Date: June 17, 2014

To: Ronny J. Coleman, Chairman
Statewide Training and Education Advisory Committee
c/o State Fire Training

From: Rodney Slaughter, Deputy State Fire Marshal, Specialist III

Subject/Agenda Action Item: Trench Rescue Technician Training

   Recommended Actions: Approve Trench Rescue Technician Training Curriculum

   Background Information:

   At the April 18th STEAC meeting, Chief Richwine updated committee members regarding the Trench Rescue cadre working with the FIRESCOPE Task Force on the type and size of lumber necessary for a trench rescue. The lumber and equipment issues have been worked through. The State Board of Fire Services (SBFS) was also updated on the status of Trench Rescue Technician curriculum at their May 2014 meeting.

   Analysis/Summary of Issue:

   The Trench Rescue workgroup, operating initially under a Homeland Security grant from the CAL OES, is presenting the Trench Rescue Technician training program to be considered for approval as an FSTEP class. The course materials meet all the State Fire Training Requirements. CMC Rescue, Inc. is prepared to publish the text for the class. The Trench Rescue Technician Course Plan, training site requirements and instructor qualifications are provided once again as an attachment.
Course: Trench Rescue Technician
Hours: 24
Designed For: Rescue\Firefighting
Description: This three day (24 hour) course will take you from classroom discussions to working safely and efficiently in a trench rescue environment. This hands-on training program will cover topics that include: Trench and Excavation Regulations, Understanding Soil, Trench Configurations, Trench Hazards, Rescue Team Preparation, Incident Response, Initial On Scene and Pre-Entry Operations, Shoring Systems and Components, Installation of Shoring Systems, Victim Rescue and Recovery and Incident Termination.

Prerequisites: Rescue Systems 1
Certification: None
Standard: 80%
Class Size: 24 maximum
Student-Instructor Ratio: 1-2 Squad Site: 12/1 (24 total students) with 1 Senior Instructor.
Instructor Ratio: 2-Squad Site: 12/1 (24 total students) with 1 Senior Instructor and 1 Primary Instructor.

Required Student Materials
- Trench Rescue Technician Manual
- Trench Rescue Technician Manual

Required Instructor Materials
- Trench Rescue Technician Manual

Publishers Contact Information
CMC | http://www.cmcrescue.com/

Trench Rescue Technician Course Plan

Introduction - Technical Trench Rescue
Terminal Learning Objective: Students provided with information from this chapter, along with headlines from current events, will be able to recall fatality statistics and case histories and accurately apply this information to potential liabilities in trench rescue operations.

Enabling Learning Objective:
- Cite fatality and injury statistics from case histories and recent trench rescue incidents.
- Understand their personal liability and the potential for criminal prosecution, including monetary fines when standard operation guidelines are not adhered to.

Chapter 1 - OSHA Trench Regulations
Terminal Learning Objective: Students, with the information provided in this chapter, will demonstrate their knowledge by accurately citing specific regulations that impact trench rescue operations.

Enabling Learning Objective:
- Cite Federal Standard for Trenching and Excavations
- Cite California Standard for Trenching and Excavations
- List examples of other related regulations that may impact trenching operations
- Understand the importance of OSHA regulations as they relate to training and exercises

Chapter 2 - Understanding Soil
Terminal Learning Objective: Students provided with information from this chapter, will be able to accurately describe soil classifications and types, soil testing procedures and other factors affecting trench stability.

Enabling Learning Objective:
- Discuss basic soil facts and statistics
- Cite soil classifications and types
COURSE INFORMATION AND REQUIRED MATERIALS

TRENCH RESCUE TECHNICIAN COURSE PLAN

- Demonstrate soil testing
- Identify trench hazards and other factors affecting soil

CHAPTER 3 - Trench Configurations

Terminal Learning Objective: Students, with the information provided in this chapter, will be able to accurately recognize types of trenches and excavations, along with the types of collapses, collapse patterns, and factors leading to trench failures.

