As occurrences of COVID-19 increase across the Commonwealth and nationwide, it is important for water and wastewater treatment professionals to remain safe and continue operating facilities to provide critical services which are necessary to ensure basic public health. It is extremely important for water professionals and utilities to take precautions and measures to protect workers and the public. The Kentucky Division of Water (DOW) recognizes that circumstances may arise where limited resources or staff are available to accomplish routine tasks. It is imperative that all resource needs and operational issues be communicated to DOW as soon as possible for evaluation and assistance.

Drinking water and wastewater sectors have been identified as Critical Infrastructure Sectors ([https://www.cisa.gov/critical-infrastructure-sectors](https://www.cisa.gov/critical-infrastructure-sectors)). As such, normal operations and maintenance of the water and wastewater sectors is expected to continue throughout the duration of the present state of emergency in order to protect national public health and safety. Systems are expected to meet all state and federal regulations that ensure the safety of public drinking water.

Due to the spread of COVID-19, the Kentucky Energy & Environment Cabinet (EEC) has implemented telecommuting procedures to enable better social distancing and slow the spread of the virus. DOW is prepared to assist Kentucky water and wastewater systems during this difficult time. Systems are encouraged to work with DOW remotely via email and phone during this emergency. However, in cases where immediate onsite assistance from DOW is necessary, every reasonable effort will be made to assist in a manner that is both safe for DOW and utility personnel.

**DRINKING WATER TREATMENT**

Drinking water treatment plays a critical role in protecting public health. The continued practice of maintaining disinfection and operating drinking water treatment plants and systems appropriately is necessary for ensuring adequate protection from microbial contaminants. The US Environmental Protection Agency (EPA) and DOW have requirements in place that prevent pathogens, such as viruses, from contaminating drinking water. These requirements, including routine disinfection practices, target removal and inactivation of pathogens such as *E.coli* and Giardia. These pathogens are more resistant to disinfection than viruses, so coronavirus represents a low health risk to the public through public water supplies.

Exposure risks to staff operating water treatment plants is also low because of the coronavirus’ susceptibility to water treatment processes and the required use of chlorine for pathogen inactivation. Virus threats should be considered and handled no differently than other pathogens present in raw, ambient waters entering plants. Employing routine engineering controls, safe work practices and the use of personal protective equipment (PPE) should provide the safeguards necessary to protect the operating staff at the water treatment plant.
STAFF MANAGEMENT AND CONTINUITY OF OPERATIONS

Utilities are encouraged to develop contingency plans to ensure adequate staffing and continued supplies of critical chemicals. The greatest threat to our drinking water and wastewater operations is the possibility for absenteeism among staff that limits the ability to adequately oversee the treatment processes and provide distribution system maintenance. The second is supply chain disruption of critical chemicals and supplies needed for proper treatment. Mutual aid agreements with surrounding utilities should be reviewed for emergency coverage of operators and supplies. Flexible leave policies should be employed to discourage ill workers from continuing to work and risking exposure to the remaining operators. The Cybersecurity and Infrastructure Security Agency (CISA) has developed guidance documents to assist utilities in preparing for impacts from COVID-19 at:


The Division of Compliance Assistance will be waiving the late fee on drinking water license renewal through August 31, 2020. For more information and a complete list of certified operators in Kentucky visit the Kentucky Operator Certification Program webpage at:

https://eec.ky.gov/Environmental-Protection/Compliance-Assistance/operator-certification-program/Pages/default.aspx

The Division of Water recommends that drinking water and wastewater facilities develop standard operating procedures (SOP) for cleaning and disinfecting plants, offices, and common spaces that demonstrate measures taken to stop the spread of the coronavirus. The SOP documents may easily be incorporated into existing Operations and Maintenance documents for present and future reference. For more information regarding disinfection of surfaces, visit https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html.

WHEN TO CONTACT DOW FOR DRINKING WATER RELATED OCCURRENCES

Contact DOW, using the contact information at the end of this document, for any of the conditions described in the chart below.

<table>
<thead>
<tr>
<th>CONTACT THE DIVISION OF WATER:</th>
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<tbody>
<tr>
<td>Customer outages</td>
<td>Areas of low pressure</td>
</tr>
<tr>
<td>Issues involving a hospital or monitoring site</td>
<td>Boil Water Advisories</td>
</tr>
<tr>
<td>E.coli positive samples</td>
<td>Filter turbidity exceedances</td>
</tr>
<tr>
<td>Supply chain issues</td>
<td>Operator shortages</td>
</tr>
<tr>
<td>Issues with contract laboratories</td>
<td>Failure to meet required CT</td>
</tr>
<tr>
<td>Areas of low/no chlorine residual</td>
<td>Other unusual or emergency situations</td>
</tr>
</tbody>
</table>
FOR QUESTIONS REGARDING COMPLIANCE SAMPLING AND REPORTING

Drinking water systems are expected to conduct all compliance sampling, as required, during this time. If monitoring sites are located in state-owned facilities, water operators may gain access by presenting their certified operator wallet card. It is important that DOW be contacted if issues or unusual circumstances arise.

