

Tri-State Oversight Committee



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DRPT

Three-Year Safety and Security Review of the Washington Metropolitan Area Transit Authority

Roadway Worker Protection Elements 13 and 16 (partial)

Review Conducted: February 2014

Draft Report: March 31, 2014

Final Report: May 30, 2014

Introduction

Representatives from the Maryland Department of Transportation (MDOT), the District of Columbia Department of Transportation (DDOT), and the Virginia Department of Rail and Public Transportation (DRPT) comprise the Tri-State Oversight Committee (TOC), which provides regular oversight of the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system. To comply with State Safety Oversight Final Rule 49 Code of Federal Regulations Part 659 (Part 659), the Federal Transit Administration (FTA) requires states to designate a State Safety Oversight (SSO) agency to administer safety and security programs for rail transit and fixed guideway systems within their jurisdictions. Specifically, 49 CFR Part 659 requires TOC to conduct an on-site safety review of each element of the WMATA System Safety Program Plan (SSPP) at least once every three years. These reviews must assess WMATA's implementation with all 21 elements of its SSPP and seven elements of its Security and Emergency Preparedness Plan (SEPP), along with related plans and procedures. Beginning in 2013, the TOC split its Three-Year Safety and Security Review topic areas into separately occurring reviews spread out during a three-year period.

The following report documents the observations and findings of the TOC's review of WMATA's Roadway Worker Protection (RWP) program. The assessment relates primarily to SSPP Element 13, Rules Compliance, and Element 16, Training and Certification. The TOC Program Standard and Procedures defines basic WMATA requirements for these elements in Section 12 and in Appendix B.

In addition, the TOC simultaneously covered the assessment required by the FTA as noted in its December 31, 2013, Urgent Safety Advisory to all State Safety Oversight (SSO) agencies. This advisory required SSO programs to conduct an extensive audit of their covered rail transit agencies' RWP programs and submit the results to the FTA by the end of February 2014. TOC has provided these required materials to FTA.

FTA also required that SSOs work with covered transit agencies to complete a hazard analysis of the results of the RWP assessment. TOC provided instructions for the completion of this hazard analysis to WMATA in a letter dated March 10, 2014; both parties subsequently worked together on revising WMATA's analysis before it was submitted to the FTA in May 2014. The TOC asked for findings from this review to be addressed using the hazard analysis process. Those findings are described in more detail in this report.

Methodology

The TOC review team included representatives from TOC and its technical consultant. In advance of the review, the TOC requested and reviewed WMATA plans, policies, procedures, and record samples. The on-site portions of the review occurred Feb. 11-12 and 17-19, 2014.

The review sought to:

- Ensure that RWP training programs are administered in accordance with WMATA policies and procedures and deliver all necessary information to pertinent WMATA employees.
- Ensure that all WMATA employees who require RWP training and recertification have successfully completed such training.
- Observe work conducted in the WMATA ROW to ensure that RWP rules and procedures are correctly applied.
- Observe WMATA's RWP compliance efforts to ensure that appropriate processes are in place to enforce RWP rules and procedures.

During the on-site review sessions, the review team interviewed WMATA managers and frontline employees about their administration of and experiences with training, program implementation, job safety briefings (JSBs), protection types, communication, and good faith challenges. The TOC also reviewed various documents and records to assess compliance with procedures and compatibility with industry standards. Persons interviewed and documents reviewed are noted at the end of this report. Additionally, the TOC conducted three field observations to monitor compliance with RWP procedures. As the review progressed, TOC representatives discussed preliminary findings and addressed questions from WMATA personnel.

Findings are categorized as Findings of Non-Compliance or Findings of Compliance with Recommendation. A Finding of Non-Compliance refers to an instance of WMATA operating out of compliance with an applicable internal or external written requirement, plan, policy, rule, standard, or procedure. Findings of Non-Compliance may be safety-critical in nature. If a Finding of Non-Compliance is identified, WMATA is required to develop an appropriate Corrective Action Plan (CAP) and take action to achieve compliance with the applicable requirement.