Enabling Learning Objective:
- Define and describe a trench
- Identify the different types of trenches
- Recognize different types of collapse
- Distinguish various collapse patterns
- Identify the points of a trench

CHAPTER 4 - Trench Hazards

Terminal Learning Objective: Students provided with the information provided in this chapter, will accurately describe the different types of hazards associated in and around the trench incident as well as how to mitigate those hazards.

Enabling Learning Objective:
- Identify types of trench collapses and failures
- Identify hazardous trench soil conditions
- Understand gravity as a hazard
- Identify water hazards
- Understand surcharge loads
- Identify underground utilities as hazards
- Understand hazardous atmospheres
- Identify vibration hazards
- Develop a mitigation plan for identified hazards

CHAPTER 5 - Rescue Team Preparation

Terminal Learning Objective: Students, with information provided in this chapter, will accurately recall and discuss rescue team preparation including rescue tool maintenance and use, scene accountability, personal protective equipment and scene safety.

Enabling Learning Objective:
- Discuss the importance of trench rescue training
- Identify and discuss the use of proper tools and equipment
- Discuss the importance of rescue team building
- Discuss the importance of accountability and discipline
- Discuss mitigation techniques and the importance of safety working in and around trench emergencies
- Discuss and demonstrate proper personal protective equipment (PPE)

CHAPTER 6 - Incident Response

Terminal Learning Objective: Students provided with information from this chapter, will accurately outline trench rescue considerations when responding to a given trench rescue incident.

Enabling Learning Objective:
- Discuss the importance of the incident location
- Recall the importance of the Time of day
COURSE INFORMATION AND REQUIRED MATERIALS

TRENCH RESCUE TECHNICIAN COURSE PLAN

- Discuss the impact of weather on trench rescue operations
- Identify and develop strategies that restrict incident access
- Recognize the importance of responding with adequate trench rescue resources

CHAPTER 7 - Initial On-Scene Operations

Terminal Learning Objective: Students with information provided in this chapter, will be able to accurately identify and integrate the operational priorities at a given trench rescue incident.

Enabling Learning Objective:
- Understand the importance of initiating the Incident Command System
- Demonstrate how to approach the trench
- Recall how to conduct a proper size-up.
- Understand the importance of the Reporting/Responsible party
- Identify all of the potential hazards at the trench incident
- Accurately recognize USA markings
- Students will understand victim considerations
- Conduct a pre-entry briefing

CHAPTER 8 - Pre-Entry Operations

Terminal Learning Objective: Students, provided with information from this chapter along with the provided tools, equipment, and materials, will accurately describe and demonstrate the pre-entry operation essential to safely perform in-and-around a given trench rescue incident.

Enabling Learning Objective:
- Assign a site Safety Officer
- Demonstrate the proper placement of ladders
- Establish edge protection around the trench
- Demonstrate the proper method of clearing the spoil
- Identify proper air-monitoring techniques
- Demonstrate the proper use of ventilation equipment
- Identify and mark unsafe hazards
- Conduct a Pre-Entry Briefing

CHAPTER 9 – Protective Systems

Terminal Learning Objective: Students, with information provided in this chapter along with the provided tools, equipment, and materials, will accurately identify and demonstrate various types of protective systems in trench rescue operations.

Enabling Learning Objective:
- Identify sloping and benching systems
- Identify trench shields and boxes
- Demonstrate timber shoring systems
- Demonstrate mechanical shoring systems including hydraulic, pneumatic and screw jacks

CHAPTER 10 – Shoring Systems and Components

Terminal Learning Objective: Students, provided with information from this chapter along with the provided tools, equipment, and materials, will accurately identify shoring system components and demonstrate how they are deployed and used in a given trench rescue operation.

