

**Request for Proposals
Alameda Corridor**

Maintenance of Way Services

APPENDIX J

Training Requirements

ALAMEDA CORRIDOR TRANSPORTION AUTHORITY
MAINTENANCE OF WAY SERVICES
TRAINING REQUIREMENTS

Course No.	Type of Training	Frequency of Training	Craft
1.	General Code of Operating Rules for Maintenance of Way Employees	Annually	All maintenance of way
2.	Roadway Worker - CFR49 Section 214.3 On-Track Safety Program	Annually	All maintenance of way
3.	1. EIC	Annually	Inspectors, flaggers, supervisors (track, bridge, sig & comm), and contract manager
	2. Lone Worker	Annually	Inspectors, flaggers, supervisors (track, bridge, sig & comm), and contract manager
4.	First Responder/ Hazardous Material (40 hours)	Annually	Supervisors (track, bridge, sig & comm), and contract manager
5.	Hazardous Material (40 hours)	3 years	Supervisors (track, bridge, sig & comm), and contract manager
6.	CFR49 Section 213/7	Once	Inspectors, rail repair leaders, supervisors (track, bridge, sig & comm), and flaggers
7.	Fall Protection/ Rescue 214 (Annual Recertification)	Annually	Supervisors (track, bridge, sig & comm), contract manager, and as required
8.	Confined Space, OSHA	Annually	As required
9.	CWR Maintenance	Annually	Inspector, rail repair leaders, welders, track supervisor and contract manager
10.	Track Welding	Current Certification	Welders, welder helpers, supervisors
11.	Emergency Ladder Inspection and Maintenance	Annually	Supervisors (track, bridge, sig & comm), contract manager, and others as required.

COURSE SPECIFICATIONS

The training to be provided by the Contractor to its employees listed above will contain the course material, require the duration, and will be expected to meet the course objectives listed in the following sections.

The Contractor will furnish a schedule of training classes to be given as a part of the proposed Maintenance of Way and Structures Service Plan. For the period between the start date and the first annual budget cycle, the Contractor will furnish a schedule of training within 30 days of the start date. ACTA will review the schedule and reserves the right to alter the schedule to avoid depletion of the work force or to avoid conflicts with scheduled maintenance activities.

ACTA may monitor the Contractor's classes for content and effectiveness of presentation and will be furnished the results of tests of the students. In the event that ACTA believes that course content or presentation is not meeting the objectives of the specifications identified below, the Contractor and ACTA representatives will meet to make adjustments to the training.

COURSE 1
General Code of Operating Rules for Maintenance of Way Employees
(5-Day Class for persons not previously qualified on the GCOR)

- 1. Introduction and Safety Briefing of the Facility**
- 2. Course Content**
 - A. Overview of documents and how they work together:
 - GCOR
 - Employee Timetable, Special Instructions, and Modifications to GCOR
 - General Orders
 - Track Bulletins
 - B. Rules
 - Rule 1, General Responsibilities
 - Rule 2, Railroad Radio
 - Rule 3, Standard Time
 - Rule 4, Timetables
 - Rule 5, Signals
 - Rule 6, Fouling and Working on Tracks
 - Rule 7, Moving Equipment Safely
 - Rule 8, Switches
 - Rule 9, Block System Rules
 - Rule 10, Centralized Traffic Control
 - Rule 14, Track Warrant Control
 - Rule 15, Track Bulletin Rules
 - 1/2 day out on the field
 - C. Examination

COURSE 2
Roadway Worker Class Outline
(4-hour class)

- 1. Introduction and Safety Briefing of the Facility**
- 2. Background of the Rule Making**
 - A. 2 years in the making
 - B. Group of peers/FRA/Training officers each RR.
 - Reason for rule
- 3. Definition of**
 - A. On-Track Safety
 - B. Training
- 4. Hierarchy of On-Track Safety**
- 5. Definitions of:**
 - A. Roadway Worker
 - B. Who is a Roadway Worker
 - C. Fouling a track
 - Job Briefing
 - D. Responsibilities of
- 6. Review the Following Definitions**
 - A. Employee In Charge
 - B. Lone Worker
 - C. Watchman
 - D. Exclusive Track
 - E. Non-Controlled Track
 - Inaccessible Track
- 7. Types of Protection**
 - A. Track and Time
 - B. Watchman
 - C. Lone Worker
 - ITD
- 8. Right to Challenge**
- 9. On-Track Equipment**
- 10. Question and Answers**

COURSE 3
Roadway Worker
Employee-In-Charge, Lone Worker, Watchmen Class Outline
(8-hour class)

- 1. Introduction and Safety Briefing of the Facility**
- 2. Background of the rule making**
 - A. 2 years in the making
 - B. Group of peers/FRA/Training officers each RR.
 - Reason for rule
- 3. Definition of**
 - A. On-Track Safety
 - B. Training
- 4. Hierarchy of On-Track Safety**
- 5. Definitions of:**
 - A. Roadway Worker
 - B. Who is a Roadway Worker
 - C. Fouling a track
 - Job Briefing
 - D. Employee In Charge
 - E. Lone Worker
 - F. Watchman
 - G. Bridge Worker
 - Fall Protection
- 6. Responsibilities of**
 - A. EIC
 - B. Lone Worker
 - C. Watchman
 - D. Machine Operator
 - E. Bridge Worker
- 7. Review the following Definitions**
 - A. Exclusive Track
 - B. Non-Controlled Track
 - Inaccessible Track
- 8. Types of Protection**
 - A. Track and Time
 - B. Watchman
 - C. Lone Worker
 - ITD
- 9. Types of Protective Equipment**
 - A. Concentrating on Fall Protection
- 10. Right to Challenge**

COURSE 4
First Responder Awareness Level Outline
(8-hour class)

1. Introduction

Provides the essential information for individuals who are likely to witness, discover, or respond to an incident of a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release.

