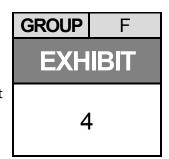


National Transportation Safety Board Investigative Hearing

Washington Metropolitan Area Transit Authority Metrorail train 302 that encountered heavy smoke in the tunnel between the L'Enfant Plaza Station and the Potomac River Bridge on January 12, 2015



Agency / Organization

Washington Metropolitan Area Transit Authority

Title

WMATA ISSR Report with Attachment 2012

Docket ID: DCA 15 FR 004

January 31, 2012



Mr. Matt Bassett Chair, Tri-State Oversight Committee Virginia Department of Rail & Public Transportation 6363 Walker Lane, Suite 500 Alexandria, VA 22310

Re: WMATA Annual Safety and Security Audit Report and Certification

Dear Mr. Bassett,

The Washington Metropolitan Area Transit Authority (WMATA) is pleased to submit the attached 2011 Annual Safety and Security Audit Report (**Attachment 1**). This report is submitted to meet the requirements of 49 CFR Part 659.27 and section 6.3 of the Tri-State Oversight Committee's (TOC) Program Standard and Procedures. Please also find attached WMATA's internal safety and security audit schedule for the three year period of October 1, 2010 through September 30, 2013 (**Attachment 2**).

2011 Safety and Security Program Highlights

As you are aware, WMATA continued to take significant steps in 2011 to bolster its safety and security programs and to continue to implement a strong and proactive safety culture throughout the organization. Highlights of our efforts included:

- Implementing all remaining recommendations from the Federal Transit Administration's (FTA) March 4, 2010 Final Audit Report.
- Finalizing and receiving TOC approval of WMATA's new Incident and Accident Investigation Policy/Instruction.
- Continuing the implementation of WMATA's new Hazard Management Procedure and the strengthening of other safety policies and procedures.
- Promoting the safety hotline and anonymous intranet reporting systems.
- Expanding safety reporting and analysis through the automated and centralized Safety Measurement System (SMS).
- Strengthening local, departmental, and executive safety committees.
- Training more than 5,000 employees in the newly developed Roadway Worker Protection Program.
- Continuing the development and implementation of tools to monitor loss of shunt health on a real-time basis.
- Increasing safety staff by more than 60%. This has included adding two on-call safety
 officers available 24/7 and on site at major weekend "shut-downs", as well as
 deploying more safety staff in the field.
- Publishing lessons learned from Incidents.

Washington Metropolitan Area Transit Authority

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A District of Columbia, Maryland and Virginia Transit Partnership WMATA Annual Safety and Security Audit Report and Certification January 31, 2012 Page 2

- Hosting the second Annual Champions of Safety Recognition Program, which was attended by Deborah Hersman, Chairman of the National Transportation Safety Board.
- Procuring 10,000 new safety vests that have been redesigned based on task specific job hazard analysis, regulatory mandates and industry best practice, coupled with consideration for comfort, security and ease of use and standardization.

In addition to the above, WMATA continues to implement its aggressive Metro Forward rebuilding effort, in which WMATA is making an investment of nearly 1 billion dollars to address National Transportation Safety Board (NTSB) safety recommendations, to install more than 21 miles of new rail, to rehabilitate or replace escalators and elevators throughout the system, to complete multiple station projects, and to rehabilitate 100 older buses and place in to service 116 new hybrid electric buses and 241 Metro Access vehicles. WMATA also continues to invest in signal system upgrades, track and infrastructure projects, and the replacement of Metro's oldest railcars, the 1000-series fleet, with new 7000-series cars.

In 2011, WMATA continued to implement its restructured internal safety and security audit program to fully comply with the requirements of Part 659 and TOC's Program Standard and Procedures. The attached report documents the internal safety and security review activities performed by WMATA for calendar year 2011 and provides the status of subsequent findings and corrective actions.

Annual Certification

I hereby certify that WMATA is in compliance with the requirements of its SSPP and SEPP with the exception of the remaining open findings identified during WMATA's 2010/2011 audit cycle and those identified by TOC during its Triennial Review and recent review of WMATA's new Hazard Management Process.

Conclusion

In conclusion, I would like to thank you for your continued oversight, cooperation and support of WMATA's safety and security programs. WMATA remains fully committed to implementing a proactive and effective system safety program in compliance with TOC's Program Standard and Procedures and all other applicable Federal and state regulations and requirements. I look forward to our continued partnership as we continue to progress WMATA's safety and security programs.

If you have any questions regarding WMATA's Annual Safety and Security Audit Report, please do not hesitate to contact me or James Dougherty, Chief Safety Officer.

Sincerely.

Richard Sarles
General Manager and

Chief Executive Officer

ATTACHMENT 1: WMATA 2010 ANNUAL SAFETY AND SECURITY AUDIT REPORT

1.0 Introduction

The Washington Metropolitan Area Transit Authority (WMATA) is required by Section 6.3 of the Tri-State Oversight Committee's (TOC) Program Standard and Procedures, and by Paragraph 3.1 of the Memorandum of Understanding by and between WMATA and TOC to develop an Annual Safety and Security Audit Report, which is to be submitted to TOC on or before February 1 of each year. This report must:

- Provide a summary of the internal audits performed during the preceding calendar year.
- Include the completed internal audit checklists used to perform the internal audits during the preceding calendar year.
- Document the findings identified as a result of the audits performed during the preceding calendar year.
- Identify the corrective action plans developed to address the findings generated through the internal audit process for the preceding calendar year.

This document has been developed to meet these requirements and serves as WMATA's **2010** Annual Safety and Security Report.

2.0 Summary of Internal Audits

In July 2010, WMATA implemented an Internal Safety Audit (ISA) Recovery Plan to bring the internal safety audit program into compliance with the requirements of WMATA's SSPP, TOC's Program Standard and Procedures, and 49 CFR Part 659. The ISA Recovery Plan included WMATA's new standard operating procedure for performing internal safety audits and was approved by TOC on August 19, 2010.

Consistent with the ISA Recovery Plan, WMATA completed the audits of SSPP Element 15, Maintenance Audits and Inspections, and SSPP Element 20, Drug and Alcohol Program to close out the 2009 audit cycle. Once these audits were completed, WMATA implemented the new audit schedule and audit process as established by the TOC approved, standard operating procedure for performing internal safety and security audits.

Under the new procedure, the internal safety and security audits were performed by department rather than by program element. In this manner, WMATA evaluated the implementation of all applicable SSPP and SEPP elements for each audited department, rather than evaluating a limited number of safety and security program elements across the organization. This was done to reduce the audit burden placed on WMATA's departments as a result of participating in multiple audits throughout the three year audit cycle, as well as to improve the thoroughness of the audits performed for each department.

WMATA 2010 Annual Safety and Security Report

During 2010, internal safety and security audits were performed for each of the following departments:

- Office of Track Structures and Systems Maintenance (TSSM) Automatic Train Control/Signals (audit conducted August 25, 2010)
- TSSM Maintenance of Way, Structures, Engineering and Production (audit conducted August 25, 2010)
- Human Resources Drug and Alcohol
- Information Technology
- Railcar Maintenance
- Communications
- Power and Way, Automatic Fair Collection, Shops and Material Support (supply and procurement)
- Quality Assurance/Warranty
- Rail Transportation

As required by Section 6.2 of TOC's Program Standard and Procedures, WMATA provided TOC with the internal audit checklists in advance of each audit as part of each audit notification package. Audit teams consisted of both WMATA and contractor personnel and included representatives from WMATA's Department of Safety and Environmental Management (SAFE), the Metro Transit Police Department (MTPD), and Quality Assurance. The audits included document and record reviews, interviews of applicable staff, and field verifications and inspections. Final audit reports documenting the audit results, including findings, recommendations and associated corrective action plans were developed and submitted to TOC in accordance with TOC's Program Standard and Procedures. In addition, WMATA has applied its hazard assessment review process to the internal audit findings to better evaluate, prioritize and respond to the findings identified through the internal audit process.

The completed checklists used to perform the internal audits are included in **Appendix A**. The corrective action plans developed in response to the internal audit findings are provided in **Appendix B**. The system security portion of the report is included in **Appendix C**.

2.1 Summary of Audit Findings – Maintenance and SSPP Element 15

The primary areas of non-compliance identified through the internal safety and security audit of Maintenance and SSPP Element 15 for 2010 are listed below:

- 1. Changes in the purchasing and warehousing policies at WMATA without the consultation of end users or the safety department has created hazardous conditions and a critical lack of parts in many of the maintenance areas. No forward stores are available any more to ATC, CMNT and other areas. This has led to a critical and unacceptable situation where some ATC parts have a back order of more than 25 weeks, delaying critical maintenance and repair functions. No hazard analysis was performed for this change even though it affected safety-critical areas. The most critical problem is the lack of understanding throughout the agency that systemic changes must be made with the knowledge and participation of the safety department. This hazardous condition must be addressed immediately with a hazard assessment and recommendations for corrective action.
- 2. Many of the documentation issues can be addressed by developing Maintenance Policies for each area. Currently, only two areas, track maintenance and structures, have a document that addresses policy in some of these areas, but a full program should be developed for each department addressing the issues listed under area of concern #1 in each audit matrix, plus any other issues that the department feels are essential to their mission, work practices and processes.
- 3. There is a general lack of supporting procedures and other documentation in all departments for required safety- and security-critical activities. Also, many of the existing OAPs are not procedures, but rather policy documents. Departmental SOPs sometimes do not reflect the OAP, or are not in compliance with OAPs, not because the departmental procedures are faulty, but rather, the specialized nature of departmental activities are not easily defined by larger OAPs meant to be general and more comprehensive. Particular areas where SOPs are needed include the GOTRS and the Engineering Review Board.
- 4. Procedures are not reviewed and updated on an annual basis; configuration control is an issue, including document control, version control, document storage and retrieval and document distribution and access. There is no system-wide system currently in place. The dates of some documents provided to the audit team for verification are 10 years past. The Documentum system has begun to be implemented at WMATA, but SOPs are still needed for every department to ensure its consistent and correct usage across the board. Also, safety currently does not review any SOPS, procedures, training, inspections, checklist or other documentation for any of the departments audited. This is a required process under system safety and should be immediately addressed.
- 5. Safety-critical processes and procedures are not adequately identified as such in any group. This is critical to ensuring that preventive, predictive, deferred, scheduled and other maintenance is performed appropriately and that no safety-critical issue or item is handles inappropriately. These items are most easily addressed in the Maintenance Policy as described above. In addition, there are no specific criteria for deferred maintenance in most groups. OAPs for CMNT refer to pullout as a standard. It is unacceptable to an agency that adheres to safety as the highest standard to refer to pullout as criteria for using cars with deferred maintenance items without the guidance of specific criteria, such

- as braking percentages, safety-critical parts and processes lists, detailed component & sub-system safety-critical criteria, fixed out-of service tolerances, etc.
- 6. In general, training programs lack specific documentation. Very few departments had any documentation at all for their on-the-job training. This is a critical area where consistency, quality assurance and structure are needed. In addition, the audit team is concerned about the pass/fail criteria for WMATA. According to stated practices in the OAPs and in other documentation provided for verification, the passing grade for required testing is generally 75%. For non-critical areas of instruction, this is acceptable. However, it is not acceptable for critical areas, such as safety-critical rules, and safety-critical repairs and processes. In addition, safety does not review the development or implementation of any training in the maintenance area, nor does it have input into the pass-fail criteria for the safety-critical areas. This is a critical oversight, and should be corrected immediately.
- 7. Lack of adequate field supervision and quality assurance on procedures are in a critical state. Several departments (ATC and Communications especially) have a critical shortage of manpower, and due to a number of concerns, including lack of adequate technological support, such as lack of ability to receive critical communications through Maximo in the field, supervisors are not able to provide adequate field supervision for technicians. There is inadequate engineering support for Communications also, as well as a lack of formal QA support. The ENSS Department is shared among multiple departments and is also understaffed. All of these factors have led to a critical backlog of maintenance, including preventive maintenance, and to critical failures, such as dead spots on the radio communications system that have not been addressed, the failure to perform meggering on ATC equipment in the field, and an unacceptable deviation from specifications and tolerances in field use of ATC equipment.
- 8. Several issues in the area of emergency preparedness are critical. They are:
 - a. Firewatch is currently being done by Communications personnel when it is needed. Not only is this an inappropriate function, since they have no training in firewatch, for a department with a critical shortage of manpower it is an unsupportable position. WMATA should take immediate action to identify a more appropriate group to implement firewatch when it is required; more appropriate personnel might be, for example, the emergency coordinators for the facility per WMATA emergency preparedness plans, or the emergency management group, or even the safety committee for the affected facility.
 - b. No group interviewed had any knowledge of a facility emergency plan, nor did the audit team find any documentation of such a document for any facility.
 - c. CMNT could not identify the WMATA-required emergency coordinators for its facility.

- d. No group had any plans or procedures for implementing WMATA's COOP. None had any understanding of what a COOP is, that they had any critical role in continuity of operations for the Authority, or when the plan would be applicable. WMATA must undertake the process of implementing its COOP fully throughout the organization by developing appropriate SOPs and EOPs for its activation, training all personnel in the plan and the supporting SOPs, and exercising the Plan in periodic drills designed to test and familiarize the agency.
- e. No NIMS training has been provided for any maintenance group.
- f. Very little contingency planning has been done in the Maintenance Group. There is a false reliance on the COOP as a plan for emergencies. Some OAPs exist, such as for weather emergencies and computer failure, but very few other situations have been addressed, such as active shooters, field emergencies and notifications, IEDs, etc. Training for employees in personal security on the job, violence in the workplace and other security procedures is needed.
- g. No facility has done training with Emergency Responders to ensure that they understand the hazards in the facilities should they have an emergency. This is very critical in the CMNT shop, where third rail and stingers pose a grave risk to responders who are unfamiliar with those hazards.
- 9. There were few SOPs for interdepartmental and interagency coordination in any departments. The sole exception was interactions with MOC, which were well codified in WMATA's OAPs. However the lack of documented interactions has led to the inappropriate exclusion of safety- and security critical interactions for the department, including the above mentioned safety review and approval of training programs, safety involvement in engineering and change control (until recent changes), the involvement of emergency management and MTPD to address deficiencies referred to in #5 above, and other areas where critical communications are lacking.
- 10. Job Safety Analyses had only been performed for the track walkers. This is an excellent practice, and the other Maintenance areas are encouraged to ensure that the Risk Management contractor, AON, be asked to perform the analyses for all jobs.
- 11. The Power department had no SOP for splicing in emergencies; although this is not the preferred method for repairs, it is sometimes required for emergency measures in the field. It is a hazardous process and should have an SOP in place to guide technicians in the field.
- 12. Field Observations in CMNT yielded many findings of non-conformity with good and required industrial hygiene and safety practices. This indicates a general lack of knowledge about the subject. It is recommended that the safety committees add more items to their facilities checks and that more training in applicable industrial safety and hygiene requirements be provided to committee members and employees working in the shop. Particular areas of concern include:

- a. Food and beverages in the shop area instead of the break room
- b. Unmarked/unlabeled spray and other bottles of liquids
- c. Hazardous use of extension cords and electrical appliances
- d. Inappropriate storage of flammable materials
- e. Blockage of utility and electrical panels and doors
- f. Inappropriate items stored in flammable storage cabinets
- g. Inappropriate or blocked safety signage
- h. Lack of supplies in first aid boxes
- i. Unlabeled locked storage cabinets
- 13. Maximo is not being used to its full potential in most of the areas audited for a number of reasons:
 - a. Staff are not receiving complete training on the use of Maximo and all of its features because of staffing and time issues.
 - b. Maximo versions change relatively frequently, and by the time a version is learned, a new version is introduced and training is again required.
- 14. It is strongly recommended that WMATA provide CPR, First Aid, and AED training to all employees.
- 15. Loss Prevention programs are lacking, especially as regards keys. Keys are taken home, there is little control of the keys and keyholders, and there are keys that are kept in lockboxes (for firemen) and no real method of accounting for key security, reproduction, misuse or loss, and no SOPs or policy exists for accountability. The audit team recommends an electronic access control policy to be implemented throughout the agency, accountability, sops
- 16. IRPG issues: There are a number of instances in which the IRPG group has specified, purchased and had systems or equipment installed, implemented and turned over of maintenance to departments without any input form the end user/maintainer. This situation has resulted in equipment being poorly or inadequately maintained, additional strain on already understaffed departments and a lack of integration and system cooperation. The IRPG group must make immediate changes to include the departments affected by all capital purchases, without exception, and ensure the following processes are part of every capital purchase initiated, implemented or completed through the group:
 - a. Reliability & maintainability studies
 - b. Life-cycle planning
 - c. End-user approval
 - d. QA review and approval
 - e. Safety & Security Certification, to include the safety department from cradle to grave

17. The audit team recommends that use of all personal electronic devices (not limiting the affected items to cell phones) be forbidden on the rights-of-way, in yards, in Metro revenue and non-revenue vehicles and in Metro facilities while work is being performed by an employee. Specifically, personal electronic devices should not be worn on the person while on duty, but may be stowed while turned off in personal effects while. Personal cell phones should only be used in the event of a Metro emergency where no other form of Metro communication is available. (ref. Special Order 08-05).