Enabling Learning Objective:
- Describe a shoring system and components
- Demonstrate the placement of shoring systems in a trench
COURSE INFORMATION AND REQUIRED MATERIALS

TRENCH RESCUE TECHNICIAN COURSE PLAN

- Identify how many shoring systems are used in a trench rescue
- Identify and establish the safe zones are in the trench

CHAPTER 11 – Installation of Trench Shoring Systems

Terminal Learning Objective: Students, with information provided in this chapter along with the provided tools, equipment, and materials, will accurately demonstrate the installation of shoring systems in a given trench rescue operation.

Enabling Learning Objective:
- Demonstrate the use of Trench Data Sheets
- Set-up and demonstrate the use of a cutting station
- Demonstrate the installation of sheeting and panels
- Apply shoring systems concepts and components
- Demonstrate proper nail patterns and positive connections
- Demonstrate the use of backfill and back-shoring

CHAPTER 12 - Victim Rescue and Recovery

Terminal Learning Objective: Students, provided with information from this chapter along with the provided tools, equipment, and materials, will accurately identify factors that affect victim search, soil removal, and demonstrate victim rescue and recovery at a given trench rescue operation.

Enabling Learning Objective:
- Discuss techniques used for victim search in a trench
- Demonstrate soil removal as it relates to victim recovery
- Demonstrate victim treatment in a trench rescue
- Demonstrate victim packaging in a trench rescue
- Demonstrate victim removal in a trench rescue

CHAPTER 13 - Incident Termination

Terminal Learning Objective: Students, with information provided in this chapter along with the provided tools, equipment, and materials, will accurately demonstrate all of the elements necessary to terminate a given trench rescue operation.

Enabling Learning Objective:
- Provide incident documentation and notifications
- Demonstrate techniques that increase rescuer safety during removal of shoring and equipment from the trench
- Identify the techniques to keep the scene safe upon leaving the area
- Describe the overall goals of critical incident stress debriefing

Course Hours: 24:00

References

NFPA 1670 Standards on Operation and Training for Technical Rescue Incidents
NFPA 1006 Standard for Technical Rescuer Professional Qualifications
Title 8, California Code of Regulations
Trench Rescue Technician Training Site Requirements

A Trench Rescue Technician Training Site must have facilities, structures, work areas, materials, props, tools, and equipment of adequate size, type, and quantity to fully and safely support the technical and manipulative training required to deliver the Trench Rescue Technician curriculum.

(A) Goals
- Set minimum performance training objectives for Trench Rescue Technician training programs.
- Identify those performance objectives a Trench Rescue Technician Training Site must be capable of supporting.
- Provide the means to ensure proper curriculum delivery.
- Trench Rescue Technician Training Sites will meet the minimum requirements to support curriculum delivery.
  - A completed "Request for FSTEP Course Scheduling" providing the dates and location of the upcoming course. The names of all Trench Rescue Technician instructors must be included in the application package to support class size.

(B) Site Capacity
A Trench Rescue Technician Training Site is evaluated on its ability to deliver the required training. A One-squad Site is the minimum and is capable of delivering training to twelve (12) students or one (1) squad. Additional sites may be capable of delivering training to a maximum of twenty-four (24) students or two (2) squads simultaneously. Each capacity level represents the maximum number of students or squads that may be taught on the site at any given time. This maximum number will be determined based on the suitability of the site to safely train between twelve (12) and twenty-four (24) students.

- One-squad Site.
  - Supports the instruction for teaching one (1) squad, a maximum of twelve (12) students on the site.
  - One (1) Trench Rescue Technician Senior Instructor is required for a student instructor ratio of 12:1.

- Two-squad Site.
  - Supports the instruction for teaching two (2) squads, a maximum of twenty-four (24) students on the site.
  - One (1) Trench Rescue Technician Senior Instructor and one (1) Trench Rescue Technician Primary Instructor are required for a student instructor ratio of 12:1.

