some workers, such as emergency responders and healthcare workers, are exempt from isolation for 14 days if they were in close contact with someone with COVID-19. Are water/wastewater employees also exempt?
Answer: MassDEP has raised this issue with the Command Center. MassDEP asked whether there is a process for a case to be evaluated if an emergency situation arises.

Question (Safety 35): There still seems to be little priority for expedited testing for water/wastewater operators. Many of our staff are getting results well beyond 4-5 days. Are there priority testing sites we can send our staff? I have staff that are waiting in long lines for up to 2+ hours just to get the test as well.
Answer: MassDEP has raised this issue with the Command Center. A list of free testing sites can be found here: Stop the Spread | Mass.gov and a list of additional sites here: https://www.mass.gov/doc/ma-covid-19-testing-sites/download.

Question (Safety 36): As an independent, regional water and sewer commission, we are not affiliated with a specific municipal body. We want to be sure that our organization and other independent agencies do not get lost in the shuffle. MassDEP may be a good advocate at the state level to ensure that regional systems are not overlooked when DPH prioritizes vaccinations.
Answer: MassDEP will advocate for prioritized vaccination on behalf of all drinking water and wastewater operators, including those affiliated with regional, non-municipal systems. See 1/6/21 Update to Safety 31.

Question (Safety 37): If I work at a wastewater plant, and work in one state but live in another, which state should I get vaccinated in? (The person asking works in MA and lives in NH but others were interested in the reverse scenario.)
Answer: MassDEP will raise this question to the Command Center.

Question (Safety 38): How will drinking water and wastewater operators be identified and then notified about being able to receive the vaccine? While first responders such as fire and police can be identified via a badge, we do not have similar identification.
Answer: MassDEP will raise this question to the Command Center.

Question (Safety 39): Is there news about vaccine distribution schedule, logistics, or eligibility?
Answer: Water and wastewater utility staff are among the essential employees included in Phase 2 of the vaccine rollout, which began Feb. 1st with people 75 and older as first priority recipients. Phase 2 is scheduled to take place in February and March. https://www.mass.gov/info-details/massachusetts-covid-19-vaccination-phases#phase-2: Water Utilities are on DPH’s radar. MassDEP has made contact with DPH and has consistently been advocating on your behalf. MWWA, MWRA and others have also
made DPH aware of the urgency and importance of vaccination for the industry given the essential service you all provide. MassDEP stands ready to help in any way to support vaccination of water utility employees. We expect to learn more from DPH and we will share that with you, as soon as we learn anything.

**Question (Safety 40): How will a private wastewater operator group receive vaccines if it does not have access to a municipality for distribution?**
Answer: MassDEP does not have information on vaccine distribution but expects to learn more from DPH and will share that with the drinking water and wastewater utilities as soon as possible.

**Question (Safety 41): Will wastewater support staff who do not have licenses will be eligible under Phase 2?**
Answer: MassDEP does not have information on vaccine distribution but expects to learn more from DPH and will share that with the drinking water and wastewater utilities as soon as possible.

**Inspections and Repairs**

**Question (Inspections/Repairs1): Are MassDEP staff performing on-site inspections? We are planning to start up a new pump station within the next 4 weeks, but MassDEP is required to perform an on-site inspection prior to startup.**
Answer: MassDEP intends to arrange for and carry out any inspections needed to ensure protection of public health and the environment and which are necessary for systems to carry out their functions. Please continue to let MassDEP know if you will be needing an inspection.

Answer Update 7/15/20: DEP is expanding inspections being conducted by DEP staff and has consulted the latest information in the development of its inspection protocols. Also, EPA’s has posted new protocols for staff interacting with the public/states on inspections, Interim EPA COVID-19 Health & Safety Guidelines for Field Activities: [https://www.epa.gov/coronavirus/coronavirus-covid-19-guidance-documents-field-activities](https://www.epa.gov/coronavirus/coronavirus-covid-19-guidance-documents-field-activities)

**Question (Inspections/Repairs2): Are collection system and pump station/wet well inspections still required to be done?**
Answer: Yes. If there are facility-specific reasons why such inspections cannot be performed without endangering personnel or the public, please contact the appropriate DEP Regional Office.

**Question (Inspections/Repairs3): Is there any guidance/recommendations regarding repair work (other than emergency work) within the collection systems?**
Answer: Wastewater systems should discuss priority projects with their MassDEP regions. If immediate repairs are needed to retain the system in a functional condition, those actions should not be delayed.
Question (Inspection/Repair 4): Nantucket is experiencing severe erosions in areas near discharge beds. Would there be any kind of an update for potential timelines for a MassDEP site visit to the island if required?
Answer: If there is an important matter requiring an in-person site visit or inspection, MassDEP will send its staff into the field and do its best to establish protocols to keep its people safe. Communities should work with their MassDEP regional contact. Send photos and any other pertinent information, if possible.

Question (Inspection/Repairs 5): What is the response to towns that need conservation commission approval for sewer work in a wetland / resource buffer. Should they appeal to DEP if the towns do not respond accordingly?
Answer: Wastewater management is an essential service. MassDEP has been in consultation with Commissions and with the Massachusetts Association of Conservation Commissions to help facilitate Commission business during this time. An Executive Order issued allows Conservation Commissions to operate remotely and hold meetings virtually. If there is a project with particular challenges, reach out to the MassDEP Regional Office Wetlands Staff or Wastewater staff who will see how they can assist by contacting the local Conservation Commission to help move things forward.

Question (Inspection/Repair 6): The Board of Health is trying to foster safer physical/social distancing and other precautionary measures for activities associated with septic assessment, design, and installation. For outdoor work such as soil testing and system installation, we have established guidelines for safe conduct of the work during this pandemic. However, concerns remain about maintaining appropriate distancing during in-home inspection/assessment efforts undertaken by septic engineers and Title 5 inspectors and the risks that would be posed for the homeowners and these professionals and septic design and Title 5 inspection professionals have asked us for protection on this.

The Board is aware of the methods by which septic repairs and replacements can be arranged to take place after property transfer (e.g., funds placed in escrow, other information at the mass.gov sources noted below). Such arrangements are typically supported by septic design evaluations having taken place before the property transfer, to help establish appropriate/realistic levels of funding and thus there is still pressure to have the interior inspections (to confirm bedroom counts, etc.).

Might MassDEP be able to identify any strategies, etc. to apply under these extraordinary circumstances of COVID-19, to help guide and ease the challenges that home sellers and buyers are facing? Could MassDEP provide guidance to address the uncertainties of septic cost and design to be addressed when setting up agreements pertaining to post-transfer septic system repairs/replacements?
Answer: Although it is considered good practice to enter the premises to confirm the number of bedrooms for occupied homes and gather other information that might affect the performance
of the system, as a temporary measure to facilitate Title 5 system inspections during social distancing associated with COVID-19, MassDEP advises that for occupied residential homes an inspector may be able to gather such information by other means. Inspectors can and should access all available information online where feasible, such as Assessor's records, which typically will indicate the bedroom count. Additional information can also be gathered by directly contacting the Board of Health via phone or email and arranging for file copies of the property to be mailed or picked up. If either the inspector or homeowner has concerns about public health risk during the Covid-19 pandemic, an interior tour of the residence may be done by the homeowner over a video conferencing application that would allow the inspector to ask about and determine the presence of a garbage grinder, presence of water filtration unit, presence of sump pump, verify if laundry discharge is on a separate line, look for signs of sewage backup and verify number of bedrooms.

Inspectors should make best efforts to meet the minimum requirements of the system inspection as stated in the Inspection Guidance at: https://www.mass.gov/guides/guidance-for-the-inspection-of-on-site-sewage-disposal-systems#-minimum-requirements-for-an-inspection. MassDEP recommends that the inspector provide documentation on the Title 5 Inspection form of the sources of the information gathered. Documentation could include review of an interior plan of the building and/or the video walkthrough of the building by the current occupant. Any information that is not available should be noted on the form and the inspector should put a comment on the front of the inspection report stating, "Due to COVID-19 issues, the inspector did not enter the premises."

**Question (Inspections 7): When will wastewater treatment system operators be able to go into industries to do industrial sampling/inspections and renew permits? This is our normal time frame to do industrial inspections and permit renewals. Or is it a town-by-town thing? Or is it up to the industry if they allow us in?**

**Answer:** Renewal of permits can be done any time as that is an administrative procedure and does not require an on-site visit. COVID-19 should have no impact on reissuance of permits. Regarding sampling and inspections, that is going to depend on the comfort level of each municipality. EPA hasn’t heard of anyone actually doing inspections yet. Given our current situation, it is expected that many programs will not be able to perform inspections yet. However, keep in mind that the federal requirement is that a program only sample and inspect each industrial user at least once per year.

If a municipality is concerned about meeting its annual monitoring or inspection requirement, they should consult Jay Pimpare of EPA at 617-918-1531. Keep in mind the EPA Temporary Enforcement Policy may also be considered if the issue is related to COVID-19.

**Staffing and Licensure**
Question (Staffing1): Can systems avoid receiving notices of non-compliance for staffing shortages if the facilities have SCADA systems in place?
Answer: Staffing shortage is a potential emergency that is required to be covered in existing emergency response plans under 314 CMR 12.00, for wastewater treatment facilities. Facilities should notify their MassDEP Regional Office of such shortages. Facilities should review these portions of their emergency response plans and prepare for the possible implementation of the emergency response plans if circumstances warrant it. MassDEP will work with facilities that are confronting absences to help determine whether other operators may be available to assist or whether remote operations (SCADA) may be sufficient during this emergency time period to substitute for some on-site practices.

Question (Staffing2): What if operators at small systems (facilities that are graded 4 or less) are unavailable due to illness?
Answer: Under existing rules, the person in direct responsible charge during the absence of the Chief Operator can be one grade below the grade of the plant. The Regional Office should be notified. For other situations, MassDEP will review requests received from systems expeditiously.

Question (Staffing3): How can we get more licensed operators?
Wastewater treatment facilities: Identify operators who can assist, including recently retired operators who are familiar with your system, and operators whose licenses recently expired (December 31, 2019).
Wastewater operators: Ensure that your license is active. Here are the options for obtaining a current license:

License Renewal
All licenses that expired on December 31, 2019 have been given an extension to renew. Due to the potential shortage of necessary wastewater operators and the closing of the exam site until April 13th, the Board is giving all operators an opportunity to remain active in the field. If your license has an expiration date of December 31, 2019 and you want to renew, please contact Michelle Jenkins, NEIWPCC at 978-349-2516 to complete the necessary form and payment.

Inactive status
For any operator who is currently under inactive status and could be needed as a backup operator for your facility, the Board will waive the requirement that an inactive operator needs 10 TCH before going back to active status. If you know any operators who have recently gone to inactive status, please reach out to them now about their potential to reactivate and work potentially as a backup operator.

Emergency Certification
In accordance with 257 CMR 2.00, any person requesting emergency certification must apply in writing to the Board of Certification. Through a majority vote and for a good cause shown, the Board will grant Emergency Certification to enable an operator to work at a specified facility in a position for which the operator is not otherwise certified. Emergency Certification shall not be granted to employees or managers of contract operation and maintenance firms. Emergency Certifications shall be valid for no longer than six months. Because the exam site is closed until April 13th, operators who have been preparing to take the exam will be allowed to apply for emergency certification to allow them coverage until the exam site is back open and exams can be taken again.

Reciprocity
Wastewater operators certified in another state are able to be certified in Massachusetts through reciprocity. In accordance with 257 CMR 2.00, any person requesting reciprocity must be a certified wastewater treatment plant operator. Your certification must have been based on an examination process recognized by the Commonwealth of Massachusetts or the Associated Boards of Certification (ABC).

Contact
For any questions on wastewater operator licensing please contact John Murphy, Wastewater Operator Certification and Training – MassDEP (john.j.murphy@mass.gov or 617-292-5867).