2.2 Summary of Audit Findings – Drug and Alcohol and SSPP Element 20

The primary areas of non-compliance identified through the internal safety and security audit of WMATA's Drug and Alcohol Program and SSPP Element 20 for 2010 are listed below:

- 1. The most significant finding was that the Medical Services and Compliance Group was not performing 49 CFR 655 compliance auditing of contractors in the rail transit area. Verification of the finding revealed that the Medical Group had not received any notification for rail contractors working in rail transit, even though they had made several requests for the information. Once the audit team verified that information had not been made available to Medical, a hazard assessment was performed and the noncompliance was found to be unacceptable. 49 CFR 659 reporting was performed per WMATA's requirements under the System Safety Program Plan and the System Safety Program Standard for reporting Unacceptable Hazardous Conditions (UHC). The corrective action put into place was to ensure that the Purchasing Department provided the current list of contractors to Medical. Follow-up corrective actions will include development of a Standard Operating Procedure (SOP) to ensure that the process is ongoing, monitored and continuous.
- 2. The primary areas of non-compliance centered on a lack of supporting procedures for a small number of required areas.

2.3 Summary of Audit Findings – Rail Transportation

The primary areas of non-compliance identified through the internal safety and security audit of Rail Transportation for 2010 are listed below:

1. The cranking and blocking procedure is not being implemented consistently and uniformly throughout the agency. The audit team received several different answers as to the areas of responsibility, procedure and training regarding this critical area. WMATA has had a fatal incident in its history in association with the cranking and blocking procedure and any inconsistencies or anomalies regarding this area should be addressed with expediency. RTRA must immediately address this concern and formulate, implement and verify full compliance at all times with a cranking and blocking procedure with the lowest level of hazard associated with it.

- 2. In addition, cranking and blocking requires equipment, which is commonly stored on the wayside in boxes. However, WMATA has no verification or inspection procedures for these boxes, and equipment is not always available in the boxes because it has been used and not replaced. Furthermore, not all personnel know where the boxes are on the wayside in any given area. Since cranking and blocking is a requirement for certain situations on the railroad, all employees operating on the system should be required to know the position of all crank/block boxes, just as they must qualify on other physical characteristics of the railroad.
- 3. The divisional COOPs are incomplete, out of date and not currently exercised. Every division needs a functional COOP with supporting procedures, and each COOP should be exercised at a minimum every year with at least a tabletop exercise.
- 4. If the GOTRS system is not functional, there is currently no contingency plan or procedure in place to address track allocations and changes occurring during the system loss. This is a high hazard and should be addressed immediately.
- 5. Fitness for duty checks performed for operators reporting to duty are performed by Clerks. No verification of the checks is performed, and no SOP exists for its performance. Some issues of conflict of interest may arise due to the positions being part of the same collective bargaining organization as the operators.
- 6. Pre-trip inspections were not consistently verified. Some field supervisors did take it upon themselves to observe and perform QA/QC on pre-trip inspections of trains by yard operators. However, it is not required that QA/QC inspections of the process be done on a regular and consistent basis. In concert with #3 above, it is the audit team's recommendation that WMATA consider changing the current staffing configuration; one option is an arrangement in which the depot clerk position be eliminated to address the conflict of interest problem, and instead, a non-union supervisory position be created for a Dispatcher. This position is common in other transit agencies, and would have multiple responsibilities at the terminals/yards, to include fitness for duty checks, rule compliance checks in the yards and terminals, supervision and QA/QC with verification assurance of predeparture inspections, and other terminal/yard duties as needed.
- 7. There is currently no verification process for safety-critical information (operational changes, general orders, etc.) issued via radio to operators in the field.
- 8. The controllers do not have all of their required duties documented in the controller manual. The controller manual should be reviewed, revised to include procedures for all required duties, and reissued. It should also be reviewed for currency annually the same as all other critical documentation in RTRA.

- 9. Shift changes in the OCC/MOC introduce the opportunity for hazards. Controllers do not have a specific task requirement to provide information between shifts, or verification that they have transmitted all critical information to their replacements. Controllers' receipt of critical information, such as track allocation and other bulletins and critical information about their shift when they come on duty is also not verified. The shift change in the morning also occurs at a critical time (6:30 AM), during the AM pullout/morning rush hour, when the demands on the control center and the whole system are increased. This situation provides opportunity for error that can result in critical safety hazards. This situation needs to be immediately addressed.
- 10. Cross training for all personnel working in the OCC/MOC is recommended so that all persons have knowledge of all the other functions. This can be critical in emergencies and when there may be a critical shortage of personnel for any reason. This is all the more critical since SOPs and EOPs are not readily available to all personnel in the control center.
- 11. There is no emergency plan specific to the control center and its personnel and responsibilities for either the JGB location or the new location in CTF. There was also a lack of knowledge of emergency evacuation plans and procedures among employees at the terminals.
- 12. All documentation for RTRA must be reviewed annually and revised as needed. SOPs for the process and documentation of its implementation are required.
- 13. All RTRA documentation must be reviewed by the safety department and MTPD for compliance with the SSPP and the SEPP.
- 14. The QC program in RTRA needs to have all of its requirements and SOPs documented. A QC manual is recommended for this process.
- 15. A training policy and procedures to cover all RTRA positions, including management, is needed.
- 16. The audit team recommends that the employee train departure times be revisited to give station managers adequate time to perform station checks before opening. The 4:50 train from Brentwood does not allow for sufficient time for station managers on that train to do proper pre-opening inspections and correct any hazards or deficiencies prior to opening the station to patrons.
- 17. The audit team also observed that not all WMATA personnel on duty on property in the terminals and yards were wearing proper safety gear, including vests. Many of the employees were not RTRA (employees included PLNT, TSSM and CMNT) but overall, this situation indicates a lack of adequate and attentive supervision, QC and safety awareness.

- 18. In the area of the MOC, the Assistant Superintendent noted a function of recording "high BCH" errors for the track circuitry. When questioned, he said he did not really know what they were, but that a "high number" of them were reason or concern. Bose-Chaudhuri-Hocquenghem (BCH) code is often used to detect anomalies in circuitry. Circuits employ the BCH code to identify and correct multiple random bit errors. High numbers of errors of this type can indicate serious failures or anomalies in the track circuitry system; however, the position tasked with identifying criticality in these errors is not provided training or full awareness of that criticality. The "high number" was not defined, but rather, the AS's untrained judgment is providing oversight in this safety-critical area. The audit team recommends that more training be provided in the track circuitry to all MOC personnel, including Superintendents and Assistant Superintendents to address this hazard
- 19. The Assistant Superintendents still use paper logs in the control center. The audit team recommends that electronic logs be used, and that quality checks be performed on them, since their use is required. In addition, RTRA should document all duties of Superintendents and Assistant Superintendents in methodologies for the department.

APPENDIX A COMPLETED INTERNAL AUDIT CHECKLISTS

February 1, 2011

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: ATC/Signals	Compliance		nce	O-mm-onto
Participants: Nabb, Flanders, Savina	1	2	3	Comments
Maintenance Policy established for MMIS scheduling/tracking processes	х			No maintenance policy in place; In many cases, OAPs are really policy documents rather than specific procedures; discrepancy between the documents available on the intranet, in other departments and in TSSM. Also, overall, there is no integration of the safety & security functions in the OAPs. Maximo manual exists, but need SOPs for verifying parts before taking them into the field for use
b. Signal system & component inspection reports	Х			PM 200-3
c. Signal system & component failures and failure trend analysis		X		Done in Maximo; mean time between failures; can be done by component; railcar engineering (CENV); ATC needs to have SOPs developed for this process with engineering.
d. Prioritization of critical repairs		Х		Need SOPs for prioritization of critical repairs; should be distributed for use in MOC also for revenue repairs
e. QA/QI/QC		X		Supervision is not in the field; have to stay at a computer to receive work orders & allocate work. No blackberries; In development; supervisors, managers in field to observe; written SOPs needed
f. Operational Coordination		Х		Through MOC; however, the GOTRS process does not have formal procedures and documentation.
 g. Coordination with Safety Department and Procurement incl. special/substitute/ replacement parts and equipment 		X		No formal coordination in any area except for Engineering Review Board; no documented SOPs
h. Hazard management; method established to track and resolve open hazard issues		X		No formal SOPs
i. Deferred maintenance and work-around criteria		X		No formal document management of deferrals; PMs can be deferred for more than 30 days using current practices
j. Scheduled maintenance adherence criteria		X		98% ; no written policy
k. Life-cycle program plan		X		NO; IRPG does life cycle planning; not necessarily shared with safety or ATC
Configuration Management and Document control		X		NO SOPs for ATC review of PMs
 Preventive maintenance program revisions/reviews/modifications control and approval processes 		X		See above
 Signal system rehabs, rebuilds & overhaul program plan 		X		IRPG; no SOPs
 Signals system component of Safety Certification, including plans/procedures for all necessary certifications 		X		IRPG does capital acquisition; no SOPs for participation by ATC
p. Participation in accident/incident investigation	X			Produce 1 st report for employees; in 7 days there is a formal accident report & corrective action; MOC dispatches ATC work crew to site of operational incidents to do an assessment; verify safety circuits & other items.
 Management of Signals Maintenance: Standards, SOPs, work methodologies 		х		None currently in place other than OAPs; need to develop standards and criteria for all ATC work; develop safety critical process and procedures and ensure that these standards are in place, used and not deviated from without approval of Safety.
r. Safety goals & accountability	Х			

^{1 =} Compliance 2 = Non-compliance 3 = Unable to Audit

February 1, 2011

WMATA System Safety Program

Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: ATC/Signals		mpliar	nce	Comments
Participants: Nabb, Flanders, Savina	1	2	3	Confinents
Signal, Switch & Equipment Inspections Checklist for all S & S inspections and maintenance established & SOPs used		х		Yes; need to have access to AIMS system for diagnostic purposes which they do not currently (AIMS controlled by engineering). Currently cannot do proper diagnosis without it.
Maintenance rules and procedures established and available at all times to maintenance personnel	х			
c. Inspections performed at prescribed intervals, or at regularly scheduled intervals for: • Grade Xings (Yards) • Track circuitry/train control rooms • Signals, signal locks, interlockings, housings, switches • Ground Detectors	x			Every 90 days (overlay circuit) for grade X Signals 90 days, TCRs weekly also interlockings Ground fault testing monthly each train control room has them; check ground detectors
Hi-rail & non-revenue vehicles d. Meggering; grounds		х		Meggering program in planning; in '12 budget; grounds need to be checked when ground detectors are checked—in the process of starting those inspections; Both areas are critical and need to be addressed immediately
e. SOPs & Standards for QA/QI (testing of repairs)	Х			Supervisor for the shift goes into Maximo; manager closes it; 3 point shunt test is in place, but employees in the field are not familiar with the reason for its use; reset procedure for Branch Avenue is not consistent with other resets for the Contr Board; special procedures for any CBs deviating from the norm need to be captured
f. Engineering support and coordination established, SOPs		Х		Through CENV, need SOPs for all interactions.
g. Supervisor spot check SOPs and documentation		Х		No SOP currently in place
h. Toolbox meetings, SOPs and documentation/Rule of day/week		Х		No SOPs & debriefs, escort procedure is not provided to everyone
i. Participation on safety committee, SOPs	X			
SOPs for response to signal system failure on mainline	X			
k. Train control room SOPs	X			
I. Systems maintenance records SOPs		х		204-1 #302, PMs not all currently kept in Maximo; Train control room data is not currently stored electronically; recommen pdfing and storing in Documentum
m. Cranking/Blocking SOP	Х			

^{1 =} Compliance 2 = Non-compliance 3 = Unable to Audit

February 1, 2011 A-3

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: ATC/Signals	Co	Compliance		Comments
Participants: Nabb, Flanders, Savina	1	2	3	Comments
3. Maintenance Facilities a. Evacuation plans and procedures, including use of emergency/safety equipment [fire ext., fire hoses, lighting & signage, escape routes]; Evacuation drills held, SOPs & schedules		х		Emergency notifications are not made in Train Control Rooms that are not in stations because they lack PA's. SOP needs to be developed to address emergency notifications through MOC in the case of emergencies on the system affecting those in TCR's outside stations. TSSM Building has no adequate facility emergency plan and no SOPs to support it.
Maintenance Training Safety rules and procedures		Х		Lone workers are not allowed only by an e-mail procedure: NEED TO issue bulletin; need to ensure that there are no lone workers and that MOC has this procedure in writing so ATC teams are not asked to go out alone.
Safety rulebook/handbook	Х			MSRPH, annual cert.
High voltage		Х		Recommend adding to the training program, especially for meggering & ground procedures.
ROW track access	Х			
S & S Equipment	Х			Technical training
D & A Policy	Х			
PM Criticality/Deferment		Х		No current policy or training
Structures/Facilities	Х			Train control rooms-technical training
 Non-revenue vehicles, including motor vehicles 	X			Hi-rail, non-revenue vehicles
Hand/small tools	X			Insulated Tools/ not small tools
CPR-AED, first aid			Х	Recommended to be required system-wide
Fitness for duty/fatigue awareness		X		Recommend beginning the EAP program once on board of fatigue; severe understaffing. Have done a man hours analysis and need 42 ATC employees to meet minimum work requirements for current scheduled inspections and repairs. Current staffing levels are lower than that.
Lockout/tagout	X			On snowmelter PMI

1 = Compliance 2 = Non-compliance 3 = Unable to Audit

February 1, 2011

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: <u>ATC/Signals</u> Participants: Nabb, Flanders, Savina	Co 1	Compliance 1 2 3		Comments
Training with area emergency responders developed, coordinated, implemented and documented.		x		Coordinate with Emergency Management to ensure responders have training in TCRs
Initial and refresher training programs developed, with lesson plans		x		205-3 Development SOP; currently only refresher training is rules certification and d&a having ATC workers out in the field without their full training can create a hazard; need to ensure that all ATC workers are fully trained. Resources need to be allocated to ensure this occurs.
d. Training matrix/schedule developed	Х			
e. Train-the-trainer program		Х		None in place
f. Safety rule testing SOPs and documentation		x		Should inform MOC and/or supervisors to ensure concerns are addressed; MSRPH
 g. Safety Division reviews conducted of maintenance safety training programs; SOPs for training schedule notification to Safety [coordination with Safety] 		x		No reviews or SOPs
h. Coordination with maintenance management, engineering & procurement		x		No SOPs
 i. SOPs for regular review, update and approval of training programs 		X		No SOPs
j. Training QA performed on training programs & trainers		X		QA is not performing evaluations currently of ATC training
k. Training QA performed on trainees		Х		Need SOPs for supervisor checks
Training records documentation, including signoffs, properly controlled and maintained. Centralization of records.	x			205-2
m. Self certification program in place	Х			
Training pass/fail and certification/decertification criteria developed	x			75% It is the strong recommendation that the pass-fail criteria, especially for safety-critical areas, be re-evaluated with the input of safety.

1 = Compliance 2 = Non-compliance 3 = Unable to Audit

February 1, 2011 A – 5

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: <u>ATC/ Signals</u> Participants: Nabb, Flanders, Savina	Co 1	Compliance		Comments
On-the-Job (OJT) training criteria established and documented		Х		Not using a formal journeyman program, and the OJT program in place is not well documented
p. OJT training documented		Х		No documentation
q. Training for contractors working on signals	X			
r. Training for contractors properly documented, maintained and controlled	X			
s. Maintenance training disciplinary criteria, guidelines and procedures established	X			
t. Retraining programs and procedures developed, criteria established, and records properly controlled and maintained [medical, LOA, etc.]		x		No current policy other than rules and D&A
5. Interdepartmental/Interagency Coordination a. Safety Department Procedure/policy/process reviews Other		х		Need SOPs
b. Transit Police		Х		Need SOPs
c. Emergency Responders, Hospitals		Х		Need SOPs
d. Hazmat Response	Х			
e. CMNT	Х			
f. Track, structures, Power, AFC, SAMS	х			
g. Transportation/Operations/MOC	X			

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February 1, 2011 A – 6

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

	ment: ATC/ Signals	Compliance		ice	Comments
Particip	Participants: Nabb, Flanders, Savina		2	3	
6. Haz	zmat/Industrial Hygiene				
	SDS on file & available for all aterials in shop		X		Need SOP s for the field work—MSDS is not available in the field
ар	afety participates in the selection, proval and procurement of izmats, SOPs established	х			
pa	azmat training provided; safety irticipates in development and view of programs; SOPs	х			
d. Er	gonomics/human factors ograms & training	х			Call safety when needed
pro	A/Supervisor spot checks for oper hazmat, PPE, other nducted, SOPs		х		No SOP in place
	her hazard potential/job hazard alyses performed		x		Not currently done, recommend be requested from AON; Because of understaffing, fatigue is a severe problem in ATC

1 = Compliance 2 = Non-compliance 3 = Unable to Audit

February 1, 2011

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: <u>ATC/Signals</u>	Co	Compliance		Comments
Participants: Nabb, Flanders, Savina	1	2	3	Comments
Employee Safety Programs Employee accident & incident information, reporting and analysis process in place	х			
b. Hazard communications programs in place, including high-tension safety	X			
c. Hazard and safety concerns reporting procedures in place	Х			Safety hotline
QA/QI/QC SOPs for participation in end user approval process		х		No SOPs
b. OEM/aftermarket/equipment fabrication		х		Engineering support is from ENSS; insufficient at this time; ENSS is shared among TSSM departments
c. Warehousing/parts storage policies and procedures		Х		No SOPs; Currently no forward supply points; no coordination with procurement—layoffs in procurement have caused a backlog in ordering so sometimes there are 28 – 30 weeks to wait for some parts. ATC is operating without some circuits due to shortages of critical parts. Also, the Metro Supply Facility may close in bad weather & on weekends.
d. Safety-critical policy/ processes defined		х		Informally using a standard of 100%; needs ot be documented in the Maintenance policy
g. Calibration Program	X			All calibration done by SAMS (shops & Material Support)/SOPs & equipment identified

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February 1, 2011

WMATA System Safety Program Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley

