CEU COURSE DESCRIPTION

SEWER AND SEPTIC CONSTRUCTION CEU COURSE

This CEU course is designed for the continuing education, knowledge and inhancement of sewer system operators, septic installers, wastewater collection operators, pretreatment /industrial wastewater operators and wastewater treatment operators. The target audience for this course is the person interested in working in a septic or pumping, installation, wastewater/sewer treatment or collection systems and/or wishing to maintain CEUs for certification license or to learn how to do the job safely and effectively, and/or to meet education needs for promotion. You will not need any other materials for this course.

Course Focus

This CEU course will review various wastewater-sewer-septic collection construction, design, cleaning and detailed safety related subjects. This course is general in nature and not state specific, but it will contain different wastewater collection methods, septic disposal, rules, confined space techniques, maintenance policies, electricity, pump operation, general safety information, and lift station information. Review of the dangers of trenching and excavation and related safety fundamentals. This course will cover the basic requirements of OSHA's Competent Person 29 CFR 1926.650 Subpart F and other related federal safety rules. The Competent Person Program, as it is called, will require formal training and on-the-job experience.

Target Audience

The primary target audiences for this course are onsite septic installers and service providers. There are no prerequisites, and no other materials are needed for this course.

Course Statement of Need

All septic installer and service providers shall be able to describe various wastewater onsite-sewer/septic collection, maintenance, construction, design, cleaning and detailed safety related subjects, from onsite wastewater treatment fundamentals to pump and motor related concerns.

All septic installer and service providers shall be able to describe various different, septic operation and maintenance concerns, related septic installer rules, confined space techniques, related electricity, pump operation, general safety information, and lift station information. All septic installer and service providers shall be able to describe various dangers of trenching and excavation and related safety fundamentals connected to sewage system installation. All septic installer and service providers shall be able to describe various requirements of OSHA's Competent Person 29 CFR 1926.650 Subpart F and other related federal safety rules.

Prerequisite

Basic math knowledge on at a high school level is recommended for successful completion of this course. The understanding of the mathematics of water calculations including hydraulics (area, flows, pressures, volumes, horsepower, velocities) and water/wastewater treatment (chlorination, detention time, chemical dosage) is an important skill for all onsite septic installers and service providers and is commonly used daily.

CEU Course Goals and Timed Outcomes Explained 18 Hours

1. Understand and define septic, sewerage, drainage, wastewater collection rules and regulations, Clean Water Act, and pumping, plumbing code regulations. Explore collection systems components and related regulations. 225 Minutes
2. Understand and explore the purpose of various septic and wastewater collection systems and reason for wastewater treatment and disposal, including pumping and disposal of waste at non-hazardous liquid disposal facilities. 200 Minutes
3. Understand and define residential septic and drainage systems and processes, construction techniques, explore conventional sewer operation and maintenance procedures. 215 Minutes
4. Understand the operations and various components of pumps, risers and baffles, including basic electricity and horsepower. Understand detailed pump troubleshooting associated with basement homes. 20 Minutes.
5. Understand various septic tanks, drainage field, collection construction safety procedures. 140 Minutes
6. Explore various scenarios found in the sewer-septic system and understand possible corrective measures. 55 Minutes
7. Understand septic tank confined space safety techniques and related safety practices. 90 Minutes
8. Math principles and formulas for sewer system disposal operators. Wastewater, plumbing related mathematical exercise that will examine pump, pipe sizing and related mathematical skills. 20 Minutes
9. Advanced septic and sewer construction techniques and confined space safety related practices, understanding and problem solving, assignment section. 145 minutes

CEU Course Learning Objectives

At the conclusion of this course, each participant should be able to demonstrate:

1. Understand and define wastewater onsite/collection/septic/plumbing rules and regulations, and Clean Water Act. Explore onsite treatment systems, collection/ septic/ plumbing systems components and related regulations.

- Compare the three categories of centralized sewer systems and their purposes.
- Analyze the results of a recent Clean Water Needs Survey conducted by the USEPA and related septic waste disposal rules.
- Recognize responsibilities of pumping and septic installers' system operators.
- Evaluate the components of domestic wastewater.
- Describe septic tanks, drainage, leech fields, sewer mains, trunk lines, and collectors.
- Identify common acronyms and associated full phrases.
- Explain the purpose of clarified and expanded permit requirements under CWA and plumbing codes and who is covered by these rules.
- Summarize the CWA and plumbing regulations, and list state goals of proper sewerage disposal.
- Compare water quality before and after the CWA was enacted.
- Define "SSO" and describe related problems.
- Evaluate the purpose of MOM programs project.
- List compounds and undesirable solids that disturb the treatment balance.
- Describe the wastewater system collection process.
- Compose a list of destructive compounds that should never be put into a sanitary sewer system.