(C) Trench Rescue Technician Senior Instructor Site Responsibilities
- The Senior Instructor will validate the trench rescue training site for compliance with the Trench Rescue Site Requirements and Equipment Standards listed below prior to teaching the class.
- State Fire Training staff, representative and/or a registered Trench Rescue Technician Senior Instructor, not affiliated with the site nor the delivery of the class, operating under the direction of the Chief of State Fire Training, may conduct an inspection of the Trench Rescue Technician Training Site.
- Discrepancies or deficiencies will be corrected before the class start date.

(D) Site Requirements

January 2014
The following are minimum requirements for a Trench Rescue Technician Training Site:

- The facilities and props should be in close proximity to each other to facilitate timeframes.
- The requesting agency assumes all responsibility, liability, and maintenance for the engineering design, strength, stability, and adequacy of all props.
- The requesting agency further assumes all responsibility, liability, and maintenance for all tools, equipment and supplies used at the site for the delivery of Trench Rescue Technician classes. This includes, but is not limited to, ladders, ropes, rescue hardware and software, hand tools and power tools.

(E) Facilities

- Classroom with audiovisual equipment.
- Wash areas.
- Bathrooms.
- Rehabilitation area.
- Safe and adequate parking.
- Area to demonstrate and practice skills (trench approach and size-up, cutting station, panel construction, tools and equipment skills stations).
- Open field area with approved excavated trenches. See page 5.
- One (1) “L” Trench and one (1) “T” Trench excavated according to trench diagram.
  1) “L” Trench. Both legs of the trench to be 36” wide; each leg to be 20’ long. One leg 8’ deep and one leg 10’ deep.
  2) “T” Trench. The top of the “T” is to be 36” wide, 23’ long and 8’ deep. The upright portion of the “T” is 12’ long, 60” wide and 8’ deep.
  3) Trenches must be in suitable soil for training with no extreme hazards.
  4) Trenches will be collapsed with manikins for each scenario.

(F) Equipment Standards

- The equipment listed below is the minimum for each Trench Rescue Technician Training Site to support one (1) squad/twelve (12) students or two (2) squads/twenty-four (24) students.
- Student safety is of paramount importance when conducting this type of high-risk training associated with a Trench Rescue Technician course.
## Trench Rescue Technician Equipment Inventory

A Trench Rescue Technician Resource List is required for each class.

<table>
<thead>
<tr>
<th>Trench Rescue Technician Equipment Inventory</th>
<th>12 Students</th>
<th>24 Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Students 1 Squad</td>
<td>24 Students 2 Squads</td>
<td></td>
</tr>
<tr>
<td>Plywood 4’x8’x3/4”</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>2”x12”x10’ (8’ is okay, 10’ preferred)</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>2”x4”x8”</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>4”x4”x8”</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>4”x4”x12” (walers)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4”x4”x14” (walers)</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>6”x6”x12” (waler)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>18”, 4’x4” wedges</td>
<td>12 pair</td>
<td>24 pair</td>
</tr>
<tr>
<td>Finland Form plywood, 4’x8’x3/4”</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Wood Pallet for cutting station</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Nails, 16D Duplex</td>
<td>30 lbs.</td>
<td>50 lbs.</td>
</tr>
<tr>
<td>Hydraulic Shores w/extensions, pump and release handles</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pneumatic Shores w/regulator, controller and hoses</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Trench Air Cushions w/regulator, controller and hoses</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SCBA Cylinders</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Pipe Screw Jacks, 1½” w/ pipe cutter and pipe wrench</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Pipe; 11/2” schedule 40 steel; 10’ lengths</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Ellis Post Screw Jacks; 4”x4”</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Lifeline 1/2”x 50’ (in bags)</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Utility Line 25’</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Webbing 1”x20’</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Backboard w/straps</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Rescue Litter (optional)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>101/4” Circular Saw w/extension cord</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Palm Nailer w/regulator, and hoses</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Chain Saw; gasoline, w/fuel can, chain oil and extra chain</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Generator; minimum 2.5 kw w/extension cord</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Crow Bars</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Shovels; round point, long handle</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Shovels; square point, long handle</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Shovels; round point, short D handle or Military type folding</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Grubbing Tools</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Pike Pole; 10’-12’</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5 gal. buckets w/wire or rope handles</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Framing Hammers</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Single Jack (short handled 3-4 lb. sledge hammer)</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Tape Measures 25’</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Speed Squares</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Carpenter Pencils</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Trench Rescue Technician Equipment Inventory</td>
<td>12 Students</td>
<td>24 Students</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Squad Boxes or Buckets</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Duct Tape</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Salvage Cover</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ladders; straight or roof, 12’-16’</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Ladder Belts or Escape Belts</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Ventilation Fan</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Atmospheric Monitor w/tubing</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Manikins</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Backhoe and Operator</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Trench Rescue Tactical Worksheets</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Daily Trench Inspection Worksheets</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Trench Rescue Site Safety Officer Worksheets</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Incident Action Plan Documents</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Required**