Date of Audit: 8-25-10

Department: ATC/Signals	Со	Compliance		Comments
Participants: Nabb, Flanders, Savina		2	3	Comments
Security a. Equipment/loss prevention SOPs & program		х		Inventory daily of test equipment, will be more defined with Maximo, for radios & train control room keys; no current SOP for ensuring those are returned or not misused,
b. Employee Security; Personal safety awareness training for personnel		х		No current security awareness training for ATC personnel.
c. Security training		Х		None in place, need MERT, NIMS, workplace violence training
d. Security Task force participation	х			Address in safety meetings
Property trespass SOPs established, implemented, enforced, tracked & managed	х			WMATA OAPs, policies
Facility/Shop area security design/redesign criteria established and implemented			x	IRPG/CPTED
g. Contingency plans for security threats i. Bomb threat ii. Hostage h. Communications failures, partial & total		x		No SOP for notification from MOC/OCC for employees in non-public areas, like train control rooms. OCC does not need to be notified for entry into bus garages and parking facilities—emergency notification procedures need revision to include all areas of access for employees. Need departmental SOPs to support the COOP
iii. Signal failure "code 34"	X			204-1 #301
i. Winter response	X			204-1 #306
j. Derailment response (ATC)	X			204-1 #307

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February 1, 2011 A-9

WMATA System Safety Program

Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-23-10

Department: Railcar Maintenance	Co	mplia		Comments
Participants: Garzone, George, Grey	1	2	3	
Maintenance Policy established for a. MMIS scheduling/tracking processes	х			No maintenance policy in place; In many cases, OAPs are really policy documents rather than specific procedures; discrepancies between the documents available on the intranet, in other departments and in TSSM. Also, overall, there is no integration of the safety & security functions in the OAPs. SOPs not reviewed by safety, many are dated 2000 or some older; Have a manual for Maximo, but they are not using Maximo to its full potential because training is limited.
b. Equipment inspection reports	Χ			Overall the instructions are good and provide adequate safety and warning instructions. However, there are not checklists only a sign-off sheet; supervisors should sign off.
 Equipment, part and procedure failures and failure trend analysis 		Х		202-5: repeat failures defined as "2X in 7 days"; need to better define, preferably by component & subsystem, with the support of QA and Engineering
d. Prioritization of critical repairs		Х		200-5 CMNT or Superintendent is tasked with prioritization of critical repairs; however there is no specific procedural guidance or standards, and the superintendents are not trained in prioritization; Safety-critical parts/processes list needs to be developed with the support of engineering and QA.
e. QA/QI/QC		Х		QAAW provides limited QA support for procedures at this time; will be expanded to cover the other necessary areas such as training. Supervision, SOP for signoff; management review; no SOPS- need to develop supervision manual with SOPs, which can also be used as a training document for supervisors.
f. Corrective maintenance SOP	X			200-5
g. Yard Control & Operational Activities	X			OAPs
Coordination with Safety Division and Procurement , including special/ substitute/ replacement parts and equipment	X			CENV coordinates with procurement/ safety review; the Engineering Review Board currently has a safety member participating, but there are no formal SOPs or membership. Formal documentation needs to be developed.
Method established to track and resolve open hazard issues		X		200-5 page 3: closed by supervisor or mechanic by signing WO; no formal procedure. training
j. Deferred maintenance and work-around criteria		Х		OAP 202-6 no indication of standards or criteria or list of critical maintenance; supervisors decide but there is no training and no standards, Need to develop a full procedure that does not indicate that pullout determines the use of a car in a deferred maintenance mode
k. Scheduled maintenance adherence criteria		X		200-3: "not exceeded except by authorization of AGM"; does not state what is differed (refer to j)
I. Configuration Management/Document Control		Х		Configuration management for the department is handled by CENV; no evidence of SOP for annual review and revision of all CMNT policies and procedures; also no review of documents by safety & security
 Preventive maintenance program revisions/reviews/modifications control and approval processes 		Х		OAP states "periodic" review of maintenance service instructions (MSI)-by Jan 31 of each year; no evidence presented that the SOP was being followed
n. Overhaul program plan/ Life-cycle program plan		X		Component overhaul is on PMIs; NO evidence presented of full life-cycle planning, including midlife/rehab.
 Maintenance component of Safety Certification, including PM plans/procedures for all necessary certifications, including overhauls, purchase of AFC equipment, etc. 		X		WMATA safety certification program & SOP, but there are no SOPs in CMNT for participation as end users. IRPG handles capital improvements; CMNT does not have access to their processes. QA is not currently participating in the certification of the 7000 series car; this is a critical oversight.
p. Participation in accident/incident investigation	Х			There are SOPs for investigation of employee accidents and incidents, but the quality of the investigations and reports is poor; Training for supervisors who write reports is needed. OAPs cover CMNT participation in mainline incidents, no internal direction.
 Management of Maintenance: Standards, SOPs, work methodologies 		X		100-1 SOP on SOPs has a review & approval process; no instruction to change update/revision info, no distribution, no safety or security input; CMNT has no methodologies or guidance for management of the department
r. Safety goals & accountability	X			

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February 1, 2011 A - 10

WMATA System Safety Program

Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-23-10

Department: Railcar Maintenance						
Participants: Garzone, George, Grey	Compliance 1 2 3			Comments		
	'		•			
Equipment Inspections Checklist for all equipment inspections established & PM SOPs used		X		No checklists for daily inspections		
 Maintenance rules and procedures established and available at all times to maintenance personnel 	X			MSRPH		
 Inspections performed at prescribed intervals, or at regularly scheduled intervals for: 	X					
Railcars (daily-weekly-annual) Wheels & Trucks Brakes, Slip-Slide Safety Equipment Emergency Exits/Procedures/Fire Eqp Doors Electrical systems (some daily, all others) PA/Communications Eqp Propulsion ATC Forklifts, cranes Locomotives, hi-rail & non-revenue vehicles, money train						
 d. SOPs & Standards for testing of repaired vehicles (QA/QI) 	X					
e. Engineering support and coordination established, SOPs	X			Through CENV, but currently no SOP for safety participation in engineering support process; ensure that this is developed.		
 Supervisor spot check SOPs and documentation 		X		No SOPs for supervisors		
g. Toolbox meetings, SOPs and documentation	X					
h. Participation on safety committee	X					
i. Rule of day/week	Х					
j. SOPs for recovery on the mainline	X			OAP		

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February 1, 2011 A – 11

WMATA System Safety Program Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley

Date of Audit: 8-23-10

Department: Railcar Maintenance	Compliance		nce	
Participants: Garzone, George, Grey	1	2	3	Comments
Maintenance Facilities Facilities fire/life safety inspections conducted in-house on a regularly scheduled basis, SOPs and checklists, doc. control, etc.	х			
Maintenance Training Safety rules and procedures	x			200-21: training OAP, which is very general; not a formal training policy or procedures, which are needed CENV: Engineering department is handling all training through TTDC; CMNT says that it provides input, but no copies of training programs were provided and there was little knowledge on the part of management of what training CMNT employees received, other than diversity training and drug & alcohol training
 Safety rulebook/handbook 	Х			Technicians are trained in applicable rules
Emergency procedures/drills		X		Biannual; run by safety; apparently no fire marshals at GBLT; no SOPs for the facility; supervisors are accountable for their employees but have no SOPs; OEM (emergency management) should provide SOPs and provide better training for CMNT
Car Wash/Car cleaners	Х			
Blue flag	Х			
High voltage	Х			
ROW track access	Х			
Yard Control	Х			
Ladders		Х		No ladder training
Forklifts	Х			
Cranes/rigging strapping		Х		No technical training
OSHA/PPE/Confined Spaces	Х			
PM Criticality/Deferment		Х		No training information was provided for this area.
Non-revenue vehicles, including motor vehicles		Х		Defensive driving is recommended for all employees required to operate motor vehicles for WMATA
Small tools		Х		No small tool training for techs
Floor tools	Х			
Hazmat/Bloodborne pathogens	Х			
Wheel Press/true/bore	Х			
Trucks	X			
D & A Policy	Х			
 CPR. AED & first aid 			X	CPR/First aid recommended for all employees at WMATA

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February 1, 2011 A - 12

WMATA System Safety Program Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley

Date of Audit: 8-23-10

	partment: <u>Railcar Maintenance</u> ticipants: Garzone, George, Grey	Coi 1	Compliance 1 2 3		Comments
b.	Coordination with area emergency responders for training		X		Need to coordinates with OEM to ensure that first responders are introduced to hazards and configuration in CMNT facilities
C.	Initial and refresher training programs developed, with lesson plans		X		Initial training is in place; however, there is a need to identify needed refresher training, including emergency mgmt
d.	Training matrix/schedule developed		X		Needs to be developed for CMNT
e.	Train-the-trainer program		Х		Technical training & OJT
f.	Safety rule testing SOPs and documentation		X		No SOPs in place for challenging rules and procedures as unsafe or in need of update/change
g.	Operational rules/procedures testing	X			
h.	Safety Dept reviews conducted of maintenance safety training programs; SOPs for training schedule notification to Safety [coordination with Safety]		X		Not currently conducted.
İ.	Coordination with maintenance management, engineering & procurement	X			
j.	SOPs for regular review, update and approval of OAPs		X		Provided no evidence of regular review and update
k.	Training QA performed on training programs		X		200-21; not presently performed by QA
I.	Training QA performed on trainees		X		200-21 "Instructors are responsible for follow-up evaluation", 205-5 training QA
m.	Training records documentation, including signoffs, properly controlled and maintained. Centralization.	x			
n.	Self certification program in place	X			
0.	Training pass/fail and certification/decertification criteria developed	X			200-21 "pass fail criteria varies—in general 75%." It is the strong recommendation that the pass-fail criteria, especially for safety-critical areas, be re-evaluated with the input of safety.

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February 1, 2011 A - 13

WMATA System Safety Program

Internal Safety & Security Audit Report
Auditors: Nichols, McCoy, McKee, Adams, Kelley
Date of Audit: 8-23-10

Department: Railcar Maintenance Participants: Garzone, George, Grey	Co 1	Compliance 1 2 3		Comments
p. On-the-Job (OJT) training criteria established and documented		Х		No formal process for OJT
q. OJT training documented		Х		No documentation
r. Training for contractors working in shop or yards		x		Nothing formal; safety briefing for visitors does not have formal documentation and is not documented when it occurs
s. Training for contractors properly documented, maintained and controlled		X		No formal training
t. Maintenance training disciplinary criteria, guidelines and procedures established	х			
Retraining programs and procedures developed, criteria established, and records properly controlled and maintained [medical, LOA, etc.]		x		No policy or procedures for technical training; only item that is re-trained is D&A per 49 CFR 655 for leave greater than 30 days
Interdepartmental/Interagency Coordination Safety Department Procedure/policy/process reviews Other		x		SOPs not reviewed by safety, MTPD, other departments
b. Transit Police		Х		No SOPs
c. IPRG		X		No SOPs
d. Hazmat Response	Х			
e. Track & Structures	X			Through the MOC via the OAP
f. Power, ATC, AFC	X			MOC
g. Transportation	X			MOC
h. PLNT	Х			MOC
i. Treasury; Fare collection		Х		No SOP for scheduled delivery of money trains for maintenance

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February 1, 2011

WMATA System Safety Program Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley

Date of Audit: 8-23-10

Department: Railcar Maintenance Participants: Garzone, George, Grey	Cor 1	mpliar 2	nce 3	Comments
Hazmat/Industrial Hygiene MSDS on file & available for all materials in shop	х			
Safety participates in the selection, approval and procurement of hazmats, SOPs established	х			
 Hazmat training provided; safety participates in development and review of programs; SOPs 	х			
 d. Waste Management program and SOPs 	Х			
e. Spill containment procedures & training	Х			
f. Ergonomics/human factors programs & training	Х			
 g. Emergency/evacuation SOPs for hazmat contamination developed and drills held 	Х			
 A/Supervisor spot checks for proper hazmat, PPE, other industrial compliance conducted, SOPs 		x		No SOPs; this is a critical internal QA process.
Environmental/air quality analysis performed to establish hazard potential	Х			
 Other hazard potential/job hazard analyses performed 			Х	Not currently done, not required per the SSPP, but AON ((WMATA insurer) provides Job safety analyses upon request—recommend that CMNT access this service

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February 1, 2011 A – 15

WMATA System Safety Program

Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-23-10

Department: Railcar Maintenance Participants: Garzone, George, Grey	Cor 1	Compliance 1 2 3		Comments
Employee Safety Programs Employee accident & incident information, reporting and analysis process in place	x			Refer to earlier comment that supervisors need more training; including the accident investigation and reporting function in the supervisor SOPs and training them in proper techniques is needed.
 Hazard communications programs in place, including high voltage safety. 	X			
 Hazard and safety concerns reporting procedures in place 	X			Safety hotline is in place
QA/QI/QC a. Participation in vendor QA processes established	x			
 SOPs for Participation in end user approval process 	Х			200-18 vendor training; recommend expand to cover mare areas of the end user process
c. OEM/aftermarket/equipment fabrication	X			QA/engineering OAPs
 d. Warehousing/parts storage policies and procedures 			N/A	Satellite facility at GBLT; SRML has taken over procurement process except for small purchases; This has resulted in part shortages and difficulty obtaining parts for on-time maintenance.
e. Shelf-life policy		Х		None in place, although some parts are marked with a shelf-life, and technicians are expected to check that date. SOPs needed
f. Safety-critical policy/ processes defined		X		No policy in place; can be addressed in the maintenance policy.
g. Calibration Program	X			SOP needs updating

1 = Compliance 2 = Non-compliance 3 = Unable to Audit

February 1, 2011 A – 16

WMATA System Safety Program

Internal Safety & Security Audit Report Auditors: Nichols, Tucci, McCoy, McKee, Adams, Kelley Date of Audit: 8-23-10

Department: <u>Railcar Maintenance</u> Participants: Garzone, George, Grey	Coi 1	mplia 2	nce 3	Comments
Security a. Facilities security plan established, including evacuation SOPs		x		Facilities security plan needs to be developed.
Shop security procedures established /Property trespass SOPs established		x		Only per WMATA ID & access policies; no specific training provided.
c. Loss prevention SOPs established			Х	SMRL/MTPD; recommend that procurement powers be restored to CMNT and loss prevention SOPs be developed in addition to procurement policy and procedures
d. Personal safety awareness training for shop personnel		X		Training programs in workplace violence are recommended.
e. Security task force participation	X			Usually addressed through the safety committee; add to SOP for safety committee
f. Shop security design/redesign (CPTED)			Х	MTPD
g. Contingency plans for security threats, including bomb threats, hostage situation, communications failures, trespass		x		For yards, have a PA system but no plan by facility, no SOPs; no departmental SOPs to support the COOP process
h. Plans for regional emergency, regional evacuation			Х	EOC
i. Severe weather	Х			202.12-4
j. NIMS training		Х		NIMS training is needed per TSA for all WMATA employees.

1 = Compliance 2 = Non-compliance 3 = Unable to Audit

February 1, 2011 A - 17

WMATA System Safety Program Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-23-10

De	partment: Communications	Co	mplia	nce	
Pa	rticipants: Nabb, Johnson	1	2	3	Comments
1. a.	Maintenance Policy established for MMIS scheduling/tracking processes	х			No maintenance policy in place; In many cases, OAPs are really policy documents rather than specific procedures; discrepancy between the documents available on the intranet, in other departments and in TSSM. Also, overall, there is no integration of the safety & security functions in the OAPs. SOPs not reviewed by safety, many are dated 2000 or some older; Have a manual for Maximo, but they are not using Maximo to its full potential because training is limited.
b.	Communications system & component inspection reports	X			COMM has QA and staffing issues; supervisors are not fee to spend enough time in the field to properly supervise mechanics; the use of the PM procedures and checklists in the field is not enforced.
C.	Communications eqp & component failures and failure trend analysis	X			No SOP in place for failure trend analysis
d.	Prioritization of critical repairs		Х		No formal SOPs; supervisors are expected to do it or mechanics in the field
e.	QA/QI/QC		Х		None done at departmental level-inadequate supervision. COMM has QA and staffing issues; supervisors are not free to spend enough time in the field to properly supervise mechanics; the use of the PM procedures and checklists in the field is not uniformly enforced.
f.	Operational Coordination		X		No SOP for GOTRS; needs to be formalized
g.	Coordination with Safety Department and Procurement on special/substitute/ replacement parts and equipment		X		No SOP and is not consistently performed
h.	Hazard management; method established to track and resolve open hazard issues		X		No procedures, no training, No SOPs for hazard assessment, management, prioritizations, etc.
i.	Deferred maintenance and work-around criteria		X		No procedures or standards
j.	Scheduled maintenance adherence criteria		X		Use Maximo, AGS reports 98% compliance, however, there is no mechanism in place to ensure that the standards are met, and no procedure to account for deferral. No verification was available other than the reported compliance because no SOP exists.
k.	Life-cycle program plan		X		No SOP for formal coordination with IRPG. Results in systems being purchased that may not be maintainable by COMM because they are not included in the planning process.
I.	Configuration Management and Document control		X		Lack engineering support-all engineers were transferred to IT. COMM has to share ENSS with all other TSSM departments, and so have inadequate support.
m.	revisions/reviews/modifications control and approval processes		X		No current SOPs
n.	Communications system rehabs, rebuilds & overhaul program plan		X		No SOPs or program
0.	Communications system component of Safety Certification, including plans/procedures for all necessary certifications		X		See k above.
p.	Participation in accident/incident investigation	X			
q.	Management of Communications Maintenance: Standards, SOPs, work methodologies		X		SOPs not reviewed by safety; no management methodologies
r.	Safety goals & accountability	Х			
		-	-		

^{1 =} Compliance 2 = Non-compliance 3 = Unable to Audit

February 1, 2011 A - 18

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-23-10

Department: Communications Participants: Nabb, Johnson	Co 1	Compliance 1 2 3		Comments
Communications Equipment Inspections Checklist for all inspections and maintenance established & SOPs used	x			Needs annual review ad update per OAP & system safety configuration management requirements.
Maintenance rules and procedures established and available at all times to maintenance personnel	х			MSRPH
 Inspections performed at prescribed intervals, or at regularly scheduled intervals for: 	X			All functions have specified inspections, SOPs, standards and inspections are performed; see bulleted list below.
Emergency Trip station phones CCTV Radio (Comprehensive Radio Communications System (CRCS) Fire & Intrusion Alarms, annunciators PA Systems (station) Passenger Emergency Response System (PERS) Environmental Monitoring Systems (Veeder Root/Gas Leaks), Methane detection PROTECT (Security system-sniffer) Hi-rail & non-revenue vehicles, including motor vehicles		х		Dead spots are identified, but not addressed adequately; understaffing has resulted in some deferred or missed preventive maintenance and other critical communications functions being performed. COMM should perform a staffing analysis to ensure that staffing levels are at levels sufficient to meet preventive and unscheduled maintenance needs.
 d. SOPs & Standards for QA/QI (testing of repairs) 	X			
e. Engineering support and coordination established, SOPs		Х		See 1L above
f. Supervisor spot check SOPs and documentation		х		Need full SOPs for supervision (manual) and ensure that the department standard of supervisors in the field 75% of time is met.
g. Toolbox meetings, SOPs and documentation/Rule of day/week	Х			
h. Participation on safety committee, SOPs	X			
i. SOPs for response to critical failures		Х		None in place, decisions are made without formal guidance. Prioritization and critical response SOPs are needed.

