LOOKING FOR COVID CLUES IN OUR WASTEWATER

Across the country, researchers and public health officials are looking to wastewater as a means to track SARS-CoV-2, the virus that causes COVID-19. Central San is actively engaged in several research projects to support these efforts in the fight against the virus. Our Engineering Planning, Laboratory, Environmental Compliance, and Operations teams are all contributing.

Wastewater is a rich source of information about the health of the population it comes from. For decades, researchers around the world have been successfully using wastewater to monitor for polio and other diseases. Through wastewater sampling, scientists can identify early-warning signs of infection within a population, track trends, and monitor hot spots. There is a lot of research yet to be done. Still, so-called *wastewater surveillance* offers a promising tool to help our communities respond more effectively to COVID-19.

Sampling and Computer Modeling

As part of a Stanford University study, Central San is collecting samples from different parts of our treatment processes to look for SARS-CoV-2 RNA, the genetic material of the virus. This study is helping scientists better understand how the concentration of the virus RNA varies throughout a treatment plant.

"I am excited to participate in the Stanford research to advance knowledge in this area," says Associate Engineer **Amanda Cauble**, who is coordinating the project with the lab. "Central San also is working with Contra Costa Health Services to establish what sampling efforts would provide relevant information for public health."

For the latter effort, we're turning to our state-of-the-art computer model and mapping tools to identify strategic sampling locations throughout our collection system. Sampling at key points in our system could help track concentrations of the virus in different parts of our community. But with more than 1,500 miles of pipe and 36,000 manholes spread across multiple cities and towns, where should we start? Our computer models are helping to provide answers, which we are sharing with county health officials.

*Chemist II **Brent Harvey** collects samples to analyze for the genetic material of the virus.*

Looking to the Future

Central San also is collaborating with other researchers, wastewater agencies, and public health agencies across the Bay Area as part of a COVID-19 wastewater surveillance working group led by UC Berkeley. Together, we're exploring ways to build monitoring programs based on sound science that will provide reliable and useful information to decision-makers. To further support this effort, UC Berkeley is working hard to launch a laboratory service in the coming months specifically aimed at analyzing wastewater for SARS-CoV-2.

Keep an eye out for updates on these exciting research efforts in future issues of *Lateral Connection*.

CELEBRATING 22 YEARS OF 100% PERMIT COMPLIANCE

Here at Central San, we work hard to ensure that every drop of water we clean meets or exceeds all federal, state, and local water quality standards before we discharge it into beautiful Suisun Bay. Recently we were honored with the 2019 Peak Performance Award - Platinum 22 from the National Association of Clean Water Agencies. This award reflects Central San's 22nd consecutive year without a single discharge permit violation—the longest successful streak in California and among the top 20 in the nation.

After more than two decades it may seem routine, but achieving 100% compliance year after year is not easy! This is a remarkable achievement of which all Central San'ers should be proud. Congratulations, everyone!