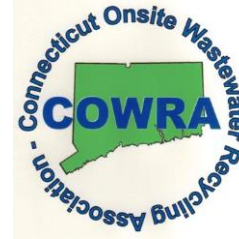


# Happy Holidays



*We wish all our members a wonderful holiday!*

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## Insert in the Newsletter:

Technical Standard Proposals

Installer Course Application

Cleaner Course Applications

**COWRA Brochures are available to our members at \$50.00 per 100, including shipping**

## CONNECTICUT ONSITE WASTEWATER RECYCLING ASSOCIATION

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## December 2022

# Season's Greetings

## Letter from the President

Dear COWRA Members,

Another year is nearing its end and I am hoping all our members find themselves in good health with a thriving and successful business.

In the spring COWRA is planning an outdoor educational Annual Meeting for all its members and hopefully many of the Sanitarians throughout the state. Our dinner meetings are painfully avoided by many of our members, so we have decided to try a different format.

In January, the State Department of Public Health will be updating the Public Health Code/Technical Standards. We will post it on our website for all our members as soon as we receive the final draft. Please make sure you are aware of the new change to avoid problems with your spring installs

I hope all our members and their families enjoy a joyous holiday season and a prosperous New Year.

Sincerely,  
Frank R. Talarico

## Happy Holidays to all of you

## NEW MEMBERS PROFILES

**Russel Breton** of Breton Builders LLC joined in mid-year of 2022. Breton Builders is a family-owned business thriving, in CT. for over 30 years. Russel was a student in our 2022 septic installer course and is planning to take the state exam in the coming months. His services include: Sitework; Foundation work; Excavating; Drainage; and Stump removal. Russel does not advertise and is kept busy full time by word of mouth. Breton Builders is located in Shelton, CT. To contact Breton Builders, call Russel at 203 395-6298 or email him at: [breatobuilder@aol.com](mailto:breatobuilder@aol.com)

**Mark Green** joined COWRA earlier this summer.

Green Construction Management LLC is a local family-owned business and has been providing quality services in Connecticut for over 12 years. Mark's company is located in Waterbury, CT. Mark took COWRA'S 2022 septic installer course. Green Construction is a full-service site and environmental contractor dedicated to providing the highest level of personal attention, partnering with our customers to understand their goals and meet their objectives. Their services include: Septic Installation; Excavating; Foundation; Site work; Sewer Line Installations; Drainage; Demolition and Trucking. You can find Green Construction on Facebook or on the web at: [www.greenconstructionmanagement.com](http://www.greenconstructionmanagement.com)



facilities by building a high school for 550 students. E.E.



Cruz won the general contractor bid, and Mark Lancor, P.E., principal engineer at DYMAR in Southbury designed the 10,000-gpd onsite system.

“The site has soils with low permeability, shallow depths to ledge and a seasonal high-water table at 18 inches below grade, ruling out a conventional subsurface drain-field,” Lancor says. Some of his design included a grease interceptor, five septic tanks, a membrane bioreactor with ZeeWeed 500Ds cassette module (SUEZ Water Technologies & Solutions), four pump stations with Barnes pumps (Crane Pumps & Systems), and a 180-by-137-foot-wide constructed-fill drain-field covered by a parking lot. All concrete tanks were H-20 traffic rated.

Green Construction Management in Waterbury had the expertise to install such a drain-field and a long list of large commercial systems that verified the company's reputation for trouble-free installations. On Lancor's recommendation, Mark Green, the company owner, met with the general contractor. “I didn't leave with a signed contract, only the feeling that I'd get the job,” Green says. He stuck out his neck and acted on the hunch.



Workers from New England Liner Systems thermal-fusion weld seams where the 40-mil liners overlap in the revetment. (Photos courtesy of Green Construction Management).

**System operation** - Permeate from the membranes is UV-disinfected, stored in a 5,400-gallon tank and used to flush the school's urinals and toilets. Overflow from the tank flows to a pump station dosing the 19,728-square-foot drain-field of CULTEC chambers. A rock revetment underdrain at the west end collects, permeates and conveys it to a wet well pumping to a 6,000-gallon fiberglass storage tank near the school's main entrance. Duplex pumps distribute flow to an irrigation drip-field under a multipurpose athletic field. Quick4 high-capacity chambers (Infiltrator Water Technologies) protect the lines.

**Handshake deal** - Lancor required the constructed fill, a custom mix of septic gravel and sand, to meet a permeability rate of 37 to 60 feet per day. "The only way I would be able to sleep at night was if I knew the mix came from Laurelbrook Natural Resources," Green says. He met with owner and friend Bob Jacquier to explain the predicament and deadline. The high school was due to open in September 2019. When and if Green landed the job, he'd have to wait two months while Jacquier's team mixed the required 8,000 tons and tested it for permeability, compaction and particle size (sieve). "Just testing each 500-cubic-yard pile took two weeks," Green says. "We'd never have met the deadline had I waited for a contract."

