QICO 2019
QUARTER 1 REVIEWS

Washington Metropolitan Area Transit Authority
WMATA

May 17, 2019

Engineering & Maintenance

1. Metrorail Vehicle Engineering Change Management
2. Metro Storeroom Truck Inventory

Service Delivery

3. Metro Non-Revenue Vehicle Utilization

Safety

4. Metrorail Vehicle Program Services
5. Metro Materials Management

TABLE OF CONTENTS

WHAT WE DO

one QICO
IMPROVE | OVERSEE | ASSURE | M

What is QICO?

The Office of Quality Assurance, Internal Compliance & Oversight (QICO) is an internal management function that partners with other departments to provide an objective review. Authorized by the General Manager as outlined in the Quality Management System Plan (QMSP).

Why QICO Performed These Reviews?

These internal reviews are intended to provide Metro senior management with an assessment of the following areas:

- Non-Revenue Vehicles Utilization
- Vehicle Program Services Change Management and Safety Program
- Storeroom Truck Inventory and Materials Management Safety Program

QICO's Methodology:

- Develop relevant review activities by identifying and assessing risks to policies, procedures & standards, quality & compliance, and traceability.
- Review documentation, observe processes and interview key personnel.
- Review findings and required actions are rated based on level of risk, which ranges on a scale from "Insignificant" to "High"

Note: An itemized internal Corrective and Preventive Action (iCAPA) is developed for each required action to achieve effective and measurable resolution of identified concerns. To check the status of iCAPA implementation go to: wmata.com/initiatives/transparency/.

WHAT WE FOUND | CYQ1. INTERNAL QUALITY & SAFETY REVIEWS
May 2019

Engineering & Maintenance

1. Metrorail Vehicle Engineering Change Management

Wins:
- ✓ Rail car performance trends are actively monitored to identify opportunities to improve fleet reliability.
- ✓ A department-level change control board has been established to coordinate implementation efforts among affected stakeholders.
- ✓ A cross-functional review board has been established to evaluate engineering requests for suitability.

Action Areas Identified During Review:
- Implementation of quality control measures is vital to promote outcomes at the expected quality level.
- A standardized approach to technical document revisions due to engineering changes is critical to an effective change control program.

2. Metro Storeroom Truck Inventory

Wins:
- ✓ Two (2) storeroom locations are utilizing a transfer log to receiving satellite storeroom, providing efficiency and traceability.

Items Resolved During Review:
- ✪ Eight (8) of 10 storerooms adjusted a total of 108 "Truck" Inventory items after February 1, 2019.

Action Areas Identified During Review:
- Generation of a documented process that defines all steps for transferring material from storeroom to storeroom.
- Creation of a documented process that depicts truck driver acknowledgement of the material and corresponding paperwork.
- Development of a documented inventory discrepancy reconciliation process for the effective inventory management of parts and materials.

Service Delivery

3. Metro Non-Revenue Vehicles Utilization

Wins:
- ✓ SVMT and STIN proactively collaborated on drafting a revised policy tackling numerous areas of improvement identified during this review.

Items Resolved within the New Policy:
- ✪ The requirement to perform pre-trip inspections is crucial for safe and reliable operation of non-revenue vehicles.
- ✪ Instructions pertaining to recordkeeping specific to the Vehicle Justification Forms is essential for effective traceability.
- ✪ A documented process is essential to promptly notify SVMT of any vehicle re-assignment or re-allocation.
- ✪ Several departments could not provide records of the quarterly physical inventory check of their assigned non-revenue vehicles.
- ✪ A written policy is necessary to govern the management and usage of toll road transponder devices.

Action Areas Identified During Review:
- The utilization of the policy's standardized data collection forms is essential for data completeness and accuracy.
- Management review of detailed trip logs is essential to ensure data completeness and accuracy.

Internal Safety Review

4. Metrorail Program Services

Action Areas Identified During Review:
- Maintaining a training and certification program for employees and contractors is necessary to maintain competency level.
- Regular attendance by required personnel at all mandatory safety committee meetings is essential to promote a culture of safety.
- Accurate and complete rail car safety certification records are essential for ensuring identified hazards have been mitigated.
- The implementation of a quality control program related to rulebook compliance is essential to maintain a safe working environment.

5. Metro Materials Management

Wins:
- ✓ SCMF partnered with SAFE to construct safe storage areas for compressed gases.
- ✓ All active SCMF warehouse and storeroom personnel completed training on safe operation of warehouse lift equipment.
- ✓ Prominent postings of safety information throughout SCMF warehouse and storerooms.

Items Resolved During Review:
- ✪ Posting current and accurate Safety Committee minutes and building evacuation plans on bulletin boards promote general safety awareness.

Action Areas Identified During Review:
- Revising SCES manual to include Acquisition, Storage and Handling of Flammable Chemicals and Hazard Communication Program.
- Creating a documented procedure to define the process for reporting incidents or accidents.
- Developing a documented procedure for handling hazardous materials during transport enhances the employee and material safety.

WHAT WE WILL DO MOVING FORWARD

Key Takeaways

1. *Established quality control measures are critical to preventing inconsistencies and unintended results during the process of implementing engineering modifications.*
   - Establish a quality control function and a documented procedure for updating technical documents upon the occurrence of engineering changes.
   - For details on committed action plans see the following iCAPAs: QICO-RVCM-19-01 and QICO-RVCM-19-02.

2. *The development of a SCMF Storeroom Transfer Standard Operating Procedure that includes the process of moving inventory from bin to "Truck" Inventory location ensures accountability and the accurate transfer of parts and materials.*
   - Establish a documented process for transferring materials between storerooms and the reconciliation of inventory discrepancies.
   - For details on committed action plans see the following iCAPAs: QICO-TRUC-19-01, and QICO-TRUC-19-02.

Key Takeaways

3. *Adherence to an effective non-revenue vehicle management policy is necessary to better allocate vehicles, minimize operation and maintenance costs, and improve overall reliability of the program.*
   - Rollout of the updated P/I, including training and awareness and the finalization of an electronic vehicle logon solution.
   - For details on committed action plans see the following iCAPAs: QICO-NRV-19-01 and QICO-NRV-19-02.

Key Takeaways

4. *Participation in safety committees, maintaining safety training certifications, and verifying rulebook adherence is essential to establishing a safety-first culture.*
   - Establish a review process to complete safety training, attend safety committees, ensure the presence of certificate of compliance before release of new rail cars, and establish rule book compliance quality control process.
   - For details on committed action plans see the following iCAPAs: QICO-CENV-19-01, QICO-CENV-19-02, QICO-CENV-19-03, and QICO-CENV-19-04.

5. *The availability of safety documented resources regarding storage, handling, and transportation of hazardous materials, as well as a documented process for accident and incident reporting establish clear safety guidelines and promote a safe working environment.*
   - Develop a process to address storage, handling and transportation of hazardous materials, and for reporting of incidents and accidents.
   - For details on committed action plans see the following iCAPAs: QICO-MATM-19-01, and QICO-MATN-19-02.

wmata.com/transparency

Page 3 of 103

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Washington Metropolitan Area Transit Authority

INTERNAL REVIEW 2019

Internal Review: Engineering & Maintenance
(1) Metrorail Vehicle Program Services Change Management

April 4, 2019

Quality Assurance, Internal Compliance & Oversight (QICO)

Promoting Transparency, Accountability, & Public Confidence

ENGINEERING & MAINTENANCE

SERVICE DELIVERY

CAPITAL PROGRAM – MANAGEMENT & EXECUTION

INTERNAL SAFETY REVIEW

What is QICO?

- The Office of Quality Assurance, Internal Compliance & Oversight (QICO) is an internal management function that partners with other departments to provide an objective review. Authorized by the General Manager as outlined in the Quality Management System Plan (QMSP).

Why QICO Performed This Review:

- This internal review is intended to provide Metro senior management with an assessment of the state of Vehicle Program Services change management process and promote the actions needed to address any concerns.

QICO's Methodology:

- Develop relevant review activities by identifying and assessing any risks to policies, procedures & standards, quality & compliance, and traceability.
- Review documentation, observe processes, and interview key personnel.
- Review findings and required actions are rated based on severity of risk, which ranges on a scale from "Insignificant" to "High".

(1) Metrorail Vehicle Program Services Change Management

Key Takeaway:
Established quality control measures are critical to preventing inconsistencies and unintended results during the process of implementing engineering modifications.

Wins:
✔ Rail car performance trends are actively monitored to identify opportunities to improve fleet reliability.
✔ A department-level change control board has been established to coordinate implementation efforts among affected stakeholders.
✔ A cross-functional review board has been established to evaluate engineering requests for suitability.

Areas for Improvement:
- Implementation of quality control measures throughout the change management process is vital to promote outcomes at the expected quality level.
- A standardized approach to discovering and executing technical document revisions due to the approval of engineering changes is critical to an effective change control program.

Supplementary Guidance:
- The absence of defined criteria for managerial review of engineering change documents leads to inconsistencies in the quality level of approved documentation.
- Policies, procedures, and standards must be reviewed in a timely manner to accurately reflect the current organizational structure, roles, and responsibilities.

Required Actions:
- QICO-RVCM-19-01: Establish a quality control group independent from CENV to oversee configuration change document approval and implementation of rail vehicle modifications.
- QICO-RVCM-19-02: Develop a documented process to identify and update the technical documents affected by the approval of engineering modifications.

Note: An itemized internal Corrective and Preventive Action (iCAPA) is developed for each required action to achieve effective and measurable resolution of identified concerns. To check the status of iCAPA implementation go to https://www.wmata.com/initiatives/transparency/

1.1. FUNCTIONAL OVERVIEW AND STRUCTURE

Metrorail Vehicle Program Services (CENV) Change Management

CENV is responsible for providing engineering services for Metrorail passenger vehicles and non-revenue roadway maintenance machines. Services are grouped in to three broad categories: Program Management, which oversees the lifecycle of new passenger rail vehicle acquisitions; Capital Improvement, leading initiatives to leverage new technologies for driving improvements within existing fleets; and Vehicle Engineering, responsible for providing technical support, facilitating configuration changes, and performing miscellaneous routine engineering tasks.
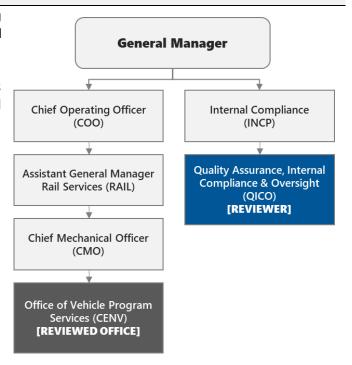
CENV works in concert with the Reliability Engineering and Performance Analysis (REPA) branch to develop and implement engineering initiatives based on statistical performance analysis as well as incorporating input from customers such as the Office of Car Maintenance (CMNT).

The objective of this review is to internally conduct a comprehensive assessment of CENV's approach to change management, encompassing the initiation, evaluation, approval, and implementation of configuration changes, including the effectiveness of methods employed to communicate such changes to stakeholders in a way that assures conformance to WMATA's policies, procedures, and standards established for the department to include any generated by CENV.

Organizational Structure and Background

Within WMATA, the office of CENV reports to the Chief Operating Officer (COO) through the Chief Mechanical Officer (CMO) and the Assistant General Manager of Rail Services.

As shown in the organization chart, QICO is independent of this function, reporting to the General Manager through Internal Compliance (INCP).