Question (Staffing4): What else can a system do to increase its number of operators?
Answer: Wastewater treatment facilities are encouraged to join the Massachusetts Water/Wastewater Agency Response Network (MAWARN.org) to find licensed operators who may be able to help a system meet temporary staffing needs. Also, where staffing permits, systems should consider cross-training other staff. The Massachusetts Water Resources Authority has offered assistance in conducting one-on-one sampler training.

Question (Staffing5): A lot of trainings have been cancelled or interrupted, which could mean operators are not able to get the necessary contact hours to maintain their licenses. Can MassDEP and Board extend deadlines for getting contact hours? Can MassDEP provide opportunities for online training?
Answer: MassDEP is currently considering options to host training classes online to make up for recent course cancellations, if needed. In addition, MassDEP will be consulting with the Board on identifying any authority to extend license terms.
Answer Update 6/5/20: Many online courses have been approved for TCHs. Contact John Murphy for more information: john.j.murphy@mass.gov or 617-292-5867.
Answer Update 11/4/20: There are numerous trainings being offered. The requirement of 20 TCHs will apply to renewals at the end of December 2021. The TCH requirement will not be adjusted.

Question (Staffing6): If an operator’s family member is quarantined, should the wastewater facility ask the operator to stay home too? What if an operator is required to sample at a facility where a case of coronavirus has been confirmed? Do you have any guidance on how to advise the wastewater system?
Answer: These situations will have to addressed on a case-by-case basis by the facility based on available information and working with public health authorities.

Question (Staffing7): Is there any recommendation on staffing? Should we be splitting up our crews and licensed operators? Should we only be going out on emergency calls and for sampling? Should the staff that are de-watering and performing lab procedures be rotated to eliminate a singular person to be exposed to probably the worst atmosphere possible? Should the personal that perform sludge hauling duty be rotated as well?
Answer: MassDEP encourages and supports all actions to ensure the continuity of treating wastewater during this emergency period, and for the safety of operations staff. Wastewater facilities should take all actions they determine to be necessary to provide the proper treatment and disposal of wastewater during this period and should inform their MassDEP regional office of all such plan or actions. If a split staffing approach is to be implemented, the staffing must always include a properly licensed staff person in responsible charge of the treatment works.

Question (Staffing8): If communities or the state begin shelter in place, how can we assure contract operators (private companies) will be able to travel freely about to collect samples? Can Licensed Wastewater Operators be deemed “essential” and able to travel regardless of whether they are a private entity? Who makes this determination? What documentation is needed by operators and who will provide it?
Answer: The Water and Wastewater section of Exhibit A to the Order issued by Governor Baker on March 23, 2020 is covered under the public works section to "support the operation, inspection and maintenance of essential public works facilities and operations", including water. Please see details here: https://www.mass.gov/doc/covid-19-essential-services.

Question (Staffing9): Can an Operator in Training (OIT) be granted full status to help fill in needs for operators?
Answer: These will be reviewed on a case-by-case basis through the emergency certification process. Contact john.j.murphy@mass.gov for more details.

Question (Staffing10): Can the 960-hour limitation for retirees in the state retirement system, as many DPW workers are, be waived for the duration of the
**emergency?** The theory is many of these retirees would be working fulltime for perhaps an extended period of time.

Answer: On April 3, 2020, Governor Baker signed “An Act to address challenges faced by municipalities and state authorities resulting from COVID-19” (H4598) into law. The law exempts: (i) any person who has been retired and who is receiving a pension or retirement allowance from the commonwealth, a county, city, town, district or authority; and (ii) any person whose employment in the service of the commonwealth, county, city, town, district or authority has been terminated by reason of having attained a specified age without being entitled to any pension or retirement allowance from the caps on hours worked and earnings received during the state of emergency issued by the Governor on March 10, 2020. See Section 14 of the law here: [https://malegislature.gov/Laws/SessionLaws/Acts/2020/Chapter53](https://malegislature.gov/Laws/SessionLaws/Acts/2020/Chapter53)

**Question (Staffing11): Where is the list of licensed operators?**

Answer: Here is the operator search tool: [https://portal.neiwpcc.org/wwo-search.asp](https://portal.neiwpcc.org/wwo-search.asp). If you don’t enter a name you have access to all licensed operators with their city/state location, level of certification and expiration date.

**Question (Staffing12): Is it ok to reduce staffing to one operator per shift?**

Answer: If there is any change in staffing the DEP Regional office should be notified. Reducing staffing to a single operator may raise safety concerns. There are some tasks that may require two people to perform safely (confined entry, etc...). Operators should coordinate with DPW or have a non-licensed staff person available for these activities - even if they use separate trucks, etc., to ensure safety.

**Question (Staffing13): My public water utility would like to join MA WARN but does not have access to signatories during the COVID 19 emergency. Can the signature requirement be waived, or can my utility sign the membership agreement electronically?**

Answer: MA WARN is a voluntary organization intended to provide mutual aid to water utilities during emergencies. Participation can be declined by a member for any particular emergency and withdrawal from MA WARN can be done at any time with notice to the group's representative.


**SIGNATURE AUTHORITY TO BIND THE UTILITY.** The person or persons authorized to sign and bind a public utility may not be the same for each system, so the first step in joining MA WARN would be identifying an authorized person to sign. This may be the board of commissioners for a utility, a DPW superintendent, water commissioner, city council or mayor or board of selectmen or town manager.
RELIEF UNDER STATE OF EMERGENCY. There has been no general declaration that changes or relieves any signatory requirements for municipal agreements, so in order to join MA WARN a signature on behalf of the utility is needed to demonstrate the utility's intention to join. MA WARN has published on its website a template for a utility to express its intent to join- but has not provided advice about electronic signatures. The template can be found here: http://portal.mawarn.org/Portals/0/MA%20WARN%20FINAL%202007.pdf?ver=2017-04-24-100420-920. No signature block is reserved for MA WARN to accept the agreement.

MassDEP’s recommendation is to obtain a signature of an authorized person for your utility on the template membership agreement, and provide MA WARN with notice that the utility intends to join and has signed the membership agreement. Sending an electronic copy of the signed template form should serve as notice of the utility’s intention to join. New England Water Works coordinates MA WARN membership. Please contact Kirsten King at 508-893-7979 or kirsten@NEWWA.org.

Question (Staffing14): Are municipal stormwater permit (MS-4) activities and the people who conduct these activities considered to be “essential” per Governor Baker's list?
Answer: Yes, essential workers include those involved in public works and wastewater, which include personnel involved in stormwater management activities. EPA has issued some guidance on this – municipalities regulated by EPA’s MS4 permit are encouraged to keep doing the work required by their permits. If they cannot, they should keep track of what cannot be completed and report this in their annual report. Please contact Newton Tedder (tedder.newton@epa.gov) of EPA Region 1’s MS4 program for further information.

Question (Staffing15): Will DEP or the State be helping to bring back retired operators and reinstate them in retirement? The requirement to pay back all the years of retirement benefit is too daunting. Some are not interested in getting just a few weeks’ pay so the increase to maximum hours is not enough.
Answer: DEP will reach out to the Retirement Board to put forth this question.

Question (Staffing 16): Has the Board of Certification given thought to reducing the TCHs needed for license renewal?
Answer: Right now, licenses are in the first 4 months of a 2-year cycle. The Board has not discussed reducing the TCH requirement but can investigate this possibility if needed.
Answer Update 11/4/20: There are numerous trainings being offered. The requirement of 20 TCHs will apply to renewals at the end of December 2021. The TCH requirement will not be adjusted.

Question (Staffing 17): The Safety and Environmental Manager for the Coca Cola facility in Northampton has a situation of being short-staffed due to an operator being quarantined because of exposure to COVID through a third party. This is a 6C Industrial facility. How can the facility get an operator? What grade is allowed? Is a lower grade than 6 allowed if the 6C operator is on call?
Answer: For emergency certification of operators please contact John Murphy at Contact john.j.murphy@mass.gov. Facilities in these situations should also contact the appropriate MassDEP Regional Office.

**Question (Staffing 18): Is there an updated listing of Board-approved trainers/training providers, for TCHs hours, for Wastewater Operators’ licenses?**
The Board does not keep a list of approved trainers/training organizations. Trainings are approved on an individual basis using the request for training contact hour evaluation form (http://click.neiwpc.org/training/training-docs/RequestTCHs.pdf). Completed forms can be submitted by email to john.j.murphy@mass.gov.

There has been an effort to move more of the training courses online. NEIWPCC, MAWEA, NEWEA, and EPA will be doing more online trainings in the next few months. MassDEP has been coordinating with MAWEA about doing their quarterly meetings via online training and with NEIWPCC about their doing the Basic Wastewater Course via online training.

**Question (Staffing 19): Our Town is considering bringing back all personnel but taking their temperatures every morning. Is this something that the DEP will support, or issue as a guideline? Are other towns taking similar measures? Can the licensing division require that operators wear masks whenever more than one employee is working together? Finally, some discussions have begun for some DPW departments to end their COVID staffing arrangements. Is there any guidance on maintaining COVID staffing arrangements such as split staffing?**

Answer: On May 18th, the following guidance was issued by Mass DPH and the Command Center for workplaces open after May 18th: https://www.mass.gov/info-details/reopening-mandatory-safety-standards-for-workplaces. MassDEP does not have independent guidance on workplace protocols for operators. Towns should continue to work with their local authorities, including Boards of Health, to make sure that the protocols are being followed. The following protection, guidance, and prevention measures apply to both State employees and contracted staff working on behalf of the State: https://www.mass.gov/info-details/covid-19-employee-health-protection-guidance-and-prevention.

**Question (Staffing 20): When will testing facilities be opened for license exams?**
Answer: Exam sites are now scheduled to open May 18th. Please note that the Bridgewater site will not reopen until June 1st. Go to: https://www.psionline.com/important-notice-update-concerning-covid-19-coronavirus/ for more information.

Answer Update 6/5/20: Exams sites are open.

**Question (Staffing 21): Can the Department provide the Wastewater Utilities with Guidance, on how to use the regulation (314 CMR 12) and the regulation enabling legislation (MGL Ch. 21, §§27(9), 27(12), 34 and 43) to help us to stay “immune” from potential Wastewater staffing furloughs by our respective Municipalities?**
According to Section 12.04 “Maintenance of Treatment Works and Sewer Systems” of 314 CMR 12.00 “Operation, Maintenance and Pretreatment Standards For Wastewater Treatment Works and Indirect Dischargers”:

(3) All wastewater treatment facilities shall be provided with adequate operating personnel to ensure proper operation and the required degree of treatment at all times.

(4) In order to assure proper operation and maintenance, the Department may determine and require a minimum number of shifts and personnel per shift for any wastewater treatment facility considering the size, complexity and safety requirements of the particular facility. Any person operating wastewater treatment facilities shall prepare and submit to the Department a staffing plan for review and approval. The Department may utilize the Northeast Guide For Estimating Staffing at Publicly and Privately Owned Wastewater Treatment Plants, prepared by New England Interstate Water Pollution Control Commission and dated November 2008, along with any other relevant information, as a guide for determining the appropriate staffing level a wastewater treatment facilities with a design flow of 0.25 million gallons per day or higher. The plan will be presumed approved if the Department does not issue a written approval, conditional approval, denial or request for further information within 90 days after submittal. The submittal and issuance dates are the dates that the manual and the Department’s approval, conditional approval, denial or information request are postmarked. The plan shall be implemented as approved. Said staffing plan shall contain a description of the number, certifications, and qualifications of personnel needed to ensure proper and continuous operation of the facility, and shall address the following items:

(a) Number of operational days per week;
(b) Number of operational hours per week;
(c) Number of shifts per day;
(d) Required personnel per shift;
(e) Saturday, Sunday and Holiday staff coverage; and
(f) Emergency operating personnel.

Answer: While MassDEP is not prepared to address the issue of municipal finance, it does require that the staffing plan for a wastewater system be implemented as approved. If a wastewater utility is considering a change to its staffing plan, it must resubmit the plan to MassDEP’s Regional Office for review and approval. Also, MassDEP recommends the use of enterprise funds accounts to fund operation and maintenance of infrastructure, stormwater mitigation and other water resource protection efforts.