A Finding of Compliance with Recommendation refers to a condition whereby WMATA may technically be conducting business in compliance with existing WMATA, TOC, or FTA procedures and requirements. However, this designation is not intended to suggest that Findings of Compliance with Recommendation are of any less significance or magnitude with regard to the safety of employees in the right of way than Findings of Non-Compliance. WMATA is requested to develop CAPs to address each Finding of Compliance with Recommendation. Alternatively, if WMATA elects not to remediate the issues described in the findings, it must use the hazard analysis process to justify no need for action and formally accept the level of risk for each finding.

Upon receipt of this draft report, WMATA had 30 days to respond with comments regarding the content of this report, primarily for accuracy. TOC then issued this final report. Using a separate matrix, WMATA will continue to submit finding responses and CAPs that must be approved by the TOC.

This review, including all findings presented in this report, intends to assist WMATA with enhancing system safety. The TOC would like to thank WMATA personnel for their time, cooperation, and forthrightness throughout the review process.

Current Conditions

WMATA's Operations Management Services department oversees the RWP program development and training implementation. The program is led by a Director, two Managers, and six trainers. The RWP Training Supervisor heads WMATA's RWP Manual Committee, which meets informally approximately once monthly and formally every six months. The RWP Manual is revised at least every two years or as needed; the latest version, from October 2013, incorporates the addition of the Silver Line (not yet in service). A separate RWP Committee, which discusses overall roadway worker issues, meets quarterly. Although there is no list of RWP Committee members or responsibilities, both committees include representatives from various operations and maintenance departments.

There are three levels of RWP training covering the following curriculum:

- Level 1 (8-hour course): basics of safety in the environment, equipment, roles
- Level 2 (16-hour course): Level 1 elements plus calling for foul time, using exclusive track occupancy, functions of flagperson/watchperson, etc.
- Level 4 (40-hour course): Roadway Worker in Charge (Level 2 is a prerequisite)

There were initially four levels of training, with Level 3 intended specifically for lone-workers who would not be serving as Roadway Worker in Charge (RWIC). Shortly after implementation of the new training program it was determined that the curriculum for Levels 3 and level 4 were essentially the same. The RWP Committee, with input from RWP Training personnel, made a determination to abolish Level 3 training and certification and consolidate all training beyond Level 2 into the Level 4 program.

All levels require annual computer-based refresher training, and full classroom requalification training every five years for Level 1 (new policy), and every other year for Levels 2 and 4. Contractors cannot take refresher courses and must requalify annually. SAFE conducts the contractor training, and MTPD conducts its own training due to security-sensitive information issues, but all departments use the material published by Operations Management Services. The TOC found the RWP program and its training components to be superior in comparison to that in place during the last review in 2010. TOC has identified a series of findings (see the Findings section) related to compliance, manual distribution, and committee structure.

A sample of RWP training records also showed no anomalies in certification compliance for personnel who need to remain qualified. Students must receive an 84% to pass Level 1 and 2 tests, 92% for Level 4, and 100% on all cardinal-rule related questions.

Interviews with separate groups of front-line personnel in Rail Transportation (RTRA), Automatic Train Control (ATC), Car Maintenance (CMNT), Track and Structures (TRST), and Power (POWR) exhibited that personnel were generally pleased with the training program. Some employees believed the training did not focus enough on their specific jobs, such as that of Train Operators, Track Inspectors, or Car Maintenance

personnel (see recommendation). The personnel also reported good support from management on safety issues. Some concerns discussed during the interviews are further outlined in the Findings section.

For rule compliance assessments, RTRA appeared to have a robust assessment program. This is in part due to the growing RTRA Quality Assurance (QA) department; its officers conduct field audits of Operator rule. The Rail Operations Control Center also had a well-organized assessment program with RWP-specific checks, which all appeared to be meeting set minimum assessment totals. SAFE supplied samples of its own assessment of RWP compliance for maintenance personnel, though it appeared not all maintenance departments were consistently conducting their own assessments.