1.2. REVIEW SCOPE

Documentation Review

- Operations Administrative Policy (OAP) 105-01 Railcar Engineering Change Documents and Reference Documents, dated September 10. 2014
- CENV Standard Operating Procedure (SOP) 1 Engineering Modification Instructions, dated April 06, 2017
- Sampled three (3) random approved EMIs:
  o 150160: High Speed Coupler Locking Tab
  o 180486: KL Panel Wiring Modification
  o 140328: Replacement of Inter-car Barriers
- CENV SOP 2 Engineering Request (ER), dated October 05, 2016
- CENV ER workflow tracking report
- CENV SOP 3 Engineering Test Plan (ETP) & Engineering Test Report, dated January 07, 2019
- Sampled three (3) random approved ETPs:
  o 150113: High Speed Coupler Locking Tab
  o 180437: KL Panel Wiring Test Report
  o 140055: Replacement of Holding Brake Pressure Switch Assembly
- CENV SOP 4 Maintenance Service Instructions (MSI), dated January 10, 2019
- Sampled three (3) random approved MSIs:
  o 180302: Local Door Control Unit (LDCU Test Procedure)
  o 150066: High Speed Circuit Breaker (HSCB) Overhaul Procedure
  o 140014: Modification of the Collector Shoe Adjustment
- CENV SOP 5 Engineering Service Bulletin (SB), dated October 05, 2016
- Sampled three (3) random approved SBs:
  o SBB 608: Air Compressor Desiccant
  o SBE 121: High Speed Circuit Breaker Electromagnet Coil Replacement
  o SBF 072: Limited Use of the Environmental Control Circuit Breakers
- CENV SOP 7 Parts Action Form (PAF), dated January 05, 2017
- CENV SOP 8 Engineering Change Notice (ECN), dated January 24, 2017
- Sampled three (3) random approved ECNs:
  o 180001: Propulsion Contactor Maintenance
  o 150003: Collector Shoe Hardware
  o 140010: Brake Disc Hollow Wear Depth Limit
- CENV Technical Documents Change Log

Personnel Discussions

- CENV Deputy Chief
- CENV Assistant Managers
- CENV Project Manager
- CENV Specifications Writer
- CENV Senior Vehicle Engineer
- CENV Vehicle Engineer

1.3. WHAT WORKED WELL (WINS)

W-RVCM-19-01 Work Measurement	Reduces Service Delivery Risk	Owner – CENV

✓ **Rail car performance trends are actively monitored to identify opportunities to improve fleet reliability.**

Discussion

- Monthly meetings are held between CENV management and the Reliability Engineering and Performance Analysis (REPA) branch to discuss how to use the reliability trend analyses to reduce rail service interruptions caused by rail vehicle failures.
- Partnering with REPA has led to CENV gaining a better understanding of the nature of rail car propulsion inverter failure trends and tracking the results of mitigation strategies.
- These collaborative meetings mutually benefit REPA by providing a forum to glean additional technical expertise, resulting in improved context and more accuracy in reliability reports.

W-RVCM-19-02 Change Management	Reduces Strategic Risk	Owner – CENV

✓ **A department-level change control board has been established to coordinate implementation efforts among affected stakeholders.**

Discussion

- The Change Control Board (CCB) within CMO coordinates engineering configuration changes with all stakeholders such as Car Maintenance (CMNT) and Maintenance Planning (MPLN), to discuss roles and responsibilities before changes are approved.
- Due to the recent construction of this review board, a documented policy and procedure governing the activities of the CCB is still in development

W-RVCM-19-03 Change Management	Reduces Strategic Risk	Owner – CENV

✓ **A cross-functional review board has been established to evaluate engineering requests for suitability.**

Discussion
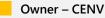
- The Engineering Change Review Board (ECRB) considers both positive outcomes and potential risks or hazards to the rail vehicles identified by board members.
- The Board consists of representatives from CENV management and staff, CMNT project management and superintendents, REPA management, ODCM (Overhaul / Documentation Control & Configuration Management) QICO, and ad-hoc invitees as required.
- The review board determines if an engineering configuration change is necessary to mitigate the potential risk and provides feedback to stakeholders.

F-RVCM-19-01	Quality Control	Service Delivery – **Elevated (4,4)**	🟨 Owner – CENV

- **Implementation of quality control measures throughout the change management process is vital to promote outcomes at the expected quality level.**

Discussion

- Through review of engineering change records and discussions with key CENV personnel, QICO learned there is no independent quality control function in place to oversee the implementation and monitor the workmanship of configuration change efforts.

- An independent quality control process would create a feedback loop to help assure configuration changes are implemented at the expected quality level, safely, and reliably.

- The absence of an independent quality control review of engineering change documentation creates an opportunity for unintended consequences to adversely affect the safety and reliability of WMATA's rail vehicle fleet.

F-RVCM-19-02	Document Control	Service Delivery – **Elevated (4,4)**	🟨 Owner – CENV

- **A standardized approach to discovering and executing technical document revisions due to the approval of engineering changes is critical to an effective change control program.**

Discussion

- Through review of engineering change records and discussions with CENV personnel, QICO learned there is no standardized approach to discovering how engineering changes will affect existing documents utilized by stakeholders.

- QICO identified instances where the approval of engineering documents required technical document changes that were not identified by the originating engineer, or the changes were simply not made. Examples:

  o EMI 140319 changed the ground brush part number, but the Illustrated Parts Catalog (IPC) was not updated.

  o EMI 140328 replaced the inter-car barrier design and function, but the IPC and operator's manual were not updated.

  o EMI 150151 replaced electrical contactors, but the IPC, Heavy Repair Maintenance Manual (HRMM), and Running Maintenance and Service Manual (RMSM) were not updated to reflect the change.

  o EMI 150175 changed the functionality of the crew key switch, but the HRMM, RMSM, electrical drawings, and operator's manuals were not updated to reflect the change.

  o EMI 180487 retrofit a door limit switch to a different model, but the IPC was not updated.

  o EMI 180491 bypassed the platform detection circuit, but the HRMM, RMSM, ATC manual, operator's manual, and related electrical drawings were not updated.

- CENV SOP 1 §3.2.1.7 requires the originating engineer to identify any technical document changes required and submit the revised pages within 60 days of the EMI being approved; however, there is no timeframe established for technical document changes to be implemented.

- The record for tracking outstanding technical document changes submitted to QICO contained multiple data fields missing information. Tracking the completion of technical document changes is critical to ensure maintenance groups have the most accurate information available in the field to reference.

- QICO observed a gap period between the dissolution of the former Technical Training and Document Control (TTDC) group, and the establishment of the Overhaul / Documentation Control and Configuration Management (ODCM) group where technical documents changes were not being implemented.

1.5. SUPPLEMENTARY GUIDANCE – QUALITY BUSINESS PRACTICES

During the course of its assessments, QICO oftentimes will observe additional elements, not relating to the parameters of its review, where opportunities for applying quality related standards, programs, and procedures will bring greater safety and efficiencies.

The following item(s) are not part of the reviewed governing documentation and will not be included into the official corrective action plans. Their inclusion herein is due to the belief by QICO that by being addressed and incorporated into its quality business practices, the department will experience an overall benefit.

G-RVCM-19-01 Quality Control	Will Reduce **Service Delivery Risk**	Owner – CENV

- **The absence of defined criteria for managerial review of engineering change documents leads to inconsistencies in the quality level of approved documentation.**

Discussion

- Through review of documentation and discussion with key personnel, it was learned that CENV managers do not have standardized criteria or checklists to use while performing engineering document review and approval.

G-RVCM-19-02 Work Standards	Will Reduce **Service Delivery Risk**	Owner – RAIL

- **Policies, procedures, and standards must be reviewed in a timely manner to accurately reflect the current organizational structure, roles, and responsibilities.**

Discussion

- OAP 105-01 Railcar Engineering Change Documents and Reference Documents, was due for review on September 10, 2016.
- Organizational elements do not exist as described (TIES, QAAW, and TTDC), and the responsibilities should be updated to reflect the current organizational structure.

1.6. SUMMARY OF REQUIRED ACTION

QICO-RVCM-19-01	**Action Owner – CMO**	Overall Risk – Elevated (4,4)

Required Action: Establish a quality control group independent from CENV to oversee configuration change document approval and implementation of rail vehicle modifications.

Applicable Findings

- F-RVCM-19-01: Implementation of quality control measures throughout the change management process is vital to promote outcomes at the expected quality level.
  - o **Measure:** Quality Control. **Risk:** Service Delivery – Elevated (4,4)

QICO-RVCM-19-02	**Action Owner – CENV**	Overall Risk – Elevated (4,4)

Required Action: Develop a documented process to identify and update the technical documents affected by the approval of engineering modifications.

Applicable Findings

- F-RVCM-19-02: A standardized approach to discovering and executing technical document revisions due to the approval of engineering changes is critical to an effective change control program.
  - o **Measure:** Document Control. **Risk:** Service Delivery – Elevated (4,4)

Internal Corrective and Preventive Actions (iCAPAs) are designated to address each Required Action listed above.

Internal Review: Engineering & Maintenance
(2) Metro Storeroom Truck Inventory

March 31, 2019

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

ENGINEERING &
MAINTENANCE

SERVICE
DELIVERY

CAPITAL PROGRAM –
MANAGEMENT
& EXECUTION

INTERNAL SAFETY
REVIEW

(2) Metro Storeroom Truck Inventory

What is QICO?
- The Office of Quality Assurance, Internal Compliance & Oversight (QICO) is an internal management function that partners with other departments to provide an objective review. Authorized by the General Manager as outlined in the Quality Management System Plan (QMSP).

Why QICO Performed This Review:
- This internal review is intended to provide Metro senior management with an assessment of the state of Metro's parts and material inventory storeroom transfer process, including "Truck" location transactions and promote the actions needed to address any concerns.

QICO's Methodology:
- Develop relevant review activities by identifying and assessing any risks to policies, procedures & standards, quality & compliance, and traceability.
- Review documentation, observe processes, and interview key personnel.
- Review findings and required actions are rated based on severity of risk, which ranges on a scale from "Insignificant" to "High".

Key Takeaway:
The development of a SCMF Storeroom Transfer Standard Operating Procedure that includes the process of moving inventory from bin to "Truck" Inventory location ensures accountability and the accurate transfer of parts and materials.

Wins:
- ✔ Two (2) storeroom locations are utilizing a transfer log to denote Purchase Order (PO), driver, and date of material transfer to receiving satellite storeroom. This adopted tracking initiative by these storerooms provides efficiency and traceability.

Items Resolved During the Review:
- ✪ Eight (8) of 10 storerooms adjusted a total of 108 "Truck" Inventory items after February 1, 2019 Kickoff Meeting.

Areas for Improvement:
- Generation of a documented process that defines all steps for transferring material from storeroom to storeroom will provide guidelines for traceability and accuracy of material transfers.
- Creation of a documented process that depicts truck driver acknowledgement of the material and corresponding paperwork delineating the items and destination of transfer will promote accountability.
- Development of a documented inventory discrepancy reconciliation process for the effective inventory management of parts and materials.

Supplementary Guidance:
- Recommend an update to the SCES Manual V4.3 Rev. 2018 to reflect the organizational change in effect as of February 7, 2019.

Required Actions:
- QICO-TRUC-19-01: Develop a Standard Operating Procedure (SOP) for all SCMF storeroom transfer activities to include: roles & responsibilities, Maximo material transfer steps, physical transfer steps, truck driver acknowledgement, records and quality control.
- QICO-TRUC-19-02: Develop a Standard Operating Procedure (SOP) that defines the process for the reconciliation of inventory discrepancies across all SCMF storerooms.

2.1. FUNCTIONAL OVERVIEW AND STRUCTURE

Supply Chain Management – Facilities and Warehousing (Metro Storeroom Truck Inventory)

The Office of Supply Chain Management – Facilities and Warehousing (SCMF) purpose is to maintain an inventory of supplies and materials to support the normal functions of administrative and maintenance personnel. Included in such inventory are materials for special projects, campaigns, and programs necessary for the effective, long-term operation of the Metro public transportation system.