- Examine the list of solids and the harm they can cause.
- Analyze the five leading causes of SSOs.
- Outline the elements of a proper pumping and disposal, recordkeeping and non-hazardous waste program.
- Explain the steps in the self-audit process.
- Explain the responsibilities of each of five groups in regards to pretreatment.
- Identify two main functions of a sanitary sewer system.
- Distinguish differences of gravity-flow sanitary sewers.
- Analyze requirements, performance standards, and management programs under CMOM.
- List the positive results of anaerobic, aerobic septic systems and their requirements.
- Analyze factors involved in overflows and proper maintenance.
- Identify the importance of the treatment balance.
- Recognize problem reasons which leech fields can present.
- Examine which pumping programs should be audited.
- Describe the environmental damage caused by infrequent septic pumping and "magic bugs".

2. Understand and explore the purpose of wastewater collection systems and reason for onsite wastewater treatment.

- Define "wastewater."
- Explain the maintenance cycle of sewer systems.
- Describe the importance of sewer line mapping and the information included on the maps.
- Note the reasons for video inspection coupled with a good cleaning program.
- Analyze the results of various flow velocities in pipes.
- List necessary written procedures needed in an O&M manual.

3. Understand and define wastewater onsite collection processes, construction techniques, explore sewer operation and maintenance procedures.

- Describe the costs associated with equipment damage and subsequent repairs and maintenance.
- Evaluate the purpose of municipality or plumbing code self-assessments and code enforcement.
- Outline important routine maintenance activities.
- Describe the three manhole maintenance operations that are routinely performed.
- Identify successful methods of preventing overflows.
- Assess the effectiveness of enzymes and describe the process.
- Recognize the purposes for sewer and septic tank cleaning.
- State the objective of sewer rehabilitation and the three ways it is accomplished.

4. Understand the operations and various components of sewer (onsite) related pumps and lift stations, including basic electricity and horsepower. Understand detailed pump troubleshooting.

- Contrast lifting stations and pumping stations.
- List and describe the four main components of a sewer lifting system and check valve.
- Evaluate the two types of electric motors.
- Identify the purpose of reduced voltage starters.
- Compare the two types of totally enclosed motors and their applications.
- Recognize the formulas for calculating the different types of horsepower.

- Examine the importance of motor controls and compare manual and automatic controls.
- Summarize pump station inspection requirements and possible atmospheric hazards.

5. Understand various onsite- collection construction safety procedures.
   - Recognize competent person requirements.
   - List the four types of soil and give examples.
   - Evaluate soil testing methods.
   - Outline safety procedures in excavation and trenching.
   - Identify components of an excavation safety plan.
   - State inspection requirements for excavation and how often performed.
   - Compare three types of excavation protective systems.
   - List potential hazards of excavation and trenching.
   - Analyze the purpose of PPE.
   - Examine items to be checked before work is performed in a confined space.
   - Define “confined space” and “permit required confined space”
   - Memorize safety rules for confined space entries.
   - Compare the dangers of flammable, irritant, toxic, and asphyxiating atmospheres.
   - Differentiate between oxygen displacement and oxygen deprivation.
   - Describe the four factors that influence the interchange of heat between people and their environment.
   - Explain LOTO.
   - Identify risks associated with noise and vibration in confined spaces.
   - Name mechanical hazards of confined spaces.
   - Evaluate carbon monoxide and its relationship to confined spaces.

6. Explore various scenarios found in the onsite sewer system and understand possible corrective measures.
   - Explain the difficulties with grease and steps to prevent problems associated with septic systems.
   - Describe the importance of inspection and maintenance.
   - Analyze the problems caused by roots and grass inside sewers, types of pipes that are affected, and how to control growth.
   - Define corrective maintenance.
   - Evaluate the importance of routine preventative O&M activities and who shall perform them.
   - Analyze a system’s minimum annual goal requirements.
   - List four types of activities CCTV contractors can perform.

7. Understand confined space safety techniques and related safety practices. Describe the importance of safety principles.
   - Describe the importance of proper protective systems and review.
   - Describe the importance of atmospheric monitoring and respiratory protection.
   - Understand various confined space and excavation definitions.
   - Understand various hazard identification procedures.
   - Describe the importance of safety standards.