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February 1, 2011 A – 19

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-23-10

Department: Communications		mpliar	nce	Comments
Participants: Nabb, Johnson	1	2	3	
3. Maintenance Facilities/Shops Evacuation plans and procedures, including use of emergency/safety equipment [fire ext., fire hoses, lighting & signage, escape routes]; Evacuation drills held, SOPs & schedules	x			Deficiencies in COMM rooms are reported through MOC;
Maintenance Training Safety rules and procedures	X			
 Safety rulebook/handbook 	X			
 High voltage gloves (hot sticking) 	X			
ROW track access	X			
D & A Policy	Х			
PM Criticality/Deferment		Х		No policy, guidelines or procedure.
 Non-revenue vehicles, including motor vehicles 	Х			Hi-rail, off-road
 Hand/small tools 		Х		No formal training/ formal training from vendor when new WMATA-owned tools are purchased
CPR-AED, first aid			Х	Recommend CPR, AED & First Aid for all WMATA employees
Fitness for duty/fatigue awareness		Х		Strongly recommend for COMM short staffing has led to lots of overtime
Lockout/tagout		Х		No formal SOP/training
Fire watch		х		COMM employees are expected to do firewatch—none have formal training, those who have done it are trained on the spot by the County or City fire inspectors. However, this is not the most efficient use of COMM workers' time in a department where severe understaffing has led to chronic problems with meeting scheduled and maintenance and critical repairs.

1 = Compliance 2 = Non-compliance 3 = Unable to Audit

February 1, 2011 A – 20

WMATA System Safety Program

Internal Safety & Security Audit Report
Auditors: Nichols, McKee, Adams, Kelley
Date of Audit: 8-23-10

Department: Communications Participants: Nabb, Johnson		Compliance		Comments
Training with area emerg responders developed, co implemented and docume	oordinated,		X	Emergency responders not trained in COMM rooms-OEM responsibility
 Initial and refresher training programs developed, with plans 		X		
d. Training matrix/schedule	developed	Х		
e. Train-the-trainer program			Χ	No formal program
 f. Safety rule testing SOPs documentation 	and		X	No formal SOPs
g. Operational rules/procedu	ures training	Х		
h. Safety Division reviews cond maintenance safety training SOPs for training schedule in Safety [coordination with Sa	programs; notification to		X	No formal SOPs
 Coordination with mainter management, engineering procurement 	g &		x	No formal SOPs
j. SOPs for regular review, approval of training progr			X	No formal SOPs
 k. Training QA performed or programs & trainers 	n training		X	No formal SOPs
Training QA performed or	n trainees		X	Informal by supervisors
 Training records docume including signoffs, proper and maintained. Centrali records. 	ly controlled	x		
n. Self certification program	in place	Х		
 Training pass/fail and certification/decertification developed 	n criteria	X		75% set by OAP; needs erview & revision & approval by safety

1 = Compliance 2 = Non-compliance 3 = Unable to Audit

February 1, 2011 A - 21

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-23-10

Department: <u>Communications</u> Participants: Nabb, Johnson	Co 1	mpliar 2	nce 3	Comments
p. On-the-Job (OJT) training criteria established and documented		X		Need to formalize current program for mechanic helpers
q. OJT training documented		Х		Need to document all OJT programs.
r. Training for contractors working in COMM		X		ROW training needed.
s. Training for contractors properly documented, maintained and controlled		x		Need to document contractor training.
Maintenance training disciplinary criteria, guidelines and procedures established	x			
Retraining programs and procedures developed, criteria established, and records properly controlled and maintained [medical, LOA, etc.]		x		No policy or procedures for technical training; only item that is re-trained is D&A per 49 CFR 655 for leave greater than 30 days
Interdepartmental/Interagency Coordination Safety Department Procedure/policy/process reviews Other		x		No SOPs
b. Transit Police		Х		No SOPs
c. Emergency Responders, Hospitals		Х		No SOPs
d. Hazmat Response	X			
e. CMNT	Х			
f. Track & structures, Power	X			
g. Transportation/Operations	X			
h. Engineering support		X		Insufficient; is shared with other departments; no SOPs in place
i. PLNT	X			

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February 1, 2011

Internal Safety & Security Audit Report
Auditors: Nichols, McCoy, McKee, Adams, Kelley
Date of Audit: 8-23-10

Department: Communications Participants: Nabb, Johnson		Compliance			Comments
	ndustrial Hygiene n file & available for all in shop	x			
approval	rticipates in the selection, and procurement of SOPs established	х			
participat	raining provided; safety es in development and programs; SOPs	х			
	ics/human factors & training	Х			
	cy/evacuation SOPs for ontamination developed held	х			
proper ha conducte			х		No SOPs
	zard potential/job hazard performed	X			

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WMATA System Safety Program Internal Safety & Security Audit Report

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-23-10

Department: <u>Communications</u> Participants: Nabb, Johnson		mplia	nce	Comments
		2	3	Comments
Employee Safety Programs Employee accident & incident information, reporting and analysis process in place	х			
b. Industrial safety/housekeeping in COMM rooms		x		COMM rooms were found to have many problems, including inappropriate storage, blockage of panels and exits with storage materials, inappropriate appliances, and flammable materials next to electrical installations, among other s(see supplemental materials). Apparently IT also has access to COMM rooms to install new telephone equipment, and some of the inappropriate materials were left by IT. Access by IT personnel is also not recorded in the logs in each room per WMATA rules, although there is evidence that they have been in to perform the installations.
c. Hazard communications programs in place, including high-tension safety	x			
d. Hazard and safety concerns reporting procedures in place	X			
QA/QI/QC a. Participation in vendor QA processes established	X			
SOPs for participation in end user approval process	Х			
c. OEM/aftermarket/equipment fabrication	Х			
 d. Warehousing/parts storage policies and procedures 			N/A	Satellite facility at GBLT; SRML has taken over procurement process except for small purchases; This has resulted in part shortages and difficulty obtaining parts for on-time maintenance.
e. Shelf-life policy		Х		None in place, although some parts are marked with a shelf-life, and technicians are expected to check that date.
f. Safety-critical policy/ processes defined		х		Need to develop a policy; can be added to maintenance policy.
g. Calibration Program	X			SOP needs updating

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WMATA System Safety Program Internal Safety & Security Audit Report

Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-23-10

Department: Communications Participants: Nabb, Johnson		mpliar	nce	Comments
		2	3	
Security a. Equipment/loss prevention SOPs & program		х		Keys are taken home, there is little control and a lot of keys that are kept in lockboxes (for firemen) and no real method of accounting for keys, reproduction, misuse or loss; no SOPs or policy; we recommended an electronic access control policy
 Employee Security; Personal safety awareness training for shop personnel 		х		None currently required; no violence in the workplace offered to employees.
c. Security Task force participation	Х			Through safety committees, but need SOP for the committees
Property trespass SOPs established, implemented, enforced, tracked & managed	х			OAP
e. Contingency plans for security threats i. Bomb threat ii. Hostage iii. Communications failures, partial & total		x		No SOPs to support the COOP.
f. Comm. room security/emergency notification		х		Above ground stations have PA's for emergencies, but no SOP in place to notify COMM employees of emergencies through MOC if they are in non-public areas

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WMATA System Safety Program Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams

Date of Audit: 8-24-10

Department: Power, AFC & Shops a Material Support (SAMS) Participants: Newman, Fitch, Harris,		Co 1	mpliar 2	nce 3	Comments
Maintenance Policy established for a. MMIS scheduling/tracking processes		x			No maintenance policy in place; In many cases, OAPs are really policy documents rather than specific procedures; discrepancy between the documents available on the intranet, in other departments and in TSSM. Also, overall, there is no integration of the safety & security functions in the OAPs. SOPs not reviewed by safety, many are dated 2000 or some older; Have a manual for Maximo, but they are not using Maximo to its full potential because training is limited.
b. Inspection reports		Х			Once SOC device is fully in place, need to develop PM procedure and checklist.
c. Failures and failure trend analysis			х		Some are currently done; problem with collecting failure trend by component in Power & AFC because MOC reports do not identify them.
d. Prioritization of critical repairs			Х		No SOP currently in place; occurs in the field or through supervisors
e. QA/QI/QC			Х		Supervision is not always in the field except in power; sometimes have to stay at a computer to receive work orders & allocate work.
f. Operational Coordination		X			
 g. Coordination with Safety Department Procurement on special/substitute/ replacement parts and equipment 	t and		x		ENSS provides support, but no SOP for safety review currently.
h. Hazard Management; method estable track and resolve open hazard issue			Х		Through Maximo, no SOPs, no training
i. Deferred maintenance and work-aro criteria	und		Х		No SOP
j. Scheduled maintenance adherence	criteria	Х			
k. Life-cycle program plan				N/A	performed through IRPG/Power
Procedure creation, Configuration Management and Document control			Х		
 Preventive maintenance program revisions/reviews/modifications contrapproval processes 			х		No SOPs
 Power system rehabs, rebuilds & over program plan 	erhaul			N/A	IRPG
Safety Certification, including plans/procedures for all necessary certifications		Х			WMATA has a safety certification SOP, but there are no SOPs in CMNT for participation as end users. IRPG handles capital improvements; TSSM does not have access to their processes.
p. Participation in accident/incident inve	estigation	X			
q. Management of Maintenance: Stand SOPs, work methodologies	lards,		Х		100-1 SOP on SOPs has a review & approval process; no instruction to change update/revision info, no distribution, no safety or security input; no methodologies or guidance for management of the department
r. Safety goals & accountability		X			

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WMATA System Safety Program Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams

Date of Audit: 8-24-10

Department: Power, AFC & Shops and		mpliar	nce	
Material Support (SAMS)				Comments
Participants: Newman, Fitch, Harris, Taylor	1	2	3	
Substation & Equipment Inspections Checklist for all inspections and maintenance established & SOPs established & used	x			No SOP for customer service to properly route deficiencies reported to them to AFC
Maintenance rules and procedures established and available at all times to maintenance personnel	х			
c. Inspections performed at prescribed intervals, or at regularly scheduled intervals for: 1. Substations/Equipment rooms 2. Emergency Trip stations 3. Meggering/Hi-potting 4. Substation Protection 5. Electrolysis & corrosion control 6. Station Power 7. Shop Power 8. Emergency generators/storage batteries/UPS 9. Hi-rail & non-revenue vehicles 10. AFC equipment 11. Safety Signage 12. Batteries	x			PMI's need revision, PMIs have good instructions, safety reminders, equipment, part numbers, etc.
d. SOP for splicing in emergencies (Power),		X		No SOP for splicing in emergencies, lithium batteries or vehicle shunting
e. SOPs for lithium batteries (AFC)		Х		No SOPs for lithium batteries
SOPs & Standards for QA/QI (testing of repairs)	Х			
g. Engineering support and coordination established, SOPs		Х		Shared with TSSM, no SOPs
h. Supervisor spot check SOPs and documentation		Х		No SOPs or manual for supervision; needed in all three disciplines
Toolbox meetings, SOPs and documentation/Rule of day/week	Х			
j. Participation on safety committee, SOPs	Х			
 k. SOPs for response to power failure, problems and incidents on mainline, in yards and shops, stations 	х			

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WMATA System Safety Program Internal Safety & Security Audit Report

Auditors: Nichols, McCoy, McKee, Adams Date of Audit: 8-24-10

Department: Power , AFC & Shops and		mpliar	nce	
Material Support (SAMS) Participants: Newman, Fitch, Harris, Taylor		1 2 3		Comments
Maintenance Training Safety rules and procedures				No training policy & procedures; SAMS has no technical training program to support it;
 Safety rulebook/handbook 	X			No specific rules training for AFC
High voltage	Х			
ROW track access	Х			
• PPE	Х			
D & A Policy	Х			
PM Criticality/Deferment		Х		No SOP or training
 Non-revenue vehicles, including motor vehicles 	Х			Hi-rail, off-road
Hand/small tools Insulated tools	X			Programs for AFC & SMAS also needed
 CPR-AED, first aid 			X	Recommended for all WMATA employees
Fitness for duty/fatigue awareness	Х			D&A only, recommend fatigue awareness be required once in place
Red tag—lockout/tagout	X			200-2 #16/18 lockout/tagout

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WMATA System Safety Program Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams

Date of Audit: 8-24-10

Department: Power, AFC & Shops and		mpliar	nce		
Material Support (SAMS)		Compilario		Comments	
Participants: Newman, Fitch, Harris, Taylor	1	2	3		
 Training with emergency responders developed, coordinated, implemented and documented. 		X		Need to coordinates with WMATA's Emergency Management Department to ensure that first responders are introduced to hazards and configuration in CMNT facilities	
 Initial and refresher training programs developed, with lesson plans 		X		No refresher training in any area; needs to be evaluated to deteri=mine thresholds for refreshers after leave of absence, disciplinary absence, poor evaluation or QA checks, medical leave, etc.	
d. Training matrix/schedule developed	X				
e. Train-the-trainer program		Х		Program needed, especially for OJT	
 f. Safety rule testing SOPs and documentation 		X		No program currently in place	
g. Operational rules/procedures training		X		Coordination is achieved through the MOC, but there is no SOP for the GOTRS process.	
Safety Division reviews conducted of maintenance safety training programs; SOPs for training schedule notification to Safety [coordination with Safety]		X		No safety review of any training is performed.	
i. Coordination with maintenance management, engineering & procurement for training		X		Some is being done with engineering, but it is not consistent, no SOPs	
j. SOPs for regular review, update and approval of training programs		X		No SOPs in place. No regular review and revision is conducted.	
 K. Training QA performed on training programs & trainers 		X		QA currently no performing training QA but is set ot begin shortly	
Training QA performed on trainees		Х		None is performed by trainers or by QAAW.	
 m. Training records documentation, including signoffs, properly controlled and maintained. Centralization of records. 	х				
n. Self-certification program in place	Х				
Training pass/fail and certification/decertification criteria developed	x			75% is passing for most areas. It is the strong recommendation that the pass-fail criteria, especially for safety-critical areas, be re-evaluated with the input of safety.	

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Internal Safety & Security Audit Report
Auditors: Nichols, McCoy, McKee, Adams
Date of Audit: 8-24-10

Material Su	nt: <u>Power , AFC & Shops and</u> <u>upport (SAMS)</u> ts: Newman, Fitch, Harris, Taylor	Compliance 1 2 3		Comments
p. On-th	ne-Job (OJT) training criteria	X		Excellent OJT documentation
q. On-th establ	lished and documented (AFC) ne-Job (OJT) training criteria lished and documented (all departments)	×	Х	Power & SAMS should use the documentation generated in AFC as templates to document their OJT.
r. OJT t	training documented	X		
	ing for contractors working on r system/signals	Х		
t. Traini	ing for contractors properly mented, maintained and	x		
criteri	lenance training disciplinary ia, guidelines and procedures dished	x		
develo	nining programs and procedures oped, criteria established, and ds properly controlled and tained [medical, LOA, etc.]		x	No formal policy except for D&A
	epartmental/Interagency			
a. Safety	y Department edure/policy/process reviews		X	No SOPs in place
b. Trans	sit Police		Х	No SOPs in place
c. Emer	gency Responders, Hospitals		Х	No SOPs in place
	nat Response	X		
e. CMN	T/other TSSM	X		
f. Trans	sportation/Operations/MOC	X		

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WMATA System Safety Program Internal Safety & Security Audit Report

Auditors: Nichols, McCoy, McKee, Adams Date of Audit: 8-24-10

Department: Power , AFC & Shops and Material Support (SAMS) Participants: Newman, Fitch, Harris, Taylor		mplian 2	ice 3	Comments
Hazmat/Industrial Hygiene MSDS on file & available for all materials in shop	X			
 Safety participates in the selection, approval and procurement of hazmats, SOPs established 	X			
 Hazmat training provided; safety participates in development and review of programs; SOPs 	X			
d. Waste Management program and SOPs	X			
e. Ergonomics/human factors programs & training	Х			
 f. Emergency/evacuation SOPs for hazmat contamination developed and drills held 	X			202-2 #22 Spill reporting
 g. QA/Supervisor spot checks for proper hazmat, PPE, other conducted, SOPs 		х		No formal documentation for supervisor spot checks
 Other hazard potential/job hazard analyses performed 	Х			JSAs are in progress and the ones that have been completed are of good quality

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WMATA System Safety Program Internal Safety & Security Audit Report

Auditors: Nichols, McCoy, McKee, Adams Date of Audit: 8-24-10

Department: Power , AFC & Shops and		mplia	nce	Comments
Material Support (SAMS) Participants: Newman, Fitch, Harris, Taylor	1	2	3	Comments
Employee Safety Programs Accident Prevention/job hazard analysis programs in place; SOPs	x			Capture the practice in the maintenance policy document
Employee accident & incident information, reporting and analysis process in place	x			
 Environmental protection program in place with scheduled inspections 	X			
d. Occupation hazard prevention programs in place	X			
e. Hazard communications programs in place, including high-tension safety	X			
f. Hazard and safety concerns reporting procedures in place	х			Safety hotline/safety meetings
QA/QI/QC a. Participation in vendor QA processes established		х		Need SOP & to be involved in process
 SOPs for participation in end user approval process 		Х		
 oEM/aftermarket/equipment fabrication 		X		Have insufficient engineering support, need SOPs
 d. Warehousing/parts storage policies and procedures 			N/A	SRML has taken over procurement process except for small purchases; This has resulted in part shortages and difficulty obtaining parts for on-time maintenance. Metro Supply Facility is not always open (like in severe weather) while department are expected to report and repair, but they can't get the parts from MSF.
e. Shelf-life policy		X		None in place, although some parts are marked with a shelf-life, and technicians are expected to check that date.
 Safety-critical policy/ processes defined 		X		Include in Maintenance policy
g. Calibration Program	X			Calibration SOP in order. SAMS provides calibration for all TSSM.