SCMF is primarily responsible for the following:

- The receiving, transferring, stocking and issuing of materials required by the internal customers to complete necessary builds, rebuilds, repairs and/or maintenance.
- Completing cycle counts and making the necessary adjustments in the system to validate the inventory counts are accurate, which aid in the prevention of stock outs and reordering of material that is already on-hand.

During a storeroom transfer from a satellite storeroom (not the Metro Supply Facility), parts and materials are moved from their storeroom location to a temporary transfer location in Maximo identified as "Truck" before arriving at their next storeroom location.

The objective of the Storeroom "Truck" Inventory Internal Review was to perform a comprehensive assessment of all "Truck" inventory within the supply chain to determine the accuracy and availability of parts listed. This assessment resulted in the Maximo/physical status identification, reconciliation, and disposition of material in the "Truck" location as necessary.
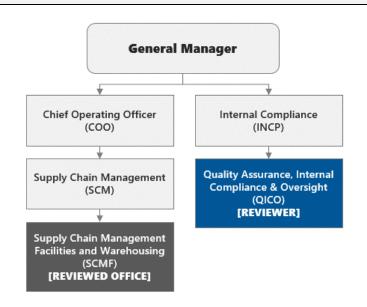
The review evaluated the Supply Chain Management – Facilities and Warehousing (SCMF) Department adherence to current business practices (Supply Chain Enterprises and Services Maintenance and Materials Policy and Procedures Manual v4.3 Rev.2018) regarding internal storeroom transfers by performing field assessments, documents and records reviews, and follow up discussions with key personnel.

The Storeroom "Truck" Inventory Internal Review evaluated all processes/procedures pertaining to the receiving, issuing, and transferring of parts between storerooms. The basis for this Internal Review originated from the 2017 Internal Review Follow up Assessments conducted in 2018 which found material residing in a Maximo location of "Truck". Maximo reports for "Truck" inventory were generated and analyzed including inventory information to determine quantity and location accuracy, Maximo transactions and accompanying documentation were reviewed for traceability and disposition. Field assessments were completed to locate the identified parts/materials currently being listed in as "Truck".

Organizational Structure and Background

Within WMATA, the department of Supply Chain Management – Facilities and Warehousing (SCMF) reports to Chief Operating Officer (COO) through the newly formed Department of Supply Chain Management (SCM). As shown in the organization chart, QICO is independent of this function, reporting to the General Manager through Internal Compliance (INCP). The scope of this internal review is limited to a review of SCMF.

On February 7, 2019, a memorandum was disseminated detailing an organizational change. The Department of Supply Chain Enterprise Services (SCES) is now Supply Change Management – Facilities and Warehousing (SCMF) (Reference: Reorganization: Supply Chain Management (SCM) 2019-007). SCES previously reported to the Office of Support Services (SSRV) under the Chief Operating Officer (COO).

2.2. REVIEW SCOPE

Documentation Review

- Supply Chain Enterprises and Services (SCES) Maintenance and Materials Policy and Procedure Manual V4.3 Rev.2018
- Maximo Report: Inventory Storeroom Report with Bin
- Maximo: Inventory (TR), Purchase Order (TR), Receiving (TR) and Item Master (TR)

Personnel Discussions

- SCMF Warehouse Manager
- SCMF Storeroom Supervisor (Storeroom 400)
- SCMF Storeroom Supervisor (Storerooms 252, 254 & 255)
- SCMF Storeroom Supervisor (Storerooms 320, 259, & 250)
- SCMF Storeroom Supervisor (Storerooms 251 & 253)
- SCMF Storeroom Supervisor (Storeroom 300)

2.3. WHAT WORKED WELL (WINS)

Wins are categorized by <u>Quality Measures</u> and rated according to <u>Risk Assessment</u>

W-TRUC-19-01	Assets and Activities	Reduces *Service Delivery* Risk	Owner – SCMF

✔ **Two (2) storeroom locations are utilizing a transfer log to denote Purchase Order (PO), driver, and date of material transfer to receiving satellite storeroom. This adopted tracking initiative by these storerooms provides efficiency and traceability.**

Discussion

- During an interview at Greenbelt and Shady Grove, Storeroom Supervisor stated that when receiving storeroom has not receipted material within two (2) days, they initiate a follow-up to locate the current status of transfer. When materials are received into a storeroom, the storeroom verifies the identity of the material and quantities to ensure they match the Purchase Order (PO). This process called receipting consists of entering these identities and quantities received in the appropriate line items of the PO.

- The driver acknowledgement log (Out Going Material Inventory Shipped Via Unit Truck) utilized provides traceability in resolving discrepancies between storerooms during material transfer. This process is undocumented but is considered good business practice.

2.4. ITEMS RESOLVED DURING REVIEW

Items resolved are categorized by <u>Quality Measures</u>

R-TRUC-19-01	Data Assurance	Owner – SCMF

✪ Eight (8) of 10 storerooms adjusted a total of 108 "Truck" Inventory items after February 1, 2019 Kickoff Meeting.

Discussion

- 105 of 108 items (97%) were adjusted after the kickoff meeting by transferring items back to their originating storerooms from the "Truck" Inventory location and subsequently reconciled through the count book.

F-TRUC-19-01	Work Standards	Service Delivery – Moderate (3,3)		Owner – SCMF
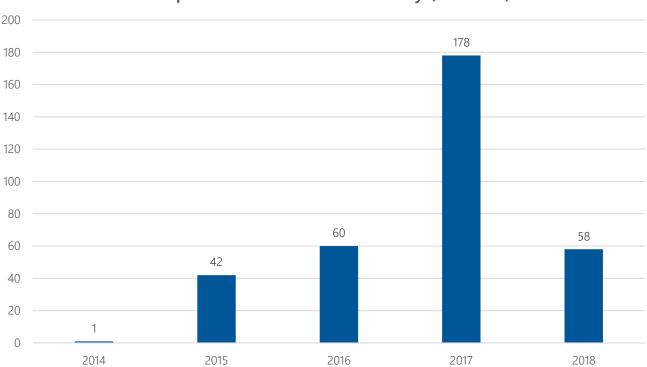
- **Generation of a documented process that defines all steps for transferring material from storeroom to storeroom will provide guidelines for traceability and accuracy of material transfers.**

Discussion

QICO's review of the "Truck" Inventory discovered a total of 339 items of which 284 had a total value of ▮▮▮▮▮▮▮. The remaining 55 items were valued at ▮▮▮▮▮▮▮▮▮. QICO performed an analysis of 112 of the 339 (33%) "Truck" Inventory to identify the validity and accuracy of material inventory. The validity and accuracy of parts and material inventory will assist in meeting scheduled maintenance activities which provides increased service reliability and fiscal responsibility.

- 0 of 112 (0%) items searched for in previous locations and staging area were found. QICO was unable to locate any of the 112 items identified in the "Truck" Inventory during its field assessments. The majority of these items were adjusted out of "Truck" Inventory locations back into their originating storeroom and subsequently adjusted through the count book (Reference: F-TRUC-19-01).

- There is no process outlined in the current SCES manual which defines the "Truck" Inventory transfer. Due to the lack of process, the 112 sampled parts have been allowed to be unaccounted for.

- Graph 1 displays the 339 items respective year when they were originally transacted into "Truck" Inventory. 78 of the 112 (70%) items assessed have been in the Truck location prior to 2018.

Graph 1: Items in Truck Inventory (Maximo)

Bar chart showing items in Truck Inventory by year: 2014 = 1, 2015 = 42, 2016 = 60, 2017 = 178, 2018 = 58.

- For more information on individual storeroom assessments, please refer to Appendix C: Maximo Analysis and Storeroom Assessments.

F-TRUC-19-02   **Work Standards**   Service Delivery – **Moderate (3,3)**   █ **Owner – SCMF**

- **Creation of a documented process that depicts truck driver acknowledgement of the material and corresponding paperwork delineating the items and destination of transfer will promote accountability.**

Discussion

QICO's review of 10 storerooms revealed that 8 of the storerooms do not utilize any method of driver acknowledgement of the accuracy of material loaded on the transfer truck. Supply chain includes the chain of custody material will take as it passes from location to location, person to person. Part of this chain of custody is the driver acknowledgement a Truck delivery driver assumes when material is taken from one storeroom and placed on their truck prior. Truck delivery is necessary for the accountability and traceability of material when resolving discrepancies between storerooms.

- There is no reference in the SCES Manual to the Out Going Material (Inventory) Shipped Via Unit Truck Log utilized by the two (2) storerooms. (Reference: W-TRUC-19-01)
- 2 of 10 (20%) storerooms assessed provided a record of driver acknowledgement identifying the material loaded on transfer truck along with corresponding paperwork. (Reference: Out Going Material (Inventory) Shipped Via Unit Truck August 2018).
- 8 of 10 (80%) storerooms do not utilize a driver log during transfer shipments from storeroom to storeroom.

F-TRUC-19-03   **Work Standards**   Service Delivery – **Moderate (3,3)**   █ **Owner – SCMF**

- **Development of a documented inventory discrepancy reconciliation process will instigate an effective inventory management of parts and materials.**

Discussion

QICO reviewed 112 items of the 339 total items in the "Truck" Inventory as of December 31, 2018 which equated to a 33% sample. QICO analyzed the 112 items in Maximo to identify their disposition in both the storeroom and Maximo. The following are the results of the analysis:

- There is no reconciliation process outlined in the SCES Manual. A reconciliation process is necessary to resolve inventory discrepancies and determine root cause for effective corrective action activities.
- 108 of 112 (96%) items were adjusted out of "Truck" Inventory locations back into their originating storeroom within the Maximo system. Four (4) items remained in the "Truck" Inventory but were not able to be found in their respective storeroom.
- 105 of 108 (97%) items were removed from WMATA's inventory through count book adjustment. Count book adjustment is a method used to write material out of the inventory and adjustment to the GL accounts, thus reconciling the inventory to reflect shrinkage. Shrinkage is defined as the difference between the accounting and actual amount of inventory.
- 3 of 108 (3%) items still reside in "Truck" Inventory location at the time of review. These items were unable to be located in their respective storerooms.
- 84 of 112 (75%) Purchase Orders reviewed had a Maximo status of closed without material being receipted. Purchase Orders are closed when the transaction has been made. By closing Purchase Orders without transferring material from "Truck" Inventory to the next location within Maximo, inventory counts will not be reflective of storeroom transfers.
- 17 of 112 (15%) Purchase Orders analyzed had a Maximo status of open but no material was receipted. Open Purchase Orders represent ongoing or active transactions. These 17 items regardless of the open Purchase Orders were transferred back to their originating storerooms.
- 11 of 112 (10%) Purchase Orders were canceled (5), had multiple Purchase Orders (3), or did not have an assigned Purchase Orders (3). When Purchase Orders are cancelled, if the material staged for shipment is not reconciled back to its originating location, the transactions inventory can remain unaccounted for or lost by not having a requirement for storeroom transfer.
-

2.6. SUPPLEMENTARY GUIDANCE – QUALITY BUSINESS PRACTICES

During the course of its assessments, QICO oftentimes will observe additional elements, not relating to the parameters of its review, where opportunities for applying quality related standards, programs, and procedures will bring greater safety and efficiencies.

The following item(s) are not part of the reviewed governing documentation and will not be included into the official corrective action plans. Their inclusion herein is due to the belief by QICO that by being addressed and incorporated into its quality business practices, the department will experience an overall benefit.