TOC representatives conducted three field observations of roadway worker activity. The first involved joining RTRA QA personnel who were, in turn, conducting their own observation of Train Operator rule compliance on the right of way between Deanwood and Minnesota Ave. stations. In this case, six out of seven Operators were compliant with horn rules when encountering the crew. One Operator was taken out of service for speeding up and not using the horn when approaching the crew. The QA JSB, however, did not cover all potential hazards in the area (such as noise), and the crew was asked to sign the form before it was filled out.

The second observation was of personnel conducting a tunnel track inspection between Stadium-Armory and Potomac stations during off-peak morning hours. Roadway workers conducted a complete JSB and appeared to follow most applicable rules. However, during both this observation and the first observation, the watchperson did not remain in a “place of safety” at all times as required in the RWP Manual. Also, only half of Train Operators properly acknowledged the crew by sounding the horn; others dimmed the headlights or used the yard horn, which WMATA prohibits outside yard limits.

The third observation occurred in a holiday shutdown work zone between Farragut North and Dupont Circle stations, after observing operations from the Mobile Command Center. A RWIC was covering several gangs which each had their own clearly defined work areas (on paper and marked with lanterns in the right of way). Personnel appeared to follow most RWP-related rules, though at one point a Gang Leader did not notify the adjacent Gang Leader that a crew was being transferred to his area. While there were multiple layers of comprehensive JSBs, not all personnel appeared to be able to hear, as a Prime Mover was running directly behind the crew.

Findings of Non-Compliance (NC)

Finding of NC 1: Some Job Safety Briefings (JSBs) are being executed inconsistently or incorrectly. Interviews and field observations indicated that a few important aspects of JSBs are sometimes missing:

- Not all JSBs are taking place in an appropriate work environment that accounts for noise levels, adequate lighting, and distractions from attending to other job duties. Roadway Workers in Charge (RWICs) should ensure that each crew member can hear, is paying attention, and understood the instructions.
- Not all JSBs are completely addressing the items on the form, including hazards in the work environment (such as noise), hazards posed by machinery and tools, clearing times and no-clearance zones, emergency communications protocols (how and whom to call for help, etc.), Personal Protective Equipment (PPE) required, and identification of the Roadway Worker In Charge (RWIC), Flagperson, or the Watchperson.
- Some crews were observed being asked to sign JSB forms before they are completely addressed and filled out.

None of the observed JSBs included discussion of the type of protection that would be used, and the associated procedures.

Recommended Corrective Actions: WMATA must take steps to ensure that JSBs are being completed fully in accordance with WMATA policies and procedures. WMATA should develop guidance for the JSB forms and distribute it to all individuals and departments responsible for conducting JSBs. Training could be improved to identify all information to be covered in a JSB form as well as methodology for soliciting feedback to acknowledge that the information was heard and understood. WMATA must provide the TOC with evidence of the steps it has taken to further ensure JSBs are being completed completely and appropriately, including but not limited to evaluation of training on JSBs.

Finding of NC 2: CMNT Road Mechanics do not adhere to parts of the WMATA RWP program. The urgency of CMNT Road Mechanics' jobs is preventing them from being afforded appropriate protection under the Roadway Worker Program. WMATA understandably places a great deal of attention on getting disabled trains moved quickly. However, road mechanics do not receive JSBs before entering the roadway. Also, their level of protection while approaching disabled trains is inconsistent. Interviews with front line employees revealed that their informal work practices result in the inconsistent application of appropriate protection. For example, they perceive a need to request foul time when walking a long distance to reach a train, but do not request foul time when working in the immediate vicinity of the disabled train which is shunting the track circuit, with the reasoning being that the standing train protects the employee from the encroachment of other trains into the area. Interviews with Road Mechanics also revealed that they sometimes respond to a disabled train only to find the train begin moving toward them or away from them.

Recommended Corrective Actions: WMATA should take immediate steps to ensure that Road Mechanics adhere to all applicable RWP requirements so that they are afforded the same level of safety as other roadway workers. Alternatively, WMATA may determine that different rules and procedures that govern protection for road mechanics'

actions are needed given their unique role. WMATA could also consider enacting a method similar to the Red Tag procedure in which the Road Mechanic responsible holds the train key before the train may resume movement. WMATA must provide evidence of steps taken to better protect Road Mechanics to TOC.