8. Understand excavation and trench safety techniques and related familiarization
   - Describe the importance of trench safety principles.
   - Understand various protective systems.
   - Describe various soil classification techniques and soil review.
   - Understand advanced confined space application and safety competency 29 CFR 1926.650 Subpart F.

Accreditation Formula for Figuring CEU Credit
The results of beta-testing were used in conjunction with a formula to determine average student time for accreditation purposes for intended audiences. This formula may not work for unintended audiences.

1 page of text = 2 minutes of student time.
1 practice problem = 1 minute of student time.
1 quiz/exam question = 1 minute of student time.

Math question = 3 minutes of student time. Some math questions may qualify for twice or three times this standard time, depending on the amount of different math conversions utilized to solve the answer. For example, in a math question that utilizes two different conversions to solve the answer, the average time would be adjusted to 6 minutes. The above time averages may change with certain audiences.

**CEU was awarded based on guidelines established by the International Association of Continuing Education and Training (IACET).
400 pages times 2 equals 800 divided by 60 minutes = 13.3 hours
400 questions equals 6.5 hour
Total time 18.5 hours
We are asking for 18 hours of credit.

Specific Course Goals and Timed Outcomes (Beta Testing) 2011
Thirty-three students were tested and the average time necessary to complete each task was recorded in the above objectives and timed outcome section. In the above timed outcome section area, the tasks were measured using times spent on each specific objective goal and final assignment grading of 70% and higher. Originally fifty students were given a task assignment survey in which to track their times on the above learning objectives (course content) while utilizing a multiple choice style answer sheet to complete their final assignment. All students were given 30 days to complete this assignment and survey. Rusty Randall, Proctor January 15, 2011, MACI Unit.

Beta Testing Group Statistics
After soliciting fifty qualified students for this assignment, beta testing was implemented. All the qualifying students held wastewater collection, onsite and/or pretreatment position. None of the test group received credit for their assignment. The average times were based upon the outcome of thirty-three successful students. Twenty-seven students did not complete or failed the course. The average educational age of this group was the tenth grade. Our best professional judgment is that this is an easily completable course for the beginning to intermediate level of certified operator/onsite operator. The average completion time was 19.6 hours with an average successful score of 84%.

2014 Second Beta Testing Breakdown
Fifty-seven percent of successful students performed at or above the *Basic* level in 2014. Thirty-three percent of successful students performed at or above the *Proficient* level, demonstrating their competency over challenging wastewater concepts content. Ten percent of successful students performed at the *Advanced* level in follow-up 2014 beta testing. London, Ohio MACI.

Beta Course Training/Assessment Short Summary

1. The difficulty of your course.

Very Easy	0	1	2	3	4	5	Very Difficult

2. Please rate the difficulty of the testing process.

Very Easy	0	1	2	3	4	5	Very Difficult

3. Please rate the subject matter on the exam to your actual field or work.

Very Similar	0	1	2	3	4	5	Very Different

Task Analysis and Training Needs Assessment Process Information Gathering

Task Analysis and Training Needs Assessments have been conducted to determine or set Needs-To-Know for the basis of TLC's continuing education courses. The following is a listing of some of those who have conducted extensive valid studies from which TLC has based the continuing education program upon: the Environmental Protection Agency (EPA), the Arizona Department of Environmental Quality (ADEQ), the Texas Commission of Environmental Quality (TCEQ), Pennsylvania Depart of Environmental Protection (PDEP) and the Association of Boards of Certification (ABC).

TLC has primary used Training Provider Manual for the Pennsylvania Water and Wastewater System Operator Training Program for course goal setting and learning objectives for all three training formats; conventional classroom, distance paper based and web based training.

The titles or names of subjects (Learning Objectives) may be changed for readability purposes. Some of the terms used in this document may be part of a copyrighted adult learning assessment process and in these cases, we utilize generic terminology. The needs assessment/survey maintains our training and education materials criteria. Assessments and changes are performed based on changes in technology, evaluations of the students, regulatory changes and editorial corrections. Most of this information is considered intellectual property and may not be owned by TLC but by third –parties. All of TLC's information is proprietary.