G-TRUC-19-01 Document Control	Will Reduce Strategic Risk Owner – SCMF

- **Recommend an update to the SCES Manual V4.3 Rev. 2018 to reflect the organizational change in effect as of February 7, 2019.**

Discussion

- On February 7, 2019, a memorandum was disseminated detailing an organizational change. The Department of Supply Chain Enterprise Services (SCES) is now Supply Change Management – Facilities and Warehousing (SCMF) (Reference: Reorganization: Supply Chain Management (SCM) 2019-007).

- SCES documentation has not been updated to reflect the organizational change.

- G-MATM-19-01 Supplementary Guidance represents the same guidance provided on Storeroom Truck Inventory Internal Review.

2.7. SUMMARY OF REQUIRED ACTIONS

| QICO-TRUC-19-01 | Action Owner – SCMF | Overall Risk **– Moderate (Average Score)** | |

- **Required Action:** Develop a Standard Operating Procedure for all SCMF storeroom transfer activities to include: roles & responsibilities, Maximo material transfer steps, physical transfer steps, truck driver acknowledgement, records, and quality control.

Applicable Findings

- F-TRUC-19-01: Generation of a documented process that defines all steps for transferring material from storeroom to storeroom will provide guidelines for traceability and accuracy of material transfers.
    - o **Measure:** Work Standards. **Risk:** Service Delivery – Moderate (3,3)
- F-TRUC-19-02: Creation of a documented process that depicts truck driver acknowledgement of the material and corresponding paperwork delineating the items and destination of transfer will promote accountability.
    - o **Measure:** Work Standards. **Risk:** Service Delivery – Moderate (3,3)

| QICO-TRUC-19-02 | Action Owner – SCMF | Overall Risk **– Moderate (Average Score)** | |

- **Required Action:** Develop a Standard Operating Procedure that defines the process for the reconciliation of inventory discrepancies across all SCMF storerooms.

Applicable Findings

- F-TRUC-19-03: Development of a documented inventory discrepancy reconciliation process for the effective inventory management of parts and materials.
    - o **Measure:** Work Standards. **Risk:** Service Delivery – Moderate (3,3)

Internal Corrective and Preventive Actions (iCAPAs) are designated to address each Required Action listed above.

Washington Metropolitan Area Transit Authority

INTERNAL REVIEW 2019

Internal Review: Service Delivery
(3) Metro Non-Revenue Vehicle Utilization

March 20, 2019

Quality Assurance, Internal Compliance & Oversight (QICO)

Promoting Transparency, Accountability, & Public Confidence

ENGINEERING & MAINTENANCE

SERVICE DELIVERY

CAPITAL PROGRAM – MANAGEMENT & EXECUTION

INTERNAL SAFETY REVIEW

(3) Metro Non-Revenue Vehicle Utilization

What is QICO?
- The Office of Quality Assurance, Internal Compliance & Oversight (QICO) is an internal management function that partners with other departments to provide an objective review. Authorized by the General Manager as outlined in the [Quality Management System Plan (QMSP)](#).

Why QICO Performed This Review:
- This internal review is intended to provide Metro senior management with an assessment of the Non-Revenue Vehicles Utilization process and promote the actions needed to address any concerns.

QICO's Methodology:
- Develop relevant review activities by identifying and assessing any risks to policies, procedures & standards, quality & compliance, and traceability.
- Review documentation, observe processes, and interview key personnel.
- Review findings and required actions are rated based on severity of risk, which ranges on a scale from "Insignificant" to "High".

Key Takeaway:
Adherence to an effective non-revenue vehicle (NRV) management policy is necessary to better allocate vehicles, minimize operation and maintenance costs, and improve overall reliability of the program.

Wins:
- ✔ The Office of Service Vehicle Maintenance (SVMT) and Chief Operating Officer (COO), including Strategic Initiatives (STIN), proactively collaborated on drafting a revised policy on Non-Revenue Fleet Management and Use (P/I 1.9/8) that tackled numerous areas of improvement identified during this review.

Items resolved within the new policy:
- ✪ The requirement to perform pre-trip inspections is crucial for safe and reliable operation of NRVs.
- ✪ The current policy on Management and Utilization of WMATA Non-Revenue Vehicles (P/I 1.9/7) does not provide instructions on record keeping specific to the Vehicle Justification Forms - Attachment 1.
- ✪ A documented process is essential to promptly notify SVMT of any vehicle re-assignment or re-allocation.
- ✪ Several departments could not provide records of the quarterly physical inventory check of their assigned NRVs, as required by the current policy (P/I 1.9/7).
- ✪ A written policy is necessary to govern the management and usage of toll road transponder devices.

Areas for Improvement:
- The utilization of the policy's standardized data collection forms is essential for data completeness and accuracy.
- Management review of detailed trip logs is essential to ensure data completeness and accuracy.

Required Actions:
- **QICO-NRV-19-01:** Authority-wide training/awareness on the new Non-Revenue Fleet Management and Use policy (P/I 1.9/8) is important to promote compliance. (Overall Risk – Moderate)
- **QICO-NRV-19-02:** Development of a driver login solution to capture the drivers' information and trip details for NRV utilization. (Overall Risk – Moderate)

Note: An itemized internal Corrective and Preventive Action (iCAPA) is developed for each required action to achieve effective and measurable resolution of identified concerns. To check the status of iCAPA implementation go to https://www.wmata.com/initiatives/transparency/

3.1. FUNCTIONAL OVERVIEW AND STRUCTURE

Metro Non-Revenue Vehicles Utilization

WMATA operates and maintains a fleet of non-revenue vehicles (NRV) that consists of 1,498 light, medium, and heavy-duty service vehicles. The NRVs are an integral part of the operation functions for the safety and security of the Metrobus and Metrorail System. The vehicle requirements are based on various functions of WMATA departments and the result is a relatively large fleet of NRVs to fulfill the Transit Authority's mission.

It is the responsibility of the Service Vehicle Maintenance (SVMT) office to manage and maintain NRVs to the highest standard of safety, reliability, sustainability, fit, and function, in a cost-effective manner. Vehicles which are leased are maintained by third-party entities, through a service contract set up with the respective WMATA department that operates the vehicle.

The operators of NRVs are responsible for operating the vehicles in a safe manner, complying with all applicable traffic laws, and in accordance with all WMATA procedures concerning vehicle operations as noted in Policy Instruction (P/I) 1.9/7.

The following depicts some, but not all, of the various service vehicles owned, leased, and operated by WMATA:
- Sedans
- Police cars & motorcycles
- Scout vehicles
- Sport utility vehicles
- Passenger vans
- Pickup trucks
- Panel vans
- Cube trucks
- Utility trucks
- High cube trucks
- Heavy-duty vehicles
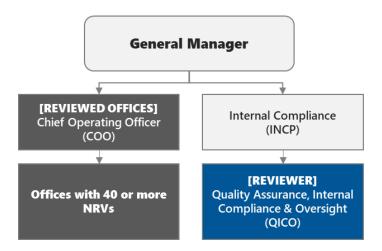
Also assessed during this internal review are practices associated with the assignment and usage of ████████ transponder devices. ████████ is an electronic toll collection system used on most tolled roads, bridges, and tunnels. WMATA uses ████ transponders mounted to vehicles to pay tolls when traveling to and from the Dulles Corridor Metrorail project locations in Virginia. Currently there is no policy addressing the assignment and utilization of ████████ devices.

Organizational Structure and Background

QICO conducted a comprehensive review and assessment of the utilization of non-revenue vehicles at WMATA. This review assessed the effectiveness of the existing policy to ensure NRVs are being properly managed, promoting the efficient control of all registered WMATA NRVs.

This Non-Revenue Vehicles Utilization Internal Review evaluated vehicle allocations of various offices, highlighting areas that may need improvement, in an effort to drive changes that would mitigate the risks resulting from any possible deficiencies.

To methodically perform this internal review and provide an adequate amount of data to be delivered to our stakeholders, QICO assessed only those offices with 40 or more NRVs. This resulted in assessing eleven (11) offices, encompassing 74% of the total NRVs available at WMATA.

The groups assessed are listed as follows:
- Office of Automatic Train Control Maintenance (ATCM)
- Office of Bus Maintenance (BMNT)
- Office of Bus Transportation (BTRA)
- Chief Mechanical Officer (CMOR) - Office of Car Maintenance (CMNT) and Office of Vehicle Program Services (CENV)
- Office of Elevators and Escalators (ELES)
- Office of Infrastructure Renewal Program (IRPG)
- Office of Plant Maintenance (PLNT)
- Office of Rail Transportation (RTRA)
- Office of Systems Maintenance (SMNT)
- Office of Traction Power Maintenance (TRPM)
- Office of Track and Structures (TRST)

Assigned the task of creating a new Non-Revenue Fleet Management and Use policy is the Strategic Initiatives (STIN) team, which reports directly to the Chief Operating Officer (COO).

QICO is independent of this function, reporting to the General Manager through Internal Compliance (INCP).

3.2. REVIEW SCOPE

Documentation Review

- Policy/Instruction (P/I): 1.9/7 Management and Utilization of WMATA Non-Revenue Vehicles, dated October 13, 2016
- Policy/Instruction (P/I): 1.9/8 Non-Revenue Fleet Management and Use, DRAFT as of February 12, 2019
- Policy/Instruction (P/I): 2.7/0 ████████ Policy and Instructions, DRAFT as of January 29, 2019

- Roster of all WMATA Non-Revenue vehicles, provided by SVMT as of January 17, 2019

- Quarterly physical inventory from the departments assessed (8 out of 11): ATCM, BMNT, BTRA, CMOR, ELES, RTRA, TRPM and TRST

- Sample of Vehicle Utilization and Detail Trip Log records (P/I 1.9/7; 068-00-1310) from each assessed department, for the months of December 2018 and January 2019, chosen randomly.

Office	Vehicles	Office	Vehicles	Office	Vehicles
ATCM	███████████ ███████████ ████	BMNT	███████████ ███████████	BTRA	███████████ ███████████
CMOR	███████████ ███████████ ████	ELES	███████████ ███████████	IRPG	███████████ ████
PLNT	███████████ ███████████ ████	RTRA	███████████ ███████████	SMNT	███████████ ███████████
TRPM	███████████ ███████████ ████	TRST	███████████		

- Sample of Non-Revenue Vehicle, Vehicle Justification Forms (P/I 1.9/7; Attachment 1) from each assessed department, chosen randomly.

Office	Vehicles	Office	Vehicles	Office	Vehicles
ATCM	███████████ ███████████	BMNT	███████████ ███████████ ████	BTRA	███████████ ███████████
CMOR	Records unavailable	ELES	Records unavailable	IRPG	Records unavailable
PLNT	███████████ ████	RTRA	███████████ ████	SMNT	████
TRPM	████	TRST	████		

- Sample of Non-Revenue Take Home Vehicle Utilization Records (P/I 1.9/7; Attachment 2) from each assessed department, for the months of December 2018 and January 2019, chosen randomly.