Finding of NC 3: There appears to be a low rate of Train Operator compliance with rules regarding acknowledgement of personnel in the ROW. Field observations and interviews indicated that the rate of proper Train Operator acknowledgement of hand signals needs improvement. During one field observation, six out of eight Train Operators were compliant with horn rules when encountering the crew; one Train Operator was taken out of service for speeding up and not using the horn when approaching the crew. In another field observation, two out of four Train Operators properly acknowledged the crew by sounding the horn; others dimmed the headlights or used the yard horn, which WMATA prohibits outside yard limits. This may be an attempt to be courteous, especially in the tunnel, but proper sounding of the horn per WMATA rules is not consistently occurring.

Recommended Corrective Actions: WMATA should take steps to more specifically enforce compliance with rules governing Train Operator acknowledgment of employees in the right of way. This could include expanding RTRA Supervisor Blackberry checks or other compliance checks to include assessments of compliance with RWP-related rules by Train Operators. WMATA should provide TOC with evidence of the steps taken to better enforce these acknowledgment rules by Train Operators.

Finding of NC 4: Maintenance departments are not routinely conducting checks of RWP rule compliance. The WMATA SSPP (Section 13) indicates that all departments will be responsible for conducting compliance checks on a regular and ongoing basis. Although SAFE produced good examples of its own assessments of maintenance employee compliance with RWP rules in some departments, not all departments were undergoing -- and none appeared to be routinely conducting -- rule compliance assessments on their own roadway workers. One department presented a memo from April 2011, generated by SAFE, which included a draft procedure for conducting compliance checks with information that a final version would be forthcoming. However, TOC was unable to review a finalized and executed procedure.

Recommended Corrective Actions: WMATA should develop policies and procedures for all relevant maintenance departments to ensure that compliance checks are performed, tracked, and analyzed for RWP-specific rules. WMATA should provide the new or revised policies and procedures to TOC.

Finding of NC 5: Watchpersons are not consistently staying in a place of safety when on the right of way. The RWP Manual calls for watchpersons to remain in a "place of safety" at all times. However, all TOC field observations indicated that this is not happening regularly.

Recommended Corrective Action: WMATA should take steps to better ensure that watchpersons remain in a place of safety at all times, such as training and stepped-up rule enforcement activities. WMATA should provide evidence of these steps to TOC. ,

Findings of Compliance with Recommendation (CWR)

The following section includes “Findings of Compliance with Recommendation.” This designation is **not** intended to suggest that the findings below are of any less significance or magnitude with regard to the safety of employees in the right of way than the Non-Compliance findings above. WMATA is requested to develop CAPs to address each one. Alternatively, if WMATA elects not to remediate the issues described in the findings, it must use the hazard analysis process to justify no need for action and formally accept the level of risk for each finding.

Finding of CWR 1: Widespread dead spots in the radio system appear to be hindering effective communication among personnel, as there are no documented procedures for how to communicate in dead spots. Employees from several departments, as well as TOC observations, indicated that radio system coverage is very poor and prevents the quick flow of understandable information among roadway workers and between RWICs and Controllers. Although there are secondary methods of communication, such as cell phones and phones in Emergency Trip Station (ETS) boxes, there is no formal written procedure for personnel to rely on these methods to convey time-sensitive information in areas with dead spots, which hinders employees’ ability to communicate effectively in these areas.

Recommended Corrective Actions: WMATA should delineate a written procedure for the use of ETS phones and cell phones in lieu of radios where there are dead spots. WMATA should provide this procedure to the TOC. WMATA should also provide TOC with quarterly progress updates on the radio upgrade project.

Finding of CWR 2: There does not appear to be a consistent procedure in place for Controllers and Operators to effectively keep track of two crews using Train Approach Warning in the same area. Controllers reported employing varied methods to track multiple groups walking or working in the same span of track using Train Approach Warning. Controllers can use the Advanced Information Management System (AIMS) screen to complement their running logs in order to determine where workers are located. It seemed that Controllers primarily look at “blue blocks” on the AIMS screen as their primary method of tracking work crews and reporting their locations to Operators. In addition, the log contains other events that the Controller must sift through on the spot to determine who remains on the right of way. There currently exists a hazard of inadvertently removing a blue block from the AIMS screen when a second crew remains in that same location. Some Controllers reported proactively depicting two unit numbers and “stickmen” on the AIMS screen to make it clear two crews are present, but this is not standard practice.