Question (Staffing 22): Can the Department provide guidance on whether we should continue to work in split shifts? Also, what information is available to our
local Board of Health regarding the risks of exposure to the coronavirus from aerosolization of Wastewater?


Specifically, please the Questions & Answers labeled as Safety5, Safety11 through Safety15, Staffing7, and Staffing12 for discussion of PPE or aerosolization.

Question (Staffing 23): Are there any opportunities for online training for people looking to get into the WW field, i.e. intro to WW treatment operations?

Answer: The following links provide information and resources for those interested in the Wastewater field and anyone looking to prepare for a Massachusetts Wastewater Operator Exam:

Water Program Sacramento State – Wastewater Courses (manuals)
https://www.owp.csus.edu/courses/wastewater.php

Water Environment Federations – Wastewater Treatment Fundamentals

Recommended (but not required) preparation (training) for taking a wastewater Operator license exam where you may view and/or download this 2-page Exam Prep document: http://click.neiwpcc.org/training/training-docs/Recommended_Prep_for_WWTPO_License_Exam.pdf

If you have any questions, please contact John Murphy at: john.j.murphy@mass.gov or 617-292-5867.

Question (Staffing 24): When will in person training begin?

Answer: At this time with the current group gathering restrictions and the need for social distancing, in person training cannot resume. Once these restrictions change and groups are able to gather, then it is possible that in person training will start up again.

Question (Staffing 25): What does “Inactive” mean for a Wastewater Operator License?

Answer: “Inactive” refers to retired operators OR operators with "when and if" status (Operators who have passed the exam but have no experience in wastewater operations).

Inactive operators will not be required to obtain the necessary TCH's, but must pay the annual renewal fee. If an Inactive operator becomes Active, the operator must obtain the necessary
TCH's annually thereafter. It is the responsibility of the Inactive operator to notify the Board of a change in status.

Question (Staffing 26): Our town is preparing for the financial impact of the corona virus and may possibly layoff one of our operators or reduce our operating hours. Our plant is currently operated with 3 operators which is the minimum required. If the town does move forward with reduction of hours or a layoff, is that acceptable to go against the staffing plan due to the financial hardship?
Answer: If there is a situation where there will be a reduction or change in staffing at your facility, please contact your DEP regional office to discuss these changes. There are minimum standards of operation that need to be met and not meeting these minimum standards is a potential compliance issue. Please talk to your regional contact so that DEP can address any potential problems they see with the modified staffing plan.

Question (Staffing 27): Is there more information about training and test taking opportunities and options during these times? I am interested in locating online training options.
Answer: Due to ongoing safety concerns with in-person trainings, the Board and NEIWPCC have developed online exam prep courses. These are the 6-week courses broken into 2-3 hour training sessions. The Board and NEIWPCC are working on a checklist of trainings available specific to the grade of exam an operator will be taking. Online TCH opportunities are coming out from multiple organizations.

Question (Staffing 28): I am interested in any other resources or other remote options like work books and mail in quizzes.
Answer: The checklist will also include other resources such as study manuals, work books, correspondence courses and other training organizations. If you are aware of other resources, please send them to John Murphy of MassDEP (john.j.murphy@mass.gov).

The checklist can be found here: https://www.mass.gov/lists/wastewater-operator-certification-forms#training-for-wastewater-treatment-plant-operators-

Question (Staffing 29): I also wanted to ask if remote exam options are being considered? I’ve got an employee whose employment is contingent in obtaining a waste water license by a certain timeline, but they are struggling with the idea of going to a center for a test. I suspect they have a vulnerable family member in their care. If there are any remote exam options available, please let me know.

October 25, 2021
Answer: ABC is investigating remote proctoring of exams, but this is not currently available. PSI sites are adhering to the latest guidelines for conducting tests. See those guidelines here:

Residuals/Sludge

Question (Residuals/Sludge 1): What are the available resources/outlets for solids management in this region?
Answer: MassDEP is compiling a list of these facilities. A partial list is available at the end of this document and at this link: https://www.mass.gov/doc/massdep-guidance-on-managing-wastewater-sludge-during-covid-19-pandemic/download

Question (Residuals/Sludge 2): There are concerns about sludge disposal transportation and the availability of haulers.
Answer: Septage hauler companies have been contacted and anticipate little to no disruptions at this time. Facilities should notify their MassDEP Regional Office of any changes in the ability to get a septage hauler to service the facility.

Question (Residuals/Sludge 3): Are sludge haulers considered essential personnel?
Answer: The Water and Wastewater section of Exhibit A to the Order issued by Governor Baker on March 23, 2020 includes workers who "support the operation, inspection and maintenance of essential public works facilities and operations." Sludge haulers play an important role in wastewater treatment operations.

Question (Residuals/Sludge 4): I am finding that sludge disposal is becoming more difficult to dispose. Sludge disposal is critical to operations. Are others finding the same and is the state is aware?
Answer:

2. NEIWPC has developed a proposal that is being discussed with the New England states to evaluate the regional capacity for sludge management. There is interest to support a national survey this fall to better understand what the capacity is at each facility. NEIWPC will update the group as the date of the survey approaches.
3. MassDEP has heard varied concerns from operators about sludge management ranging from having not experienced any problems to some who are aware of occasional problems with sludge capacity. Here is a summary from MassDEP’s regions:

Options are limited and sludge production is increasing as permit limits are tightened.

In general, costs are going up. When breakdown and/or maintenance occurs at the major facilities, this impact trickles down to the generators. Example: When receiving equipment at a major facility for dewatered sludge broke down, a Massachusetts WWTP was told to reduce dewatered sludge delivered to the facility by 30%. Costs doubled until repairs were made. A number of these short-term situations have occurred over the past few years.

WERO reports their only known problem is that Erseco (Erving #2) is not accepting septage due to concerns with PFAS.

### Septage

**Question (Septage1): Are there recommendations for facilities treating septage? Any guidance on those facilities accepting septage?**

**Answer:** MassDEP’ Office of Research and Standards is reviewing the most current data available for the presence of COVID-19 in fecal matter. MassDEP will provide any updates it discovers, including those that relate to the handling of septage. It is advisable to follow the current CDC guidelines established for wastewater. Please also see the recommendations noted in Question Safety 3 of this document. MassDEP has compiled a list of facilities that accept septage. This list can be found at the end of this document.

**Question (Septage2): What should a septage hauler do if a wastewater treatment plant will not accept its waste?**

**Answer:** Proactively communicate with the treatment plants that you frequently utilize for disposal. Massachusetts’ municipal wastewater treatment plants remain in operation. However, in response to COVID-19 outbreak and to maintain staffing, these facilities may be limiting hours and rotating staff on shifts or scaling back on the number of staff working in the facility at the same time. As staffing is reduced, some facilities may, in turn, have reduced capacity to receive septage. We are encouraging haulers to speak directly with the facility operators and, if requested, adjust their workloads so that emergency pump outs and crucial jobs are prioritized over routine septic maintenance/pump outs.

For additional assistance or questions, please contact a DEP Regional Office.

Sampling and O&M

Question (Sampling/O&M1): Can sampling requirements at the facility be reduced or suspended?
Answer: The facility should make best efforts to continue to monitor and sample as required by its discharge permit. The facility should contact its MassDEP Regional Office or EPA’s Michael Cobb regarding any difficulties or changes made in the sampling schedule.

Question (Sampling/O&M2): The facility served by the WWTP I operate is shut down and now not generating any wastewater flows. Am I required to sample?
Answer: If there is no effluent discharge for the month, there is no permit requirement to sample plant flows. On eDEP reports, the daily summary sheet should indicate dates for which there was no discharge. Sampling requirements for monitoring wells remain in place. In addition, under these conditions, operations staff should take actions to retain the biomass to the maximum extent feasible, so that the plant can go into a favorable operating condition quickly once wastewater flows are restored. The operations staff should continue to log site inspections and actions in the facility operations logbook.

Question (Sampling/O&M3): Non-flushable products are becoming a problem at wastewater facilities. What can be done to stop the flushing of wipes, etc.?
Answer: MassDEP has posted on social media regarding this problem and will be posting information concerning the proper disposal of wipes and other non-flushable items on its wastewater webpages.
Update 5/14 Answer: MassDEP has posted this message here: https://www.mass.gov/guides/caring-for-your-septic-system and on Twitter and is exploring new ways to get this message out. We will also continue to advise the Command Center of this ongoing issue.
Answer update 6/5/20: Weekly posts are being made to Twitter and additional web page resources are being evaluated. Any updates and additional links will be posted here.

Question (Sampling/O&M4): Has there been any discussion regarding adjusting chlorine levels in the effluent to favor bacteria kill versus the current goal to achieve a controlled partial kill?
Answer: According to the Occupational Safety and Health Administration (OSHA), “coronaviruses are susceptible to the same disinfection conditions in the healthcare setting as other viruses, so current disinfection conditions in wastewater treatment facilities is expected to be sufficient.” However, where possible, if the permittee wishes to effect a more rigorous
disinfection process, MassDEP supports this approach, so long as there are controls to prevent against toxic impacts at and near the point of discharge.

**Question (Sampling/O&M5):** Has there been any discussion regarding adjusting treatment goals? For example, is it permissible if needed to forgo nitrification?

**Answer:** The facility should make best efforts to continue to treat, monitor, and sample as required by its discharge permit. The facility should contact its MassDEP Regional Office in regard to any changes made in the treatment provided or any planned bypass.

**Question (Sampling/O&M6):** We are not requiring operators at the plant to enter the headworks of the plant or to take Sludge Judge readings at both the Primary and Secondary tanks. Also, we are not performing any non-necessary maintenance at the plant. The sprayers are turned off to both the Aeration tanks and Secondary Tanks. Is this OK?

**Answer:** MassDEP encourages and supports all actions to ensure the continuity of treating wastewater during this emergency period, and for the safety of operations staff. Wastewater facilities should take all actions they determine to be necessary to provide the proper treatment and disposal of wastewater during this period and should inform their MassDEP regional office of all such plan/actions and of any deviations from their O&M plans.

**Question (Sampling/O&M7):** Would MassDEP be open to adjusting compliance schedules within its jurisdiction? If yes, how long of an extension would generally be allowed?

**Answer:** If a facility has a compliance schedule and believes an extension is required, they should contact its Mass DEP Regional office. These will be evaluated on case-by-case basis.

**Question (Sampling/O&M8):** What discussions MassDEP has had with U.S. EPA Region 1 on issues related to compliance schedules, reporting extensions and other deadlines that are under EPA’s jurisdiction (ACOs, Consent Decrees, NPDES permits, etc.)?

**Answer:** MassDEP has been in contact with EPA. MassDEP and EPA are also consulting with one another on facility specific requests and will continue to stay in touch on these issues. Questions related to EPA-issued enforcement orders and consent decrees should be directed to EPA, but MassDEP would appreciate being copied on these requests. Questions related to MassDEP-issued enforcement orders for NPDES permits should be directed to the appropriate MassDEP regional office. For questions related to NPDES permit compliance, please remember to make requests to EPA and MassDEP since the NPDES Program is jointly administered.

**Question (Sampling/O&M9):** For Industrial Pretreatment Programs (IPP) and required industrial sampling and inspections, how will business closures and access for required sampling and inspections be addressed?