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Internal Safety & Security Audit Report
Auditors: Nichols, McCoy, McKee, Adams
Date of Audit: 8-24-10

Department: Power , AFC & Shops and Material Support (SAMS) Participants: Newman, Fitch, Harris, Taylor		mpliar 2	nce 3	Comments
Security a. Equipment/loss prevention SOPs & program		х		No SOPs; no accounting for materials used in work or for keys; shold have an electronic access control system
Employee Security; Personal safety awareness training for shop personnel		х		
 Facilities security plan established; shop security procedures 		х		SAMS facility does have a security plan, others do not
d. Security Task force participation	x			Safety committees also ocver security concerns.
Property trespass SOPs established, implemented, enforced, tracked & managed	х			
f. Facility/Shop security design/redesign criteria established and implemented		х		Need input in the design facilities including security ; need SOPs
g. Contingency plans for security threats i. Bomb threat ii. Hostage iii. Communications failures, partial & total iv. Power failures		x		No SOPs for post-incident critical debriefing No SOPs for emergency information or bulletins/updates for AFCs No SOPs for emergencies/notifications for remote locations, such as substations No fire drills at Telegraph Road Facility (where SAMs is located) Need SOPs in general for all departments to support the COOP
h. Weather power outages	X			
i. Rail computer failure	X			
j. 'Vandalism at substations		Х		Need SOP
a. Money spills	Х			

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Appendix A – Completed Internal Audit Checklists

WMATA System Safety Program Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley

Date of Audit: 9-26-10

	_			
Department: QA/Warranty		mpliar	nce	Comments
Participants: Bitar, DiNatale	1	2	3	
QA/Engineering Department Policies	X			Current Hazard management is not referenced in QA docs per the SSPP; priorities are done by the engineering review board—there is no formal policy for this but it is being done by the ERB with input from QA. Need SOPs for the ERB.
SOPs a. PM & procedure inspections b. Training QA c. Checklists, schedules, matrices d. Reports, distribution e. Hazard management i. Failure trend analysis ii. Tracking to closure of open items		x		QA areas: railcar, ATC/signals, Power, AFC, Shops, Facilities, Training QA not currently being done. QA is currently not performing reviews or auditing in any area except CMNT. Start date for training audits is Nov. 2010 206-1, 206-2 Equipment testing 406-1 Equipment reliability 205-4 QA audit program 205-5 Training & Ops QA No specific SOP for Training QA 205-6 Maintenance audits
Change control procedures for all programs and documentation; Document control of policies & procedures		x		Review/update procedure (annual) needed for all documentation; approval process for all documentation does not include safety. No version control for documents released to CMNT for corrective action; include distribution for documents to include safety.
Internal controls policies/SOPs		Х		Refers to performance of internal QA on the QA function; no current SOP for QA's periodic formal review of its own documentation
SOPs for vendor/contractor audits of quality & safety, documentation, etc	Х			
Review and approval of vendor/contractor safety & quality programs (external QA/QI/QC)	x			205-6 first article, etc. 606-5 contractor facility inspections
 Training policy, programs, procedures & matrix 		Х		Need to add training/certification policy/procedures to the QA Policy
8. Management SOPs & methodologies	X			
Policies/programs for redesign/re- engineering, including overhaul, rehab, maintainability, replacement of OEM parts, etc.	х			205-6 eng. modifications review
10. SOPs for coordination with Safety		X		SOPs not reviewed by safety

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WMATA System Safety Program Internal Safety & Security Audit Report

Auditors: Nichols, McCoy, McKee, Adams, Kelley

Date of Audit: 9-26-10

Department: QA/Warranty Participants: Bitar, DiNatale	Compliance			Comments
SOPs for coordination with other departments through life-cycle	X			
 Engineering support established for all departments (ops, maint, training, etc.) 	X			200-4 for maintenance
 SOPs for participation in Safety Certification 		X		QA is not participating in the 700-series procurement & certification process
14. Calibration program	Х			
QA programs & procedures for warehousing, materials management			х	Currently done by SRML (storeroom, receiving, materials & logistics)
16. Capital programs policies & procedures a. Life-cycle programs b. Railcar rehabilitation c. Infrastructure rehabilitation		x		Currently not included in life-cycle planning (M Hiller in charge)

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Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

December 140W Structures Francisco de					
Department: MOW, Structures, Engineering and					
Production	C	Compliance		Comments	
Participants: Lee, Albright, Brown, Brooks,	1	2	3	Comments	
Damico, Seredich					
Maintenance Policy established for MMIS scheduling/tracking processes	x			There are beginnings for a maintenance policy in 208.1 (Track maintenance) and 208.2 (Structures). These policies are a good start toward a full maintenance policy, and should be fleshed out and not be OAPs, but a stand alone document. MMIS processes are captured in the Maximo manual.	
b. Track inspection SOPs and reports	X				
 Track, trackbed and procedure failures and failure trend analysis 	Х			Flesh out procedures and add to maintenance policies	
d. Prioritization of critical repairs		Х		Flesh out procedures and add to maintenance policies	
e. QA/QI/QC		X		Managers inspect every rail repair; but need SOP for the process	
f. Operational Coordination	X			MOC procedures; need SOPs for doing the SSWPs through TAMC	
 G. Coordination with engineering & Safety Division and Procurement on special/substitute/ replacement parts and equipment 		X		Fabrication in Structures, goes through EMI; no SOPs coordination with safety	
h. Method established to track and resolve open hazard issues		Х		Maximo; No SOPs; capture in maintenance policy	
Deferred maintenance and work-around criteria		Х		Maintenance that is deferred becomes the backlog; comes from rail profile report once a year, does the projection, followed; &tracked through Maximo; tie assessment report with maintenance reports; / no SOPs for any of this-add to maintenance policy	
j. Scheduled maintenance adherence criteria		Х		100% scheduled maintenance adherence; if they are deferred for weather, etc. they are done immediately as soon as also in structures; Severe weather inspection procedure in track inspection (no SOPs) add criteria to maintenance policy	
k. Life-cycle program plan		X		Need work flow documentation	
Configuration Management and Document control		Х		Engineering Modifications do not specify safety review. (EMI procedure); SOPs for using Documentum for configuration management are not yet developed	
 Preventive maintenance program revisions/reviews/modifications control and approval processes 		х			
n. Track replacement program plan		X		Need to see work flow	
 Maintenance component of Safety Certification, including PM plans/procedures for all necessary certifications 		x		Currently Safety is not participating in the certification of the Sperry car; need SOPs to ensure inclusion of safety	
p. Participation in accident/incident investigation	Х			Rerailing 202-1 Track & structures 508.17-1; BOCC for non-revenue accidents	
 Management of Maintenance: Standards, SOPs, work methodologies 		Х		Some information in 208.1 & 208.2, but not sufficient for management of all areas. Recommend the area be fleshed out in the Maintenance policy	
r. ROW safety	X			200-30, no date/ in revision	
s. Safety goals, safety accountability	X				

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Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: MOW, Structures, Engineering and Production Participants: Lee, Albright, Brown, Brooks, Damico, Seredich	Co 1	mpliar 2	nce 3	Comments
Track & Equipment Inspections Checklist for all Track inspections and maintenance established & SOPs used	X			yes
 Maintenance rules and procedures established and available at all times to maintenance personnel, including track access 	X			100-9 Wed meetings; SOPs for GOTRS (TAMC) Storage of rail between running rails; not following MSRPH for all items; this is an enforcement issue; see supervision recommendations beow in 2f.
c. Inspections performed at prescribed intervals, or at regularly scheduled intervals for: Track Track Trackbed & Ballast Third Rail Ties Fasteners Geometry-equipment (Sperry)/devices Special trackwork, interlockings, etc. Lubrication Track standards Vegetation Tampers, profilers & other equipment Hi-rail & non-revenue vehicles, including Motor vehicles		x		Inspections performed daily for all track to be done 1x/week; for red line twice a week Ultra-5 times/ year; geometry, 4X year; ties at least 1ce/year Quarterly (switch inspections) Lubrication is done automatically on short radius curves in the yards CMNT
d. SOPs & Standards for QA/QI	X			
Engineering support and coordination established, SOPs		X		Need SOPs
f. Supervisor spot check SOPs and documentation		Х		Need SOPs for all supervisory functions.
g. Toolbox meetings, SOPs and documentation	X			508.17-1
h. Participation on safety committee, SOPs	X			508.17-1 Track & structures safety committee
i. Rule of day/week	X			

1 = Compliance 2 = Non-compliance 3 = Unable to Audit

Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: MOW, Structures, Engineering and Production	Со	Compliance		Comments	
Participants: Lee, Albright, Brown, Brooks, Damico, Seredich	1 2 3		3	Sammente	
Maintenance Facilities Evacuation plans and procedures, including use of emergency/safety equipment [fire ext., fire hoses, lighting & signage, escape routes]; Evacuation drills held, SOPs & schedules		х		Plans are posted; drills held 2X year, but no SOPs in their department; No schedule but usually done after twice-yearly picks	
4. Maintenance Training		Х		No formal tracking of training for structures; no SOPs for managing training in structures	
Safety rulebook/handbook	х			Audit team recommends that use of personal electronic devices be forbidden on the wayside, in yards and in Metro facilities while work is being performed by an employee. Personal electronic devices should not be worn on the person but may be stowed while turned off in personal effects while performing work duties. Personal cell phones should only be used in the event of a Metro emergency where no other form of Metro communication is available. (ref. Special Order 08-05)	
High voltage		Х		Recommended to begin high voltage training for track & structures	
 ROW track access/escort training & red tag outage 	X				
Track Equipment	X			Refreshers no SOP	
D & A Policy	X				
PM Criticality/Deferment	X			Yes	
Structures/Facilities	Х			Yes	
 Non-revenue vehicles, including motor vehicles 	Х			Defensive driving is recommended ; currently reactive—should be done proactive	
Small tools		Х		Insulated tools/ not on small tools	
CPR-First Aid-AED			Х	Not currently required; recommend everyone at WMATA receive training in this area	
.Fitness-for-duty/fatigue awareness	Х			Stepping up to supervision; ODEV; have work limits (16) hours; need to ensure that workers get the fatigue training once it is in place through Medical Group	
b. MOC training		Х		Recognition of "events or situations" per 200-2 #9 (PLNT, ATC at MOC desk—NOT TSSM person); The process could be by implementing improved training for MOC in TSSM issues	
c. Rerailing	X				
d. Red tag	X			Once	

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Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: MOV	/, Structures, Engineering and	Compliance		nce	Commente	
Production Participants: Lee, Damico, Seredich	Albright, Brown, Brooks,	1	2	3	Comments	
1	refresher training developed, with lesson	х			Track Walker Qualifications certification says that QAAW representative administers tests; should have increased QA involvement in all maintenance training	
f. Training m	atrix/schedule developed	Х			Except for structures	
g. Train-the-t	rainer program		Х			
h. Safety rule documenta	testing SOPs and ation		Х		Not formal, but all employees are instructed to follow the rule book and report hazards	
maintenand SOPs for tra Safety [coor	sion reviews conducted of e safety training programs; aining schedule notification to rdination with Safety]		х		Need SOPs.	
,	on with maintenance ent, engineering & ent		х		Need Sops	
k. SOPs for r approval	egular review, update and		Х		Need SOPs	
 Training Q programs/ 	A performed on training trainers		Х		Except for Track Walkers	
	A performed on trainees		X		Except for track walkers	
including s	cords documentation, ignoffs, properly controlled ained. Centralization.	х				
o. Self certific	cation program in place	X				
	ass/fail and n/decertification criteria	х			In general, the criterion is 75%. It is the strong recommendation that the pass-fail criteria, especially for safety-critical areas, be re-evaluated with the input of safety.	

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Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: MOW, Structures, Engineering and	Co	Compliance			
Production			_	Comments	
Participants: Lee, Albright, Brown, Brooks, Damico, Seredich	1	2	3		
 q. On-the-Job (OJT) training criteria established and documented; OJT training documented 		X		Have documentation on some; inconsistent need SOPs	
 Training for contractors working on track; Training for contractors properly documented, maintained and controlled 	x			ROW safety program in place and tracked	
 Maintenance training disciplinary criteria, guidelines and procedures established 	X				
 Retraining programs and procedures developed, criteria established, and records properly controlled and maintained [medical, LOA, etc.] 	x			Retraining on return to work for D&A only; recommend refresher for all employees out over 30 days	
 5. Interdepartmental/Interagency Coordination a. Safety Division Procedure/policy/process reviews Investigation Other 		х		SOPs (OAPs) not reviewed by safety Safety sign-off on track inspection work instructions Need to complete SOPs for all interdepartmental interactions It is critical that a hazard assessment be performed by SAFE for any reorganization of any TIES department or organization.	
b. Transit Police		Х		Need SOPs	
c. Emergency Responders, Hospitals		Χ		Need SOPs	
d. Hazmat Response	Х			EOCs/DCOs	
e. CMNT	Х				
f. Power, ATC	Х				
g. Transportation/Rail Operations	Х				

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Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: MOW, Structures, Engineering and Production	Coi	Compliance		Comments
Participants: Lee, Albright, Brown, Brooks, Damico, Seredich	1	2	3	
			_	
MSDS on file & available for all materials in shop	x			SOPs needed; supervisors carry them in the field for track inspectors
 Safety participates in the selection, approval and procurement of hazmats, SOPs established 	х			
 Hazmat training provided; safety participates in development and review of programs; SOPs 	Х			
d. Waste Management program and SOPs		Х		SOPs needed for structures
e. Ergonomics/human factors programs & training	X			Call safety when assistance is needed.
 f. QA/Supervisor spot checks for proper hazmat, PPE, other conducted, SOPs 	X			In track, in general the supervision in all areas is good; no SOPs for structures
 g. Other hazard potential/job hazard analyses performed 	X			

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Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley Date of Audit: 8-25-10

Department: MOW, Structures, Engineering and Production	Compliance		nce	Comments	
Participants: Lee, Albright, Brown, Brooks, Damico, Seredich	1	2	3	Comments	
7. Employee Safety Programs a.					
Employee accident & incident information, reporting and analysis process in place	x				
 Environmental protection program in place with scheduled inspections 	X				
Occupation hazard prevention programs in place	Х				
Hazard communications programs in place, including high-tension safety	х				
f. Hazard and safety concerns reporting procedures in place	X			"Safety Audit Documentation" program does not appear to be an effective process.	
g. Safety Incentive Program	Х			500-8 100 days accident free gift certificate sponsored by safety, participation	
QA/QI/QC a. Participation in vendor QA processes established	x				
 SOPs for participation in end user approval process 	х			OAP	
c. OEM/aftermarket/equipment fabrication	Х			engineering	
 d. Warehousing/parts storage policies and procedures 	X			no mention of safety & security oversight of inventory/ need Sops for rail, fasterners, ties, general storage, etc.	
e. Shelf-life policy		X		No SOPs	
f. Safety-critical policy/ processes defined		Х		Needs to be formally defined; recommend adding to maintenance policy	
g. Calibration Program	X			Daily for gauge for track inspections/ SOPs	

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WMATA System Safety Program Internal Safety & Security Audit Report Auditors: Nichols, McCoy, McKee, Adams, Kelley

Date of Audit: 8-25-10

Department: MOW, Structures, Engineering and Production Participants: Lee, Albright, Brown, Brooks, Damico, Seredich	Co	Compliance		Comments
Security a. Equipment/loss prevention SOPs & program		x		RTRA 101.11-1 radio 600.3, 600.4, inventory & usage control—no safety/security reference No key control policy; OAP
 Employee Security; Personal safety awareness training for shop personnel 		х		Through rules training No NIMS training, and MERT has not been completed
c. Security Task force participation	X			Through the safety committee
 d. Property trespass SOPs established, implemented, enforced, tracked & managed 	х			
e. Contingency plans for security threats i. Bomb threat ii. Hostage iii. Communications failures, partial & total		x		No SOPs for support of the COOP
f. Weather emergencies	Х			
g. Cell phones	x			Audit team recommends that use of personal electronic devices be forbidden on the wayside, in yards and in Metro facilities while work is being performed by an employee. Personal electronic devices should not be worn on the person but may be stowed while turned off in personal effects while performing work duties. Personal cell phones should only be used in the event of a Metro emergency where no other form of Metro communication is available. (ref. Special Order 08-05)
h. ID Access	X			Need to document the procedure for forgotten IDs—temporary employee IDs