Recommended Corrective Actions: WMATA should formalize a method to prevent inadvertent removal of a “blue block” on the AIMS screen when one crew leaves the site but another remains, or some other method for tracking multiple crews in the same location, such as using two stickmen and two unit numbers on the AIMS screen. WMATA should provide evidence to the TOC of steps taken to better track two crews in the same area.

Finding of CWR 3: Some front-line employees expressed that the RWP training focuses too much on fixed work zones and not enough on commonly used Train Approach Warning and other forms of protection for mobile/walking crews. Employees from in various job functions and departments reported they believe much of the RWP training is focused on Exclusive Track Occupancy or Inaccessible Track and that there could be additional focus on protection for mobile or walking crews.

Recommended Corrective Actions: WMATA should evaluate whether the existing RWP training program sufficiently addresses protection for mobile work crews and consider whether changes to the current training program are needed. WMATA should provide documentation of this evaluation to the TOC, as well as any proposed changes to the training program.

Finding of CWR 4: There is no written policy or procedure documenting how the Operations Management Services (Training) Department tracks, monitors, and communicates employees’ need for RWP qualification and recertification. The department has informal processes in place to send out training matrices. The department determined during the review that improved processes for communicating information on personnel due for training on a regular basis would be implemented in March 2014.

Recommended Corrective Actions: WMATA should develop a policy or procedure documenting how and when, as well as to and from whom, the status of employees’ RWP certification is communicated to WMATA departments. WMATA should provide this procedure to TOC.

Finding of CWR 5: There is no written policy or procedure for the control and documentation of RWP manual distribution and receipt. RWP students sign class attendance sheets, and each student is supposed to receive a manual as part of the class. However, neither the sign in sheets nor any other form acknowledges receipt of the manual. Additionally, TOC members observed a training class where no manual was distributed to students, and no electronic version was either offered nor provided.

Recommended Corrective Actions: WMATA should formalize a policy or procedure whereby individual employees formally acknowledge receipt, understanding, and expectation of ownership of the RWP Manual as a requirement of completing the training. WMATA should provide this policy or procedure to TOC.

Finding of CWR 6: WMATA has no documentation on the membership, structure, or duties of the RWP Committee. Although there is a list of the current RWP *Manual* Committee members in the front of the RWP Manual, WMATA indicated that the “RWP Manual Committee” is distinct from the “RWP Committee.” There is no documentation formalizing the composition, responsibilities, meeting frequencies, and other relevant details for the either of these committees.

Recommended Corrective Actions: WMATA should document the membership, structure, responsibilities, and meeting frequencies for the RWP committees in a written policy or procedure. WMATA should provide this documentation to the TOC.

Finding of CWR 7: WMATA lacks a written process or procedure for the coordination of roadway work between front-line employees across departments to ensure that each is aware of other crews working nearby. WMATA already has a good process in place to coordinate track access across departments. However, this information is not trickling down to the front-line employees performing the work, which may create hazards. Front-line personnel discussed past issues that demonstrated there could be better coordination among departments’ activities:

- ATC personnel reported that safety lighting critical to performing their duties is sometimes moved by workers from other departments who may not be aware of their presence or their need for sufficient lighting.
- Personnel from multiple departments reported that the at-grade right-of-way is often not cleared of hazardous debris by crews from other departments, who may not have been aware of the working needs of subsequent crews. This can be particularly hazardous when debris is snow-covered.
- Personnel from multiple departments reported that they have been surprised or unaware that other crews were arriving to “piggyback” on their work area.

Recommended Corrective Actions: WMATA should develop and formalize a process for communication and coordination for front line employees across departments conducting either simultaneous or successive work in the same location. This process should ensure that front line employees from each department are aware of the potential for piggybacking, debris, equipment, lighting, and other potential safety hazards. WMATA should provide evidence of this new process, through meeting minutes and/or a new procedure, to the TOC.

