

Technical Tours

Tours fill up fast. Sign up today for these fascinating site tours!

- Register early! See Registration Form on page 38.
- Buses leave from Convention Center entrance promptly at departure time indicated.
- Tour registration may only be purchased along with either a one-day or full-conference registration.

Tours At-A-Glance

Tour #	Tour Name – Location	Day, Date	Bus Departs	Bus Returns
T1	South Placer Municipal Utility District – SSO Spill Simulator	Wed, 4/18	8:00 AM	12:00 PM
T2	Sacramento Regional County Sanitation District – Wastewater Treatment Plant	Wed, 4/18	1:00 PM	5:00 PM
T3	City of Sacramento – Combined Sewer System	Thu, 4/19	8:00 AM	11:30 AM
T4	City of Roseville – Pleasant Grove Wastewater Treatment Plant	Thu, 4/19	1:00 PM	4:30 PM
T5	Sacramento Regional County Sanitation District – Biosolids Recycling Facility	Fri, 4/20	8:00 AM	12:00 PM

Tour T1

South Placer Municipal Utility District – SSO Spill Simulator

Date: Wednesday, April 18th

Departure: 8:00 AM Return: 12:00 PM

Earn 4.8 contact hours

South Placer Municipal Utility District (SPMUD) provides sewer collection and maintenance services to the City of Rocklin, the Town of Loomis, the community of Penryn, and a portion of Granite Bay. SPMUD's service area includes 20,500 sewer connections, 246 miles of pipe, and 10 pump stations.

SPMUD has developed a manhole sanitary sewer overflow (SSO) spill estimating apparatus that is used to train sewer collection system operators for SSO response efforts. The apparatus allows for controlled flow of water through a manhole frame and cover so that observers can develop visual calibrations of sewer overflow rates witnessed in the field during an SSO response. In addition, attendees will learn about the challenge of accounting for all the variables that one faces when trying to make accurate spill volume estimations. Accurate estimation of SSO rates is critical for regulatory reporting, SSO response, and clean-up efforts.



During this tour, attendees will witness operation of the SSO spill simulation apparatus and learn to estimate spill volumes during mock spill events from manhole and property line cleanouts. Attendees will also learn about other spill estimation methods, strategies for determining spill start times, and strategies for documenting spills.





Tour T2

Sacramento Regional County Sanitation District – Wastewater Treatment Plant

Date: Wednesday, April 18th

Departure: 1:00 PM Return: 5:00 PM

Earn 4.8 contact hours

Located in Elk Grove, the Sacramento Regional Wastewater Treatment Plant (SRWTP) began service in 1982 and replaced 22 wastewater treatment plants that served the Sacramento County communities. It is currently the largest wastewater treatment facility in northern California, serving more than 1 million residents. SRWTP is designed to treat 180 million gallons per day dry weather and 490 million gallons per day peak wet weather flow.

SRWTP provides secondary level wastewater treatment consisting of mechanical bar screens, aerated grit removal, primary sedimentation, pure oxygen activated sludge aeration,



secondary clarification, chlorine disinfection with dechlorination, and a diffuser for discharge to the Sacramento River. SRWTP also has a water recycling program and tertiary treatment via sand filters for approximately 3 million gallons per day during summer months. Solids are processed using dissolved air flotation thickeners, gravity belt thickeners, two blending digesters, nine other digesters, solids storage basins, biosolids disposal, and a biosolids recycling facility. Discharge to the Sacramento River can be ceased for short periods of time through storage of raw wastewater, primary or secondary undisinfected effluent, or disinfected effluent in emergency storage basins.

The tour will include a walk-through of the treatment process and will cover the plant's computerized control center and the 2,400 acres of natural wetlands, grasslands, riparian forest, and farmlands surrounding the plant. The tour will also include a discussion of the current issues surrounding recent changes to SRWTP's NPDES permit, which will necessitate extensive treatment process improvements in the future.