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Internal Safety & Security Audit

Auditors Nichols, Tucci, Adams, McCoy, Kelley, McKee, Sullivan, Briscoe, Davis, Mclean

Date: November 2, 2010

Date: November 2, 2010								
Department: RTRA Participants: Dziduch, Epps, Piper, England, Ballard, Lewis	Co 1	Compliance 1 2 3		Comments				
1. Rail SOPs/Rules	x			Issuance/Effective date for new MSRPH? January 31,2011Date 9/18/2010 All SOPs, manuals and safety/security critical documents need to have RTRA annual review & revision & signoff for concurrence by safety & MTPD. MOC SOPs are out of date (Feb 2001), as are Terminal operations procedures, Controller manual and many other critical documents. Recommend revision of 12-hour clock for reports per SSOP #37 to 24-hour clock to conform to other RTRA operations				
Readback/hearback SOP		Χ		Need rule number/documentation to verify				
SOPs for interaction of control center with vehicle maintenance, infrastructure maintenance & plant, including change and modification	x			MOC SOPs in place-dated February 2001 See #1 Internal SOP on SOPs needed to cover all SOPs.				
SOPs for Pre-Trip inspection/ Checklist		X		Instructions are in troubleshooting guide; no checklist for sign-off. Need to ensure a documented and verifiable procedure to ensure performance and accountability is put in place.				
5. Emergency / Contingency SOPs	x			SOP 8.5.5.1: "Station managers shall attempt to extinguish small fires"; RTRA should ensure that this instruction is well-defined as to size and type of fire, and that fire extinguisher training is provided annually to ALL personnel.				
Rules / Procedures available to Controllers at all times & Emergency/Contingency SOPs, always available to controllers on duty		x		Control Center Manual—2002 is the official date- the document is currently in revision OCC checklists for SOPs provided; however, field verifications indicated that controllers and superintendents did not have immediate access to all SOPs and EOPs needed. The only manuals any personnel could locate were long out of date. Electronic access was not consistent or well-understood by OCC/MOC personnel				
7. Contingency SOPs for partial / total failure of communications; other contingencies		x		No OCC-specific emergency plan; no OCC COOP; current plan for back-up OCC at CTF not yet functional; (need forty minutes to two hours to establish a new OCC) A copy of a document called the DC Evacuation plan was provided of the auditors; however, the audit team saw no supporting SOPs for RTRA to participate in such an evacuation as a coordinated effort.				
8. SOPs for distribution of bulletins, notices and updates Operators Supervisors Maintenance Controllers	x			Need a verification process for issuance/receipt of all shift information for controllers.				
9. Track Allocation/GOTRS SOPs	Х			Participation by ROCC/MOC-SOP is in the new rulebook; need to add SOP to Controller Manual				
				L				

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Appendix A – Completed Internal Audit Checklists

WMATA System Safety Program Internal Safety & Security Audit

Auditors Nichols, Tucci, Adams, McCoy, Kelley, McKee, Sullivan, Briscoe, Davis, Mclean

Date: November 2, 2010

Date. November 2, 2010							
Department: RTRA Participants: Dziduch, Epps, Piper, England, Ballard Lewis	Co 1	Compliance 1 2 3		Comments			
10. SOPs on SOPs		X		Rule development in place; Need SOP for SOPs to cover all SOPs used in the department			
11. Annual review and revision or rules & SOPs; configuration management & document control; approval & signoff procedure; review by safety & other departments		Х		Maintenance, MTPD, etc. New MSRPH 5.3 (a) 1 "bi-annual review & update" Many SOPs provided need update-annual update and revision and appropriate SOPs for update and revision of all departmental documentation needed Ensure review by safety and security			
12. SOP for bulletins/daily-general orders	X			MSRPH/SOPs in place			
13. Yard Control SOPs	X			No drills for OCC or yard tower emergencies/contingencies/COOP			
14. SOPs for participation in drills & exercises		Х		Should be developed in concert with OEM and Safety.			
 Efficiency/proficiency testing; SOPs, schedule, 	X			Blackberry program; 5 per month per supervisor; training program in place; reports filed "Quality Control checks"			
16. Safety Rule testing SOPs	X						
17. SOPs for logs & other documentation		X		Add to controller manual. The station managers should also have access to Maximo so that so much manual paperwork is not generated. The audit team found that many times station managers did not fill out their paperwork properly. Electronic management of these records would enhance compliance and verification.			

Internal Safety & Security Audit
Auditors Nichols, Tucci, Adams, McCoy, Kelley, McKee, Sullivan, Briscoe, Davis, Mclean

Date:	Novem	ber 2	, 2010
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Department: RTRA Participants: Dziduch, Epps, Piper, England, Ballard Lewis	Compliance 1 2 3		Comments
18. SOPs for information control	Х		P/I; ensure that WMATA has a disciplinary process for electronic (social media, Twitter, etc.)
 SOPs for interaction w/Safety dept. on all safety critical processes 		X	Ensure that safety approves all documentation.
20. Radio maintenance (troubleshooting)/ SOPs available		X	Need SOP in place for radio problems in OCC. Need to put together a manual for the superintendents and assistant superintendents for their work tasks & methodologies.
21. Radio/communications equipment modification changes; engineering support; change control; safety certification; life-cycle planning for equipment		x	RTRA does not significantly participate in safety certification, end-user input or life-cycle planning.
Safety criticality of Control Center Communications equipment established		X	Supervisory control of train movement is a critical activity; documentation in RTRA should document this criticality.
Non-revenue vehicles/ Control center SOPs for: a. Deadhead	X		In place
b. Testing	X		First revenue train is used to test in manual mode; maintainers do not operate revenue trains, but road mechanics are and are certified to operate trains.
c. Yard operations	Х		
d. Supervisor motor vehicles	Х		
e. Money train	Х		
f. Special orders/general orders	X		Open channel; no method of verifying that operators have received the information for all such announcement. Temporary order SOP is in place in MSRPH

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Internal Safety & Security Audit

Auditors Nichols, Tucci, Adams, McCoy, Kelley, McKee, Sullivan, Briscoe, Davis, Mclean

Date: November 2, 2010

Department: RTRA Participants: Dziduch, Epps, Piper, England, Ballard Lewis	Compliance 1 2 3		nce 3	Comments	
24. Rule of the day / week	Х			Safety contact program in place; rule of the week	
25. SOPs for Supervision (field, ROCC, MOC)	x			ROCC supervision SOPs in place, field supervision covered primarily in training program & rulebook.	
26. SOPs for OTP/ trend analysis, other reporting		x		MOC daily summary report provided; COP, ROCC report of incidents, OCC incident report (Maximo reporting also), new SMS reporting-training. Customer Operations unusual occurrence report, SOPs need to be developed for all analysis and reporting.	
27. SOPs for interaction with Rail Planning	Х			OTP/trend analysis; other system information; dwell; headways, ATC anomalies/analysis, etc. Through weekly reporting; need to have SOP	
28. Safety data acquisition and analysis	х			Safety incident reports printed; analysis and tracking to closure through the weekly report-SOP needed.	
29. Safety Committee Participation	X			LSC/Superintendent; minutes provided & tracking of items to closure;	
30. Hazard Identification and Resolution Process/SOPs	х			Need to fully document superintendent activities and asst superintendent.	
31. SOPs for participation & conduct of Supervisory personnel in accident investigation		x		No full SOP.	

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WMATA System Safety Program Internal Safety & Security Audit

Auditors Nichols, Tucci, Adams, McCoy, Kelley, McKee, Sullivan, Briscoe, Davis, Mclean
Date: November 2, 2010

				Date. November 2, 2010		
Department: RTRA Participants: Dziduch, Epps, Piper, England, Ballard Lewis	Compliance 1 2 3		ice 3	Comments		
32. Training: a. Lesson plans/matrix	X					
b. Pass/Fail criteria	X			Operator certification requirements & pass fail criteria provided; need to ensure that cardinal rules have 100% pass-fail compliance.		
c. Rules Testing	Х					
d. OJT	Х					
e. Training documentation & control	X					
f. Training QA	Х					
g. Re-qualification	Х			biennial		
h. Safety	X			BBP, CPR, First Aid, Station Managers all need to be trained.		
i. Emergencies	X			COOP training is needed once COOPs are updated and in place for Divisions; and when SOPs are developed to support the WMATA COOP		
j. Security Plan/Programs , including violence in the workplace, anger management		x		Need a full security plan & training in the plan for the OCC and other RTRA functions and facilities		
k. EAP-Employee Assistance Program	X					
Equipment (radio, control boards, SCADA, etc.)	X					
m. Train the trainer	X			TSI Train-the-Trainer instruction is recommended during the first year of instruction for all employees providing RTRA training		
 n. Other department review & input on training (maintenance, MTPD) 		Х				
 o. Safety Review and concurrence for RTRA training 		Х				
Superintendents & supervision trained in all rules /procedures	X			No training policy in place		

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Internal Safety & Security Audit

Auditors Nichols, Tucci, Adams, McCoy, Kelley, McKee, Sullivan, Briscoe, Davis, Mclean

Date: November 2, 2010

1			Date: November 2, 2010	
Department: RTRA Participants: Dziduch, Epps, Piper, England, Ballard Lewis	Compliance 1 2 3		Comments	
34. Fitness for Duty a. Checks performed/SOPs		x	Station Manager Wellness Program provided includes all below—it would be of great benefit to everyone in RTRA to receive similar training; the depot clerk is responsible for fitness for duty check. Recommend fitness for duty training; SOPs and verification of those checks are required.	
 b. Supervisor training / re-training 	X			
 c. Fitness for duty / fatigue 	X			
d. Uniforms	X		Field supervision	
e. Rulebooks	X		Field supervision	
f. Bulletins	X		Field supervision	
g. Documentation of checks	X		Blackberry (quality control program) checks; ensure that all blackberry program-related information becomes part of the field supervisor training and manual.	
35. Management SOPs and work methodologies		X	Not currently in place—have performance measure for management, which lists tasks, but not how to perform them	
36. Management Training Program and policy		X	Not currently in place	
37. Environmental hazard communication	X			
38. Security & Emergencies: a. Facilities Plan/Exercises		x	Emergency plans (COOPS) for RTRA facilities are out of date (GBLT 2003; several have no date at all; all need to be updated and expanded-some are barely a few pages); exercises should be held at each RTRA facility; make sure all have orders of succession; 2010-2011 Emergency weather plan provided-updated annually?	
b. SOPs		X	Some are in place-however additional SOPs are needed for situations to include active shooter, shelter in place of personnel, etc.	
c. COOP SOPs		x	No approved COOP for OCC yet-in draft format-also, notifications are by name, not position. Lots of alternate location and notification info, but doesn't have provisions for needed items (Orders of succession, vital records and systems, etc.) For every COOP for every location SOPs are needed-currently documents give instructions, but don't explain responsibilities or procedural performance of the instruction.	
d. Task force participation	Х		Addressed through safety committees	

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Internal Safety & Security Audit

Auditors Nichols, Tucci, Adams, McCoy, Kelley, McKee, Sullivan, Briscoe, Davis, Mclean

Date: November 2, 2010

Department: RTRA Participants: Dziduch, Epps, Piper, England, Ballard Lewis	Compliance 1 2 3		Comments
e. Interaction with Office of Emergency management		Х	No formalized interaction; need to develop formal SOPs with OEM, including for all activities for OEM "desk" function
 f. SOPs for interaction w/MTPD and external first responder agencies 		X	Not formalized
g. Loss prevention		Х	Hand held radio SOP (10-23-2000) needs update. SOP needed for keys.
39. Interdepartmental Coordination a. Safety b. MTPD c. TSSM d. PLNT e. Other		x	For maintenance functions, through MOC there are SOPs provided, but none for other departments, including safety, MTPD, IT, etc.
40.			
41.			
42.			

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Auditors Adams, Gilbert, McCoy, Nichols Date of Audit: 18 May 2010

Department: HR: Drug & Alcohol Participants: Dr. Lisa Cooper-Lucas, Manager,	Compliance		nce	0		
Medical Svcs & Compliance			3	Comments		
Santos Garcia, Compliance Monitor						
Drug and Alcohol policy clearly stated and disseminated -definitions -alcohol -substance abuse -prescription medications -OTC medications -testing program -Referral	x			Last Revision Date 2002 (see item 4 below) Recommendations for improvement: ✓ Prescription and Over-the-Counter Medication policy should provide more guidance, i.e. more specific information as to the types of medications that should be reported ✓ Upcoming proposed changes to the policy removes the list of covered positions. This should be reinstated as part of the policy, and included as an attachment so that it can be updated on a regular basis per WMATA organizational changes. This list provided needed guidance to the departments and to the Medical Group so there is no question as to those positions which require testing per 49 CFR 655 and WMATA internal standards and requirements		
(a) Formals SOP for dissemination of the policy throughout WMATA		Х		Formal SOP for dissemination needed		
Standard Operating Procedures (SOP) for drug and alcohol testing -Pre-employment -Post-accident -Reasonable Suspicion -Discretionary -Random -Referral Testing SOPs -Validity of testing -Test results accurate	х			Recommendation for improvement: ✓ Although there is a sign-off sheet for the reasonable suspicion testing, WMATA's SOPs and handbooks for the positions that qualify as supervisory under 655 should indicate that in all cases of reasonable suspicion and post-accident testing the supervisor should maintain reasonable care, custody and control of the employee to be tested until the testing is undertaken.		
SOPs and standards, including checklists, including for supervisory personnel in the modes, for 655-compliant testing	x			Testing Methodologies clearly stated; SOPs in place Retesting for alcohol > .02 Refusal to submit Return to duty SAP, MRO SOPs		
SOPs for periodic Review/Update of policies, standards and procedures		х		Policy has not been revised since 2002—currently in review but new version not yet approved. The Department should include the language for annual review and revision as needed in the document.		
5. EAP established	Х			Metro Transit Police are not currently partaking fully of EAP programs—recommend that more outreach be done with MTPD should officers wish to use the programs.		
6. SOPs for EAP referral developed		X		Formal SOPs should be documented for use throughout the authority.		

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Auditors Adams, Gilbert, McCoy, Nichols Date of Audit: 18 May 2010

Department: <u>HR: Drug & Alcohol</u> Participants: <u>Dr. Lisa Cooper-Lucas, Manager,</u>	Со	mplia	nce	Comments			
Medical Svcs & Compliance	1	2	3				
Santos Garcia, Compliance Monitor							
Supervision and management trained in EAP procedures	X						
Notification SOPs for testing established; supervision and management trained	X						
Testing and training records control established	X						
Safety/D&A data analysis performed/ Hazard Identification and Resolution Process		х		No data analysis or reports for testing of WMATA employees were available for review.			
Safety data -FTA MIS reporting requirement	X			FTA compliance is in order			
11a.Safety data distributed for analysis to appropriate departments -Safety - Other HR (EAP) -Metro police -Risk Mgmt Post-analysis data -Operations -Maintenance		x		No data is currently shared with other departments for analysis. There is a need to have wider distribution of raw results to Safety & other departments for trend analysis, because hazards may be missed without proper analysis for safety and security. Safety Department will provide a written request to share data by February 1, 2011.			
Sanctions policies clearly stated.	Х						
13.SOPs developed for sanction procedures		X		SOPs are needed system-wide for implementing sanctions related to 49 CFR 655			
Change control SOPs, including SOPs for distribution of notices and updates		х		SOPs are needed to control changes within the department and provide proper Configuration Management per the requirements of system safety.			

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Auditors Adams, Gilbert, McCoy, Nichols Date of Audit: 18 May 2010

				Bate of Addit. To May 2010
Department: HR: Drug & Alcohol Participants: Dr. Lisa Cooper-Lucas, Manager,	Co	mplia	nce	Comments
Medical Svcs & Compliance	1	2	3	Confinence
Santos Garcia, Compliance Monitor		_		
15. Training: Lesson plans Pass/Fail criteria Policies/Matrix Document/records control Re-qualification Employed initial training	x			
Employee initial training Supervisor training				
 Formal Training program in place for Medical Group employees. 		Х		No formal training policy or program is in place for the medical group. A training matrix, program and policy should be developed for the department.
Self-Referral program and policy established	х			
 Self-referral program procedures established, and training provided to employees 		х		No SOP in place for the self-referral program.
19. Fitness for duty awareness programs and training developed -fatigue -medical conditions, health & nutrition -violence in the workplace -financial crises -emotional crises -anger management	x			Recommend that financial and emotional crisis programs also be made available and awareness programs instituted for employees.
20. D & A Contractor QA SOPs established and implemented -vendor audits/QA performed -contractor safety plans required -contractors required to abide by WMATA SSPP reqs	X			There is limited documentation in place to support vendor audits There is a guideline currently being used, and the program is effective for the audits currently being done. However, for the program to be most effective, and to preserve institutional knowledge, a full WMATA SOP should be developed.

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Auditors Adams, Gilbert, McCoy, Nichols

Date of Audit: 18 May 2010

Department: <u>HR: Druq & Alcohol</u> Participants: <u>Dr. Lisa Cooper-Lucas, Manager,</u>	Co	Compliance		Comments
Medical Svcs & Compliance	1	2	3	
Santos Garcia, Compliance Monitor				
21. Other contractors subject to WMATA drug and alcohol policies & testing programs	X			
21 (a) Bus Contractor drug testing/auditing procedures -SOPs, Manuals, Signatures	X			
21 (b) Rail Contractor drug testing/auditing procedures		X		Currently, no rail contractors are being audited for 49 CFR 655 compliance. This condition was reported to the CSO as a UHC.
22. Records control for contractor testing programs	X			
23. Contractor training programs for substance abuse	X			
24. Medical qualifications established -Regulatory -Physicals	X			Rail operator physical not currently required— Rail operator medical recertification program is in development. Full medical recertification program and Standard Operating Procedures for rail should be fully implemented.
25. Medical qualifications standard operating procedures , and Records control and review -Medical facilities /contractors -Medical referrals counseling	Х			
26. Information Security: SOPs QA		X		No information security SOPs were provided.
27. 49 CFR 29 Certification Original Certification submitted SOPs for employee convictions Employee signatures			х	Unable to fully verify at present. Item is currently under investigation, and will remain open until verification is complete. No hazards are associated with the item remaining open.