**Trench Rescue Technician**

**Trench Props Diagram**

*(Next Page)*
**TRENCH RESCUE TECHNICIAN**

Trench Rescue Technician Training Site Requirements

**Trench Dimensions:**
- 23’
- 36”
- 8’ Deep
- 36”
- 9’
- 12’
- 12’
- 36”
- 5’
- 10’ Deep
- 36”
- 20’ Deep
- 20’ Deep
- 8’ Deep
- 20’

**Requirements:**
- Dig trenches a minimum of 20’ apart
- Square corners, lip and bottom

January 2014

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TRENCH RESCUE TECHNICIAN INSTRUCTOR LEVELS

(A) PRIMARY INSTRUCTOR TRAINEE
   (1) The Primary Instructor Trainee is the entry level for becoming a Primary Instructor for the Trench Rescue Technician course.
       (a) This position is valid for two (2) years after beginning the Instructor Trainee Task Book process.
   (2) Primary Instructor Trainees are not registered with SFT.

(B) PRIMARY INSTRUCTOR
   (1) A Trench Rescue Technician Primary Instructor is qualified to teach a squad (up to 12 students) in a Trench Rescue Technician class with two squads.

(C) SENIOR INSTRUCTOR TRAINEE
   (1) The Senior Instructor Trainee is entry level for becoming a Trench Rescue Senior Instructor.
       (a) This position is valid for two (2) years after beginning the Senior Instructor Trainee Task Book process.

(D) SENIOR INSTRUCTOR
   (1) A Trench Rescue Technician Senior Instructor is required for any delivery of a Trench Rescue Technician course.
   (2) A Trench Rescue Senior Instructor may also function as the Primary Instructor for a squad.
TRENCH RESCUE TECHNICIAN PRIMARY INSTRUCTOR TRAINEE

(A) QUALIFICATIONS

(1) Course work.
   (a) Have attended and passed a SFT Rescue Systems 1 course
   (b) Have attended and passed a SFT Trench Rescue Technician course.

(2) Instructor requirements [one (1) of the following five (5) options]:
   (a) Have attended and passed Fire Training Instructor 1A, 1B and 1C.
   (b) Have a valid community college teaching credential.
   (c) Completed the UC/CSU 60-hour Techniques of Teaching course.
   (d) Completed the NFA's Fire Service Instructional Methodology course.
   (e) Completed four semester units of upper division credit in educational materials, methods, and curriculum development.

(3) Teaching experience.
   (a) None.

(4) Rank and experience.  
   (Performing in an "acting" capacity does not qualify.)
   (a) Have a minimum of three (3) years experience within a California fire department in the field of rescue.
      1. For example, being a member of an identifiable rescue team.

(B) APPLICATION

Submit the following to the Trench Rescue Senior Instructor who will be evaluating you:

(1) Resume.
   (a) A current resume of education, position/rank, and experience.