Office	Vehicles	Office	Vehicles	Office	Vehicles
ATCM	███████████ ███████████	BMNT	Records unavailable	BTRA	███████████ ███████████
CMOR	███████████ ███████████ ████	ELES	███████████ ███████████ ████	IRPG	████
PLNT	███████████	RTRA	███████████	SMNT	███████████
TRPM	Records unavailable	TRST	████		

Personnel Discussions

- ATCM Shop Supervisor
- BMNT Managing Director
- BTRA Superintendent Service Operations
- BTRA Supervisor Transit Field Operations
- CMOR Project Coordinator
- ELES Compliance Manager
- ELES Manager Admin Service
- ELES Project Coordinator
- DECO Program Manager
- DECO/IRPG Senior Program Manager

- DECO/IRPG Senior Program Manager
- PLNT Assistant Director
- PLNT Special Projects Manager
- RTRA Manager Operation Support
- RTRA Inventory Specialist
- SMNT Assistant General Superintendent
- SVMT Director
- TRPM Superintendent
- TRST Assistant Director

3.3. WHAT WORKED WELL (WINS)

Wins are categorized by Quality Measures and rated according to Risk Assessment

W-NRV-19-01	Document Control	Reduces Service Delivery Risk	Owner – SVMT/STIN

✓ **SVMT and STIN proactively collaborated on drafting a revised policy on Non-Revenue Fleet Management and Use (P/I 1.9/8) that tackled numerous areas of improvement identified during this review.**

Discussion

- During the internal review, SVMT and the Strategic Initiatives (STIN) team were able to promptly resolve five (5) out of seven (7) Areas of Improvement within the new policy.

3.4. ITEMS RESOLVED WITHIN THE NEW POLICY

Items resolved are categorized by Quality Measures

R-NRV-19-01 **Quality Control** **Owner – SVMT/STIN**

✪ **The requirement to perform pre-trip inspections is crucial for safe and reliable operation of the NRVs.**

Discussion

- The current policy (P/I 1.9/7) does not include requirements to perform a pre-trip inspection of non-revenue vehicles before being operated.
- The new Non-Revenue Fleet Management and Use policy, (P/I 1.9/8), section 5.09, "Day-to-day NRV maintenance", (a) requires NRV operators to perform a pre-trip inspection following all instructions in attachment B "Pre-Trip Inspection and Safety Reference Checklist".

R-NRV-19-02 **Document Control** **Owner – SVMT/STIN**

✪ **The current policy on Management and Utilization of WMATA Non-Revenue Vehicles (P/I 1.9/7) does not provide instructions on record keeping specific to the Vehicle Justification Forms - Attachment 1.**

Discussion

- Current policy (P/I 1.9/7) does not outline record management process for Vehicle Justification Forms (P/I 1.9/7); Attachment 1.
- Multiple departments were unable to supply Vehicle Justification Forms (P/I 1.9/7; Attachment 1) to fulfill QICO's document request.
- The new Non-Revenue Fleet Management and Use policy, (P/I 1.9/8) outlines record management process for Vehicle Justification Forms (P/I 1.9/7); Attachment 1.

R-NRV-19-03 **Work Standards** **Owner – SVMT/STIN**

✪ **A documented process is essential to promptly notify SVMT of any vehicle re-assignment or re-allocation.**

Discussion

- Current policy (P/I 1.9/7) does not outline a specific process to timely communicate to SVMT any changes in vehicle location or operator reassignment.
- During discussion with SVMT, it was noted that departments have the option to report re-assignments and/or re-allocations through email, by telephone or the SVMT intranet link "Update Vehicle & Equipment Asset (PTR)".
- The new Non-Revenue Fleet Management and Use policy, (P/I 1.9/8) will include the instructions on how to report vehicle re-assignments and re-allocating.

R-NRV-19-04 **Quality Control** **Owner – SVMT/STIN**

✪ **Several departments could not provide records of the quarterly physical inventory check of their assigned NRVs, as required by the current policy (P/I 1.9/7).**

Discussion

- Three (3) out of eleven (11) departments assessed were not able to provide a quarterly physical inventory.
- Seven (7) out of eleven (11) departments submitted for review incomplete quarterly physical inventories.
- During QICO's document request process it was discovered that multiple vehicle allocations or assignments were not up-to-date with the SVMT vehicle inventory roster.
- As a result of SVMT managing vehicle inventory to track vehicle records and maintenance, it has caused several departments to deviate from the policy requirement of managing their own in-house inventory.
- During discussion with COO's Strategic Initiatives team, it was noted that all departments will have access to a dashboard which will allow them to monitor the following: vehicle count, vehicle utilization summary for a three (3) month period, traffic citations summary, preventative maintenance inspections (PMIs) due that given month and vehicles that are 500 miles to PMI, and DC inspections due.

R-NRV-19-05	Work Standards		Owner – SVMT/STIN

⊛ **A written policy is necessary to govern the management and usage of ▉▉▉▉ transponder devices.**

Discussion

- It was noted during discussions that offices utilize ▉▉▉▉ devices to report to incidents and/or activities related to WMATA daily operations including the Dulles Corridor Metrorail Project.
- Currently there is no governing policy for the assignment and utilization of ▉▉▉▉ transponder devices, nor is it included within the current policy for the management and utilization of NRVs, (P/I 1.9/7).
- The new Non-Revenue Fleet Management and Use policy, (P/I 1.9/8) will provide guidelines on the issuance of ▉▉▉▉ transponders for WMATA daily operations including the Dulles Corridor Metrorail Project.

3.5. AREAS FOR IMPROVEMENT

Findings are categorized by Quality Measures and rated according to Risk Assessment

F-NRV-19-01	Document Control	Service Delivery – **Moderate (3,4)**	🟨 Owner – SVMT/STIN

- The utilization of the policy's standardized data collection forms is essential for data completeness and accuracy.

Discussion

- ATCM, CMOR, ELES, IRPG, PLNT, RTRA, SMNT, TRPM and TRST are utilizing in-house custom forms to record details of their vehicles usage, deviating from the attached Detailed Trip Log form specified in the policy (P/I 1.9/7) - Management and Utilization of WMATA Non-Revenue Vehicles.
- ATCM, CMOR, ELES, IRPG, PLNT, RTRA, SMNT, TRPM and TRST, are inconsistent with recording all trip details.
- The amount of information collected varies between departments based on their in-house custom forms.
- The appointment and responsibilities of key personnel such as the Vehicle Control Officer (VCO) and Vehicle Monitor (VM) were not clearly identified.

F-NRV-19-02	Data Assurance	Service Delivery – **Moderate (3,3)**	🟨 Owner – SVMT/STIN

- Review of detailed trip logs is essential to ensure data completeness and accuracy.

Discussion

- During the review of vehicle detailed trip logs, QICO observed incomplete and/or inaccurate records.
- During discussions with stakeholders it was noted that incomplete or inaccurate trip log details create an accountability issue and lead to increased time spent to investigate vehicle accidents or traffic violations.
- Examples of incomplete trip log forms are as follows:
  - ▉▉▉▉ – missing vehicle information.
  - ▉▉▉▉ – mileage discrepancies Ex. (11/20/18 – 11/26/18), (12/19/18 – 12/28/18), (1/26/19 – 2/8/19).
  - ▉▉▉▉ – mileage discrepancies Ex. (12/11/18 – 12/12/18), (1/30/19 – 1/31/19).
  - ▉▉▉▉ – mileage discrepancies Ex. (12/15/18 – 12/17/18), (12/18/18 – 12/19/18).
  - ▉▉▉▉ – instances of information not recorded; missing vehicle information, stop time, mileage discrepancies and locations.
  - ▉▉▉▉ – instances of information not recorded; start and stop time, and mileage.

3.6. SUMMARY OF REQUIRED ACTIONS

QICO-NRV-19-01	Action Owner – SVMT/STIN	Overall Risk – **Moderate (Average Score)**	

Required Action: Authority wide training/awareness on the new Non-Revenue Fleet Management and Use policy (P/I 1.9/8) is important to promote compliance.

Applicable Findings

- F-NRV-19-01: The utilization of the policy's standardized data collection forms is essential for data completeness and accuracy.
  - o **Measure:** Document Control. **Risk:** Service Delivery – Risk Rating (3,4)

QICO-NRV-19-02	Action Owner – SVMT/STIN/IT	Overall Risk – **Moderate (Average Score)**	

Required Action: Development of a driver login solution to capture the drivers' information and trip details for NRV utilization.

Applicable Findings

- F-NRV-19-02: Review of detailed trip logs is essential to ensure data completeness and accuracy.
  - o **Measure:** Data Assurance. **Risk:** Service Delivery – Risk Rating (3,3)

Internal Corrective and Preventive Actions (iCAPAs) are designated to address each Required Action listed above.

Washington Metropolitan Area Transit Authority

INTERNAL REVIEW 2019

Internal Review: Internal Safety Review
(4) Metrorail Vehicle Program Services

March 13, 2019

Quality Assurance, Internal Compliance & Oversight (QICO)

Promoting Transparency, Accountability, & Public Confidence

ENGINEERING &
MAINTENANCE

SERVICE
DELIVERY

CAPITAL PROGRAM –
MANAGEMENT
& EXECUTION

INTERNAL SAFETY
REVIEW

(4) Metrorail Vehicle Program Services

What is QICO?

- The Office of Quality Assurance, Internal Compliance & Oversight (QICO) is an internal management function that partners with other departments to provide an objective review. Authorized by the General Manager as outlined in the Quality Management System Plan (QMSP).

Why QICO Performed This Review:

- This internal safety review is intended to provide Metro senior management with an assessment of the state of Vehicle Program Services compliance to WMATAs System Safety Program Plan (SSPP) and promote the actions needed to address any concerns.

QICO's Methodology:

- Develop relevant review activities by identifying and assessing any risks to policies, procedures & standards, quality & compliance, and traceability.
- Review documentation, observe processes, and interview key personnel.
- Review findings and required actions are rated based on severity of risk, which ranges on a scale from "Insignificant" to "High".

Key Takeaway:

Participation in safety committees, maintaining safety training certifications, and verifying safety rulebook adherence from all employees is essential to establishing a safety-first culture.

Areas for Improvement:

- Maintaining a training and certification program for employees and contractors is necessary to maintain the competency level of employees.
- Regular attendance by required personnel at all mandatory safety committee meetings is essential to promote a culture of safety.
- Accurate and complete rail car safety certification records are essential for ensuring identified hazards have been mitigated.
- The implementation of a quality control program related to rulebook compliance is essential to maintain a safe working environment.

Required Actions:

- QICO-CENV-19-01: Develop a documented process to record and audit required safety training and certifications of employees and contractors.
- QICO-CENV-19-02: Determine how each work group will provide representation to attend designated local safety committee monthly meetings and establish a consistent presence at the monthly SCRC meetings.
- QICO-CENV-19-03: Develop a documented process to determine which document approval signatures are required and implement a method to record any revisions to the document approval signature page. Establish a method of verifying rail vehicle safety certifications are completed prior to releasing vehicles into service.
- QICO-CENV-19-04: Develop a documented quality control process to verify rulebook compliance.

Note: An itemized internal Corrective and Preventive Action (iCAPA) is developed for each required action to achieve effective and measurable resolution of identified concerns. To check the status of iCAPA implementation go to https://www.wmata.com/initiatives/transparency/

4.1. FUNCTIONAL OVERVIEW AND STRUCTURE

Metrorail Vehicle Program Services (CENV)

CENV is committed to proactive problem solving, and continuous improvement by providing engineering solutions for all WMATA's rail vehicle fleets. CENV promotes partnerships with the Reliability Engineering and Performance Analysis (REPA) branch to develop and implement engineering initiatives based on statistical performance analysis as well as incorporating input from stakeholders such as the Office of Car Maintenance (CMNT). CENV demonstrates their commitment to the safety and reliability of our system through continuous open communication with stakeholders.