**Answer:** If the facility is in operation and discharging wastewater, it needs to have a certified operator present. If the facility is closed and not operating no inspections or sampling need to be done and it should be reported as no discharge.
Question (Sampling/O&M10): For those of us with septic systems, what household cleaners are you using that will kill the virus & yet be ok for septic systems?
Answer: It is generally recommended that household disinfecting cleaners be used. While it is likely that people are doing more frequent handwashing and more cleaning with disinfectants given the current health threats associated with Covid-19, if these products are used in their intended way, there should not be any severe impacts to the septic system given typical daily volumes discharged. Disinfectant wipes, paper towels and Kleenex should not be flushed to any wastewater system, including a septic system.
Update 5/14: EPA has published a list of disinfectants that are effective against the virus that causes covid-19. It’s called List N: [https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2](https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2). The disinfectants on the list have not been tested specifically against the virus that causes COVID-19, but they demonstrate efficacy against a harder-to-kill virus; or against another human coronavirus. All surface disinfectants on List N can be used to kill viruses on surfaces such as counters and doorknobs. It is not safe to drink or inject them. Don’t flush them if you have septic because these List N disinfectants may kill the beneficial bacteria that break down the organic matter in a septic system. Please make sure to dispose of personal care products, cleaning supplies, and other household waste properly by putting them in the trash can, in the recycling bin, or at your local household hazardous waste disposal site.

Question (Sampling/O&M11): In the event that a sludge incineration facility’s staff becomes incapacitated or unavailable, can incinerator operators from other states be substituted?
Answer: While there are no formal reciprocity provisions for states and facilities in the federal incinerator regulations, EPA has indicated that a qualified operator from another facility could work at a “new” facility in the event of COVID-19-related staffing shortages. As long as a qualified operator receives training on the site-specific elements of the “new” facility, for example training requirements (iii)-(ix) of §62.15920(c)(1) (see below) as found in the Sewage Sludge Incineration (SSI) Federal Plan, EPA believes the operator training requirements would be fulfilled. EPA views these requirements as something an operator should be familiar with anyway when learning how to operate the “new” facility. If this situation arises, the facility should contact EPA and detail specific reasons why the staff substitution is needed. Documentation that the necessary site-specific training was completed by the visiting operator should be kept with other records related to qualified operator requirements.

40 CFR §62.15920(c)
(c) Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs (c)(1) through (3) of this section:
(1) Training on the 10 subjects listed in paragraphs (c)(1)(i) through (x) of this section:
(i) Environmental concerns, including types of emissions;
(ii) Basic combustion principles, including products of combustion;  
(iii) Operation of the specific type of incinerator to be used by the operator, including proper startup, sewage sludge feeding and shutdown procedures; 
(iv) Combustion controls and monitoring; 
(v) Operation of air pollution control equipment and factors affecting performance (if applicable); 
(vi) Inspection and maintenance of the incinerator and air pollution control devices; 
(vii) Actions to prevent malfunctions or to prevent conditions that may lead to malfunctions; 
(viii) Bottom and fly ash characteristics and handling procedures;  
(ix) Applicable federal, state and local regulations, including Occupational Safety and Health Administration workplace standards; and 
(x) Pollution prevention.

Question (Sampling/O&M12): With limited information available about the COVID-19 virus, operators have expressed concern with sampling raw wastewater as there may be a risk of exposure to coronavirus, it is difficult to maintain social distancing, and personal protective equipment is difficult to obtain. With the potential of UV disinfection killing the virus, effluent samples aren’t as critical, but influent has the potential to emit untreated aerosols. We understand that influent results are of value to calculate treatment efficiency in terms of percent removal, but we ask that until the shelter in place mandate is lifted, DEP suspend the influent sampling requirements for wastewater treatment facilities in hotspot locations, such as assisted living/nursing homes and hospitals, that do not have a reportable percent removal permit limit (groundwater discharge permitted facilities).

Answer: As stated in Sampling/O&M1, the facility should make best efforts to continue to monitor and sample as required by its discharge permit. The facility should contact its MassDEP Regional Office or EPA contact regarding any difficulties or changes made in the sampling schedule. We will be looking at these situations on a case-by-case basis and responding directly to those who notify DEP. If a facility anticipates discontinuing influent sampling at a Groundwater Discharge facility, please contact Marybeth Chubb, Marybeth.Chubb@mass.gov, and the appropriate DEP Regional Office and provide the following information:

- Name of Facility  
- Location of Facility  
- Groundwater Permit Discharge Number  
- MassDEP Region  
- Dates of Influent Sampling Discontinuation  
- Reason for Discontinuation of Influent Sampling

Question (Sampling/O&M13): Can't the MassDEP and US EPA give approvals for reasonable relaxation of permit requirements at this time? We asked for one and the message back was - try your best, document, and we'll decide later if it's a
violation. It hard to schedule and plan around that. We are all doing scheduling gymnastics to separate employees and some help would be appreciated.
Answer: We can’t emphasize enough to work with your regional office of MassDEP or your EPA contact if you are confronting a situation where you think you might violate your permit. They will help you document the situation and assess the potential for any alternatives. They can also help you confirm that there are no alternatives, if that’s the case. We want to be sure the operators stay healthy and are able to do their jobs. We recognize that we are in a state of emergency and this is a pandemic.

**Question (Sampling/O&M14):** I have a ground water permit for a high school, there is no flow. The only thing that could happen is if the school is used in an emergency. Should I still sample even though there is no flow in or out?
Answer: If there is no flow, the effluent does not need to be sampled. Discharge Monitoring Reports (DMRs) should still be submitted through eDEP indicating no flow by entering ‘ND’ in the flow column of the Daily Data form. Monitoring wells should continue to be sampled on the regular schedule required by the permit. You should notify the regional office of the status of the facility and of any change to that status or any further deviations from sampling.

**Question (Sampling/O&M #15):** Does EPA intend to relax or modify its MS4 Stormwater Permit for municipalities?
Answer: EPA does not plan to change any MS4 permit milestones for Year 2 of the MS4 permit. As described in the March 26 policy, if a permittee is unable to meet requirements due to the COVID-19 public health emergency, EPA will consider the circumstances on a case-by-case basis when determining an appropriate response. In cases that may involve acute risks or imminent threats, or failure of pollution control or other equipment that may result in exceedance, the permittee should contact the EPA or authorized state as quickly as possible with all relevant info so that regulators can work with the permittee to mitigate or eliminate the risks or threats.

If communities have specific questions related to municipal stormwater requirements, they should reach out to Todd Borci at **borci.todd@epa.gov**, 617-918-1358. EPA will coordinate closely with MassDEP in responding to issues that arise.

**Question (Sampling/O&M 16):** We have a common activities log book and daily round inspection/sampling sheets that are filled out by the various operators on each shift. We require all operators to wear gloves and use their own pens during documentation. What have other plants been doing to reduce cross contamination on these common items?
Answer: You could use computer tablets that can be wiped down with Clorox wipes instead of pen and paper. You may also place a disinfectant spray and cloth near the pen and log sheet and ask employees to use it before and after touching the log and pen. Wearing gloves is also recommended.

**Question (Sampling/O&M 17):** Is DEP expecting all facilities to return to normal (operations) on May 18th?

October 25, 2021
Answer: No. As you know, water and wastewater operations have already been operating as essential services throughout this emergency situation. MassDEP, EPA and the utilities have engaged in regular communication throughout this event to ensure that water and wastewater facilities can continue to perform their critical functions to protect public health. On May 11th, the Baker-Polito Administration announced a four-phase approach to reopening the Massachusetts economy amidst the COVID-19 pandemic, and published Mandatory Workplace Safety Standards that will apply across all sectors and industries once reopening begins. The goal of the phased reopening, based on public health guidance, is to methodically allow certain businesses, services, and activities to resume, while protecting public health and limiting a resurgence of new COVID-19 cases. https://www.mass.gov/news/baker-polito-administration-announces-four-phase-approach-to-reopening-and-publishes-mandatory

As the re-opening phases move forward, MassDEP will provide timely and reasonable notice of any planned changes to the compliance and operational guidance it has provided throughout the emergency.

Question (Sampling/O&M 18): Has any facility had experience with the disposal of large quantities of beer and the problems with the disposal of it?
Answer: DEP has been approached by a couple of utilities about this. Beer is a high strength waste and it can cause problems for treatment facilities in terms of meeting discharge limits. DEP has reached out to brewers and restaurants encouraging them to find alternative disposal methods such as anaerobic digestors.

EPA has shared the following links which provide information on pretreatment and on ways to recycle beer into other products versus dumping it:

- EPA video about pretreatment in breweries: https://www.youtube.com/watch?v=wdoPk-3H-6g
- Sending beer to anaerobic digesters: https://utahbeernews.com/wasatch-resource-recovery-brewery-waste/
- A firm that specializes in taking off spec beer and similar products: https://ethanolrecycling.com/beverage-destruction-and-recycling/

Question (Sampling/O&M 19): Has any thought been given to going after manufacturers and producers of PFAS products (the actual polluters) to recover the cost of testing at treatment facilities?
Answer: MassDEP is working with the Office of Technical Assistance (OTA) to provide technical support to manufacturers that use PFAS and discharge into POTWs. OTA can provide free and
confidential support to help manufacturers identify if they are using PFAS products and if use can be reduced/eliminated.

**Question (Sampling/O&M 20):** Has the MassDEP made any cost estimates of what the quarterly PFAS testing of the influent, effluent, and sludge will cost a facility?

**Answer:** At $300 per sample for lab analyses plus the need for QA/QC samples like blanks, MassDEP estimates that quarterly sampling could cost between $5,000-$10,000 per year.

**Question (Sampling/O&M 18):** Question (Sampling/O&M 21): There are 34 small facilities in Massachusetts eligible for the NPDES General Permit. The frequency of PFAS testing for these small facilities should be reduced from 4 times per year to 2 times per year. The cost for PFAS testing is expensive and this will affect the small facilities disproportionately. For example, the wastewater treatment plant in Monroe has a design flow of 0.015 MGD and serves about 40 households. Costs for PFAS testing will be a very significant part of its budget compared to a larger facility. There are roughly 130 POTW's in MA. MassDEP will get plenty of PFAS data without putting a financial burden on the very small facilities.

**Answer:** MassDEP received and is considering this comment from the MA Water Environment Association (through Executive Director Mickey Nowak).

**Laboratory Services**

**Question (Lab1):** I have had questions from multiple utilities on how or whether the labs will operate with the quarantine? Will you or do you have special conditions for sample drop off?

**Answer:** At this time, the labs that have shared their status with MassDEP have indicated that they remain open for business but may have instituted new procedures for sample delivery and drop off.

Wastewater facilities should contact their lab regularly and confirm whether they need to modify any of their routine practices. Labs can contact MassDEP’s Wall Experiment Station for guidance on sample drop-off.

**Question (Lab2):** Are laboratories that do water quality testing to ensure fit and pure water and compliance with regulatory requirements would be considered "Essential Services" for purposes of the Order issued by Governor Baker on March 23, 2020?

**Answer:** They are. Laboratories are listed as essential in the Water and Wastewater section of Exhibit A to the Governor's Order, which includes personnel for "required sampling or monitoring" and for "distribution and testing."
Question (Lab3): The current Water Pollution study for laboratories closes on April 23, 2020 with no grace period. Any results not entered in the database by that date are considered not acceptable. If a laboratory fails to report a second time, it loses certification in that parameter. Will EPA consider a one-year extension of that deadline to April 2021.
Answer: EPA is extending both Study 40 and Study 39 and is developing guidance. The EPA contact is Greg Savitske, at (202) 564-2601 DMRQA@epa.gov
Update 5/14 Answer: EPA has announced that it has settled dates for the DMR-QA Study 40. This is an annual lab audit process for NPDES facilities and contract labs. There was some talk of cancelling or postponing in light of COVID-19, but now it will go forward with modified dates. The schedule and milestone dates are as follows: EPA will accept DMR-QA proficiency test standards for Study 40 that were ordered on or after March 20, 2020. EPA will continue to accept water pollution proficiency test standards where the study closed on or after January 1, 2020.

Question (Lab4): Would DEP consider creating, and updating weekly, a list of laboratories and their current capabilities and contact information. It should identify drinking water and wastewater testing laboratories in service during the crisis.
Answer: DEP will investigate what information it has to create such a list and will update this response accordingly.