2. Review of hazard communication (Right-to-Know).

At the completion of this training course, the participant will be acquainted with the following information:

- A. Understanding of hazardous substance and risks associated with them in an incident
- B. Understanding of potential outcome associated with an emergency created when hazardous substances are present.
 - Ability to recognize the presence of hazardous substance in an emergency.
 - Ability to identify the hazardous substance, if possible
 - Understanding of the role of the first responder awareness individual in the employer's emergency response plan. (Including site security and control) and the US department of transportation's Emergency Response Guidebook.
 - The ability to realize the need for additional resources, and to make appropriate notification to the communication center.

COURSE 5
Hazardous Material Course EIC (40 hours)
Outline
(5 day 8 hour/day)
12 participants per class

A comprehensive technical course designed to provide a thorough introduction to regulations covering personnel involved in investigation and remediation of hazardous waste sites.

Topics include:

- Classes of hazardous materials
- Site Safety
- Levels of protection
- Personal equipment programs
- Medical and emergency considerations
- Site Safety plans sources of information
- Decontamination procedures and instruction commonly used on-site.

COURSE 6
Track Safety Standards Class
FRA part 213 sections A to F
Basic Course for First-Time Qualification
(4-Day Class)

1. **Introduction and Safety Briefing of the Facility**
 - A. Foundation of the railroads physical plant
 - B. Determination of acceptable variation in track

2. **Technical Discussion**

3. **Course Description**

This course will allow the student to understand the FRA 213 Track Safety Standards and to make track evaluations based on the minimum safety requirements.

- A. General Information

- Application
- Excepted track
- Responsibility of track owners
- Designation of qualified persons to supervise certain renewals and inspect track
- Class of track operating speed
- Civil penalty
- Exemptions

- B. Roadbed

- Drainage
- Vegetations

- C. Track Geometry

- Gage
- Alignment
- Curves
- Elevation
- Surface

- D. Track Structure

- Ballast; general
- Crossties
- Defective rails
- Rail end mismatch
- Railjoints
- Rail fasteners
- Turnouts, switches and frogs

- E. Track Appliances

- Scope
- Derails

- F. Inspections

- Track inspection
- Rail inspection
- Inspection records
- Crosstie inspection
- Special inspections

COURSE 7
Fall Protection and Rescue
(4-hours)

- 1. Introduction and Safety Briefing**
- 2. Background: 49 CFR 214 (Roadway Worker)**
- 3. Fall Protection**
 - A. When Required
 - B. Inspection
 - C. Exceptions
- 4. Fall Protection Equipment**
 - A. Intended Use
 - B. Certification
 - C. Inspection before use
 - D. Training
- 5. Working over Water**
- 6. Scaffolding**
- 7. Rescue Plan**
 - A. Communications
 - B. Assignment of personnel to roles for rescue
 - C. Equipment

COURSE 8
Confined Space Outline
(8-hour classroom)

- 1. Introduction and Safety Briefing**
- 2. Equipment Knowledge**
 - A. Oxygen
 - B. Hazardous Gas
- 3. Proper dress for levels**
 - A. Clean
 - B. Chemical
- 4. Proper ventilation**
- 5. Vertical rescue**
- 6. Record Keeping**
 - A. Gas monitoring

COURSE 9
CWR Maintenance Class Outline
(8-hour class)
Given on an Annual Basis

1. Introduction and Safety Briefing

Maintenance of Continuously Welded Rail was prepared to focus on reducing the problems that tend to occur in CWR track. In order to give participants a firm understanding of the problem and the solutions, the following main points must be covered:

- A. The theory of thermal expansion
- B. Understanding the cause of track buckles and pull apart
- C. Inspection techniques to locate and identify possible buckle/pull apart sites
- D. Proper diagnostic and preventative maintenance methods to be used
- E. Step-by step procedures for the repair and reinstatement of thermally defective track
- F. Requirements of 49CFR213.119

2. Technical Discussion

A. Course Description

The aim of the course is to provide a training program that will be taught to all track maintenance forces that have responsibility for the inspection, maintenance and distressing of CWR.

B. Objectives

At the end of the course the participant will:

- Understand the theory of thermal expansion.
- Identify and demonstrate the inspection techniques and identifiers used to determine rail stress conditions.
- Calculate the length of an unrestrained rail at different temperatures.
- Calculate in track rail stress at different temperatures.
- Define stress free temperatures, preferred rail laying temperatures, preferred rail laying temperatures range.
- Calculate the adjustment required to return rail to its stress free condition at any temperature.
- Identify when distressing can be performed.
- Understand the proper steps for distressing rail.
- Identify precautions to be taken when distressing rail.
- List all maintenance work that must only be performed within the preferred rail laying temperature range, working zone, and joint inspections limits.
- Satisfy the requirement for training under 49CFR213.1 19.

COURSE 10
Track Welding Class Outline
(4-hour Classroom)
(4-hour Shooting Welds)

1. **Introduction and Safety Briefing**
 - A. Discussion of:
 1. Welding Safety
 2. Approved Welding Procedures
 3. Prohibited Welding
 - B. Welding of frogs and switches
 1. Types
 - C. Thermite Welds
 1. Welding Process
 2. Adjusting CWR Temperature
 3. Making the weld