Finding of CWR 8: Some employees may not fully understand the parameters of the Good Faith Challenge program. Interviews with managers and frontline employees determined that employees virtually never use the Good Faith Challenge process, and that some employees are apparently raising non-RWP issues as Good Faith Challenges.

Recommended Corrective Actions: WMATA should conduct an analysis of the effectiveness of the Good Faith Challenge program to enhance employee understanding of the intent and purpose of the program and reduce the cases of

inappropriate use. As part of this analysis, WMATA should evaluate employee knowledge about other methods to raise safety concerns, such as through their Supervisors for urgent issues, through Local Safety Committees, and the Safety Hotline. WMATA should provide TOC with documentation of steps taken.

Finding of CWR 9: Frontline personnel in multiple departments were not aware of the existence of a Local Safety Committee, Safety Bulletins, or other hazard management conduits to raise safety issues. The TOC is aware of initiatives that SAFE and other departments have executed to improve awareness of these forums to raise safety issues. However, some personnel – particularly those based out of some smaller field offices and ancillary reporting locations – were unaware these fundamental methods exist.

Recommended Corrective Actions: WMATA should evaluate current employee awareness of Local Safety Committees and other safety reporting mechanisms and determine whether further communication efforts or training is necessary. WMATA should also ensure that safety posters, committee meeting minutes, and other safety information have reached all smaller reporting locations, rather than only yards and other larger reporting locations. WMATA should provide TOC with documentation of steps taken.

Finding of CWR 10: Frontline personnel from multiple departments reported their interactions with Controllers lead them to believe that Controllers do not sufficiently understand the field environment. Controllers already receive an annual field familiarization visit. However, front-line personnel interviewed by TOC across multiple departments stated that Controllers should have a better understanding of conditions in the field in order to effectively protect roadway workers.

Recommended Corrective Actions: WMATA should evaluate the field familiarization that Controllers currently receive and determine whether any enhancement is necessary. WMATA should provide the TOC with documentation of this evaluation and any changes to the familiarization program.

Finding of CWR 11: There is no written policy or procedure specifying how Operators entering service or returning to duty from a break must receive the most current information about workers on the ROW. Current practice is for Operators to obtain this information from Terminal Supervisors; however, there is no policy or procedure documenting this process, or alternative processes for those locations without a Terminal Supervisor. Controllers are required to make announcements to Train Operators every 20 minutes regarding the locations of crews on their operating lines. However, these announcements may not be sufficient. Train Operators may go up to 20 minutes without knowing the locations of work crews if they are just entering or resuming operation; they may go 40 minutes or longer if they are making on-board announcements that pre-empt the Controllers' radio announcements.

Recommended Corrective Actions: WMATA should develop a policy or procedure for Train Operators to obtain the current status of work crews and other important information on their lines before entering or resuming operation. WMATA should provide this policy or procedure to the TOC.

Finding of CWR 12: The current RWP rules are not clear regarding whether or how track workers should face and acknowledge trains on an adjacent track.

Interviews and field observations showed different interpretations of the rules, such as whether there is a minimum distance between tracks at which no hand signals are required.

Recommended Corrective Actions: WMATA should evaluate the current RWP rules to determine whether changes are needed to clarify how workers acknowledge trains on adjacent tracks. WMATA should provide its evaluation and/or the revised rules, if needed, to the TOC

Finding of CWR 13: The current RWP rules do not require workers to clear to a place of safety when a train approaches on an adjacent track.

By rule, employees do not have to clear an adjacent track, but the watchperson must give hand signals to the Operator, who in turn must sound the horn twice in acknowledgement. Some employees felt it would be safer to require crews to clear the track when a train is approaching on an adjacent track.

Recommended Corrective Actions: WMATA should evaluate the current RWP rules to determine whether it is necessary to require crews to clear the track when a train is approaching on an adjacent track, and enact a rule change if necessary. WMATA should provide its evaluation and/or the revised rules, if needed, to the TOC.

Finding of CWR 14: The current WMATA RWP Manual (May 2012) does not contain all of the provisions recommended by FTA in Appendix A of FTA SA 14-1.