Question (Lab5): Could you point out where facilities can access the list of approved labs for PFAS testing in wastewater?
Answer: Because there is no EPA-approved method for testing residuals or wastewater for PFAS, MassDEP has established a process to ensure that a laboratory will use appropriate analytical methods and quality control. MassDEP must review and approve the laboratory’s proposed methodologies. MassDEP publishes a list of approved laboratories for analysis of PFAS in residuals here: https://www.mass.gov/info-details/testing-of-pfas-in-wastewater-and-residuals. Please contact the residuals program at massdep.residuals@mass.gov if you have a specific question on this issue.

Question (Lab 6): Would you discuss the significance of the approved EPA method for testing for PFAS in wastewater? Many facilities have PFAS testing in their permits.
Answer: EPA has proposed a PFAS method, but it is not yet a multi-lab validated method. POTWs should comply with their NPDES permit language. Many permits do not have PFAS monitoring requirements. For those that do, typically, the NPDES permit requires reporting for PFAS only once a multi-lab validated method for wastewater is available and after EPA notifies the permittee. The actual NPDES permit language is, “This reporting requirement for the listed per- and polyfluoroalkyl substances (PFAS) parameters takes effect the first full
calendar quarter beginning at least 6 months after EPA notifies the Permittee that a multi-lab validated method for wastewater is available.”

Permits for discharges to surface waters from MassDEP could require that the PFAS monitoring be conducted sooner than the adoption of a lab method. If that applies to a facility, it must submit its proposed analytical method to MassDEP for approval by its Office of Research and Standards.

Chemicals and Other Supplies

Question (Supplies1): What if there is a shortage of necessary chemicals? Are chemical delivery companies considered essential personnel?
Answer: Yes, they are covered under the Governor’s directive that essential staff include “Employees needed to operate and maintain public and private drinking water and wastewater/drainage infrastructure.”

MassDEP wants to know what chemicals are most in short supply. If you are concerned that your facility is or may be running out of chemicals in the near future, please notify your MassDEP Regional Office at once. MassDEP will work with federal and state authorities to see if we can help address such a shortage. But timely notification is essential to avoid disruption.

According to the Order issued by Governor Baker on March 23, 2020, "Essential Services" include workers who transport basic raw chemicals.

Question (Supplies2): Does MassDEP require official notification of a reduction in chemical dosing, such as hypochlorite, to conserve use?
Answer: Conservation of chemicals may be used to extend supply but the facility is still required to comply with the limitations of its permit and should not limit the use to the extent it causes discharge violations. Please notify the U.S. EPA and DEP Regional Office of any chemical shortages you are or may have.

Question (Supplies3): Can we get a waiver to store more chlorine on-site over the coming months?
Answer: Yes. But with prior notification to and approval by regional MassDEP staff, permission will be granted so long as proper protections are in place on receipt, storage, and use of the disinfectant chemicals.

Question (Supplies4): Some wastewater facilities are ordering way more chemicals than they would normally need, and other suppliers are concerned about this. Wastewater systems should be planning chemical usage and not “hoarding.”
Answer: MassDEP strongly discourages hoarding of supplies as this could result in a shortage of supplies impacting the operations of many systems. We encourage you to coordinate with neighboring facilities if you do have ample supplies.

Question (Supplies5): Fuel supply and backup power? What if there is a shortage of fuel?
Answer: At this time, there have been no reports to MassDEP regarding the lack of sufficient fuel supply, or storage. If you are concerned about this matter, you should speak directly with regional MassDEP staff to determine appropriate next steps.

Question (Supplies6): I have heard that wastewater treatment plants may not be able to purchase oxygen. This is a concern since it is used in some facilities in secondary treatment processes supply issue.
Answer: MassDEP regions contacted the local water and wastewater facilities that rely on oxygen supplies. While we did identify one plant that is reliant on oxygen – without a backup treatment technology – this plant’s supplier has assured us that it will be able to receive oxygen. A second plant is also reliant on oxygen but may be able to rehabilitate its backup system so it would not need to receive oxygen. Currently both of the plants report having sufficient supplies of oxygen. Nevertheless, we want to know if this becomes a concern. Please notify your MassDEP regional office or your EPA contact of any oxygen supply concerns.

Question (Supplies 7): With the uptick in COVID cases, is MassDEP or EPA hearing any concerns from water systems about potential impacts to chemical delivery or the supply chain in general?
Answer: EPA has heard that there is an issue with CO₂ in Florida, but has not heard of this issue in Massachusetts.

MassDEP heard from a commercial laboratory that there is a delay or backorder in flip-top sterile bottles for bacteria testing and petri dishes from suppliers, possibly because of the nationwide demand for sterilization equipment. MassDEP checked with the MA Water Resources Authority on this issue. MWRA reported that it uses screw top bottles but did notice a delay in availability of flip-top bottles. It also noted that heterotrophic plate count (HPC) plates were delayed by one week and sterile pipettes tips were delayed by one month. One larger facility reported to MWWA that its vendors are restricting its ordering of PPE to the quantities it had ordered in the past. This facility is interested in exploring the possibility of a consortium to purchase PPE, similar to the consortium that purchases chemicals.

It is imperative that facilities that experience supply chain issues report this to both MassDEP and EPA.

Question (Supplies 8): With the recent fire in a chlorine factory in Louisiana, are there any issues in treatment plants getting the supplies they need?
Answer: Neither MassDEP nor EPA is aware of shortages and none were reported during the May 5, 2021 call with wastewater operators. However, if any treatment plant experiences a
Reporting

Question (Reporting1): What are MassDEP’s expectations of reporting going forward? We want to make sure reporting still takes place and the appropriate people in each region are receiving it.
Answer: For Groundwater Discharge Permit facilities, reports are required to be submitted through eDEP an online service provided by DEP and accessible from any computer with user name and password.

To submit to eDEP go to: https://edep.dep.mass.gov/edep/DEPlogin.aspx?_ga=2.52116073.1959123745.1584731304-1877506371.1584731304.

If sampling is not done, please report ‘NS’ for ‘Not Sampled’ on the appropriate eDEP data form. Please use the Comments Section to note the reason(s) samples were not collected.

Please contact Linda Barba, Linda.Barba@mass.gov or 617-556-1150 with any eDEP questions for Groundwater Discharge reporting.

For NPDES Facilities, reports are required to be submitted through netDMR, which can be accessed here: https://cdx.epa.gov. Please contact Neil Handler, handler.neil@epa.gov.

Question (Reporting2): Can MassDEP give wastewater facilities time extensions on paperwork deliverables, such as 15-year Engineering Assessments, DMR’s, and staffing plans?
Answer: MassDEP will consider these types of requests and will continue to re-evaluate circumstances throughout the spring and summer. Groundwater discharge facilities should contact their regional office of MassDEP to request extensions for any paperwork they think will be submitted late. NPDES facilities should contact their regional MassDEP office, as well as U.S. EPA to request extensions. EPA contacts are Dave Turin (turin.david@epa.gov; 617-918-1598) for the Southeast Region and Doug Koopman (koopman.douglas@epa.gov; 617-918-1747) for all other regions.

Question (Reporting3): What should we do about the NPDES Discharge Monitoring Report Quality Assurance (DMR-QA) Study 40?
Answer: EPA is aware of the challenges posed by the COVID-19 pandemic. To address these challenges and provide greater flexibility to regions, states, PT providers, permittees and
laboratories, EPA has decided to continue this year’s study under a modified schedule. We will accept DMR-QA proficiency test (PT) standards that were ordered on or after March 20, 2020. We will continue to accept Water Pollution (WP) PT standards where the study closed on or after January 1, 2020. The Study 40 closing date and all other milestones will be extended to allow participants additional time to complete the study.

The following table provides new milestones for DMR-QA Study 40. If you have any questions or concerns about the revised dates, please let Greg Savitske (Savitske.Gregory@epa.gov) know as soon as possible.

Answer Update 6/5/20: (replaces previous table)

<table>
<thead>
<tr>
<th>Date</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 20, 2020</td>
<td>DMR-QA Study 40 begins, labs may begin ordering PT samples</td>
</tr>
<tr>
<td>May 29, 2020</td>
<td>Address Verification Forms due to State DMR-QA Coordinator</td>
</tr>
<tr>
<td>September 18, 2020</td>
<td>Study 40 ends. Labs: deadline to submit ungraded Data Report to PT Providers.</td>
</tr>
<tr>
<td>October 16, 2020</td>
<td>PT Providers: deadline for sending graded results to labs</td>
</tr>
<tr>
<td>October 30, 2020</td>
<td>Labs: deadline to send graded results to Permittees. For “Not Acceptable” results, labs to begin ordering retest samples as soon as possible</td>
</tr>
<tr>
<td>November 20, 2020</td>
<td>Permittees: deadline to submit signed and completed Permittee Data Report Form to State DMR-QA Coordinator Labs: send corrective action letter including any retest results as soon as possible to your Permittee, if applicable.</td>
</tr>
<tr>
<td>January 15, 2021</td>
<td>Permittees: deadline to submit Corrective Action Report, including retest results, to State DMR-QA Coordinator</td>
</tr>
</tbody>
</table>

Participants in this year’s DMR-QA study should focus on fulfilling day-to-day operations at their facility; the extended timeline we are proposing should provide greater flexibility for participants to complete study requirements. The EPA contact is Greg Savitske, at (202) 564-2601 DMRQA@epa.gov.

Question (Reporting 4): Due to the virus, we are split into two shifts, working two days on, and two off. EPA’s QA/QC Study 40 is now open. With a fragmented work force, how can we be expected to perform the tests? They can be done, but we have half of our employees on site at any time doing what a full staff is expected to do. Can these tests be put off until our state is fully open and we have a full work force?

Answer: The DMR-QA Study 40 has now launched but EPA has extended the deadline to complete the study from July to September 18. If you believe you cannot meet the extended
deadline of September 18, contact your state or federal contact person. The contact person information is in the packet you received for Study 40. For Massachusetts, the contact is Ping Yee (ping.yee@mass.gov).

**Question (Reporting 5): Is there more guidance on NPDES permits?**
Answer: EPA Region 1 has provided the following guidance, “NPDES Annual reports can be attached and sent through NetDMR for receipt by both EPA and MassDEP. For any questions related to NetDMR, contacts are Diane Castricone and Marie MacDonald. If for any reason a permittee cannot submit the report through NetDMR, it can be sent via email to EPA and MassDEP. For EPA, reports should be sent to Dave Turn (turin.david@epa.gov) for the Southeast Region and to Doug Koopman (koopman.douglas@epa.gov) for all other regions.” For MassDEP, reports should be sent to your regional office contact.

**Question (Reporting 6): What No Data Indicator (NODI) code should be used for COVID-19?**
Answer: The NODI code “Z” is to be utilized for reporting in netDMR when sampling data are not available due to the COVID-19 pandemic. More information is available in the document entitled *Temporary Advisory for NPDES Reporting in Response to COVID-19 Pandemic*, issued by EPA on March 31, 2020.

**Question (Reporting 7): Will there be time extensions for submitting Annual Reports for Industrial Pretreatment Programs (IPP)?**
Answer: The guidance in the EPA Memo *COVID-19 Implications for EPA’s Enforcement and Compliance Assurance Program* issued by Susan Parker Bodine on March 26, 2020 applies to annual reports for IPPs.

**Question (Reporting 8): The recently signed “act promoting awareness of sewage pollution in public waters” or "CSO Notification" statute is of concern to wastewater treatment facilities with combined and sanitary sewer overflows. We are hoping that the MA DEP will offer their opinion and guidance on this bill.**
Answer: MassDEP is currently reviewing the requirements of this law and intends to reach out to the industry as we develop a stakeholder process that will inform the development of the program and regulations.
Answer update: (Answer update: 5/5/21) In January 2021, the Legislature passed, and the Governor signed into law Chapter 322 of the Acts of 2020, an Act Promoting Awareness of Sewage Pollution in Public Waters. The Act requires MassDEP to promulgate regulations to implement the Act by January 2022 and implement the program by July 2022. The proposed regulation will establish requirements and procedures for notifying the public of sewage discharges and overflows into the surface waters of the Commonwealth to protect and preserve public health. To MassDEP has held three stakeholder meetings: one with the regulated community; one with proponents of the legislation, who represent environmental advocacy groups, recreational user groups, and environmental justice groups; and one with a
stakeholder committee. MassDEP anticipates releasing the draft regulations for public comment this summer.