COMPLIANCE STAFF

All questions or concerns about compliance monitoring and reporting may be submitted to DrinkingWaterCompliance@ky.gov. Drinking Water Branch Compliance Section contact information is located at: https://eec.ky.gov/Environmental-Protection/Water/Drinking/DWProfessionals/Pages/Compliance-and-Technical-Assistance-Staff.aspx

REVISED TOTAL COLIFORM RULE

It is important that water systems continue to provide good coverage of the distribution system when collecting routine bacteriological samples. If limited access is causing a problem, new sites may be added. To add new sites or for further assistance with RTCR issues send an email to DrinkingWaterCompliance@ky.gov.

CERTIFIED LABORATORY STATUS

To report issues or check the status of certified laboratories send an email to DOWLabCertification@ky.gov

WASTEWATER TREATMENT SYSTEMS

Report to the Division of Water any overflows, bypasses or spills using the contact information at the end of this document.

Studies have indicated coronavirus may be present in hospital wastewater or domestic sewage for 2 – 3 days. Combined sewer overflows and bypasses could release such viruses into the environment. However, experts in waterborne infection and disease outbreak control at the Water Environment Federation have indicated that this particular coronavirus can be easily inactivated through disinfection. Pathogens for which we currently treat have an even higher resistance to disinfection than coronavirus. Typical municipal wastewater disinfection processes are viewed as highly effective to inactivating coronavirus before it enters the environment. Use caution and the appropriate PPE when contact with untreated sewage is possible.

Guidance issued by the Occupational Safety and Health Administration (OSHA) indicates no additional protections are needed for wastewater treatment operators beyond routine hygienic practices.

Those practices include:

- Using engineering and administration controls
  - Barriers to prevent worker exposure to splashes and sprays
  - Enclosing certain processes that may produce aerosols
  - Adequate ventilation to remove potentially contaminated air from the workspace
- Safe work practices
  - Thoroughly washing hands with soap and water
Avoiding touching the face, eyes, mouth, nose or open cuts or sores
Before eating, removing work clothes and eat in designated areas
Cover open sores and cuts with clean, dry bandages
Remove work clothes before leaving the worksite

- Personal protective equipment normally required for tasks involving handling untreated wastewater
  - Goggles, face masks and face shields
  - Rubber boots
  - Liquid repellent coveralls and gloves

ADDITIONAL REFERENCES AND RESOURCES

- www.kycovid19.ky.gov
- www.asdwa.org/covid19/
- https://www.krwa.org/downloads/
- www.osha.gov/SLTC/covid-19/
- https://www.epa.gov/fedfunds/small-business-administration-loans-available-water-and-wastewater-utilities

DIVISION OF WATER CONTACT INFORMATION

<table>
<thead>
<tr>
<th>Regional Office</th>
<th>Emergency Contact</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Bowling Green</td>
<td>Bill Baker</td>
<td>270-791-7590</td>
</tr>
<tr>
<td>Columbia</td>
<td>Brian Crump</td>
<td>270-384-4734</td>
</tr>
<tr>
<td>Florence</td>
<td>Matthew Gross</td>
<td>859-760-6650</td>
</tr>
<tr>
<td>Frankfort</td>
<td>Robert Daniell</td>
<td>502-782-6348</td>
</tr>
<tr>
<td>Hazard</td>
<td>Ashton Johnson</td>
<td>606-594-8600</td>
</tr>
<tr>
<td>London</td>
<td>Robert Miller</td>
<td>606-434-4282</td>
</tr>
<tr>
<td>Louisville</td>
<td>Todd Giles</td>
<td>502-650-6901</td>
</tr>
<tr>
<td>Madisonville</td>
<td>Randy Thomas</td>
<td>270-339-4256</td>
</tr>
<tr>
<td>Morehead</td>
<td>Daniel Fraley</td>
<td>606-783-8655</td>
</tr>
<tr>
<td>Paducah</td>
<td>Shannon McLeary</td>
<td>502-782-5880</td>
</tr>
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