The objective of the CENV Internal Safety Review (ISR) is to internally validate that routine operations, system extensions, new projects, rehabilitated facilities, systems, and equipment under the purview of CENV are as safe as reasonably possible per WMATA's System Safety Program Plan (SSPP). The SSPP is an authority-wide safety plan created by the Department of Safety & Environmental Management (SAFE) in accordance with Federal Transit Administration (FTA) guidelines (49 CFR 659), and details WMATA's approach to satisfying the 21 required elements for system safety. Of these 21 elements, 8 elements were found applicable to CENV. This includes processes for hazard identification and management, rules and regulations compliance, and employee training. The 8 elements reviewed were as follows:
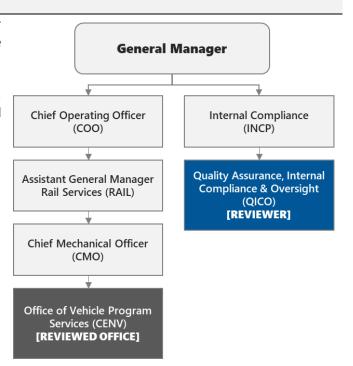
- Hazard Management (Element 6)
- System Modification (Element 7)
- Safety Certification (Element 8)
- Safety Data Acquisition (Element 9)
- Rules and Procedures Compliance (Element 13)
- Training Certification Review/Audit (Element 16)
- Configuration Management and Control (Element 17)*
- Drug and Alcohol Program (Element 20)

This element was reviewed in depth through the CENV Change Management Internal Review

Organizational Structure and Background

Within WMATA, CENV reports to the Chief Operating Officer (COO) through the Chief Mechanical Officer (CMO) and the Assistant General Manager of Rail Services.

As shown in the organization chart, QICO is independent of this function, reporting to the General Manager through Internal Compliance (INCP).

4.2. REVIEW SCOPE

Documentation Review

- WMATA System Safety Program Plan, January 2018
- Safety & Security Certification Plan (SSCP), 2015
- WMATA Policy/Instruction (P/I) Manual
- WM7-U-8057 Rev D ▮▮▮▮▮▮▮▮ Project Specific Safety & Security Certification Management Plan
- Greenbelt Local Safety Committee (LSC) sign-in logs for the months of October, November, and December 2018.
- Greenbelt LSC meeting agenda, minutes, and action logs for the months of October, November, and December 2018.
- Safety & Security Certification Review Committee (SCRC) meeting agendas, minutes, and action logs for May 2018, August 2018, and November 2018.
- Records indicating review and approval of Quarterly Hazard Tracking Logs (HTL) for the ▮▮▮▮▮▮▮▮ program from CY18Q1, CY18Q2, CY18Q3, and CY18Q4 per ▮▮▮▮▮▮ Safety and Security Certification Management Plan.
- Records indicating written certification from major equipment suppliers ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ method of integrating supplier equipment is satisfactory per Kawasaki Safety and Security Certification Management Plan.
- Signed Certificates of Compliance (COC) for thirty (30) conditionally accepted ▮▮▮▮▮▮ rail cars (▮▮▮▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮).
- RWP training records for ten (10) randomly selected active (per ▮▮▮▮▮▮▮▮▮) CENV contractors.

Personnel Discussions

- CENV Deputy Chief
- CENV Assistant Managers
- CENV Project Manager
- CENV Specifications Writer
- CENV Senior Vehicle Engineer
- CENV Vehicle Engineer

4.3. AREAS FOR IMPROVEMENT

Findings are categorized by Quality Measures and rated according to Risk Assessment

---

F-CENV-19-01   Safety Training & Certification   Safety – **Moderate (3,3)**   ▢ **Owner – CENV**

- **Maintaining a training and certification program for employees and contractors is necessary to maintain the competency level of employees.**

Discussion

- Through discussions with CENV managers, it was learned that CENV does not have a process to provide for periodic reviews of training records to ensure all required safety training and certifications are complete and up to date per SSPP element 16.1.
- Roadway Worker Protection (RWP) is an authority wide safety training certification program conducted by Technical Skills Maintenance Training (TSMT). RWP includes training for, and annual competency assessments of, Metro employees and contractors with the established safety protocols and requirements while performing activities on Metro's roadway.
- Training records for ten randomly selected contractors assigned to CENV revealed expired or missing RWP certifications for four individuals (40%), as follows:
    - o Two contractors were scheduled for recertification in August and October 2018, respectively, but were listed as "no show" in records.
    - o Records for two additional contractors reflect no RWP training was completed.

F-CENV-19-02   Assets & Activities   Safety – **Moderate (3,3)**   ▢ **Owner – CENV**

- **Regular attendance by required personnel at all mandatory safety committee meetings is essential to promote a culture of safety.**

Discussion

- Safety and Security Certification Review Committee (SCRC) meeting minutes for the months of May, August, and November 2018 indicate that neither the Chief Engineer of Vehicle Program Services nor a designee attended the August and November meetings as required by Policy/Instruction 10.2/4 Safety Committees §3.03.
- Review of Greenbelt LSC meeting minutes from the months of October, November, and December 2018 show that one vehicle engineer regularly attends, but this does not "reflect the make-up of the work group in terms of management and non-management representation" per Policy/Instruction 10.2/4 Safety Committees §5.10.

F-CENV-19-03   Document Control   Safety – **Moderate (3,3)**   ▢ **Owner – CENV**

- **Accurate and complete rail car safety certification records are essential for ensuring identified hazards have been mitigated.**

Discussion

- Certificates of Compliance (COC) are required per the SSCMP for the ▮▮▮▮▮▮ program. COCs certify that hazards and vulnerabilities have been identified, assessed, and mitigated, and that systems and equipment have been inspected to ensure conformance with specifications and design criteria.
- QICO requested a random sample of thirty COCs for in-service ▮▮▮▮▮▮ rail cars. CENV provided COCs for twenty-six rail cars, leaving 13% non-compliant. The cars with missing COCs were ▮▮▮▮▮▮▮▮▮▮▮▮▮.
- Supplemental document requests found that an additional twenty-eight in-service rail cars were missing COCs.
- Multiple versions of the COC signature approval form were provided to QICO. The approval form did not exhibit a revision control number or revision log. Most of the forms did not match the designated template from the SSCMP.
- Missing or incomplete COCs may not necessarily indicate validation tasks were not completed, but may represent gaps in documentation management and control.

- The implementation of a quality control program related to rulebook compliance is essential to maintain a safe working environment.

Discussion

- Per the Policy/Instruction 1.15/0 Rule Book Management, all offices with employees subject to the Metrorail Safety Rules and Procedures Handbook are required to develop a documented quality control program to ensure compliance to rules and procedures. This program must include compliance checks, corrective actions, analysis, and record-keeping requirements.

- CENV was unable to provide records indicating rulebook compliance quality control checks are performed as per WMATA SSPP element 13.5.

- Per record review and discussions with key personnel, no documented quality control program for safety requirements were evident as required by Policy/Instruction 1.15/0 Rule Book Management §5.08.

- CENV personnel may be subject to safety hazards while conducting field work. The implementation of a rulebook compliance quality control program would reinforce the safety awareness of the employees.

4.4. SUMMARY OF REQUIRED ACTIONS

QICO-CENV-19-01	Action Owner – CENV	Overall Risk – Moderate (3,3)

Required Action: Develop a documented process to record and audit required safety training and certifications of employees and contractors.

Applicable Findings

- F-CENV-19-01: Maintaining a training and certification program for employees and contractors is necessary to maintain the competency level of employees.
  - o **Measure:** Safety Training & Certification **Risk:** Safety – Moderate (3,3)

QICO-CENV-19-02	Action Owner – CENV	Overall Risk – Moderate (3,3)

Required Action: Determine how each work group will provide representation to attend designated local safety committee monthly meetings and establish a consistent presence at the monthly SCRC meetings.

Applicable Findings

- F-CENV-19-02: Regular attendance by required personnel at all mandatory safety committee meetings is essential to promote a culture of safety.
  - o **Measure:** Assets and Activities **Risk:** Safety – Moderate (3,3)

QICO-CENV-19-03	Action Owner – CENV	Overall Risk – Moderate (3,3)

Required Action: Develop a documented process to determine which document approval signatures are required and implement a method to record any revisions to the document approval signature page. Establish a method of verifying rail vehicle safety certifications are completed prior to releasing vehicles into service.

Applicable Findings

- F-CENV-19-03: Accurate and complete rail car safety certification records are essential for ensuring identified hazards have mitigated.
  - o **Measure:** Document Control **Risk:** Safety – Moderate (3,3)

QICO-CENV-19-04	Action Owner – CENV	Overall Risk – Moderate (3,3)

Required Action: Develop a documented quality control process to verify rulebook compliance.

Applicable Findings

- F-CENV-19-04: The implementation of a quality control program related to rulebook compliance is essential to maintain a safe working environment.
  - o **Measure:** Safety Training & Certification **Risk:** Safety – Moderate (3,3)

Internal Corrective and Preventive Actions (iCAPAs) are designated to address each Required Action listed above.

Washington Metropolitan Area Transit Authority

INTERNAL REVIEW 2019

Internal Review: Internal Safety Review

(5) Metro Materials Management

March 31, 2019

Quality Assurance, Internal Compliance & Oversight (QICO)

Promoting Transparency, Accountability, & Public Confidence

ENGINEERING & MAINTENANCE

SERVICE DELIVERY

CAPITAL PROGRAM – MANAGEMENT & EXECUTION

INTERNAL SAFETY REVIEW

(5) Metro Materials Management

What is QICO?
- The Office of Quality Assurance, Internal Compliance & Oversight (QICO) is an internal management function that partners with other departments to provide an objective review. Authorized by the General Manager as outlined in the Quality Management System Plan (QMSP).

Why QICO Performed This Review:
- This internal safety review is intended to provide Metro senior management with an assessment of the state of Supply Chain Management -Warehousing and Facilities (SCMF) compliance to WMATAs System Safety Program Plan (SSPP) and promote the actions needed to address any concerns.

QICO's Methodology:
- Develop relevant review activities in accordance with the SSPP to include identifying and assessing any risks to policies, procedures & standards, quality & compliance, and traceability.
- Review documentation, observe processes, and interview key personnel.
- Review findings and required actions are rated based on severity of risk, which ranges on a scale from "Insignificant" to "High".

Key Takeaway:
The availability of safety documented resources regarding storage, handling, and transportation of hazardous materials, as well as a documented process for accident and incident reporting establish clear safety guidelines and promote a safe working environment.

Wins:
- ✓ SCMF partnered with the department of SAFE to construct safe storage areas for compressed gases in response to Tri State Oversight Committee (TOC) audit, promoting a safe working environment.
- ✓ Although it is not required, 100% of all active SCMF warehouse and storeroom personnel completed training on safe operation of warehouse lift equipment maintaining the competency of all employees.
- ✓ Prominent postings of safety information throughout SCMF warehouse and storerooms promote employee Right to Know and general safety awareness.

Items Resolved During the Review:
- ✪ Posting current and accurate Safety Committee minutes and building evacuation plans on bulletin boards promote general safety awareness and create a safe working environment for everyone.

Areas for Improvement:
- Revising Supply Chain Enterprises and Services (SCES) manual to include Acquisition, Storage and Handling of Flammable Chemicals and Hazard Communication Program promotes a safe work environment.
- Creating a documented procedure to define the process for reporting incidents or accidents creates traceability, lessons learned, and promotes a safer environment.
- Developing a documented procedure for handling hazardous materials during transport enhances the employee and material safety.

Supplementary Guidance:
- Recommend an update to the SCES Manual V4.3 Rev. 2018 to reflect the organizational change in effect as of February 7, 2019.
- Recommend procurement and usage of specialized lift equipment for the handling of large drums of hazardous materials.

Required Actions:
- QICO-MATM-19-01: Develop a documented process pertaining to storage, handling, and transportation of hazardous materials.
- QICO-MATM-19-02: Develop a documented process for accident/incident reporting.

