

Kennedy Jenks Technical Workshop #4

SUPPORTING DOCUMENTATION

Instructor Bios

Jeff Foray, PE

Jeff is registered professional civil engineer in the States of California, Oregon, and Washington. Jeff Foray has over 25 years of experience in the construction and design of water, wastewater, and industrial facilities. His areas of expertise include pumping system design, building mechanical systems, biogas utilization, power generation, chemical feed systems, cost estimating, and code compliance.

Dr. Ganesh Rajagopalan, PE, PhD

Ganesh is a registered professional civil engineer in the State of California. Dr. Ganesh has over 25 years of experience in planning, design, research, technology development and project management in wastewater, biosolids, recycled water, potable water and oilfield produced water treatment. Dr. Ganesh has performed several process and research studies on high strength waste co-digestion, improving sludge dewatering, odor control and waste to energy generation for municipal and industrial wastes. He has performed multiple projects to address unintended consequences and optimization of co-digestion process. Another major focus of his work on biosolids projects has been in lowering sludge mass requiring disposal through innovative approaches including novel polymer additives as well as selective organic waste co-digestion. Additionally, his areas of expertise include application of nanotechnology to improve water and wastewater treatment.

Mike Barnes, PE

Michel (Mike) is a registered professional civil in the States of California and Colorado with experience in wastewater treatment projects. Mike has over 39 years' experience in both the public and private sectors. Mike's experience includes managing the design and construction of wastewater, water, and recycled water facilities; management and implementation of wastewater capital improvement programs; and management of wastewater infrastructure facilities.

Timeline

3 hours

Agenda

9:00 am **Biogas: The Misunderstood Process**

Presenter: Jeff Foray, PE
jeffforay@kennedyjenks.com
32001 32nd Ave S, #100
Federal Way, WA 98001

10:00 am **Food Waste**

Presenter: Dr. Ganesh Rajagopalan, PE
rganesh@kennedyjenks.com
3200 El Camino Real
Suite 200
Irvine, CA 92602

11:00 am **Digester Mixing**

Presenter: Mike Barnes, PE
mikebarnes@kennedyjenks.com
165 South Union Boulevard
Suite 570
Lakewood, CO 80228-1828

Course Synopsis:

The workshop includes three hours of presentations on various wastewater related topics. The topics were chosen to provide content that is applicable and timely to wastewater operators, designers, and other industry professionals. It begins a presentation on Biogas featuring content related to the generation, storage, and usage of digester/biogas at wastewater treatment facilities. The second presentation gives an overview of food waste digestion at wastewater treatment facilities, to include operational considerations, impacts on gas production, odor issues, and more. The third and final presentation involves the various technologies and options for digester mixing. The outcomes for each of the three presentations include increasing attendee's knowledge of wastewater operations, maintenance and design of digester systems.

Tracking Attendance on Webinar:

The workshop will be moderated by Andrew Perez, PE (Kennedy Jenks) who will track participants and collect the necessary information needed for CEUs.