On a handshake, Jacquier began stockpiling the mix in early March. By the time Green signed the contract on Friday, May 3, the quarry had 4,000 tons ready for Green the following Monday. Meanwhile, E.E. Cruz had built the drain field's 5- to 7-foot-deep subgrade with 4% rise in elevation from west to east.

"All my subcontractor friends were busy and had to drop what they were doing when this job took off," Green says. Monday morning, Dave Welch, owner of New England Liner Systems, and crew began installing the underlayment and the 40-mil high-density smooth HDPE liner (GSE Environmental) over it. The latter arrived on 870-by-22.5-foot-wide rolls, which were run out, overlapped, thermal-fused and tested for leaks at the welded seams.

**Keeping things rolling-** Meanwhile, 15 to 22 dump trucks per day made the 4.5-hour round trip from the quarry in Canaan to deliver the custom mix. Wayne Green, Mark Green's 72-year-old father, managed tickets and material inventories for all 355 loads.

By Wednesday, 2 tons of mix were on site and the liner had passed inspection. Green began stockpiling mix inside the pit at the center of the west face using a rented Volvo L110 wheel loader with 4-cubic-yard bucket. "Liners are slippery as ice, and the sandbags holding down the edges didn't work as well as anchor trenches," Green says. "No matter how carefully I dumped the mix over the side, the liner slid into the hole with it and had to be pulled back."

Constructing the revetment required building a 10-foot-wide-by-12-inch-deep track-in road from the stockpile. Green drove one of two low-ground-pressure Volvo MCT125C rubber-tracked skid-steer loaders with 1-cubic-yard buckets. Tom Dauti, his friend and owner of Dauti Masonry, drove the second machine. They laid out and confirmed elevations using a Spectra Precision/Trimble LL500 laser level with Crain grade rod.

Green and Dauti lined the revetment with filter fabric, brought in 2 feet of septic stone and laid the 6-inch perforated collection pipe, but there wasn't time to cover it. Torrential rain fell over the weekend, causing Green to worry that the sand would wash down and contaminate the stone. "By Monday morning, I was so nervous I didn't want to go to work for fear of what I would find," he says. "Somehow, we were OK."

**Bucket by bucket** - Even with two machines, building 12-inch-deep lifts over the entire liner went slowly, as each layer required six samples to be tested for particle size, moisture density, density of soil in situ and permeability before the inspection. In addition, heavy rains fell daily, turning buckets of mix to slush. The wet well pumps weren't operational yet, so the crew dewatered the pit.

"It was a nightmare until the third lift was inspected, enabling us to bring in the rented Case 650M WT LGP crawler dozer with 8-foot-wide blade," Green says. His retired uncle, Joey Paparazzo, used it to fine-grade the lifts. It took a month to build the 5-

and 7-foot lifts, followed by a 3-inch base of 1 1/4-inch stone (Haynes Materials) for the 108 Contactor 100HD low-profile H-10 wheel-loading chambers (CULTEC).

From the manifold, Green and Dauti set nine galleys per row, only the end unit was 36 inches long instead of 96 inches long. Meanwhile, Wayne Green drilled and deburred 1/4-inch orifices every 4 feet in the distribution pipes. Lancor measured and inspected every hole.

Although the ball valves were all 1 1/2 inches, they required concentric reducers to telescope the manifold, enabling optimization of flow. "The first three rows closest to the west have 3-inch pipe, the next two rows have 2-inch pipe, and the last row has 1 1/2-inch pipe," Mark Green says.

After Lancor conducted squirt tests to equalize the pressure in the pipes, Green and Dauti backfilled to the top of the galleys with 1 1/4-inch stone and covered them with filter fabric. Then they built thrust blocks with 8-inch manhole covers over the valves and clean-outs. Dauti Masonry poured the concrete. Green handed the site to E.E. Cruz near the end of June.

**Upon request, Mark Green sent COWRA this article.**

## COWRA's 2022 Annual Meeting

COWRA will not be holding a formal annual meeting this year. Instead, we will be holding a regular board meeting where the board will be planning an educational meeting to be held in May of 2023. This meeting will be held out door and will be free to all members and health officials throughout Connecticut. At the meeting we will go over issues that affect our members and the industry they serve. We will cover the changes in the Technical Standard Revision beginning in 2023, and address the continuing problem our area is having with septic tank deterioration along with other issues that will help our members provide the best outcome for their business needs, our overall industry and the consumers who depend on our services.

If any of our members have suggestions or topics, they would like covered at our meeting, we would welcome their input.

## COWRA 2022 Installer Course

COWRA is accepting applications for our 2023 Installer School. Students enrolled in the installer course are automatically enrolled in the cleaner course. Both courses will be held live in a virtual Zoom classroom. Classes for the installer course will begin on Thursday, February 16, 2023 and run for 7 consecutive Thursdays.

Topics for the Installers Course include, Septic Tanks: design, structure, function; watersheds and drainage profiles; Soils: physical characteristics, profiles and types, identification; Site Conditions: deep hole and percolation testing, plumbing and pipe configuration; Distribution Systems; Leaching fields; Trenches, Dry wells, Galleries; Curtain Drains; Biomat; Septic Failures; Transit work and Surveys; Septic Design: MLSS, plans and sketches, forms, etc.