Assessment Implications

Core tasks have been statistically analyzed then reviewed and edited by the Advisory Committee, SME Experts. These tasks now form a distinct definition of the course and assessment content. The emphasis for most of the levels of operation would be found in the duty/functions discussion below. To recap, bodies of knowledge and concepts that support the understanding and valid performance of the following duty/functions should be taught first. Based on the job-task survey data and beta-testing, the most useful parts of the course are beneficial for the following:

ADDIE

TLC utilizes a five-phase instructional design model consisting of Analysis, Design, Development, Implementation, and Evaluation for our continuing education courses. Each course design step has an outcome that feeds into the next step in the sequence. The five phases of ADDIE are as follows:

ANALYSIS
During the Training Needs Assessment Process Information Gathering Analysis phase, the course designer(s)(see Subject Matter Experts and Contributing Editors) identifies the learning need, the goals and objectives, the student's needs, existing knowledge, Course Statement of Need**,** and any other relevant characteristics (State or Federal Need-to-Know) and to ensure that students are learning what is relevant for their job**.**

DESIGN
This is the systematic process of specifying learning objectives from the Training Needs with a focus on Bloom's Taxonomy. A detailed storyboard following the Needs Assessment/Survey and/or Course Statement of Need will determine the course content.

DEVELOPMENT
The actual creation (production) of the training content will begin based upon the Design phase using Bloom's Taxonomy. At this time, a decision is make to proceed or table the course.

IMPLEMENTATION
During implementation, the Alpha testing plan is put into action and a procedure for course and/or assessment revision is implemented. These course materials and assessments are delivered or distributed to the student group. After delivery, the effectiveness of the training materials is evaluated in Beta testing phase. All of our courses have extensive Alpha and Beta testing to ensure job relevancy, correct information and course learning objectives are met.

EVALUATION
This phase consists of (1) formative and (2) summative evaluation from Alpha and Beta testing. Formative evaluation is present in each stage of the ADDIE process. Summative evaluation consists of tests designed for criterion-related referenced items and providing opportunities for feedback from the students and proctor.

Ongoing Course Evaluation: Administrative and instructional staff will collect all student concerns (verbal, written and surveys) and distribute these to TLC Administrative personnel for evaluation and course corrections. Course and/or Assessment revisions are made as necessary.

Precept-Based (Micro-Learning) Training Course
TLC's training courses are based upon a form of induction training, made of topical and technical precepts that are discovered in the Needs Assessment/Survey and/or Training Needs Assessment Process Information Gathering. The training topics or learning objectives are made up of "micro-content" or "precepts"– or small chunks of information that can be easily digested. These bite-size pieces of technical information are considered to be one of the most effective ways of teaching students new or important information (regulatory or technical) because it helps the mind retain knowledge easier.

Micro-learning or precept-based training doesn't rely on the student to process a large amount of information before breaking it down. Our method includes short modules with clearly defined learning goals for each section. This method allows a student to hone in on a particular skill, then given the opportunity to exhibit their knowledge in the final assessment (assignment).

Course Training/Assessment Needs Methodology
Technical Learning College identified training/assessment needs by placing identifying them in two categories; internal and external.

Internal Methods include:
- ✓ Observation
- ✓ Interviews
- ✓ Instruments: Perception instruments and Knowledge based assessments
- ✓ Student records and reports
- ✓ Group problem analysis (Classroom or Seminars)
- ✓ Performance or Survey appraisals

External Methods include:
- ✓ Outside consultants (Completion)
- ✓ Government Certification Reviews (Training Needs)
- ✓ Records and reports from other agencies

The needs assessment/survey maintains our training and education materials criteria. Assessments and course material changes are performed based on changes in technology, evaluations of the participants and regulatory changes. Materials are assessed yearly or as needed to insure course integrity.

Final Examination for Credit
Opportunity to pass the final comprehensive examination is limited to three attempts per course enrollment.

Upon Successful Completion of this Course, You Will Receive
- ➢ 1.8 Continuing Education Unit/ Thirty training hours.
- ➢ A frameable certificate of competition.

Educational Learning Objective Topics
The CEU course covers several educational topics/functions/purposes/objectives. The topics listed are to assist in determining which educational objective or goal is covered for a specific topic area. This information is available in the detailed beta-testing information and may be found in the course's table of contents. The titles or names of subjects may be changed for readability purposes.

Course Author
Melissa Durbin
This course was co-authored by Melissa Durbin; she has over 25 years of wastewater treatment teaching experience as a college instructor. Melissa has written the several nationally accepted wastewater treatment manuals since 2001. This course has been accepted in most States for continuing education credit. Melissa has taught approximately 10,000 students about water/wastewater treatment, disinfection and related classes. She will be available to answer questions relating this course.

Extensive Academic Research
Technical Learning College's (TLC's) continuing education course material development was based upon several factors; field experience working in the water quality field, extensive academic research (teaching in the community college system), advice from subject matter experts (State officials and industry leaders), data analysis, task analysis and training needs assessment process information gathered from other states.