Tour T3

City of Sacramento – Combined Sewer System



Date: Thursday, April 19th

Departure: 8:00 AM Return: 11:30 AM

Earn 4.2 contact hours

The City of Sacramento's Combined Sewer System provides sewage and drainage service to more than 24,000 parcels in Downtown, Midtown, Land Park, and East Sacramento. The system, originally established in the 1800s, collects and conveys both sewage and stormwater in pipes ranging from 4 inches to 120 inches in diameter. The combined wastewater is pumped to the Sacramento Regional County Sanitation District's Treatment Plant in Elk Grove where it is treated and released back to local rivers. During heavy rain events, excess stormwater is also treated at several City facilities before being released back to the river. Management and operation of a combined sewer system

presents challenges not experienced by separate sewer and storm drain systems.

This tour will cover the history of the City's Combined Sewer System, its development over time, and plans for future improvements to the system. Typical operations and maintenance duties and strategies will be discussed, with an emphasis on the City's recent efforts to develop and implement its Sewer System Management Plan. Strategies used to prevent sewer system overflows and educate the public regarding the operation of the system and waste disposal best management practices will be described. The tour will include site visits to Combined Sewer System pumping station facilities and stormwater treatment facilities, highlighting unique design and maintenance characteristics.





Tour T4

City of Roseville – Pleasant Grove Wastewater Treatment Plant

Date: Thursday, April 19th
Departure: 1:00 PM Return: 4:30 PM
Earn 4.2 contact hours

The City of Roseville's Pleasant Grove Wastewater Treatment Plant (WWTP) was constructed in 2003, with a treatment capacity of 12 million gallons per day average dry weather flow, serving southern Placer County. The Pleasant Grove WWTP is a major provider of recycled water to several local users in the area.

This tour will include a walk-through of the WWTP treatment process, which includes screening and influent pumping, aerated grit removal, activated sludge aeration (oxidation ditches), secondary clarification, filtration, and either chlorination/dechlorination or UV disinfection. The City recently completed construction of a UV system for the disinfection of water discharged directly to Pleasant Grove Creek without the addition of chlorine. Chlorinated effluent is used in the recycled water distribution system. Waste solids are processed using centrifuges, and a biofilter odor control system is used to mitigate odors occurring in the headworks and grit basins.

The Pleasant Grove WWTP provides recycled water for irrigation to several local golf courses and City parks. Recycled water is also served to the Roseville Energy Park, located adjacent to the WWTP, which is a 160-megawatt natural gas power generation facility. Recycled water is used at the Energy Park as cooling and process water. This tour will include an overview of the City's recycled water program, recycled water distribution infrastructure, and strategies used to maximize the use of recycled water locally.



Tour T5

Sacramento Regional County Sanitation District – Biosolids Recycling Facility

Date: Friday, April 20th
Departure: 8:00 AM Return: 12:00 PM
Earn 4.8 contact hours



Each year the Sacramento Regional Wastewater Treatment Plant (SRWTP) processes 26,000 dry tons of biosolids, making the program one of the largest producers of biosolids in California. Approximately 70 percent of those biosolids are treated and then injected into on-site land disposal units. The remainder is beneficially recycled at the District's Biosolids Recycling Facility.

SRCS D has developed a diversified biosolids management program that is environmentally friendly and of high value to rate payers. This program is two-pronged, consisting of both recycling biosolids into environmentally beneficial products and applying biosolids to land disposal units. Biosolids are rich in nitrogen and contain phosphorus, potassium, and micro-nutrients, all necessary to the growth process. As a fertilizer, biosolids retain soil moisture, helping to reduce soil erosion. As a soil enhancer, biosolids can be marketed as dry, pelletized, odorless fertilizer; as green waste compost in which the biosolids are mixed with natural plant materials; or as garden-variety compost.

A continuing component of SRCS D's Biosolids Management Program includes ongoing community outreach. SRCS D is continuing its efforts to educate the public, farmers, and community leaders on the benefits of biosolids recycling, which can be done safely and effectively. This tour of the Biosolids Recycling Facility will provide information on the latest methods used to recycle biosolids into resources that are viewed as a value rather than a waste product.