Question (Reporting 9): Will discharges of partially or untreated wastewater other than combined sewer overflow be regulated under the recently signed “CSO Notification” legislation?
Answer: In its implementation of the CSO Notification law, MassDEP will consider how to reflect language in An Act promoting awareness of sewage pollution in public waters including “a release or diversion of sewage, industrial waste or other effluent, which is untreated or partially treated, including from a combined sewer system overflow” in its regulations.

Funding

Question (Funding1): Are there funds available for COVID expenses?
Answer: There may be funds made available through FEMA to cities and towns, state agencies and certain non-profits in all Massachusetts counties to help pay for emergency protective measures (response costs) related to the COVID-19 pandemic. Sheets to track expenses provided by MEMA are located here: https://www.mass.gov/info-details/fema-3438-em-ma-covid-19-emergency-declaration MEMA has sent out the information through its list service. DPH linked to the MEMA announcement and sent it to their list services, which included municipal partners. Anyone seeking reimbursement will likely need to be able to provide documentation of expenses as well as the authority under which emergency actions were performed, i.e. state or federal emergency declaration.
Answer Update 6/5/20: USDA has funds and technical assistance for POTWs and drinking water plants through the Water and Waste Disposal Loan and Grant Program for facilities serving fewer than 10,000 people. For a fact sheet on the USDA Water and Environment funding program go to: https://www.rd.usda.gov/sites/default/files/fact-sheet/508_RD__FS_RUS_WEPDirect.pdf.

For information and to apply for this funding: https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program.

Question (Funding2): Can you please provide an update on plan for finalizing the Clean Water Intended Use Plans that will be financed through the Clean Water SRF loan Program. Particularly regarding the Asset Management Planning Grants, do you anticipate any effects on the timeline or procedural changes for the June 30th Appropriation of Local Funds, October 16th Financing Application deadline, or any other program changes?
Answer: The comment period on the Intended Use Plan closed on March 16, 2020 and MassDEP is working to finalize the IUP. MassDEP and the Clean Water Trust have issued the following statement:

**COVID-19 Guidance for State Revolving Fund Borrowers**

Due to protocols put in place by the State of Massachusetts in response to the COVID-19 emergency, MassDEP and the Clean Water Trust are working remotely during this time. Both agencies are fully functional and the day to day operations continue to assist borrowers in funding their projects.

We have heard from many communities concerned about their ability to hold town meetings or sign contracts due to availability of construction materials and the uncertainty of the impact the COVID-19 emergency will have on project costs.

**Additional Subsidy for 2019 Intended Use Plan (IUP)**
In response, MassDEP and the Massachusetts Clean Water Trust (the Trust) have extended the deadline to qualify for additional subsidy for eligible borrowers in the 2019 Intended Use Plan for both the Clean Water and the Drinking Water State Revolving Fund (SRF) programs. **Additional subsidy will be disbursed over construction contracts that are executed by August 14, 2020.** This 45-day extension will be reassessed and may be further extended if so required. MassDEP and the Trust remain committed to work with borrowers during these challenging times to ensure SRF financed projects are implemented in order to protect public health and the environment.

**Local Authorization for 2020 IUP**
The final IUPs, when published, will state that to be considered for funding priority, communities must have appropriated the necessary local project funds or have committed to a schedule to obtain those funds by October 16, 2020. This deadline will allow for communities to plan for a town meeting in the fall in time to submit the complete SRF loan application.

For questions please contact:

- Maria Pinaud, Division Director for Municipal Services at MassDEP
  [Maria.Pinaud@mass.gov](mailto:Maria.Pinaud@mass.gov)

- Nathaniel Keenan, Deputy Director, Massachusetts Clean Water Trust
  [nkeenan@tre.state.ma.us](mailto:nkeenan@tre.state.ma.us)
Question (Funding 3): Is there any consideration for grant deadline extensions?
Answer: MassDEP is looking into extensions for existing grants for all of its programs. It is also considering allowing electronic submission of new grant requests and additional time for responding to these new grant requests.

Question (Funding 4): The economic impacts are likely to last beyond the virus. With the economic downtrend, how will revenue and rates be affected?
Answer: This question affects both water and wastewater. Many of you are looking ahead to what impact there will be on operations with less water usage, larger customers being idle, and the possibility of more people having trouble paying bills. We have identified these concerns at the state level. There are groups at the National level that represent water and wastewater utilities that are raising this issue with Congress. We will update this information as we learn more.

Answer Update 7/15/20: The EPA has a Water Infrastructure and Resiliency Finance Center web page which provides tools and resources for drinking water, wastewater and stormwater utilities. There is a calculator tool you can use to track the impact of COVID-19 on utility cost and revenues. This tool might help in organizing information, provide uniformity with other utilities and may assist in seeking budget increases or reimbursements from FEMA. Please offer comments on this tool and/or suggestions for other tools at the website: https://www.epa.gov/waterfinancecenter/financial-technical-assistance-and-tools-water-infrastructure#tools

Question (Funding 5): Section 11, Chapter 53 of Acts of 2020 prohibits the shutoff of water service until June 30, 2020. However, Section 11 discusses interest charges but states “may” waive the payment of interest. Yesterday’s call indicated that it must waive interest, which is it?
Answer: Section 11 states (with emphasis added):
“[T]he Chief Executive Officer of a city or town . . . or the prudential committee or commissioners of a district may waive the payment of and other penalty in the event of late payment of any excise, tax, betterment assessment or apportionment thereof, water rate or annual sewer use or other charge added to a tax for any payments with a due date on or after March 10, 2020 and made after its respective due date but before June 30, 2020, if the nonpayment resulted from a demonstrated inability to pay due to circumstances related to the outbreak of COVID-19 or the governor’s March 10, 2020 declaration of a state of emergency; provided that the inability to pay shall include a demonstrated financial hardship of a resident, which may include, but not be limited to, loss of employment, serious illness of someone within the home or death of someone within the home” (https://malegislature.gov/Laws/SessionLaws Acts/2020/Chapter53).

Our General Counsel’s Office notes (as the question itself did) that the language of Section 11 uses the phrase “may waive” for any late payments on bills that were due “on or after March 10th”, with the conditions: (1) a resident must demonstrate an “inability to pay” due to COVID-19; and (2) the provision applies to payments received before June 30, 2020. Public water
suppliers should seek the advice of their Town Counsels when interpreting Chapter 53 of Acts of 2020.

**Question (Funding 6): What is the status on the CWSRF IUP finalization?**  
Answer Update 5/14: The IUPs for both Clean Water and Drinking Water SRF have been finalized and can be found here: https://www.mass.gov/lists/2020-final-srf-intended-use-plans.

**Question (Funding 7): Is there infrastructure money in any of the stimulus bills coming out of Washington? Are water and wastewater projects part of the infrastructure money? Will the money be distributed as it was in 2009 from the American Reinvestment and Recovery Act - through SRF funding? Should facilities be thinking about "shovel-ready" projects?**  
Answer: There has not been a bill passed yet but there is a lot of work being done on this. MassDEP will continue to monitor this and provide updates.

**Question (Funding 8): Would the attendance and participation in the weekly MassDEP COVID-19 briefings be reimbursable expenses for water and wastewater personnel? Should water and wastewater personnel keep a record of their attendance at these briefings and submit their time, along with other COVID-19 expenses, to FEMA through their municipality or district?**  
Answer: MassDEP recommends that water and wastewater personnel keep track of all COVID-19 related expenses. However, FEMA makes the final decisions on what is reimbursable.

**Question (Funding 9): Can there be direction on how to fill out the MEMA needs spreadsheets that support reimbursement under the FEMA COVID-19 Federal Disaster Declaration?**  
Answer: There is a lot of information on the COVID-19 Federal Disaster Declaration here: https://www.mass.gov/info-details/covid-19-federal-disaster-declaration, including a “Questions” section which is portal to submit questions to MEMA. MEMA checks this site and ensures all questions are answered. Please follow this link to go directly to the question form: https://massgov.formstack.com/forms/em3438_declaration_fema_pa_questions. Also, MEMA recently held applicant briefings to provide guidance on filling out the reimbursement forms. MEMA will post the recordings, slides, and Q&As shortly.

**Question (Funding 10): Regarding the use of the CARES Act for municipalities, has there been any discussion about providing subsidies to ratepayers for paying water and wastewater bills?**  
Answer: DEP has not heard of any recent activity with respect to the CARES ACT. DEP will investigate this and will update this response accordingly.

**Question (Funding 11): Do you know the status of Bill H.4631? I think this would be interesting to all the water and wastewater personnel that have worked through this pandemic with no extra pay.**
Bill H.4631 SECTION 1. Notwithstanding any general or special law to the contrary, any employee of the Commonwealth or its political subdivisions who was required to work during the Massachusetts state emergency related to COVID 19 declared on March 11, and required to report to a work location outside of their home, shall be compensated retroactively at a rate of one and a half times their regular rate of pay for every day that they were required to report to work for the duration of the state emergency, or in lieu of compensation an employee may, at their discretion, receive one half day of compensatory leave for each day, or portion thereof worked during the duration of the state emergency. SECTION 2. This act shall take effect upon passage.

Answer: This bill is currently in the Committee on Public Service, but hasn’t seen any movement since it was filed.

**Question (Funding12): What is the industry doing to address financial impacts?**
Answer: Jennifer Pederson, Executive Director of the Massachusetts Water Works Association, is working with the Water Infrastructure Alliance to send a letter to legislative leaders detailing the financial impacts on water and wastewater utilities. If you have details on the financial impacts to your facility, send that information to Jen Pederson at jpederson@masswaterworks.org.

**Question (Funding 13): Are state funds available yet to conduct testing of essential employees?**
Answer: MassDEP is not aware of a state program for this purpose.

**Question (Funding 14): If there are any utility payment relief programs planned at the MA state level, we request that water and wastewater utilities be included in those programs.**
Answer: MassDEP has notified the Command Center of the water and wastewater utilities’ concerns about revenues shortfalls. We will continue to stay in touch with the Command Center and the utilities on this issue.

**Question (Funding 15): The most recent federal COVID relief bill included $638 Million in assistance for low-income water and wastewater rate payers. This relief is critically important to our utility as our retail customers have the second lowest median household income in the state and our receivables sit at close to $10 Million, triple what they typically are. Many other urban, socially/economically challenged communities are facing similar issues. How will this relief money will be accessed and distributed?**
Answer: Congress passed two pieces of legislation, the Covid Relief Act and the Consolidated Appropriations Act to provide relief to water and wastewater rate payers. The Covid Relief Act includes money for renters who are having trouble paying their utility bills. Included in the Consolidated Appropriations Act that the House and Senate approved on December 12, 2020 is $638 million to forgive overdue water and sewer bills of intended to help low-income customers.
households. According to the legislation, the Department of Health and Human Services (HHS) will send money to states and tribes, which will, in turn, distribute the funds to utilities. Utilities have the option of reducing customer arrears or reducing water rates for eligible customers.

Funding will be awarded to states and tribes based on two criteria: the percent of households with income less than 150 percent of the federal poverty line and the number of households paying more than 30 percent of income on housing. Utilities are supposed to use existing processes, programs, and procedures to identify people in need of funding. We will alert the drinking water and wastewater industries when we receive information on how this will be distributed.