(2) Course work.
   (a) Copies of your SFT course completion certificates.

(3) Instructor requirements.
   (a) Instructor training.
      1. Copies of your SFT Fire Training Instructor 1A, 1B and 1C certificates or qualifying equivalents.

(4) Rank and experience (performing in an "acting" capacity does not qualify).
   (a) A current, original letter written on department letterhead and signed by the Fire Chief, or his/her authorized representative, describing your specific background as it relates to the rank and experience requirement(s).

(C) RESPONSIBILITIES

Under direct supervision of a registered Trench Rescue Technician Senior Instructor, the Primary Instructor Trainee will:
(1) Assist in classroom and field exercise setup.
(2) Support the logistics of the component(s) being trained in.
(3) Teach no more than 50% of a single course delivery.
   (a) Completing a Primary Instructor Trainee Task Book requires participating in at least two (2) Trench Rescue Technician courses.
(4) Carry out all other related tasks as assigned by the Senior Instructor.
(5) Satisfactorily complete and have signed by a Trench Rescue Technician Senior Instructor the Primary Instructor Trainee Instructor Task Book within two (2) years of beginning the Primary Instructor Trainee process.
(6) The orientation module in the task book is not required to be complete to become a primary Trench Rescue Technician instructor.
TRENCH RESCUE TECHNICIAN PRIMARY INSTRUCTOR

(A) QUALIFICATIONS

(1) Course work.
   (a) Have attended and passed a SFT Rescue Systems 1 courses.
   (b) Have attended and passed a SFT Trench Rescue Technician course.

(2) Instructor requirements (all of the following):
   (a) Regional Instructor Orientation.
       1. Have attended and passed the SFT Regional Instructor Orientation or be a currently registered SFT instructor in good standing who has previously attended a Regional Instructor Orientation.
          a. Prospective instructors shall satisfy all instructor requirements and become registered as an instructor within one (1) year of attending the Regional Instructor Orientation.
   (b) Ethical Leadership in the Classroom.
       1. Have attended and passed the SFT Ethical Leadership in the Classroom course and signed the Instructor Code of Ethics/Conduct.
   (c) Instructor Training [one (1) of the following five (5) options]:
       1. Have attended and passed Fire Training Instructor 1A, 1B and 1C.
       2. Have a valid community college teaching credential.
       3. Completed the UC/CSU 60-hour Techniques of Teaching course.
       4. Completed the NFA's Fire Service Instructional Methodology course.
       5. Completed four semester units of upper division credit in educational materials, methods, and curriculum development.
   (d) Primary Instructor Task Book
       1. Completed the Trench Rescue Technician Primary Instructor Trainee Task Book.
          a. Signed off by at least one (1) Trench Rescue Senior Instructor within two (2) years of beginning the Primary Instructor Trainee process.
             b. The orientation module in the task book is not required to be complete to become a Primary Trench Rescue Technician instructor.

(3) Teaching experience.
   (a) Taught a minimum of 80 hours within a fire service related program.

(4) Rank and experience
   (Performing in an "acting" capacity does not qualify.)
   (a) Have a minimum of three (3) years experience within a California fire department in the field of rescue.
1. For example, being a member of an identifiable rescue team.

(B) APPLICATION
Submit a complete application package for a State Fire Training (SFT) review that includes all of the following:

(1) Application form.
   (a) A current instructor application signed by the applicant (available online).

(2) Resume.
   (a) A current resume of education, position/rank, and experience.

(3) Course work.
   (a) Copies of your SFT course completion certificates.

(4) Instructor requirements.
   (a) Regional Instructor Orientation.
      1. A copy of your SFT course certificate.
   (b) Ethical Leadership in the Classroom.
      1. A copy of your SFT course certificate.
   (c) Instructor training.
      1. Copies of your SFT Fire Training Instructor 1A, 1B and 1C certificates or qualifying equivalents.
   (d) Primary Instructor Task Book.
      1. Copy of your Primary Instructor Task Book signed off by at least one (1) Trench Rescue Technician Senior Instructor within two (2) years of beginning the Primary Instructor Trainee process.