Note: An itemized internal Corrective and Preventive Action (iCAPA) is developed for each required action to achieve effective and measurable resolution of identified concerns. To check the status of iCAPA implementation go to https://www.wmata.com/initiatives/transparency/

5.1. FUNCTIONAL OVERVIEW AND STRUCTURE

Metro Materials Management

The Office of Supply Chain Management – Facilities and Warehousing (SCMF) purpose is to maintain an inventory of supplies and materials to support the normal functions of administrative and maintenance personnel. Included in such inventory are materials for special projects, campaigns, and programs necessary for the effective long-term operation of the Metro public transportation system. The transition from SCES to SCMF has occurred during this Internal Safety Review (ISR). Functionality of the new department of SCMF remains the same as the previous SCES, but now includes materials and supplies management for:

- Storerooms and materials logistics for Bus
- Storerooms and materials logistics for Rail
- Materials and inventory planning
- Supply chain planning and analytics

The scope of this ISR is to assess the compliance of SCMF (formerly SCES) with the WMATA System Safety Program Plan (SSPP) regarding rail storerooms and materials' logistics. The SSPP is an authority wide safety plan created by the Department of Safety & Environmental Management (SAFE) in accordance with the Federal Transit Administration (FTA) guidelines (49 CFR 659) and contains the 21 specific elements for system safety and security. These elements were assessed and nine (9) elements were found applicable to the SCMF group. This includes processes for hazard identification and management, accident/ incident reporting, emergency management, rules and regulations compliance, and employee training. The nine (9) elements reviewed are as follows:
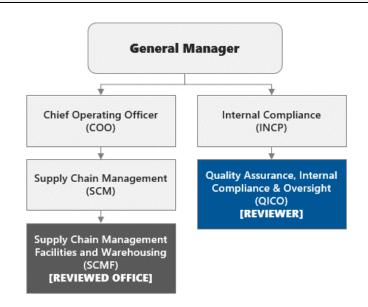
- Hazard Management (Element 6)
- Safety Data Acquisition (Element 9)
- Accident/Incident Notification, Investigation and Reporting (Element 10)
- Emergency Management (Element 11)
- Rules and Procedures Compliance and Review (Element 13)
- Training Certification Review/Audit (Element 16)
- Local, State, and Federal Regulations (Element 18)
- Hazardous Materials (Element 19)
- Procurement (Element 21)

QICO performed this Internal Safety Review by conducting document review supported with discussions with key personnel and site visits of three (3) storeroom facilities (Metro Supply Facility 400, Storeroom 251 ▮▮▮▮▮▮▮▮▮▮▮, and Storeroom 259 ▮▮▮▮▮▮▮▮▮▮▮▮▮▮).

Organizational Structure and Background

Within WMATA, SCMF reports to the Chief Operating Officer (COO) through the newly formed Department of Supply Chain Management (SCM). As shown in the organization chart, QICO is independent of this function, reporting to the General Manager through Internal Compliance (INCP). The scope of this ISR is limited to a review of SCMF.

On February 7, 2019, a memorandum was disseminated detailing an organizational change. SCES is now SCMF (Reference: Reorganization: Supply Chain Management (SCM) 2019-007). SCES previously reported to the Office of Support Services (SSRV) under COO.

5.2. REVIEW SCOPE

Documentation Review

- Supply Chain Enterprises and Services (SCES) Maintenance and Materials Policy and Procedure Manual V4.3 Rev.2018
- SCES Standard Operating Procedures (SOP)
- SCES Continuity of Operations Plan (COOP)-Annex
- SCES Employee Lift Truck Training Logs
- Accident/ Incident forms and reports
- Local Safety Committee (LSC) records
- Daily Safety Briefing (DSB) records
- Previous FTA, Tristate Oversight Committee (TOC), SAFE and QICO storeroom inspection or assessment reports, CAPS, and actions taken
- SCES internal storeroom inspection forms, reports, and follow up actions
- Fire drill and/ or evacuation drill records, MSF 400
- Metrorail Safety Rule Procedure Handbook (April 2011 with August 2018 updates)
- WMATA P/I Manual
- WMATA System Safety Program Plan (SSPP) (January 2018)

Personnel Discussions

- SCMF Director (Acting)
- SCMF Storeroom and Materials Logistics Coordinator
- SCMF Storeroom Supervisor
- SCMF Storeroom Supervisor
- SCMF Inventory Parts Specialist
- SCMF Storeroom Clerk
- SCMF Storeroom Clerk

5.3. WHAT WORKED WELL (WINS)

W-MATM-19-01	Regulations and Oversight	Reduces Safety Risk	Owner – SCMF

✓ **SCMF partnered with the department of SAFE to construct safe storage areas for compressed gases in response to Tri State Oversight Committee (TOC) audit, promoting a safe working environment.**

Discussion

- In January 2015, TOC published a report with findings from the former SCES for unsafe storage areas of compressed gas cylinders at all WMATA facilities (Corrective Action Plan (CAP) - *TOC-OSP-15-007*). In response, SCMF has partnered with the department of SAFE to have new storage areas constructed or installed at the rail yard facilities that meet OSHA and NFPA requirements. To date, this CAP remains open as SAFE continues to address the remainder of WMATA's facilities (i.e. Bus and PLNT facilities).

- This installation of compliant storage areas promotes a safe working environment for employees and helps prevent damage to inventory materials.

W-MATM-19-02	Job Safety	Reduces Safety Risk	Owner – SCMF

✓ **Although it is not required, 100% of all active SCMF warehouse and storeroom personnel completed training on safe operation of warehouse lift equipment maintaining the competency of all employees.**

Discussion

- SCMF provided a list of 122 warehouse and storeroom employees. 121 of 122 (99%) of the employees were trained for operation of warehouse lift equipment regardless of their job description. The one (1) employee not currently trained on operation of warehouse lift equipment has been out of the office on an extended absence (inactive).

- Maintaining a current training strategy ensures personnel are adequately qualified to perform their work competently and safely.

W-MATM-19-03	Occupational Safety & Health	Reduces Safety Risk	Owner – SCMF

✓ **Prominent postings of safety information throughout SCMF warehouse and storerooms promote employee Right to Know and general safety awareness.**

Discussion

- Field site visits were conducted at three (3) locations: MSF 400, Storeroom 251 (�) and Storeroom 259 (▬▬▬▬▬▬).

- Three (3) of three (3) (100%) of sites visited/assessed have signage, posters and notices clearly expressing safety tips and Employee's Right to Know information.

- Three (3) of three (3) (100%) of sites' personnel discussions displayed knowledge and abilities to access Safety Data Sheets (SDS) information for materials.

- Informative signage, postings, and SDS access foster general safety awareness and enhance the employees' "Right to Know" regarding hazardous materials.

Items resolved are categorized by Quality Measures

R-MATM-19-01 Occupational Safety & Health	Owner – SCMF

✪ **Posting current and accurate Safety Committee minutes and building evacuation plans on bulletin boards promote general safety awareness and create a safe working environment for everyone.**

Discussion

- Bulletin Boards at MSF 400 contained outdated notices, Local Safety Committee (LSC) minutes, and evacuation plans.

- QICO identified the outdated information to SCMF management on March 7, 2019. QICO followed up on March 14, 2019 and confirmed SCMF management had removed the notices and replaced them with current and accurate safety related information.

5.5. AREAS FOR IMPROVEMENT

Findings are categorized by Quality Measures and rated according to Risk Assessment

| F-MATM-19-01 | Policies, Procedures & Standards | Safety – **Moderate (3,3)** | 🟨 | Owner – SCMF |
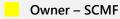
- **Revising Supply Chain Enterprises and Services (SCES) manual to include Acquisition, Storage and Handling of Flammable Chemicals and Hazard Communication Program promote a safe work environment.**

Discussion

- The SSPP requires the existence and compliance of departmental policies that outline the department' s safe work practices (Element 13 & 18).

- Within the SCES manual, references are made to documents for Acquisition, Storage and Handling of Flammable Chemicals and Hazard Communication Program. These references state to consult the Comptrollers Manual for actual documentation. The Comptrollers Manual was previously used within the Procurement (PRMT) group and is no longer valid (obsolete).

- Documentation or valid references are required to be compliant with the SSPP. A revised SCES Manual or the creation of supplemental documentation to fulfill this requirement is essential.

| F-MATM-19-02 | Policies, Procedures & Standards | Safety – **Moderate (3,3)** | 🟨 | Owner – SCMF |

- **Creating a documented procedure to define the process for reporting incidents or accidents creates traceability, lessons learned, and promotes a safer environment.**

Discussion

- The SSPP includes requirements to perform accident/ incident notification. While the department of SAFE conducts safety investigations, risk evaluations, and reporting to outside agencies, it is the responsibility of each department within WMATA to conduct the initial accident/ incident reporting to SAFE by way of the Safety Measurement System (SMS) (Element 10).

- QICO requested a year's worth of SCMF incident and accident records. SCMF supplied one (1) Incident report for review, dated 12/19/2018. This report is lacking information, such as: location of incident and signatures from the employee and the supervisor. QICO was given a copy of a system generated unsigned report. Therefore, QICO is unable to verify if previously submitted reports to Safety were signed.

- The SCES manual does not contain clear instructions for the process of reporting accidents or incidents. Documentation or valid references are required to be compliant with the SSPP. The SCES Manual must be revised or supplemental documentation created to fulfill this requirement.

| F-MATM-19-03 | Policies, Procedures & Standards | Safety – **Moderate (3,3)** | 🟨 | Owner – SCMF |

- **Developing a documented procedure for handling hazardous materials during transport enhances the employee and material safety.**

Discussion

- The SSPP includes requirements to address knowledge and handling of hazardous materials (Elements 13 and 19).

- Discussions with two (2) SCMF delivery drivers confirmed their knowledge and awareness of transporting hazardous materials. The drivers stated they do verify SDS information when unsure of any materials.

- The last Internal Safety & Security Review (ISSR) audit was conducted by SAFE on May 19, 2016. Area of Concern #10 was noted as "There was no SOP for transportation provided for moving hazardous materials from the main warehouse to the satellite warehouses that include driver responsibilities". (ISSR, May 19, 2016, Area of Concern #10)

- SCES has yet to create a procedure or work instruction to address Area of Concern #10 of the May 19, 2016 ISSR report.

5.6. SUPPLEMENTARY GUIDANCE – QUALITY BUSINESS PRACTICES

During the course of its assessments, QICO oftentimes will observe additional elements, not relating to the parameters of its review, where opportunities for applying quality related standards, programs, and procedures will bring greater safety and efficiencies.

The following item(s) are not part of the reviewed governing documentation and will not be included into the official corrective action plans. Their inclusion herein is due to the belief by QICO that by being addressed and incorporated into its quality business practices, the department will experience an overall benefit.

G-MATM-19-01	Document Control	Will Reduce Strategic Risk	Owner – SCMF

- **Recommend an update to the SCES Manual V4.3 Rev. 2018 to reflect the organizational change in effect as of February 7, 2019.**

Discussion

- On February 7, 2019, a memorandum was disseminated detailing an organizational change. SCES is now SCMF (Reference: Reorganization: Supply Chain Management (SCM) 2019-007).
- SCES documentation has not been updated to reflect the organizational change.

G-MATM-19-02	Job Safety	Will Reduce Safety Risk	Owner – SCMF

- **The acquisition and usage of specific material handling equipment when handling large containers (drums) of hazardous materials will reduce the risk of accidents.**

Discussion

- Discussions with warehouse and storeroom personnel indicated that the purchase and usage of material handling equipment specifically designed for moving 55-gallon drums would reduce the risk of accidental damage to materials or possibly to personnel.