The actual language is:

SEC. 533. For an additional amount for “Department of Health and Human Services—Administration for Children and Families—Children and Families Services Programs”, $638,000,000, to prevent, prepare for, and respond to coronavirus, for necessary expenses for grants to carry out a Low-Income Household Drinking Water and Wastewater Emergency Assistance Program: Provided, That the Secretary of Health and Human Services shall make grants to States and Indian Tribes to assist low-income households, particularly those with the lowest incomes, that pay a high proportion of household income for drinking water and wastewater services, by providing funds to owners or operators of public water systems or treatment works to reduce arrearages of and rates charged to such households for such services: Provided further, That in carrying out this appropriation, the Secretary, States, and Indian Tribes, as applicable, shall, as appropriate and to the extent practicable, use existing processes, procedures, policies, and systems in place to provide assistance to low-income households, including by using existing programs and program announcements, application and approval processes: Provided further, That the Secretary shall allot amounts appropriated in this section to a State or Indian Tribe based on the following (i) the percentage of households in the State, or under the jurisdiction of the Indian Tribe, with income equal to or less than 150 percent of the Federal poverty line, and (ii) the percentage of such households in the State, or under the jurisdiction of the Indian Tribe, that spend more than 30 percent of monthly income on housing: Provided further, That up to 3 percent of the amount appropriated in this section shall be reserved for Indian Tribes and tribal organizations: Provided further, That such amount is designated by the Congress as being for an emergency requirement pursuant to section 251(b)(2)(A)(i) of the Balanced Budget and Emergency Deficit Control Act of 1985. This division may be cited as the “Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, 2021”.

Answer update 5/5/21:
- Governor Baker officially designated the Department of Housing and Community Development (DHCD) as the agency that will receive the funds and submit the state plan
for use of funds. Health and Human Services (HHS) recently held two listening sessions on this program.

- Yesterday, MassDEP met with DHCD and several drinking water and wastewater utilities receive an update on this program.
- HHS is going release the funds by the end of May to provide the states the funds to get the program set up.
- Then DHCD needs to develop guidance on disbursement; DHCD is not expecting funds to be disbursed until late in 2021.
- For the sake of efficiency, HHS is allowing categorical eligibility through other low-income programs and DHCD is planning to use the Low Income Home Energy Assistance Program (LIHEAP) as a model for setting up Low Income Household Water Assistance Program (LIHWAP).
- DHCD will need to submit a state plan for approval from HHS, the template for the state plans is under review by HHS right now and there is no timeline on when HHS will release the templates to the states or what the deadline will be for the states to submit them back.
- There is some concern among utilities that the funds must benefit renters and that most renters in MA do not pay for water.
- MassDEP will continue to follow the development of this funding and will likely be a liaison between DHCD and the drinking water and wastewater utilities.

**Question (Funding 16): What is the new bill HD1794?**

Answer: HD 1794, An act relative to providing a covid-19 retirement credit to essential public-sector worker, and SD.1686 are identical Bills that would enhance pension benefits for essential personnel who worked at their worksite through the COVID-19 state of emergency. The legislation proposes that persons by employed by the Commonwealth of Massachusetts, its political subdivisions, state and community colleges and universities under the board of higher education and the University of Massachusetts would be eligible to add three years to his/her age or 8 years of service or a combination thereof for the purpose of calculating a retirement benefit.

**Research**

**Question (Research1):** Given the time between the Biobot sample being collected and analyzed, wouldn't it be prudent to assume that the virus is alive at the WWTF?

Answer: While there has been testing done on fecal matter from COVID patients indicating low viability of the virus, MassDEP strongly recommends that all staff handling materials containing...
untreated sewage carefully follow all safety recommendations by the CDC. These can be found at “Guidance for reducing health risks to workers handling human waste or sewage” (https://www.cdc.gov/healthywater/global/sanitation/workers_handlingwaste.html).

Careful implementation of best work practices should always be a priority for employees involved in wastewater management operations, including those at wastewater treatment facilities. This should include using the engineering and administrative controls, safe work practices, and PPE required for work tasks when handling untreated wastewater” (https://www.osha.gov/SLTC/covid19/controlprevention.html#solidwaste).

**Question (Research2): Is there any update on Biobot sampling program?**

**Answer:** The Biobot research is new and emerging and MassDEP will continue to follow it. MassDEP does not have an update. MassDEP did provide the information reported to it from one of the participating systems to the Command Center so that the public health officials also have it.

**Answer Update 5/6:** A few participants on the call provided information that Biobot was expanding the sampling and had reached out to the state for funding. DEP will follow-up through the Command Center to see who Biobot is working with at the state. It was also stated that the Biobot sampling cost would be going up to $1200 per sample in June. The Biobot website can be found here: https://www.biobot.io/covid19.

**Answer Update 6/5/20:** Boston Water and Sewer Commission has embarked on the Biobot Study. See this article for details: https://www.westonandsampson.com/covid-19-tracing/?fbclid=IwAR0RistVYHjCglh8Xcp8Xx2YGQu3333F2phoCrLw9JINB1rUXJb765jCk.

**Answer Update 7/1/20:** Facilities who are participating will be sharing the results of their testing under the Biobot program:

- **Nantucket** – Doing testing at facility. Had a spike in results they believe to be associated with sludge dewatering. Nantucket Biobot test results are posted here: https://nantucket-ma.gov/1864/Surfside-Wastewater-Treatment-Facility-C

- **South Hadley**- Sampling at facility. Shares information with Board of Health. Taking samples every two weeks. Source of funding is an issue. Looking to the CARES ACT for potential reimbursement.

- **Greenwich CT** - They are participating in Biobot testing and have found it very useful. Biobot does have info about CARES ACT funding and has been helping us try to get some funding from the state of CT. Their trends have represented what seems to be going on in the NYC area and CT state from clinical data and patient testing. You can see from the results that they started out with pretty high covid levels while things were still at their peak in the NYC area and CT, and have since dropped substantially. Their most recent samples have been low or non-detects (although note that non-detect does not mean that there is zero covid in the community, it means that the amount of covid is below the limit of detection which they estimate is about 0.3% of the catchment population). Biobot has informational calls on Friday afternoons - if
facilities are interested in hearing more it might be useful to tune into one of those calls. Call information will be provided.

Massachusetts Water Resources Authority – MWRA has contracted Biobot to analyze its wastewater samples and is also working with DPH on how to share the results.

Answer Update 7/15/20: Biobot is investigating a broader sampling effort statewide and has sent out RFRs to facilities. DEP will keep informed on this and will provide updates. Biobot has weekly phone call sessions on Fridays. To participate in these calls contact support@biobot.io.

Answer Update 8/24/20: On July 21, 2020, the Executive Office of Health and Human Services (EOHHS) issued a Request for Responses to solicit proposals for the collection and analysis of wastewater in municipalities across the Commonwealth for the COVID-19 Wastewater Surveillance Testing (WaSTe) Program. The purpose of the WaSTe Program is to monitor increasing and decreasing trends in the prevalence of COVID-19 within a specified set of cities and towns across the Commonwealth. Through this Project, EOHHS seeks to use wastewater-based epidemiology to detect increasing trends in municipality-level COVID-19 prevalence earlier than typically possible with traditional testing services administered by health care providers as part of the Commonwealth’s response to COVID-19. Proposals are due on August 31, 2020.

More information is available at this link: https://www.commbuys.com/bso/external/bidDetail.sdo?docId=BD-21-1039-EHS01-EHS01-53388&external=true&parentUrl=bid.

Answer Update 8/26/20: The Massachusetts Water Resources Authority is conducting testing from two influent sites, one North and one South. Results are provided to DPH and then posted at: http://www.mwra.com/biobot/biobotdata.htm.

Answer Update 1/6/21: MWRA continues to monitor its wastewater for the SARS-CoV-2 virus (https://www.mwra.com/biobot/biobotdata.htm). The MWRA website indicates that Biobot has refined its analysis; MWRA’s data have been updated to reflect this refinement. Also, MWRA’s graphics indicate that the presence of the virus is increased compared to earlier in the year.

Answer Update (10/12/21): The Department of Public Health and DEP are partnering on two grants to sample wastewater for the coronavirus and are looking for wastewater treatment facilities that volunteer to participate by collecting samples. Details on the grant opportunities are:

1. Food and Drug Administration Grant: $60,000
a. MassDEP will solicit participation from, and regular sampling by 2-3 municipal wastewater treatment facilities.

b. MassDEP will also receive split wastewater samples for SARS-CoV-2 analysis at the MassDEP Laboratory (DELS/WES). Results for all samples will be shared between DEP and DPH.

2. **Center for Disease Control Grant: $135,000**
   a. MassDEP will solicit participation from 20-27 municipal wastewater facilities to participate in the sampling program.
   b. MassDEP will target facilities to reflect differences in system size, contributing populations (urban/rural), and geographic distribution.
   c. Facilities will take samples twice per week for six months. A total of 2 samples per week from each facility for 24 weeks (48 total) will be sent to DPH lab; a selected number of split samples will be sent to WES lab.

Please contact [kathleen.baskin@mass.com](mailto:kathleen.baskin@mass.com) if you are interested in volunteering in either grant.

**Question (Research3):** Is there any study checking for acquired immunity or partial immunity in wastewater workers?

**Answer:** U.S. EPA and other research organizations are exploring research options to address potential exposures to COVID-19 from untreated wastewater. Some of these include investigating COVID-19 infection/exposure rates among wastewater operators. To our knowledge data from such studies has not been published. When (if) implemented, the data from such studies could address the question posed. This will require careful data analysis and interpretation; would likely necessitate a fairly large sample size and adjustment for potential confounding factors; and identification and comparison of results to appropriately matched reference groups.

MassDEP will also discuss this with the MEMA Command Center and DPH to get their input and will update this answer accordingly.

**Question (Research4):** Any evidence if antibodies indicate that a person is no longer a transmission risk? Are any policies being formed with exceptions for or special considerations for those who have tested (positively) for anti-bodies?

**Answer:** DEP with reach out to its Office of Research and Standards (ORS) and DPH for information on this topic.

**Question (Research5):** Mickey Nowak of MA Water Environmental Association asked Patrick Wittbold, a researcher at UMass Amherst, to provide an overview of on-going wastewater research projects, including one related to COVID.

**Answer:** Patrick Wittbold presented on the following projects during the August 12 call:
1. COVID Analytical testing RNA vs. Protein - we are evaluating a new method for measuring COVID using a protein based analysis instead of conventional RNA testing which uses RT-qPCR. This method may prove useful in monitoring the presence of COVID in wastewater. At this point the project is at a very early stage and we have completed minimal testing to prove the new method.

2. Introduction of UMass Water and Energy Technology Center and the leadership team (Dave Reckhow/John Tobiason)

3. Odor control and disinfection in WW using peracetic acid - we have been conducting many bench scale tests using peracetic acid to evaluate it as a replacement to permanganate, chlorine, and peroxide based oxidants. We have had very positive results and are currently assisting with a pilot study for Springfield Water and Sewer to determine if it is a suitable replacement for their liquid chlorine and/or permanganate.

4. Electrochemical ammonia removal in primary and secondary effluent. UMass has a 1-year ongoing study evaluating an electrochemical oxidant/disinfection system at both bench and mid pilot sized up to 10 gpm. They have demonstrated very fast removal of ammonia in primary effluent, secondary effluent, and a variety of industrial wastes.

5. UMass is currently working with the MassDEP Drinking Water Program to implement statewide testing for PFAS chemicals in drinking water sources across the Commonwealth.

Question (Research6): What companies or labs test for the coronavirus in wastewater? I have heard of Biobot but wonder if there are others.
Answer: (provided by DEP ORS): Biobot is the local firm that we are aware of. MWRA has provided samples to several other research efforts and would be a good source of information as to what to look or ask for. Testing is for COVID-19 RNA and typically relies on the CDC molecular real time reverse transcriptase quantitative polymerase chain reaction (RT-qPCR) assay. MassDEP has not surveyed which commercial labs may provide such analytical testing services but a quick internet search identified several that do.

DPH is looking to do a broader wastewater surveillance program and put out procurement documents this summer. DEP will keep you updated on any progress.

EPA has provided these links for the COVID research they have been doing:
The Ohio project is described here: “Detecting and Monitoring SARS-CoV-2 in Wastewater”.