Both Melissa and Jeff Durbin are the two primary Instructors, Subject Mater Experts and Technical Writers have trained and/or certified more than ten thousand students. These two Instructors teach on a daily basis in a classroom setting throughout Arizona and on-line to students nationwide. See below for more information.

Advice from Subject Matter Experts
Both Melissa and Jeff Durbin are professional trainers and have been educated in current trends in professional education and continuing education needs.

Primary Course Designers Melissa and Jeff Durbin
Melissa Durbin
This course was co-designed by Melissa Durbin; she has over 25 years of teaching water and wastewater treatment experience as a college instructor. Melissa has written the several nationally accepted water and wastewater treatment manuals. Melissa has taught approximately 10,000 students about water and wastewater treatment and related classes. She will be available to answer questions relating this course.

Jeff Durbin
This course was co-designed by Jeff Durbin, over 10 years of water and wastewater treatment experience as a backflow inspector for the City of Phoenix and 20 years of water and wastewater treatment experience. Jeff has taught approximately 10,000 students about water and wastewater treatment primarily in water distribution, and pollution control (water quality) related classes. Jeff will also be able to answer any question pertaining to this course or material.

Course Complier
Peter Easterberg, Detail-oriented technical writer/technical editor/desktop publisher/copy editor. 20 years' experience editing and writing feasibility and trade-off studies, test procedures, specifications, user manuals, company policies, HR forms, and ISO-9000 documents. Exceptional grammatical/written communication skills. "Go-to" person for Microsoft Word, Outlook, and general computer questions. Internet Webmaster Certificate (including HTML)

Contributing Editors

James L. Six Received a Bachelor of Science Degree in Civil Engineering from the University of Akron in June of 1976, Registered Professional Engineer in the State of Ohio, Number 45031 (Retired), Class IV Water Supply Operator issued by Ohio EPA, Number WS4-1012914-08, Class II Wastewater Collection System Operator issued by Ohio EPA, Number WC2-1012914-94

Joseph Camerata has a BS in Management with honors (magna cum laude). He retired as a Chemist in 2006 having worked in the field of chemical, environmental, and industrial hygiene sampling and analysis for 40 years. He has been a professional presenter at an EPA analytical conference at the Biosphere in Arizona and a presenter at an AWWA conference in Mesa, Arizona. He also taught safety classes at the Honeywell and City of Phoenix, and is a motivational/inspirational speaker nationally and internationally.

James Bevan, Water Quality Inspector S.M.E. Twenty years of experience in the environmental field dealing with all aspects of water regulations on the federal, state, and local levels. Experience in the water/wastewater industry includes operation of a wastewater facility, industrial pretreatment program compliance sampling, cross-connection control program management, storm water management, industrial and commercial facility inspections, writing inspection reports for industry, and technical reports per EPA permit requirements. Teacher and Proctor in Charge for Backflow Certification Testing at the ASETT Center in Tucson for the past 15 years and possess an Arizona Community College, Special Teaching Certificate in Environmental Studies. Extensive knowledge and experience in college course and assignment/assessment writing.

Dr. Pete Greer S.M.E., Retired biology instructor, chemistry and biological review.

Jack White, Environmental, Health, Safety expert, City of Phoenix. Art Credits

Ongoing Course Evaluation

Administrative and instructional staff will collect all student concerns (verbal, written and surveys) and distribute these to Jeff Durbin and Bubba Jenkins for evaluation and course corrections.

Final Examination for Credit

Opportunity to pass the final comprehensive examination is limited to three attempts per course enrollment.

Course Procedures for Registration and Support

All of Technical Learning College's (TLC) distance and classroom training courses have complete registration and support services offered. Delivery of services will include: e-mail, web site, telephone, fax and mail support. TLC will attempt immediate and prompt service. When a student registers for a correspondence course, he/she is assigned a start date and an end date. It is the student's responsibility to note dates for assignments and keep up with the course work. If a student falls behind, he/she must contact TLC and request an end date extension in order to complete the course. It is the prerogative of TLC to decide whether to grant the request. All students will be tracked by a unique number assigned to the student.

Instructions for Written Assignments

The Sewer and Septic Construction CEU Training course uses a multiple choice style answer key. You can write your answers in this manual or type out your own answer key. TLC would prefer that you fill out and fax or e-mail the final examinations to us, but it is not required.

Student's Identity, Attendance, and Participation Verification

A proctoring report and/or computer-tracking program validates proper identity, attendance and participation. The student shall submit a driver's license for signature verification and track their time worked on the assignment. The student shall also sign an affidavit verifying they have not cheated and worked alone on the assignment. We follow up with telephone confirmation and/or quiz review assessment. All student attendance is tracked on TLC's student attendance database.

