FALL 2017

Smoking allowed: Vallecitos has an important ally in preventing sewer spills

Usually, wherever there is smoke there is fire. But that doesn’t apply when the Vallecitos Water District’s Systems Collection Department routinely performs smoke testing of our wastewater system. Armed with the necessary equipment, staff take to the streets of the community to perform smoke testing—a technique specifically implemented to locate and identify sources of inflow or infiltration caused by broken or incorrectly installed sewer pipes, lateral connections, or missing/broken clean-out caps.

The test is performed by introducing smoke (through a device similar to a fog generating machine) into the wastewater system and visually monitoring the surrounding area to see if smoke comes out of the system. Homeowners are notified when smoke testing is performed in their area. This Environmental Protection Agency (EPA) sponsored practice is successful and has no ill effects. The smoke is non-toxic and dissipates quickly. Vallecitos staff notify the owners/residents in the surrounding areas so that they can monitor inside their house during the test to see if they have any internal plumbing problems.

The smoke—which is more of a steam—actually enters the sewer and bypasses the living quarters of each residence before rising out of vents located on the roof. When this happens, it’s actually a good indicator that there are no illegal hookups to the sewer. Another way smoke gets out is if the private sewer lateral clean-out is missing its cap.

If smoke emits from residence’s storm drain system or front yard, this means there is a possible illegal connection or opening to the sewer that can lead to surplus water levels and subsequent sewer spills.

If field crews notice any problems during the testing, issues are immediately addressed. Residents are notified to disconnect illegal connections or face potential future fines. The sewer lateral, the clean out, and other plumbing inside the house is not the responsibility of the District. But if there is a simple and inexpensive fix, Vallecitos crews will make the repair in the interest of customer service. A door hanger is left after the quick-fix is completed.

In some cases, customers are able to identify a problem and Systems Collection Department staff schedule an investigation to determine where there is a potential problem and how to resolve those problems.

Smoke testing isn’t really a new technology. It’s been around since the 1950s, and for over the past ten years, smoke testing has proved to be a valuable ally in sewer maintenance. A minimum of four tests are performed annually to keep our system operating at the optimum level.
Many of our customers keep their irrigation system running the same year-round without making adjustments. However, if the irrigation controller is not modified based on season or weather conditions, there could be a considerable amount of water wasted. Sprinklers set to too many days or times can over-irrigate and run off the landscape, which is prohibited by the District. By reducing watering during the colder, wetter months, customers may be able to lower their water bill and grow healthier roots and plants. But how is this done?

There are several options for seasonally adjusting the irrigation system:

- Manually changing the schedule
- Seasonal Adjustment
- Weather Sensors

**Manual Adjustment**
Customers can adjust their sprinkler timer by going through each station on the irrigation controller to manually change the days and run times during hotter or cooler seasons.

**Seasonal Adjustment**
Customers can universally increase or decrease watering with a single, simple setting. Most modern controllers have a feature called “Seasonal Adjustment,” often referred to as a “water budget” or “watering index,” which adjusts the entire irrigation schedule by increasing or decreasing irrigation by a certain percentage. If the controller does not have this feature, then look for a “Watering % Adjustment” to manually adjust the watering duration or frequency. It is usually a button or dial that permits the watering run time to be increased or decreased with just one adjustment.

**Weather Sensor**
Another option is to install a weather sensor. Weather sensors track current weather conditions by measuring rain, temperature, and solar radiation. Once this information is obtained, the sensor communicates with the irrigation controller to automatically adjust the run times based on the weather. This state-of-the-art technology is excellent for giving your plants exactly the amount of water that they need. And as a bonus, rebates may be available for these products at [www.vwd.org/rebates](http://www.vwd.org/rebates).

If all this talk about percentages, indexes and seasons has your eyes spinning, don’t worry. **Free help is available!**

Sign up for a free landscape irrigation audit, also known as a “WaterSmart Checkup,” which is available to all Vallecitos customers. The audit features a visit to your property from a Certified Landscape Irrigation Auditor, a specialist trained on efficient water use management. The auditor will test run your irrigation system to identify any maintenance issues, and if needed, the auditor will spend time explaining how to adjust the irrigation control timer. For more information or to schedule an appointment, go to [www.vwd.org/landscapeaudit](http://www.vwd.org/landscapeaudit).
Vallecitos Behind-the-Scenes ‘Water Academy’ Tour

October 19, 2017 from 8:30am - 4:30pm.

Have you ever wondered how your drinking water is treated and delivered to your home or business, or how the water from your toilets and sinks is recycled to such high standards that it can be used for irrigation? You can have these and more questions answered by getting a behind-the-scenes look during our FREE award winning Water Academy tour.

Our certified water and wastewater specialists offer customers a first-hand look at what it takes to operate the Vallecitos Water District and provide reliable, exceptional and sustainable water and wastewater services to the more than 98,000 residents in our service area. Participants board a chartered bus for a first-hand look at the District’s 33-million-gallon and 40-million-gallon capacity Twin Oaks Reservoirs, currently said to be the largest of their kind in the world. The grand finale of the tour is a visit to the District’s Meadowlark Water Reclamation Facility in Carlsbad, capable of recycling up to 74% of the wastewater generated in our service area. At this facility, participants learn how microorganisms help clean the water and see how increased capacity from the recent plant upgrade benefits the community by lowering the overall demand for limited, imported water.

In addition to these destinations, other tour highlights include seeing how specialized equipment is used in the field to keep the wastewater flowing, visiting the Water Operations Department’s computerized control room to see how the District ensures that the drinking water is safe, and touring the Sustainable Demonstration Garden where participants will learn easy steps to conserve water. Various presentations will also be given at the beginning of the tour where participants will hear an overview of the District and have an opportunity to have questions answered by staff and District Board members.

From conservation-leading, forward-thinking projects like the Meadowlark plant upgrade to the unique educational aspect of the Water Academy tour itself, Vallecitos Water District has proven itself a community leader ready to use out-of-the-box thinking to meet its customers’ demands.

The tour begins at the District’s Administrative Offices located at 201 Vallecitos de Oro, San Marcos.

Vallecitos customers or members of the media interested in participating in the next Water Academy tour are welcome to contact Alicia Yerman at (760) 752-7123 or register online at www.vwd.org/wateracademy.
Help Your Trees Weather the Weather

- Take care. Trees in areas without sprinklers or that share irrigation zones with grass likely require additional deep irrigation.

- Add organics. Spread compost and mulch around trees to decrease evaporation and reduce soil temperatures.

- Get efficient. Assess irrigation systems and convert to drip lines around trees. Drip systems operate slowly, so plan to water longer for a deep soak.

- Make plans. Develop an annual tree maintenance plan to promote long-term health.


- Plant trees. A tree is a smart investment and can be watered even in drought.