(5) Teaching experience.
   (a) A current, original letter written on department letterhead and signed by the Fire Chief, College Administrator, or his/her authorized representative, describing your specific background as it relates to your teaching experience.
      1. May be combined in one letter with the rank and experience verification.

(6) Rank and experience *(performing in an "acting" capacity does not qualify).*
   (a) A current, original letter written on department letterhead and signed by the Fire Chief, or his/her authorized representative, describing your specific background as it relates to the rank and experience requirement(s).
      1. May be combined in one letter with the teaching verification.

(C) RESPONSIBILITIES
Under supervision of a registered Trench Rescue Technician Senior Instructor, the Primary Instructor will:

(1) Administration.
   (a) Setup the classroom and field exercises.

(2) Course.
   (a) Teach the current curriculum as adopted by SFT.
1. Abiding by the information and requirements listed in the Course Plan manual for the course.

   (b) Ensure all objectives of the course curriculum are met.

   (c) Teach at least 50% of the course.

   1. For courses delivered on a "shift" or back-to-back schedule, a Primary Instructor must be assigned to each shift and teach at least 50% of that shift's course schedule.

   2. A Primary Instructor may be assigned to more than one (1) shift.

   (d) Administer any skills exams.

   (e) Ensure the safety of all students and adjunct instructors.

   (3) Student task books.

   (a) Evaluate student/team performance and sign each student's task books.

   (4) Recordkeeping.

   (a) Record and maintain:

      1. Daily attendance records.

      2. Student progress chart.

      3. Student assignment records.

      4. Calendar of events identifying the topics taught.

   (b) Turn over all class records to the Senior Instructor upon completion of the class.

   (5) Supervision.

   (a) Verify the qualifications for a Guest Lecturer and directly supervise by attending and monitoring the presentation.

   (D) MAINTAINING PRIMARY INSTRUCTOR STATUS

   (1) Abide by all published procedures of SFT, including the Instructor Code of Ethics/Conduct.

   (2) Be a Trench Rescue Technician Primary Instructor for at least one (1) SFT Trench Rescue Technician courses every two (2) years.

   (3) Submit any change of address or phone number.

      (a) Department.

      (b) Home.

      (c) Cell.

      (d) Email.

   (4) Attend an update course delivered by SFT when required.
TRENCH RESCUE TECHNICIAN SENIOR INSTRUCTOR TRAINEE

(A) QUALIFICATIONS

(1) Course work.
   (a) No additional course work required.

(2) Instructor requirements (all of the following):
   (a) Currently registered as a SFT Trench Rescue Technician Primary Instructor in good standing.

(3) Teaching experience.
   (a) No additional experience required.

(4) Rank and experience.
   (a) No additional experience required.

(B) APPLICATION

Submit the following to the Trench Rescue Technician Senior Instructor who will be evaluating you:

(1) Resume.
   (a) A current resume of education, position/rank, and experience.

(2) Instructor requirements.
   (a) Verification of your Primary Instructor status.

(3) Trench Competent Person requirement
   (a) Verification of Trench Competent Person certification

(C) RESPONSIBILITIES

Under direct supervision of a registered Trench Rescue Technician Senior Instructor, the Senior Instructor Trainee will:

(1) Administration.
   (a) Ensure all administrative requirements are completed in accordance with printed guidelines, including, but not limited to:
      1. Submitting a "Request for Course Scheduling."
      2. Qualifying each Assistant Instructor, Skills Evaluators, and Guest Lecturers.
      3. Returning, within fifteen (15) days of course completion, all required student and course materials, using a carrier that can track your shipment.