Teaching Techniques and Assessment Tools

Our training courses are based upon a form of induction training, made of topical and technical precepts. The training topics are made up of "micro-content" or "precepts"– or small chunks of information that can be easily digested. These bite-size pieces of technical information are considered to be one of the most effective ways of teaching people new information because it helps the mind retain knowledge easier. Micro-learning or precept-based training doesn't rely on the student to process a large amount of information before breaking it down. Our method includes short modules with clearly defined learning goals for each section with a post quiz and a final assessment (quiz). This method of pre-quiz allows a student to hone in on a particular skill, then given the opportunity to exhibit their knowledge in the final assessment.

Security and Integrity

We expect every student to produce his/her original, independent work. Lesson sheets and final exams are not returned to the students, to discourage sharing of answers. If any fraud or deceit is discovered, the student will forfeit all fees, and the appropriate agency will be notified. Any student whose work indicates a violation of the Academic Misconduct Policy (cheating and/or plagiarism) can expect penalties as specified in the Student Handbook, which is available through Student Services; contact them at (928) 468-0665.

Required Texts

The Sewer and Septic Construction CEU Training course will not require any other materials. This course comes complete. ***No other materials are needed.***

Environmental Terms, Abbreviations, and Acronyms
TLC provides a glossary that defines in non-technical language, commonly used environmental terms appearing in publications and materials. It also explains abbreviations and acronyms used throughout the EPA and other agencies. You can find the glossary in the rear of the manual.

ADA Compliance
TLC will make reasonable accommodations for persons with documented disabilities. Students should notify TLC and their instructors of any special needs.

Course content may vary from this outline to meet the needs of this particular group.

Prerequisites: None

Educational Learning Objective Topics
The CEU course covers several educational topics/functions/purposes/objectives. The topics listed are to assist in determining which educational objective or goal is covered for a specific topic area. This information is available in the detailed beta-testing information and may be found in the course's table

Feedback Mechanism (Examination Procedures)
Each student will receive a feedback or survey form as part of his or her study packet. The student will be able to find this form in the front of the assignment or lesson(assessment). The student can e-mail, snail mail or telephone TLC for any concern at any time.

Student Concerns
Most of student/training course related concerns are generally answered within 2 hours but not more than 24 hours. TLC has three support staff administrators with computers and telephones and have excellent communication and computer skills and able to respond and track all students and obtain or submit required forms and assignments. TLC has a dedicated computer student tracking system database that is backed-up on a daily bases and this information is secured and stored at a secure offsite location in case of fire or security problems. All student website information is tracked and documented for security measures.

Recordkeeping and Reporting Practices
TLC keeps all student records for a minimum of five years. It is the student's responsibility to give the completion certificate and/or paperwork to the appropriate government agencies. If necessary, we will electronically submit the required information to New York, Colorado, Texas, Indiana, Pennsylvania and any other required state for your certification renewals.

TLC Record Storage
TLC's training records include the following elements:
1. Individual course training (assessment) and registration page (Customer Order Record) is recorded in Excel format and the hard copies are scanned and stored in a computer database for 5 years and include the following:
a. the instructor(s) who taught each session on that date the of the training session or grading was offered (in comments section registration page) as well as which instructor was considered to be the lead instructor(s) and by the Director.

b. the name of the instructor(s) and facilitator(s) who proctored and/or graded the examination for each training session if applicable (in comments section registration page);
c. the attendance sign-in sheet(s) (registration page) for each training course or session;
d. all graded and dated validated examination answer (Assessment) sheets for each examination attempt including an explanation (written in comments and/or Excel list) for any retests as well as a narrative explaining any assistance provided to the attendee before the re-test; and
e. session evaluation(survey)forms (in comments section registration page and or Excel list).

Grading Criteria
TLC offers students the option of either pass/fail or assignment of a standard letter grade. If a standard letter grade is not requested, a pass/fail notice will be issued. Final course grades are based on the total number of possible points. The grading scale is administered equally to all students in the course. Do not expect to receive a grade higher than that merited by your total points. No point adjustments will be made for class participation or other subjective factors. For security purposes, please fax or e-mail a copy of your driver's license and always call us to confirm we've received your assignment and to confirm your identity.