Practical exercises will be assigned for classwork and field encountered problems will be discussed. Students will need to have a calculator and an engineer's ruler for the course. The study guide will be mailed to students prior to the first night of class. (Application form can be found in the insert section of this newsletter). For more information visit our website [www.cowra-online.org](http://www.cowra-online.org) and go to the Licensing Class page.

## COWRA 2023 Cleaning Course

COWRA is accepting applications for our 2023 cleaner course. This will be held on a zoom platform on March 30, 2022. Topics included are: Septic Tanks: design, structure, function; Watersheds and Drainage Profiles; Outlet filters; Port-O-Lets, etc.

The course will specifically cover sections of the CT Public Health Code 19-13-B103, General Provisions (pages 5 and 6 in the code) and 19-13-B100a, as well as the Technical Standards Section V on Septic Tanks (pages 28-32 in the code), Chapter 9 on Septic Tanks and Grease Traps from the Design Manual. For more information visit:

[www.cowra-online.org](http://www.cowra-online.org) and go to the Licensing Class page, (application as insert in newsletter).

## Water & Wastewater Equipment Treatment and Transport Show Indianapolis, IN. February, 20th through February, 23th 2023



The **WWETT Show** is the event for wastewater and environmental services professionals. Join the industry **February 20-23, 2023** in Indianapolis for education, product sourcing, and networking. The WWETT show – Water & Wastewater Equipment Treatment & Transport show is the world largest annual trade show for wastewater and environmental service professionals.



This event offers an unmatched educational program, a full slate of live demos, an array of networking opportunities, and an extensive expo

floor where the buyers and sellers come together to see and experience the latest product innovations and technology.

For more information contact:

[www.wwethshow.com](http://www.wwethshow.com)

## Dates to Remember

Please note. The deadline to have student's installer applications returned to us is **February 1st 2023**. After that date we must charge a late fee as our book ordered on that date. It costs us more per book when we order the books individually rather than in bulk, this is why a late fee is charged.

## Membership Renewal

COWRA's annual membership renewal forms will be mailed at the end of December. We ask members to please include the form with your renewal payment, as the information serves to update our Membership Directories. The COWRA website was rebuilt last year so that it would be easier for Connecticut Consumers to find our members. It is important for us to have your current business information so our website can reflect your company's information correctly.

## Public Health Department

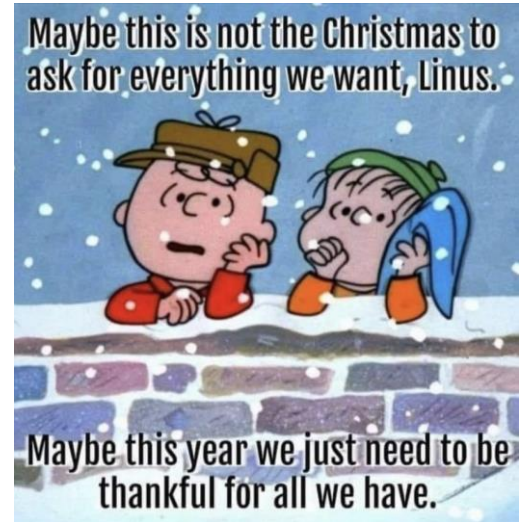


The proposed changes to the Technical Standards for the Subsurface Sewage Disposal Systems are moving along. The DPH anticipates a projected target date for release January 1, 2023 of the revised standards. However, it is possible that factors beyond the DPH control could cause a slight delay.

Training seminars will be scheduled in the new year by the Department of Public Health.

*You will find the Summary of Proposed 2023 Technical Standard Revisions from the November 18, 2022 Code Advisory Meeting included as an insert in this newsletter.*

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May the joy of the season fill the hearts of our members

## FORWARDING SERVICE REQUESTED

**UPDATES!!** We are accepting applications for COWRA's 2023 Installers & Cleaners Courses.

You **MUST** contact the Department of Public Health to register for the Installers & Cleaners Exams.  
**Please Note: Attendance at the COWRA Installer School DOES NOT register you for the State exam.**

Please contact D.P.H. at 860-509-7296 for any information pertaining to your results and license.  
 You may also contact D.P.H. by going to [www.dph.state.ct.us/licensure/apps/subsew.pdf](http://www.dph.state.ct.us/licensure/apps/subsew.pdf)

**The 2022 & 2023 Licensing Exams.** To schedule your exam, submit a Subsurface Sewage Disposal Systems Installer or Cleaner exam application with any supporting documentation to the DPH to determine exam eligibility. The DPH will then issue an approval letter to qualified applicants with detailed instruction, on how to schedule the exam. Exams are held year-round at a third-party testing center (PSI). There are multiple testing locations available throughout the CT area. Please note: A DPH Approval Letter is required to schedule and sit for the state exam at all PSI testing facilities.

**Connecticut Onsite Wastewater Recycling Association**  
**P O Box 116**  
**East Hampton, CT. 06424**

**Protecting the interests of our members  
 and the industry they serve.**