Here is a link for all of the EPA Covid-19 research projects: https://www.epa.gov/healthresearch/research-covid-19-environment#water

Answer Update 12/2/20:
There is an Ohio study on SARS-CoV-2 RNA in wastewater. Two presentations on this project are posted at: MassDEP COVID-19 resources for water suppliers and wastewater operators | Mass.gov under Additional Resources.

CDC and Health and Human Services (HHS), are getting active in testing of POTW effluent for SARS-CoV-2 RNA and there are opportunities for Massachusetts wastewater utilities to participate at no cost.

Health and Human Services (HHS) recently issued a contract for wastewater surveillance to AquaVita, a spinoff from ASU in Arizona. The company will analyze SARS-CoV-2 RNA samples from POTWs and push the sampling data out to states. HHS will fund the procurement and testing of wastewater samples from water treatment plants of large and small communities nationwide. The first phase of the effort, which will last about six weeks, will analyze wastewater from up to 100 treatment plants serving about 10 percent of the US population. The hope is to expand this effort to include treatment plants in up to 42 states serving at least 30 percent of the US population. To participate, contact Adam Gushgari, AquaVitas CEO, adam@aquavitas.com.

Centers for Disease Control (CDC) is establishing a community of practice for wastewater operators related to Covid-19. There has been a similar community of practice in place for labs. For more information, https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/wastewater-surveillance.html or email EOCevent456@cdc.gov.

Question (Research7): Can you provide more information about the research that the Department of Public Health is conducting related to the collection of SARS-CoV-2 RNA samples from POTWs?
Answer: The MA Department of Public Health has an active contract for wastewater testing with CDM Smith. It is focused on testing a sewershed serving 4,000 people in Revere. The goal is to develop a protocol that can be transferrable to smaller systems.

Answer Update 12/2/20:
Regarding the CDM Smith monitoring, the aim is to create a protocol for screening that can be shared with other smaller systems/communities of under 4,000 people. Composite samples with an autosampler at 5 locations are taken three times a week. Locations were selected based on population density, case prevalence, wastewater flow and system configuration/manhole sizes. When and if a signal change is detected, a mobile unit will be deployed to obtain more information.

Question (Research8): Has anyone used Biobot to check for COVID-19 in wastewater effluent?
Answer: Biobot’s current focus is on influent sampling. Three facilities (Nantucket, MWRA and South Hadley) responded they are only testing influent.
Question (Research9): Are there any updates on the CDC water surveillance program?
Answer: On January 6, 2021, CDC sent $19 billion to states for wastewater surveillance. States are working on workplans which will be completed 90 days from that date. National wastewater surveillance began on January 1 and covered 10% of the United States population. There will be a Phase 2 in March or April where CDC will expand to 50% of the population and all 50 states, tribal areas and outlying states.

The wastewater data goes to the HHS Protect system, and then is publicized by CDC. CDC is considering use of wastewater tracking to identify new variants, including the P1 variant from Brazil. They don’t expect wastewater to be the first warning, but it can help track degree of spread.

CDC continues to look at safety data related to wastewater treatment and they are not seeing elevated Covid-19 risk due to working at wastewater treatment plants. CDC advises continued use of standard PPE.


Answer Update 5/5/21: The CDC wastewater surveillance system is now collecting samples from 169 locations. Amy Kirby of CDC is keeping a list of wastewater utilities, cities and states who want to participate in Phase 2, which will take place this year. CDC is considering monitoring for variants of Covid-19. They have methods to detect variants and they are formulating a public health response, analyzing wastewater data along with clinical data to determine what is noise, and working with NIH to develop a wastewater database that can be linked to their Decipher system which feeds data back to health departments. They are already thinking beyond Covid-19. You can detect many pathogens in wastewater, so there is interest in continuing the use of wastewater surveillance for other pathogens. Possibilities could include antibiotic resistant genes, Norovirus or food-borne pathogens such as the E. coli in romaine lettuce. If you want to receive notifications, contact Amy Kirby at nwss@cdc.gov or agk1@cdc.gov.

Question (Research10): Is Massachusetts participating in the CDC Wastewater surveillance program or planning to do so?
Answer: The requirements of the study are data intensive and Massachusetts are not participating in Phase 1 although it may participate in future phases.

Question (Research11): As more and more people get vaccinated, will that change the results of Covid Testing done in wastewater?
Answer: MassDEP does not know but will provide updates as they become available.
Webinars and Other Information Sessions

EPA has two national webinars coming up on best practices for POTW operation which will feature Bill Ingram, Wastewater Superintendent at Great Barrington, Massachusetts.

Recordings of Webinars
Presented on April 15, 2020
Asset Management 101 - Finding Financial Assistance for Infrastructure Upgrades, Alison Fenniken, EPA, Sarah Buck, Rural Community Assistance Partnership (RCAP) and Heather Hemmelberger, PE Southwest Environmental Finance Center. Recording: https://attendee.gotowebinar.com/recording/4273087420871591174

Presented on July 15 and August 20, 2020 (to correct poor audio)

Webinars
August 18, 2020 (1-2:30 pm Eastern)
Best Management Practices for POTW Compliance: Critical Elements of Successful Wastewater Treatment- Part 1
Registration: https://attendee.gotowebinar.com/register/416863747902839052

September 15, 2020 (1-2:30 pm Eastern) EPA
Best Management Practices for POTW Compliance: Critical Elements of Successful Wastewater Treatment- Part 2, (Creating and implementing effective SOPs, managing your WWTP to promote compliance and efficiency, finding technical assistance programs and resources)
Presenters: Jake Albright PG Environmental, Heather Himmelberger PE, Director Southwest Environmental Finance Center
Registration: https://attendee.gotowebinar.com/register/4830617882121360652

September 23, 2020 Massachusetts Water Environment Association:
For those that are interested in COVID 19 detection in wastewater, MAWEA will be having a quarterly meeting on September 23rd at 1 PM. Speakers from Tighe and Bond will be talking about the various technologies being used. The link is https://attendee.gototraining.com/r/5322551481004506369

October 20, 2020 (1-2:30 Eastern EPA
Strategies for Small POTWs Handling High Strength Influent (Pretreatment / non-domestic sewage), Presenters: Justin Pimpare, EPA Region 1 (Boston, MA) Al Garcia EPA Region 8
(Denver, CO)
Registration: [https://attendee.gotowebinar.com/register/1781061907578748429](https://attendee.gotowebinar.com/register/1781061907578748429)

**November 17, 2020 (1-2:30 Eastern) EPA**
The Microbiology of Wastewater Treatment - Life in the Aeration Tank: Bacteria, Protozoa and Metazoa, Presenter: Jon van Dommelen, OH EPA Compliance Assistance Unit
Registration: [https://attendee.gotowebinar.com/register/2924798095979033360](https://attendee.gotowebinar.com/register/2924798095979033360)

**December 8, 2020 (1-2:30pm EST) EPA**
Flow Measurement

**January 27, 2021 (1-2:30pm EST) EPA**
Dos and Don’ts of Sampling

**Additional Information**

Calling all drinking water and wastewater operators who are willing to assist other facilities!

Please fill out this survey: [https://www.surveymonkey.com/r/5VTP5SS](https://www.surveymonkey.com/r/5VTP5SS)

**Question (AdditionalInfo1): What actions should water and wastewater system operators take to address the Coronavirus?**
Answer: There are several best practices that operators can adopt to minimize interruption of services as well as illness of employees. These include:

- **Review your Emergency Response Plan (ERP) with staff**, with a focus on the pandemic/communicable disease section. Update as necessary to ensure continuity of operations in the event a staff member or members become affected and must quarantine. Remember, a shortage or lack of resources that could affect operations of your system is considered an emergency under 310 CMR 22.04(13).

- **Participate in mutual aid programs!** Being a member of MAWARN and/or the statewide mutual aid programs will be of value if you need to call upon other communities’ resources for
If you are not part of any mutual aid program, you can access the forms at these links:

- **MAWARN** – Massachusetts Water/Wastewater Agency Response Network download the application at [www.mawarn.org](http://www.mawarn.org) and submit to Kirsten King at NEWWA.

- **Statewide Mutual Aid** - [https://www.mass.gov/service-details/intrastate-mutual-aid](https://www.mass.gov/service-details/intrastate-mutual-aid)

**Reach out to your neighboring utilities** to see what they may be doing to plan. Good communication before an event is key to response and recovery. If neighboring utilities are not members of MAWARN or other mutual aid, encourage them to join.

**Check in with your chemical suppliers and other critical vendors** to see if any deliveries may be impacted and what you can do to ensure you have enough supply through advance purchases. Check in with other key suppliers for status on materials.

**Fuel your service vehicles and generators.** Equip your vehicles with cleaning supplies and personal protective equipment.

**Encourage all employees to get the flu shot** if they have not done so already as this helps to boost your immune system. It’s not too late!

**Curtail interactions; practice “social distancing.”**

**Question (AdditionalInfo2): Where can I find information for the wastewater industries?**
**Answer:** Below are links to helpful resources for the **wastewater industries**:

**MassDEP**
- Recordings of the Commissioner’s calls, as well as Q&As for both wastewater and water supply are at: [https://www.mass.gov/lists/covid-19-information-for-drinking-water-and-wastewater-operators](https://www.mass.gov/lists/covid-19-information-for-drinking-water-and-wastewater-operators)
- Wastewater Programs: [https://www.mass.gov/wastewater](https://www.mass.gov/wastewater)

**Centers for Disease Control and Prevention (CDC)**
- Addition to CDC links: Go to the bottom of the FAQs, click on ‘Water’
U.S. Environmental Protection Agency Guidance on Coronavirus and Drinking Water and Wastewater

- Disinfectants that can be used against COVID: https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

American Water Works Association
- https://www.awwa.org/AWWA-Articles/coronavirus-and-water

Water Environmental Federation

WaterISAC, a membership organization and international security network created by and for the water & wastewater sector:
- https://www.waterisac.org/

WaterOnline-Coronavirus-What Treatment Professionals Need To Know

Stantec article
Question (AdditionalInfo3): Where can I find more general information?
Answer: Below are additional links to helpful resources:

U.S. Environmental Protection Agency
- https://www.epa.gov/coronavirus
- “Top 10 List Pandemic and Natural Disasters Notebook” (being updated now; tips are still relevant, but some links are outdated):
  https://www3.epa.gov/region1/eco/drinkwater/pdfs/TopTenFlu.pdf

Centers for Disease Control and Prevention (CDC)

MA Department of Public Health (MDPH)
- https://www.mass.gov/info-details/covid-19-guidance-and-directives#businesses-&-employment-
- Update 7/15/20: OSHA guidance protocol for "In-Home Repair Services":

Solids Management Facilities

RMI - rmi@rmirecycles.com  603-536-8900

Casella - Patrick Ellis - patrick.ellis@casella.com  603-661-3820

Synagro - Pat Rimkoski - primkoski@synagro.com  860-483-0160

Waste Management - Jason Barroso - jason.barroso@wm.com or jbarroso@wm.com

UBCW is the only Massachusetts incinerator

MWRA is a dryer and pelletizer

Hoosac Valley is the only large compost facility

Gardner MA is the only sludge mono of which MassDEP is aware

There are some small-scale composters that recycle sewage sludge also.
Englobe (Quebec) is taking solids from at least northern New England; contact: Nicholas Leblanc, Nicholas.Leblanc@englobecorp.com, 819.829.0101, ext. 182033

Veolia runs two major merchant incinerators, one in CT and one in RI. contact: Dan Gorka, daniel.gorka@veolia.com, 401-265-1085

Denali Water provides solids management services, and has a significant presence in upstate NY: contact: Jason Fleury, jason.fleury@denaliwater.com, 479-498-0500

Agresource manages biosolids composts and other soil amendment products and has considerable expertise: info@agresourceinc.com, 978-388-5110

Septage Receiving Facilities
https://www.mass.gov/info-details/massdep-covid-19-resources-for-water-suppliers-and-wastewater-operators#wastewater-treatment-system-operator-resources-