Final Assignment
The final examination assignment is determined by the examination administrator or the instruction and there are generally three versions that are readily available. There are also three levels of the examination from average, (5 Answers) Difficult (5 +All of the above) and very difficult (Six answers and All of the above). The student is provided the average rated examination unless there is a condition or concern that requires a more difficult exanimation. Example, two or more students at the same address or any suspicion of cheating or potential fraud. We try to ensure the security and learning experience. Assignments/answer keys are only accessible to instructors and administrative staff that have a need to know clearance.

Failure
If the student fails the examination, they are provided with two more chances to successfully pass the exam with a score of 70% or better. The student may receive a different and randomly generated exam. Upon failure of an exam, the student can submit their concerns in writing or submit a survey form and has the option to receive instructor assistance that would be equivalent to conventional classroom assistance in discovering the areas that are deficient. The instructor has the option in describing the assistance method or procedure depending upon the student's deficiencies.

Grading Criteria
TLC will offer the student either pass/fail or a standard letter grading assignment.
A 900 – 1000 points
B 800 – 899 points
C 700 – 799 points
D 600 – 699 points
F <600 points

In order to successfully pass this course, you will need to have 70% on the final exam. The entire assignment is available on TLC's Website in a Word document format for your convenience.

Forfeiture of Certificate (Cheating)
If a student is found to have cheated on an examination, the penalty may include--but is not limited to--expulsion; foreclosure from future classes for a specified period; forfeiture of certificate for course/courses enrolled in at TLC; or all of the above in accordance with TLC's Student Manual. A letter notifying the student's sponsoring organization (State Agency) of the individual's misconduct will be sent by the appropriate official at TLC. No refund will be given for paid courses. An investigation of all other students that have taken the same assignment within 60-day period of the discovery will be re-examined for fraud or cheating. TLC reserves the right to revoke any published certificates and/or grades if cheating has been discovered for any reason and at any time. Students shall sign affidavit agreeing with all security measures. The student shall submit a driver's license for signature verification and track their time worked on the assignment. The student shall sign an affidavit verifying they have not cheated and worked alone on the assignment.

Note to students: Keep a copy of everything that you submit.
If your work is lost, you can submit your copy for grading. If you do not receive your certificate of completion or quiz results within two or three weeks after submitting it, please contact us immediately. We expect every student to produce his/her original and independent work.

Any student whose work indicates a violation of the Academic Misconduct Policy (cheating, plagiarism) can expect penalties as specified in the Student Handbook, which is available through Student Services; contact them at (928) 468-0665. A student who registers for a distance learning course is assigned a "start date" and an "end date." It is the student's responsibility to note due dates for assignments and to keep up with the course work. If a student falls behind, she/he must contact the instructor and request an extension of her/his *end date* in order to complete the course. It is the prerogative of the instructor to decide whether or not to grant the request.

Your assignments are due on time. Any assignment or mailed-in examination that is one to five days late will be marked down one letter grade. Any assignment or mailed-in examination that is turned in *later* than five days will not be accepted and will be recorded in my grade book as "non-participating" and you can be withdrawn from class. (See final grade options.)

Proctoring Instructions
Students enrolled in Technical Learning College's CEU courses that require proctored testing and **who do not live in the physical service area** of the Technical Learning College Test Center must nominate and gain prior approval of a proctor who will monitor course tests. A new proctor nomination form is required for each term and for each class.

PROCTORS, *If Necessary…*
A proctor is an individual who agrees to receive and administer a student's test(s) from Technical Learning College at the proctor's business email address. The test(s) will be ethically and professionally administered in a suitable testing environment (e.g., college/library or professional office). The proctor will return the test(s) to the Technical Learning College Test Center via fax immediately after administration, and the proctor will

mail the exam within one (1) work day of administration to the Technical Learning College Test Center.

Proctors certify in writing to the Technical Learning College Test Center that the student completed the test according to all of the specific directions provided in the proctor guidelines letter. As the Proctor Nomination Form indicates, the student will identify the specific test(s) the proctor will monitor.

Any proctor the student nominates must be acting in the official capacity in one of the following positions:

- **College or University Personnel:** Dean, Department Chair, Student Records, Professional Staff Member of an adult/continuing education office or counseling center, Librarian, Professor, or any official testing center personnel if the tests are administered in the center.
- **Armed Forces Education Office Personnel**
- **Public or Private School Personnel:** Superintendent, Principal, Guidance Counselor, or Librarian.
- **Other:** Civil Service Examiner, Librarian for City/County, HR Professional, or Education/Training Coordinator.