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APPENDIX B CORRECTIVE ACTION PLANS TO ADDRESS INTERNAL AUDIT FINDINGS

Appendix B – Corrective Action Plans to Address Internal Audit Findings

WMATA S	WMATA System Safety Program								
Internal S	afety and Security Audit Corrective	ve Action Plan							
	nce, SSPP Element 15								
~Septemb	er 30, 2010								
CAP#	Finding/Area of Concern	Corrective Action	Date Due	Dept & Staff Responsible					
M1	program revisions and approvals, life-cycle planning and management SOPs and methodologies.	These critical processes must be defined and documented. It is recommended that each Maintenance department develop a Maintenance Control Policy to cover these critical areas. Track Maintenance and Structures have provided a curtailed description of some of the processes in OAPs 208.1 and 208.2; however, these documents are not sufficient to cover all of the detail for all of the critical processes.	09/30/12	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright					
M2	There are no checklists for use in daily inspections of railcars	Develop a checklist to be used with the Daily Inspection Procedure.	03/30/11	CMNT-Garzone					
M3	Supervisors do not have Standard Operating Procedures or Methodologies for any of their duties; supervisors do not have a formal training program for their position and duties.	Develop SOPs & methodologies to cover all supervisory duties, including (as applicable) spot checks, prioritization of repairs, field inspections, QA inspections, PPE checks, toolbox meetings and safety contacts, disciplinary processes, on-the-job training, etc. This manual/guidebook can then be used as a training tool to institute training for all supervisors in the departments.	09/30/11	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright					
M4	Lack of training for emergency preparedness and security	Train all personnel in NIMS, COOP and facility emergency plans and procedures; personal safety awareness & procedures; workplace violence.	09/30/12	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright Office of Emergency Management-LaPorte					
M5	Lack of procedures to support COOP	Develop departmental procedures to support activation of the COOP	09/30/11	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright Office of Emergency Management-LaPorte MTPD-Taborn					
M6	No specific facility emergency plans or procedures	Develop facility emergency plans and procedures for each facility, to include all-hazards scenarios, including active shooter, weather emergencies, fire, shelter-in-place options, etc. The facility that houses the SAMS departments does have a facilities emergency plan, but there are no supporting procedures or drills to test the plan.	09/30/11	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright Office of Emergency Management-LaPorte					
M7	Lack of exercises to test COOP	Hold annual exercise to test COOP	09/30/11	Office of Emergency Management-LaPorte					

WMATA S	WMATA System Safety Program									
Internal S	afety and Security Audit Correctiv	ve Action Plan								
	nce, SSPP Element 15 per 30, 2010									
- oepterni	61 30, 2010									
CAP#	Finding/Area of Concern	Corrective Action	Date Due	Dept & Staff Responsible						
МВ	There is a lack of certain technical training for maintenance personnel.	CMNT: Ladders, cranes/rigging/strapping, PM criticality, defensive driving, small tools COMM: PM criticality, fitness for duty, small tools, lockout/tagout Power: PM criticality ATC: Lone Worker, high voltage, PM criticality TSSM: High voltage, small tools In addition, it is recommended that all Maintenance employees receive training in fatigue/fitness for duty when the new course comes online from the medical group.	09/30/11	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright						
M9	No SOP for GOTRS	Need formal documentation of GOTRS process for meeting to allocate track	03/30/11	TIES-Dave Kubicek						
M10	No SOP for Engineering Review Board	Need formal documentation of ERB process for change control in Maintenance, to ensure the participation of all end users, SAFE and security where appropriate	03/30/11	TIES-Dave Kubicek						
M11	There is no dedicated engineering support for TSSM, COMM, Power, AFC and SAMS, and, as a result, there is a lack of proper engineering support for these areas of Maintenance	Each maintenance area must have adequate dedicated engineering support. This means that all engineering needs for change control, procedures, training and QA should be met by qualified engineering staff within a reasonable period of time to meet established preventive and other maintenance schedules without deferrals.	03/30/11	TIES-Dawe Kubicek						
M12	No SOPs or procedures in place for Configuration Management & Document Control	Ensure that there are formal, documented procedures for configuration management and document control for all maintenance departments, Documentum system is being implemented, but SOPs for its use must be developed for each department. This includes all field logs, inspections, notes and briefings from all departments.	03/30/11	TIES-Dawe Kubicek						
M13	Area emergency response partners have not been trained in the hazards of the facilities to which they may have to respond	Include maintenance facilities in emergency responder training	12/31/10	Office of Emergency Management-LaPorte						
M14	No refresher training or retraining program is in place for any courses with the exception of drug and alcohol per FTA requirements and trackwalker recertification	Perform an analysis with SAFE to determine needed refresher training and retraining requirements, including emergency training	12/31/10	TTDC-Petersen SAFE-Cohen						
M15	CMNT has no training matrix	Develop a matrix that lists training for each position in CMNT, required training and training intervals	12/31/10	TTDC-Petersen CMNT-Garzone						
M16	There is no train the trainer program for Maintenance areas. Since there is a considerable amount of on-the-job training provided in all areas, this is a key omission.	Review and analyze all OJT, and determine the positions that will require Training skills within the Maintenance function	03/31/11	TTDC-Petersen SAFE-Cohen						

Appendix B – Corrective Action Plans to Address Internal Audit Findings

WMATA System Safety Program				
Internal S	afety and Security Audit Corrective	ve Action Plan		
Maintenance, SSPP Element 15				
~September 30, 2010				
CAP#	Finding/Area of Concern	Corrective Action	Data Dua	Dept & Staff Responsible
CAF#	Finding/Area of Concern	Develop a formal system-wide process for all	Date Due	Dept & Staff Responsible
M17	There is no formal safety rule testing program in place at WMATA	levels in all departments to report hazards within the existing rules and procedures structure.	03/31/11	SAFE-Dougherty
M18	SAFE does not currently review any maintenance training programs	Ensure that all training programs are reviewed by safety for compliance with the SSPP and other safety requirements	03/31/11	TTDC-Petersen SAFE-Dougherty CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright
M19	There is no SOP for regular review, revision and update of OAPs	Develop an SOP for the review, revision and update of OAPs, to include the review and approval process with safety review and signoff	03/31/11	TIES-Dave Kubicek
M20	QAAW is not currently performing QA on Maintenance training	Ensure proper QA is performed ion maintenance training programs	03/31/11	TIES-Dave Kubicek
M21	There is currently no formal QA performed on trainees in maintenance	Ensure a full QA program for evaluation of trainees is developed	03/31/11	TIES-Dave Kubicek TTDC-Petersen
M22	There is currently no formal process or documentation for On- the-Job training for any Maintenance department except for AFC	Develop a formal, documented OJT program for all OJT; the AFC format and documentation is an excellent template	09/30/11	TIES-Dave Kubicek TTDC- Petersen
M23	There is no formal safety training program in place for contractors working in the CMNT shops.	Develop a formal safety training for contractors and briefing for visitors; ensure all training provided is documented, that visitors are escorted at all times, and that contractors are supervised at all times by CMNT employees.	03/30/11	CMNT-Garzone TTDC-Petersen
M24	Interdepartmental and interagency communications and coordination are not formally documented. These SOPs must include review of programs and documents as well as formal communications and interactions.	Develop SOPs to cover interdepartmental and interagency interactions CMNT: Safety, MTPD, Treasury & Fare collection (to include scheduled delivery of the money trains for maintenance and repair) COMM: Safety, MTPD, ENSS, IRPG Power: Safety, MTPD, ENSS, IRPG ATC: Safety, MTPD, ENSS, IRPG TSSM: Safety, MTPD, ENSS, IRPG	09/30/11	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright
M25	There are no formal shelf-life policies in place for materials used in any of the departments audited.	Each department will analyze its materials and develop appropriate shelf-life policies and procedures for perishable items.	09/30/11	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright SRML-Mitchell
M26	Safety-critical parts, processes and systems are not formally identified.	Develop a safety-critical policy and procedures to cover parts, processes and systems in maintenance. This may be included as part of the maintenance policy document.	09/30/11	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright

February 1, 2011 B – 4

WMATA	System Safety Program			
Internal S	Safety and Security Audit Corrective	ve Action Plan		
	nce, SSPP Element 15 ber 30, 2010			
~Septem	Der 30, 2010			
CAP#	Finding/Area of Concern	Corrective Action	Date Due	Dept & Staff Responsible
M27	Ensure that SOPS are developed that IRPG includes end users, saf and all appropriate stakeholders por Departmental participation in safety WMATA's safety certification police.			IRPG-Troup
M28	No SOPs are in place for splicing in emergencies	Develop SOPs for splicing in emergencies	11/30/10	Power-Newman
M29	No SOPs are in place for lithium batteries	Develop SOPs for lithium batteries	12/31/10	AFC-Newman
M30	Insufficient participation in end user approval process, vendor QA processes and OEM replacement processes for Power group	Ensure that SOPS are developed to ensure that Power is included in all engineering and QA processes applicable to their operation	03/30/11	Power-Newman QAAW-Bitar ENSS-Myersr
M31	incident debriefings	Ensure SOPs are in place to include departments affected by critical incidents in the debriefing process	12/31/10	Office of Emergency Management-LaPorte
M32	No SOPs in place to ensure field notifications in emergencies are made in remote locations, such as substations	Ensure SOPs are in place to cover notifications in emergency situations to cover all field assignments without PAs.	12/31/10	MOC-Piper
M33	No SOPs to cover vandalism or graffiti remediation at Power substations	Develop SOP to handle graffiti and vandalism at substations	12/31/10	Power-Newman
M34	Understaffing in some departments has led to deferred maintenance and excessive overtime, leading to fatigue.	Perform manpower analyses for each department in coordination with SAFE.	03/30/11	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright SAFE-Dougherty
M35	No SOPs in place for response to critical failures in COMM	Develop SOPs for response to critical failures	03/30/11	COMM-Nabb
M36	Training for contractors working in COMM is inadequate	Ensure contractors working on property with COMM receive proper ROW safety training, and that the training is properly documented	12/31/10	COMM-Nabb
M37	COMM rooms are not maintained in proper and safe order. Several COMM rooms had hazardous conditions.	Ensure that COMM rooms are inspected for safety when entered for work. Violations should be reported, documented and corrected.	12/31/10	COMM-Nabb
M38	Currently, ATC does not have access to the AIMS system, which hinders the diagnostic process,	The AIMS system must be accessible to all departments performing diagnostic processes for ATC failures and anomalies.	12/31/10	ATC-Nabb ENSS-Myers
M39	Currently no meggering or ground testing is performed in ATC.	SOPs for testing of grounds and meggering should be developed and implemented.		ATC-Nabb
M40	MSDS are not readily available in the field for ATC crews	Ensure that ready access to MSDS is available to ATC field technicians	11/30/10	ATC-Nabb SAFE-Best

	System Safety Program			
	Safety and Security Audit Corrective	ve Action Plan		
	ance, SSPP Element 15 ber 30, 2010			
- әеріеш	Del 30, 2010			
CAP#	Finding/Area of Concern	Corrective Action	Date Due	Dept & Staff Responsible
oru n	i mangraca or concern	OST COLIVE FISHOR	Date Dat	CMNT-Garzone
M41	Job hazard analyses are not complete for all departments	Ensure job hazard analyses are completed for all positions	09/30/12	0010101701111
M42	all the hours the departments have needs, and it closes in bad weather, when crews in the departments it supplies are still working and in need of supplies	Perform an immediate analysis of the critical supply needs for each department in coordination with SAFE	11/30/10	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright SAFE-Dougherty SRML-Mitchell
M43	and parts. Track replacement program plan is not fully documented	Document the existing work flow plan; recommend adding it to the Maintenance Control Policy	09/30/12	TSSM-Albright
M44	MOC is not well versed in the events and situation experienced by TSSM. There is no TSSM person at the MOC desk.	Training for MOC personnel in prioritization of items for TSSM	12/31/10	TSSM-Albright MOC-Piper
M45	Structures has no SOPs for disposal of hazardous waste generated at work sites	Develop SOPs for hazardous waste for structures	12/31/10	TSSM-Albright
M46	QA is currently not performing reviews or auditing in any area except CMNT, and is not performing any training audits.	Ensure all appropriate areas have proper QA support.	03/31/11	TIES-Kubicek QAAW-Bitar
M47	No SOP for QA documentation	Develop and implement annual review and revision of QA Documentation. Ensure that all QA documentation references the SSPP and hazard management roles and processes and all documentation is reviewed by SAFE.		QAAW-Bitar
M48	No SOP is place for QA's periodic formal review of its internal documentation.	Develop formal SOP for internal controls for QA.	03/31/11	QAAW-Bitar
M49	No training or certification policy or procedures for QAAW staff	Develop training and certification policy and procedures for all positions in QAAW. Recommend adding this to existing QA policy document.	03/31/11	QAAW-Bitar
M50	Insufficient involvement of end users and QA in Capital acquisitions	Ensure that end users and QA are involved in all steps of capital acquisitions, including life-cycle planning and programs, & rehabilitation of rolling stock and infrastructure.	03/31/11	IRPG-Troup
M51	Toolbox meetings and Safety Contacts have worksheets to document them, but no SOPs	Ensure SOPs are developed for Toolbox meetings and Safety Contacts. May be included in Supervisor's Manual/SOPs	09/30/11	CMNT-Garzone COMM &ATC-Nabb Power-Newman TSSM-Albright

WMATA:	System Safety Program				
Internal S	Safety and Security Audit Corrective	ve Action Plan			
	ANSPORTATION (RTRA)				
~Novemb	per 22, 2010				
CAP#	Finding/Area of Concern	Corrective Action	Date Due	ue Dept & Staff Responsible	
	There is no RTRA SOP for				
R1	development of internal SOPs.	Develop internal SOP on SOPs.	03/31/11	RTRA-Epps	
R2	No read back/hear back procedure	evelop a read back/hear back procedure r critical radio transmissions; this should clude the conditions under which critical formation passed by radio to the field is erified.		RTRA-Epps	
R3	No verification procedure in place for pre-departure train inspections	evelop and implement a checklist for the e-departure inspection and a verification ocedure, including sign-offs and QC		RTRA-Epps	
R4	Lack of training for security	Ensure that security and related training for areas of concern is provided to RTRA employees: Refer to item 32 j in the audit matrix.	11/30/11	RTRA-England	
R5	Lack of procedures to support COOP	Develop departmental procedures to support activation of the WMATA COOP	11/30/11	RTRA-Epps	
R6	No specific facility emergency plans or procedures	Develop facility emergency plans and procedures for each division, to include all-hazards scenarios, including active shooter, weather emergencies, fire, shelter-in-place options, etc. Develop OCC COOP and supporting SOPs; as appropriate, develop internal SOPs to support DC evacuation.		RTRA-Epps Office of Emergency Management-LaPorte	
R7	Lack of exercises to test COOPs	Hold annual exercises to test RTRA COOPs; ensure that SOPs are developed within RTRA to facilitate participation in drills, critical debriefings and corrective actions from items identified in emergency preparedness drills.		Office of Emergency Management-LaPorte RTRA-Epps	
R8	Critical documentation is not readily available to control center employees	Ensure that all critical documentation is updated properly and readily available to everyone on duty as appropriate in the control center.	12/31/10	RTRA-Epps	
R9	There is no SOP or verification process for issuance/receipt of all shift information for controllers.	Develop a formal SOP and supporting checklists/documentation for the controller shift changes to ensure accountability and correct exchange of critical safety information between shifts.	05/31/11	RTRA-Epps	
R10	There is no SOP for controllers to ensure that the information contained in GOTRS is properly reviewed prior to each shift	Develop a formal SOP and accountability for controller review of the GOTRS information on each shift.	12/31/10	RTRA-Epps	
R11	SAFE does not currently review any RTRA documentation	Ensure that all RTRA documentation is reviewed by Safety for compliance with the SSPP and safety requirements	03/31/11	RTRA-Epps	
R12	No SOPs or procedures in place for Configuration Management & Document Control	Ensure that there are formal, documented procedures for configuration management and document control for all areas of RTRA; Documentum system is being implemented, but SOPs for its use must be developed for each area. This includes all logs, inspections, notes and briefings from all departments.	11/30/11	RTRA-Epps	