This includes, but is not necessarily limited to, ensuring that JSBs are conducted in an “appropriate work environment.”

Recommended Corrective Action: Revise the RWP manual to incorporate all of the provisions listed as part of FTA SA 14-1, Appendix A as part of the current revision cycle.

Persons Interviewed

[REDACTED]

[REDACTED]



The TOC is not publishing the names of the frontline personnel interviewed from Rail Transportation (Train Operators and Controllers), Automatic Train Control, Car Maintenance, Power, Track and Structures, as well as others encountered during field observations.

Documents Reviewed

- Rail Transportation Rules Compliance Check Procedure, Rev. 2, 1/27/14
- RTRA QA/QC Audit Report, 9/10/13
- RTRA QA/QC Audit Report, 8/21/12
- RTRA QA/QC Internal Auditing Procedure, 2/5/12
- RTRA Supervisor rule compliance check samples, December 2013
- Rail Operations Control Center Communication Quality Control Check Log, December 2013

- Rail Operations Control Center Communication Quality Control check samples, December 2013
- Rail Operations Control Center RWP Quality Control Check Log, December 2013
- Rail Operations Control Center RWP Quality Control check samples, December 2013
- Storyboard, Roadway Worker Protection Training Level IV Refresher
- Storyboard, Roadway Worker Protection Training Level II
- Third rail and fire map schematics, various lines
- Good Faith Challenge form
- Roadway Job Safety Briefing form
- Roadway Safety Compliance Checklist
- Checklist for ATC Lab
- Good Faith Challenge Roadway Worker Protection Manual Information, 3/8/11
- Level 1 Class Progress Sheet, Course Evaluation Form RWP, PowerPoint, Cardinal Rules (Answers attached), Pretest, Sign in sheet, Student Guide, Test, Practical Assessment
- Level 1 Refresher Class Progress Sheet, PowerPoint, Cardinal Rules, Test
- Level 2 Class Progress Sheet, Course Evaluation Form RWP, PowerPoint, Cardinal Rules (Answers attached), Pretest, Sign in sheet, Student Guide, Test, Practical Assessment
- Level 2 Refresher Progress Sheet, Course Evaluation Form RWP, PowerPoint, Sign in sheet, Student Guide, Test
- Level 2 Requalification Syllabus, Test, Instructors Guide, PowerPoint
- Level 4 Class Progress Sheet, Course Evaluation Form RWP, PowerPoint, Cardinal Rules (Answers attached), Pretest, Sign in sheet, Student Guide, Test, Practical Assessment, ETO Authority Track Exercises 1-4, Flagging Track Exercises 1-4, Inaccessible Track Exercises 1-4
- Level 4 Refresher Progress Sheet, Course Evaluation Form RWP, PowerPoint, Sign in sheet, Test
- Level 4 Requalification Syllabus, Test, Instructors Guide, PowerPoint
- Description of RWP Training Protocols, January 2013
- Roadway Access Guide, May 2012
- Roadway Worker Protection Manual, Rev. 5, May 2012
- Roadway Worker Protection Manual, Rev. 5A, 10/25/13
- Temporary Order T-13-01, 1/11/13
- Permanent Order T-13-09, Roadway Announcements, 9/13/13
- Permanent Order T-13-10, Movement of Work Trains, 10/4/13
- Temporary Order T-12-10, Green Line Grade Crossing, 9/9/13
- Permanent Order T-13-11, Switch Movement in Work Areas, 10/17/13
- Shutdown Map and Facts, 9/10/13; 9/26/13; 11/7/13; 11/13/13; 1/13/14; 2/12/14
- Confidential Close Call Reporting brochure
- RWP certification records, 2012-2014 to date, for the following job classifications: Train Operators, Controllers, Rail Transportation Supervisors, Track Inspectors, Car Maintenance Mechanics

- ROCC Weekly Compliance Form and Logs, samples from October through December 2012 and 2013
- RTRA QA/QC Internal Audit Log, 2011-2013
- SAFE Roadway Safety Compliance Check of TRST, POWR, ATC - samples, misc. dates