The following persons do not qualify as proctors:

- Co-workers, someone who reports to you or your immediate supervisor
- Friends
- Neighbors
- Relatives

Nominating a Proctor

Students are responsible for identifying, nominating, and making all of the arrangements for the proctoring of their course tests, including the payment of any fees for services and the return of test materials to Technical Learning College Test Center (cost of FAX or postage). The proctor must be able to receive the student's test(s) via email as attachments. The Technical Learning College Test Center does not accept Yahoo, AOL, G-mail, Hotmail, or etc. email addresses.

If the student is unable to find a suitable proctor, they must contact the Technical Learning College Test Center for assistance immediately via email.

Proctor Nomination Form

Students will use the Proctor Nomination Form for nomination and approval of a proctor. The student will complete the top part of the form for each course s/he is taking, even if the same proctor is used for all tests. The student must click on the submit button for the data to be electronically transmitted to the Technical Learning College Test Center.

Disclaimer Notice

It is ultimately the student's responsibility to ensure that this CEU course is either approved or accepted in my State for CEU credit. The student shall understand State laws and rules change on a frequent basis and believe this course is currently accepted in their State for CEU or contact hour credit, if it is not, the student shall will not hold Technical Learning

College responsible. The student shall also understand that this type of study program deals with dangerous conditions and that the student shall will not hold Technical Learning College, Technical Learning Consultants, Inc. (TLC) liable for any errors or omissions or advice contained in this CEU education training course or for any violation or injury caused by this CEU education training course material. The student shall will call or contact TLC if help or assistance is needed and double-check to ensure the registration page and assignment has been received and graded.

Affidavit of Exam Completion
The student shall affirm that they alone completed the entire text of the course. The student shall affirm that they completed the exam without assistance from any outside source. The student shall understand that it is their sole responsibility to file or maintain their certificate of completion as required by the state.

Refund Policy
We will beat any other training competitor's price for the same CEU material or classroom training. Student satisfaction is guaranteed. We will refund course fees if the course is not accepted for credit by the State. Otherwise, any other problem will be given an exchange credit towards an acceptable or approved course for the State. Once we are notified of the refund or exchange, we will generally issue a refund in 30 days of the problem and exchange within the same day.

Continuing Education Units
You will have 90 days from receipt of this manual to complete it in order to receive your Continuing Education Units (**CEUs**) or Professional Development Hours (**PDHs**). A score of 70% or better is necessary to pass this course. If you should need any assistance, please visit our Assistance Page on the website. Please e-mail all concerns and the final test to info@tlch2o.com.

Course Objective: To provide eighteen hours of continuing education training in effective and efficient sewerage and waste disposal collection methods, pumping, recordkeeping, cleaning, rules, and generally accepted collection related safety practices.

The student is required to submit the following information for assignment grading…
1. 70 PERCENT ON FINAL ASSESSMENT
2. DRIVER'S LICENSE
3. SCHEDULE OF TIME WORKED ON ASSIGNMENT
4. AFFIDAVIT OF EXAM COMPLETION
5. PROCTOR CERTIFICATION
6. TELEPHONE CONFIRMATION

Mission Statement
Our only product is educational service. Our goal is to provide you with the best possible education service possible. TLC will attempt to make your learning experience an enjoyable opportunity.

Educational Mission
The educational mission of TLC is:

To provide TLC students with comprehensive and ongoing training in the theory and skills needed for the environmental education field,

To provide TLC students with opportunities to apply and understand the theory and skills needed for operator certification,

To provide opportunities for TLC students to learn and practice environmental educational skills with members of the community for the purpose of sharing diverse perspectives and experience,

To provide a forum in which students can exchange experiences and ideas related to environmental education,

To provide a forum for the collection and dissemination of current information related to environmental education, and to maintain an environment that nurtures academic and personal growth.

CUSTOMER SERVICE RESPONSE CARD

NAME: _____

E-MAIL_____PHONE_____

PLEASE COMPLETE THIS FORM BY CIRCLING THE NUMBER OF THE APPROPRIATE ANSWER IN THE AREA BELOW.

1. Please rate the difficulty of your course.
   Very Easy 0 1 2 3 4 5 Very Difficult

2. Please rate the difficulty of the testing process.
   Very Easy 0 1 2 3 4 5 Very Difficult

3. Please rate the subject matter on the exam to your actual field or work.
   Very Similar 0 1 2 3 4 5 Very Different

4. How did you hear about this Course? _____

5. What would you do to improve the Course?

_____

How about the price of the course?

Poor_____ Fair ____ Average ____ Good____ Great_____

How was your customer service?

Poor___ Fair ____ Average ____ Good _____ Great_____

Any other concerns or comments.