WMATA:	System Safety Program			
Internal S	Safety and Security Audit Corrective	ve Action Plan		
	ANSPORTATION (RTRA) per 22, 2010			
~NOVEIII.	Jet 22, 2010			
CAP#	Finding/Area of Concern	Corrective Action	Date Due	Dept & Staff Responsible
R13	Area emergency response partners have not been trained in the unique configuration of the JGB and CTF control centers.	Include control center facilities in emergency responder training	12/31/10	Office of Emergency Management-LaPorte
R14	Some RTRA documentation, especially logs, is not collected or stored electronically. Many of these items also do not have SOPs for their use, and do not have QC performed.	Il required documentation, including logs, equires SOPs to guide the completion of e task. Electronic means of completing e task may improve processes. In addition, having Maximo available to Station anagers would be of great benefit and approve documentation and verification for eir areas of responsibility.		RTRA-Epps
R15	No SOP in place for radio troubleshooting	Need SOP for radio troubleshooting	03/31/11	RTRA-Epps
R16	Superintendents and Assistant Superintendents do not have SOPs or methodologies to cover their work	Develop SOPs or methodologies for all work tasks for Superintendents and Assistant Superintendents	12/31/12	RTRA-Epps
R17	Safety criticality of control center activities is not formally established	Ensure that documentation of all safety- critical processes in the control center is in place.	03/31/11	RTRA-Epps
R18	SAFE does not currently review any RTRA training programs. Programs are also not reviewed by other stakeholders.	Ensure that all training programs are reviewed by safety for compliance with the SSPP and other safety; by MTPD for security/SEPP compliance; and by other stakeholders as appropriate.	03/31/11	RTRA-England
R19	There is no SOP for regular review, revision and update of all internal RTRA documentation	Develop an SOP for the review, revision and update of all RTRA documentation, to include the review and approval process with safety review and signoff	03/31/11	RTRA-Epps
R20	RTRA does not significantly participate in safety certification, end-user input or life-cycle planning.	Ensure full participation of RTRA in all procurements from planning to disposal for all equipment and other purchases. Ensure that safety certification is performed for all safety-critical procurements, and that RTRA and Safety participate.	12/31/11	IRPG-Troup
R21	There are no SOPs for trend analysis and other reporting performed by RTRA	Ensure that responsibilities and SOPs/methodologies for all trend analysis and reporting are captured (see R16)	12/31/12	RTRA-Epps
R22	Complete documentation for participation of RTRA personnel in accident and incident investigation is not in place.	Ensure that complete formal documentation for all investigations is in place for RTRA personnel.	6/31/11	RTRA-Epps
R23	No training policy or matrix for RTRA personnel	Develop a formal training policy and matrix for all RTRA personnel, including Superintendents.	12/31/11	RTRA-England
R24	No verification of fitness for duty checks for operators is performed	Implement standards, guidelines, SOPs and verification for fitness for duty checks.	01/31/11	RTRA-Epps
R25	OEM desk function is not covered in RTRA SOPs	Ensure that SOPs for OEM desk functions are developed and implemented.	05/31/11	RTRA-Epps Office of Emergency Management-LaPorte

WMATA	System Safety Program			
Internal	Safety and Security Audit Corrective	ve Action Plan		
	ANSPORTATION (RTRA)			
~Novem	ber 22, 2010			
CAP#	Finding/Area of Concern	Corrective Action	Date Due	Dept & Staff Responsible
R26	No SOPs in place for loss prevention regarding keys.	Develop and implement SOPs for loss prevention for keys issued to RTRA personnel.	05/31/11	RTRA-Epps
R27	Not all interdepartmental coordination is covered by formal SOPs	Develop SOPs for all interdepartmental coordination.	12/31/11	RTRA-Epps
R28	Cranking and blocking procedure is not clearly defined and fully implemented agency-wide	Cranking and blocking procedure needs to be evaluated and revised to ensure responsibilities, equipment and procedures are fully documented.	01/31/11	RTRA-Epps
R29	No contingency plan is in place for loss of the GOTRS system	Develop and implement a contingency plan for full, partial, short- and long-term loss of the GOTRS system.	01/31/11	RTRA-Epps
R30	Superintendents and Assistant Superintendents do not have adequate training on track circuitry error reporting	Ensure that all Personnel handling BCH errors are adequately trained in this critical area	12/31/11	RTRA-England
R31				
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WMATA System Safety Program Internal Safety & Security Audit Program Corrective Action Plan

Department: HR: Drug & Alcohol Participants: Dr. Lisa Cooper-Lucas, Manager, Medical Svcs & Compliance, Santos Garcia, Compliance Monitor Date CAP Opened: Area of Non-Compliance (Matches Audit Matrix Number)	Corrective Actions for Deficiencies Identified Requiring Corrective Action per TOC SSPS	To Be Completed On Or Before	Responsible Party
(a) There is no formal Standard Operating Procedure (SOP) for dissemination of the WMATA Drug and Alcohol policy and procedures document.	Develop a formal SOP for dissemination of the WMATA Drug and Alcohol policy and procedures document. It can be part of the policy and procedures document. See #4 below.	8-18-11	Dr. Lisa Cooper-Lucas, Manager, Medical Svcs & Compliance
4 Current Policy has not been revised since 2002	Current policy is under revision process at this time, and is expected to be in place by October 1, 2010. A formal SOP needs to be added to the policy document to indicate annual review and version control.	10-1-10	Dr. Lisa Cooper-Lucas, Manager, Medical Svcs & Compliance
6. Current EAP program has no formal SOP	Formal SOPs for the EAP Program should be documented for use throughout the Authority	8-18-10	Dr. Lisa Cooper-Lucas, Manager, Medical Svcs & Compliance
No data analysis reports for testing of WMATA employees are currently being performed on drug and alcohol testing	Drug and alcohol testing results with redacted personal/medical identifying information are to be forwarded to the Safety Department for review and analysis. The Safety Department shall make a formal request in writing to ensure the data is transmitted for analysis. See 11(a).	2-1-11	James M. Dougherty, Chief Safety Officer, WMATA Safety Department
11(a) Data is not currently shared with other departments for analysis and review	Drug and alcohol testing results with redacted personal/medical identifying information are to be forwarded to the Safety Department for review and hazard analysis, and transmittal to other departments for review as appropriate based on that analysis. An SOP is needed to ensure the implementation of hazard analysis for D&A results.	2-1-11	James M. Dougherty, Chief Safety Officer, WMATA Safety Department

No system-wide SOPs exist for implementation of sanctions per 49 CFR 655	Develop WMATA SOPS for use throughout the agency for sanctions related to 49 CFR 655	8-18-10	Dr. Lisa Cooper-Lucas, Manager, Medical Svcs & Compliance
No change control (Configuration management) SOPs exist for Medical Group documentation	Development of formal configuration management/document control procedures are needed for the Medical Group.	8-18-10	Dr. Lisa Cooper-Lucas, Manager, Medical Svcs & Compliance
16. There is no formal training program in place for Medical Group employees.	A formal training program needs to be developed for the department, including a training matrix and policy.	8-18-11	Dr. Lisa Cooper-Lucas, Manager, Medical Svcs & Compliance
There are no SOPs in place for use system-wide for the self-referral program	Develop WMATA SOPS for use throughout the agency for the self- referral program	8-18-10	Dr. Lisa Cooper-Lucas, Manager, Medical Svcs & Compliance
21 (b) Rail Contractor drug testing/auditing program is currently not being implemented.	Ensure the Medical Group has a list of the contractors currently working in rail Development of an SOP to ensure notification of the Medical Group any time a contractor begins work for TSSM. Ensure the applicable contractor audits are performed per 49 CFR 655	1. 8-20-10 (UHC) 2. 12-31-10 3. 12-31-10	1 & 2: Heather Obora, Chief Procurement Officer, WMATA Office of Procurement 3. Dr. Lisa Cooper-Lucas, Manager, Medical Svcs & Compliance
26 No departmental information security SOPs were provided	Development of departmental SOPs for information security. These an be part of the Departmental policy and guidelines.	2-18-10	Dr. Lisa Cooper-Lucas, Manager, Medical Svcs & Compliance

APPENDIX C ANNUAL SECURITY AUDIT REPORT

M E M O R A N D U M

DATE: January 25, 2011



SUBJECT: Security and Emergency

Preparedness Plan (SEPP) - Annual

Internal Audit Report

FROM: MTPD - Michael A. Tabern

TO: GMGR - Richard Sarles

Overview

This report was created in accordance with the reporting requirements defined in the State Safety Oversight Rule, 49 CFR Part 659, and the Tri-State Oversight Committee (TOC) Program Standards, Section 6.3.

Section 6.3, TOC Program Standards and Procedures, requires the Washington Metropolitan Area Transit Authority (WMATA) to submit an annual internal security audit report to the TOC on or before February 1st of each year. The report must contain the following:

- 1. A summary of the internal audit
- 2. Internal audit checklist
- 3. Findings of the internal audit
- 4. Any Corrective Action Plans (CAP)

Audit Description

On April 7, 2010, TOC and the Metro Transit Police Department (MTPD) performed an Internal Audit (IA) for Elements 4.1 thru 4.5. Several findings of non-compliance were identified and CAPs were created to address those findings.

The TOC performed a Triennial Safety and Security Audit in June 2010, as required by 49 CFR Part 659 and several areas were identified as requiring corrective action.

On August 19, 2010, TOC approved an IA process that is currently being performed jointly by SAFE and MTPD with the concurrence of Mr. James Dougherty, WMATA Chief Safety Officer and Chief Michael A. Taborn, Chief of Police, Metro Transit Police Department. This ongoing IA includes review, assessment, and auditing of security and the Security and Emergency Preparedness Plan (SEPP). Every IA performed at WMATA since June 2010, includes auditing of system security and the SEPP.

Washington Metropolitan Area Transit Authority The TOC also revised its Program Standards as of January 2011. To ensure a more accurate portrayal of the current practice, the SEPP was rewritten to meet the new TOC Program Standards and address current practices.

Findings of the Internal Audit

- 1. WMATA Policy and Instruction, P/I #1.11/1 Procedures for Inter-Departmental Notification of Incidents, dated June 30, 2003, was outdated and needed to be revised. The MTPD TOC liaison will ensure that revisions to this document are accomplished in collaboration with responsible WMATA offices. The office responsible for originally writing this P/I is no longer in existence due to organizational changes. A delay in the response to this update may be necessary to determine the lead WMATA office.
 - MTPD issued numbered memorandum #10-66, Command Notifications, to address this issue. A copy of the memorandum was provided to TOC in December 2010.
- 2. MTPD General Order 405 Communications, dated April 25, 2001, is outdated and should reflect the current Command Notifications protocols.
 - MTPD is currently updating this General Order and should be completed by March 2011.
- 3. MTPD Numbered Memorandum #10-02 Command Notifications, dated January 21, 2010, should update the TOC notification incident list as set forth in the TOC Program Standards & Procedures.
 - MTPD issued memorandum #10-66, Command Notifications, to address this issue. A copy of the memorandum was provided to TOC in December 2010.
- 4. The current MTPD General Order 365 *Major Incident Scenes*, dated August 15, 2001, should be updated to reflect current response protocols. In regard to protocols for emergency response procedures, the team recommended that the MTPD General Order 340, *Active Shooter*, dated September 29, 2010, be added and the National Incident Management System (NIMS) 400 updated.
 - MTPD is currently updating this General Order and should be completed by March 2011.
- The Metro Emergency Response Training (MERT) should be added to the training that supports the SEPP related activities table.
 - This element has been included in the current update of the SEPP.

- 6. Develop a standardized After Action Report (AAR) form to properly document exercises and incidents. This would enable the Department to convert the AAR's into CAP's that can be tracked through implementation.
 - MTPD provided TOC with a copy of the current AAR in December 2010. Several offices of the MTPD are working together to update the AAR. The MTPD is updating General Order 365, Major Incident Scenes, requiring AAR's be completed after any "hot wash" of major incidents.

2011 Internal Audit Schedule

Please refer to the TOC letter of August 19, 2010, which approved the IA recovery plan, and subsequent revisions of the audit schedule. The most recent audit schedule is included in the annual report.

2010 Security Internal Audit

In May of 2010, MTPD performed an internal audit of the SEPP. The checklist and corrective actions are attached.

Metro Transit Police Department Security and Emergency Preparedness Plan (SEPP) Internal Audit Checklist

Part I

Position
MTPD
MTPD
MTPD
MTPD
SAFE
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Date TOC notified of Internal Audit: March 4, 2010

Date Audit Completed: April 7, 2010

#	CHECKLIST ITEM	SEPP Requirements Does the SEPP contain or provide for the following:	INCLUDED Yes No	Page Ref.	COMMENTS
3.1	Responsibility for Mission Statement	 Identification of the person(s) responsible for establishing transit system security and emergency preparedness policy and for developing and approving the SEPP. 			
3.2	Management of the SEPP Program	 Identification of the person(s) with overall responsibility for transit security and emergency preparedness policy and for developing and approving the SEPP. 			
3.3	Division of Security Responsibility	Listing of SEPP-related responsibilities of the personnel who work within the transit agency security/police function.			

Metro Transit Police Department Security and Emergency Preparedness Plan (SEPP) Internal Audit Checklist

#	CHECKLIST	SEPP Requirements	INCLUDED	Page	COMMENTS
	ITEM	Does the SEPP contain or provide for the following:	Yes No	Ref.	
3.3	Division of	Listing of the security-related responsibilities of			
	Security (continued)	other (non-security/police) rail transit agency			
	(continued)	employees, including their relationship to the employees other duties.			
		A SEPP Program Roles and Responsibility Matrix			
		should be developed showing interfaces with other			
		transit system departments/functions and the key reports or actions required.			
		The responsibilities of external agencies for			
		supporting SEPP development and implementation			
		should be identified.			
		The committees developed by the rail transit agency			
		to address security issues should be identified.			
4.1	Planning	 Identification of SEPP activities and programs in 			
		place at the rail transit agency to support planning			
12		for system security and emergency preparedness.			
4.2	Organization	Identification of the organization of SEPP-related activities and programs and the ability to coordinate			
		with external response agencies.			
4.3	Equipment	Description of the equipment used to support			
		implementation of the SEPP program.			
4.4	Training and	Description of the SEPP-related training and			
	Procedures	procedures available to ensure employee			
1.5	Evensions and	proficiency.	 		
4.5	Exercises and Evaluations	Description of SEPP-related activities to ensure the conduct of emergency exercises and evaluation			
1	Evaluations	conduct of emergency exercises and evaluation			

Metro Transit Police Department

Security and Emergency Preparedness Plan (SEPP)
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Additional Information pertinent to the Internal Audit:

Part II

MTPD Internal Audit Corrective Action Form

CAP NUMBER	DESCRIPTION	WMATA DEPARTMENT AND PERSON RESPONSIBLE	EXPECTED COMPLETION DATE	ACTUAL COMPLETION DATE	TOC VERIFICATION
1	Procedures for Inter-Departmental Notification of Incidents" P/I Number 1.1111, dated 6-30-2003 were outdated and needed to be revised. The MTPD TOC liaison will ensure that MTPD works with the other responsible WMATA offices in sending updated procedures and assist in the revision of this document. The office responsible for originally writing this PI1 is no longer in existence due to recent WMATA organizational changes, therefore there may be a delay in the response to this update since WMATA will have to identify a new office to take the lead in the revision	WMATA Unknown MTPD Sgt. N. McKee	November 2010	MTPD has addressed this in Memo #10-66, which addresses how MTPD notifies other external agencies. This CAP is now closed. June 2, 2010.	
2	MTPD General Order 405 – Communications was outdated (dated 4/25/01) and should reflect the current Command Notification Protocols	MTPD Sgt. N. McKee	MTPD requests extension to March 31, 2011. This General Order is currently being revised		
3	MTPD Memorandum #10-02 —Command Notifications, (dated January 21,2010) should update the TOC notification incident list as set forth in the TOC Program	MTPD Sgt. N. McKee	August 2010	June 2, 2010	
4	The current MTPD General Order 365 - Major Incident Scenes should be updated to reflect current response protocols. In regards to protocols for emergency response procedures, the team recommended that the Active Shooter General Order be added and the NIMS 400 update.	MTPD Sgl. N. McKee	MTPD requests extension to March 31, 2011. This General Order is currently being revised.		

Metro Transit Police Department Security and Emergency Preparedness Plan (SEPP) Internal Audit Checklist

5	Recommended that a list of equipment carried by members assigned to the Special Operations Division be added under a separate section. Recommended that a write-up of the Chemical Detector Sensors be included to include their locations.	MTPD Sgt. N. McKee	January 1, 2011 (Yearly update of the SEPP)	January 1, 2011	
6	The MERT Training should be added to the training that supports the SEPP Related Activities table.	MTPD Sgt. N. McKee	January 1, 2011(Yearly update of the SEPP)	January 1,2011	
7	Determined that a standardized After Action Report form needed to be developed to properly document exercises and incidents. This would enable the Department to convert the After Action Reports into Corrective Action plans that are tracked through implementation.	MTPD Sgt. N. McKee OEM T. Jones	MTPD requests extension to March 31, 2011. This General Order is currently being revised.		

ATTACHMENT 2: WMATA INTERNAL SAFETY AND SECURITY AUDIT SCHEDULE – OCTOBER 2010 THROUGH SEPTEMBER 2013

WMATA Internal Safety Audit Schedule* Performance Period: October 1, 2010 through September 30, 2013

Year 1 – October 2010 – September 2011		
Quarter	Audit Areas	
1 (Oct, Nov, Dec)	IT, Rail Transportation, OCC	
2 (Jan, Feb, March)	Public Relations/Public Information	
3 (April, May, June)	Procurement/Materials	
4 (July, Aug, Sep)	Fare Collection, Customer Service	

Year 2 – October 2011 – September 2012		
Quarter	Audit Areas	
1 (Oct, Nov, Dec)	Rail Scheduling/Planning, Training	
2 (Jan, Feb, March)	Engineering, Station & Systems Planning	
3 (April, May, June)	Facilities/Plant Maintenance	
4 (July, Aug, Sep)	Elevator & Escalator, MTPD, Emergency	
	Management	

Year 3 – October 2012 – September 2013		
Quarter	Audit Areas	
1 (Oct, Nov, Dec)	TSSM (ATC/Signals, Communications)	
2 (Jan, Feb, March)	TSSM (MOW/Power)	
3 (April, May, June)	Railcar Maintenance	
4 (July, Aug, Sep)	QA & Warranty, Drug and Alcohol	

^{*}Please note that this schedule includes auditing all SSPP and SEPP elements by Department to reduce the burden placed on WMATA's departments to participate in multiple audits throughout the three year schedule.