(2) Course.
   (a) Ensure all objectives of the course curriculum are met.
   (b) Ensure the maximum student limit is not exceeded for the class.
   (c) Function as the Safety Officer to ensure the safety of all students and adjunct instructors.
      1. Coordinate and monitor all safety issues during the delivery of the course.
(3) Senior Instructor Trainee Task Book.
   (a) Complete the Senior Instructor Trainee Task Book within two years.

(4) Recordkeeping.
   (a) Maintain class records under the supervision of the Senior Instructor in accordance with the State Fire Training Policy and Procedures Manual.

(5) Supervision.
   (a) Ensure that the student/instructor ratio is maintained.
   (b) Supervise the Primary Instructor's presentation of the course.
TRENCH RESCUE TECHNICIAN SENIOR INSTRUCTOR

(A) QUALIFICATIONS

(1) Course work.
   (a) None.

(2) Instructor requirements (all of the following):
   (a) Currently registered as a SFT Trench Rescue Technician Primary Instructor in good standing.

(b) Senior Instructor Trainee Task Book.
   1. Completed the Trench Rescue Technician Senior Instructor Task Book.
      a. Signed off by at least two (2) Trench Rescue Technician Senior Instructors within two (2) years of beginning the Senior Instructor Trainee process.

(3) Teaching experience.
   (a) No additional experience required.

(4) Rank and experience.
   (a) No additional experience required.

(B) APPLICATION

Submit a complete application package to State Fire Training for review and include all of the following:

(1) Application form.
   (a) A current instructor application signed by the applicant (available online).

(2) Resume.
   (a) A current resume of education, position/rank, and experience.

(3) Instructor requirements.
   (a) Verification of your Trench Rescue Technician Primary Instructor status.
   (b) Task book (when applicable).
      1. Copy of your Senior Instructor Task Book signed off by at least two (2) Trench Rescue Technician Senior Instructors within two (2) years of beginning the Senior Instructor Trainee process.

(4) Trench Competent Person requirement
   (a) Verification of Trench Competent Person certification

(C) RESPONSIBILITIES

(1) Administration.
   (a) Ensure all administrative requirements are completed in accordance with printed guidelines, including, but not limited to:
      1. Submitting a "Request for Course Scheduling."
      2. Qualifying each Assistant Instructor, Skills Evaluators, and Guest Lecturers.
3. Returning, within fifteen (15) days of course completion, all required student and course materials, using a carrier that can track your shipment.

4. Confirming complete course rosters.

5. Confirming complete Scantrons.

6. Confirming complete course evaluations

(b) Verify student eligibility.

(2) Course.

(a) Ensure all objectives of the course curriculum are met.

(b) Ensure the maximum student limit is not exceeded for the class.

(c) Ensure the safety of all students and adjunct instructors.

1. Coordinating and monitoring all safety issues during the delivery of the course.

(d) Completing a Daily Trench Inspection Worksheet for each day of class.

(e) Completing an Incident Action Plan for the course.

(3) Instructor Trainee Task Book.

(a) Evaluate a Primary Instructor Trainee's performance and sign the Primary Instructor Task book.

(b) Evaluate a Senior Instructor Trainee's performance and sign the Senior Instructor Task Book.

(4) Recordkeeping.

(a) Maintain all class records received from the Primary Instructor(s) for a minimum of four (5) years.

1. SFT may request, at any time, the Senior Instructor to submit these records for review. Failure to comply shall result in disciplinary action.

(5) Supervision.

(a) Ensure that the student/instructor ratio is maintained.

(b) Supervise each Primary Instructor's presentation of the course.

(D) MAINTAINING SENIOR INSTRUCTOR STATUS

(1) Abide by all published procedures of SFT, including the Instructor Code of Ethics/Conduct.

(2) Be a Trench Rescue Technician Primary or Senior Instructor for at least one (1) SFT Trench Rescue Technician courses every two (2) years.

(3) Submit any change of address or phone number.

(a) Department.

(b) Home.

(c) Cell.

(d) Email.
(4) Attend an update course delivered by SFT when required.