5.7. SUMMARY OF REQUIRED ACTIONS

| QICO-MATM-19-01 | Action Owner – SCMF | Overall Risk – Moderate (3,3) | |

Required Action: Develop a documented process pertaining to storage, handling, and transportation of hazardous materials.

Applicable Findings

- F-MATM-19-01: Revising SCES manual to include Acquisition, Storage and Handling of Flammable Chemicals and Hazard Communication Program promotes a safe work environment.
    o **Measure:** Policies, Procedures & Standards **Risk:** Safety – Moderate (3,3)
- F-MATM-19-03: Developing a documented procedure for handling hazardous materials during transport enhances the employee and material safety.
    o **Measure:** Policies, Procedures & Standards **Risk:** Safety – Moderate (3,3)

| QICO-MATM-19-02 | Action Owner – SCMF | Overall Risk – Moderate (3,3) | |

Required Action: Develop a documented process for reporting safety incidents and accidents.

Applicable Findings

- F-MATM-19-02: Creating a documented procedure to define the process for reporting incidents or accidents creates traceability, lessons learned, and promotes a safer environment.
    o **Measure:** Policies, Procedures & Standards **Risk:** Safety – Moderate (3,3)

Internal Corrective and Preventive Actions (iCAPAs) are designated to address each Required Action listed above.

INTERNAL CORRECTIVE AND PREVENTATIVE ACTIONS (iCAPAs)

METRORAIL VEHICLE PROGRAM SERVICES CHANGE MANAGEMENT iCAPAs

Return to *Summary of Required Actions*

INTERNAL REVIEW

Service Delivery

In response to the internal review report regarding Vehicle Program Services (CENV) Change Management, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) has coordinated the development of two (2) iCAPA's. The iCAPA's have been developed to address required action and the associated finding(s).

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Internal Corrective and Preventive Action (iCAPA) Commitment

_____   5-2-2019
Joseph Leader   *Date*
Executive Vice President & Chief Operating Officer

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Internal Corrective and Preventive Action (iCAPA) Commitment

_____   5/2/2019
Hakim Davis   *Date*
Vice President, Quality Assurance, Internal Compliance & Oversight (QICO)

_____   5/6/19
Eric Christensen   *Date*
Executive Vice President, Internal Compliance (INCP)

_____   5/6/19
Paul J. Wiedefeld   *Date*
General Manager & Chief Executive Officer (GM/CEO)

Purpose and Scope

On April 4, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an Internal Review report regarding Vehicle Program Services (CENV) Change Management. This internal Corrective and Preventive Action (iCAPA) has been developed to address required action QICO-RVCM-19-01 and the associated finding(s).

Required Action

QICO-RVCM-19-01	*Action Owner - CMOR*	Elevated

Required Action(s): Establish a quality control group independent from CENV to oversee configuration change document approval and implementation of rail vehicle modifications.

- **F-RVCM-19-01:** Implementation of quality control measures throughout the change management process is vital to promote outcomes at the expected quality level.

Measure: *Quality Control*   Risk: *Service Delivery – Elevated (4,4)*

Action Plan Overview

The office of the CMO is in the process of implementing a plan to create a 'Budget and Compliance" department. One of the responsibilities of this department will be to oversee configuration changes, which coincides with the establishment of a quality control group, that is independent from CENV. CMOR is in the beginning stages of the hiring process for the Director of this department. The Director of Budget and Compliance, will in turn work to hire the required staff.

Business Impact – Budget/Cost Estimate

New/Expanded Initiative or Process – A new initiative needs to be created or a current process/procedure needs to be substantially expanded to address the Required Action(s). Additional resources will be required to address these initiatives.

- The salary for the Director of Budget and Compliance will be funded via the CMO operational budget. The funding source for subsequent staff will be identified by the Director, once hired. Associated funding years will begin in FY 2020 and will be continuously funded as this is an essential function of WMATA.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 49 of 103

Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1. Establish Budget & Compliance group	Establish an Independent Quality Control group to oversee Configuration Change. CMO will submit organizational structure and evidence of dedicated new Position Control Numbers (PCN) or staff augmentation to the Budget & Compliance group.	John Doherty CMO	04/11/19	10/14/20
2. QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	10/15/20	10/30/20

Performance Measures

- N/A

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 50 of 103

Responsible Parties[1]

CMO　　　　John Doherty　　　　　　　　　　　　　　　　　　　　　 4/30/19
　　　　　　　　　　　　　　　　　　　　　　　　　　(Signature/Date)

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019　　　　　　　　Quality Assurance, Internal Compliance & Oversight (QICO)
wmata.com/transparency　　　　　　　　　　　　　　　Promoting Transparency, Accountability, & Public Confidence

Page 51 of 103

Purpose and Scope

On April 4, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an Internal Review report regarding Vehicle Program Services (CENV) Change Management. This internal Corrective and Preventive Action (iCAPA) has been developed to address required action QICO-RVCM-19-02 and the associated finding(s).

Required Action

| QICO-RVCM-19-02 | *Action Owner - CENV* | Elevated |

Required Action(s): Develop a documented process to identify and update the technical documents affected by the approval of engineering modifications.

- **F-RVCM-19-02:** A standardized approach to discovering and executing technical document revisions due to the approval of engineering changes is critical to an effective change control program.

Measure: *Document Control*   Risk: *Service Delivery – Elevated (4,4)*

Action Plan Overview

Update current process to establish timeframe, tracking, and implementation of technical document changes.

Business Impact – Budget/Cost Estimate

Process Improvement – A current process/procedure needs to be optimized to address the Required Action(s). This type of initiative does not need additional resources because current manpower will be used to improve the process.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 52 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1.	Process Update	Update procedures for Engineering Modification Instruction (EMI), and Engineering Change Notice (ECN) to establish timeframe for technical document changes to be updated. CENV will submit updated procedures.	Stephen Baldassano (CENV)	04/15/19	06/05/19
2.	Process implementation	Implementation of the updated procedure as per item 1 above. This will include an update of current tracker to include completion dates and responsible engineer. CENV will submit a onetime static copy of the tracking spreadsheet for QICO review.	Stephen Baldassano (CENV)	10/02/19	10/07/20
3.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	10/08/20	10/31/20

Performance Measures

- Tracking spreadsheet indicating 95% of document updates completed within timeline established as per actionable item #1.

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 53 of 103

Responsible Parties[1]

CENV   Stephen Baldassano

(Signature/Date)

Second-Level Responsibility

CENV   Steven Fuhrman   4/30/2019

(Signature/Date)

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019   **Quality Assurance, Internal Compliance & Oversight (QICO)**
wmata.com/transparency   *Promoting Transparency, Accountability, & Public Confidence*

Page 54 of 103

METRO STOREROOM TRUCK INVENTORY iCAPAs

Return to

INTERNAL REVIEW

Service Delivery

In response to the internal review report regarding Storeroom Truck Inventory, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) has coordinated the development of two (2) iCAPA's. The iCAPA's outline the findings, recommendation and requirements to be addressed, and a detailed action plan outlining responsible parties and specific actionable items.

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Internal Corrective and Preventive Action (iCAPA) Commitment

_____   4/29/2019

Joseph Leader   *Date*
Executive Vice President & Chief Operating Officer

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Internal Corrective and Preventive Action (iCAPA) Commitment

_____   4/29/2019

Hakim Davis   *Date*
Vice President, Quality Assurance, Internal Compliance & Oversight (QICO)

_____   5/6/19

Eric Christensen   *Date*
Executive Vice President, Internal Compliance (INCP)

_____   5/6/19

Paul J. Wiedefeld   *Date*
General Manager & Chief Executive Officer (GM/CEO)

wmata.com/transparency   Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 56 of 103

Purpose and Scope

On March 14, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an internal review report regarding Storeroom Truck Inventory. This internal Corrective and Preventive Action (iCAPA) report is developed to address associated finding(s) and required action for **QICO-TRUC-19-01**.

Required Action

QICO-TRUC-19-01	*Action Owner - SCMF*	Moderate

Required Action(s): Develop a Standard Operating Procedure for all SCMF storeroom transfer activities to include: roles & responsibilities, Maximo material transfer steps, physical transfer steps, truck driver acknowledgement, records, and quality control.

- F-TRUC-19-01: Generation of a documented process that defines all steps for transferring material from storeroom to storeroom will provide guidelines for traceability and accuracy of material transfers.
  Measure: *Work Standards*   Risk: *Service Delivery – Moderate (3,3)*

- F-TRUC-19-02: Creation of a documented process that depicts truck driver acknowledgement of the material and corresponding paperwork delineating the items and destination of transfer will promote accountability.
  Measure: *Work Standards*   Risk: *Service Delivery – Moderate (3,3)*

Action Plan Overview

- SCMF will revise and update the current process for transferring materials between storerooms. These changes will allow
- SCMF to have more controls to include at a minimum; roles and responsibilities, Maximo transfer steps, physical transfer steps, truck driver acknowledgement, records and quality control.

Business Impact – Budget/Cost Estimate

Process Improvement – A current process/procedure needs to be optimized to address the Required Action(s). This type of initiative does not need additional resources because current manpower will be used to improve the process.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 57 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1.	Meeting with Storeroom Supervisors and Managers	Action(s): Revise the current process and map out the steps for the reconciliation of inventory discrepancies in SCMF storerooms. Deliverable(s): Meeting agenda, minutes and meeting roster will be submitted to QICO.	Myrna Guzman SCMF Nichole Williams SCMF	04/8/2019	04/09/19
2.	Develop SOP	Action(s): Creation of a new SOP in compliance with QICO assessment. The new process will include the steps for the reconciliation of inventory discrepancies, and a checklist to investigate potential issues. The new process will also be added in the Countbook procedure section in the SCFM manual. Deliverable(s): SCMF will provide QICO the approved and signed SOP.	Myrna Guzman SCMF	04/10/2019	06/30/19
3.	New SOP Staff Notice	Action(s): This phase will include communication with all SCMF storeroom personnel and Supervisors' training of the new process. Training will be provided by Courtney Chavis, Business System Analyst. Supervisors will provide awareness refresher training to the SCMF storeroom clerks. Refresher training will be provided to the clerks after the June Pick is done and during the Clerk induction meeting on July 2019. Deliverable(s): Staff Notice, meeting agenda, minutes and meeting roster will be submitted to QICO.	Myrna Guzman SCMF Courtney Chavis SCMF	07/1/2019	07/31/19

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 58 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
4.	Monitoring	Action(s): Storerooms Supervisors will ensure the process is followed during the 90 days implementation phase. The new SOP will include an additional line item for the monthly storeroom inspection. Deliverable(s): SCMF will submit monthly storeroom inspection records for the 90-day monitoring period.	Myrna Guzman SCMF	07/1/2019	09/30/19
5.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	10/1/2019	10/31/19

Performance Measures

- QICO will verify compliance for the three (3) consecutive monthly storeroom inspection records prior to closure of this QICO-TRUC-19-01.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 59 of 103

Responsible Parties[1]

SCMF	Myrna Guzman	███████████	4-4-19
		(Signature/Date)	
SCMF	Nichole Williams	███████████	4/4/19
		(Signature/Date)	
SCMF	Courtney Chavis	███████████	4-4-19
		(Signature/Date)	
SCMF	Gerald Verno	███████████	4-4-19
		(Signature/Date)	

Second-Level Responsibility

SCM	James Saenz	███████████	4/5/19
		(Signature/Date)	

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 60 of 103

Purpose and Scope

On March 14, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an internal review report regarding Storeroom Truck Inventory. This internal Corrective and Preventive Action (iCAPA) report is developed to address associated finding and required action for **QICO-TRUC-19-02**.

Required Action

QICO-TRUC-19-02	*Action Owner - SCMF*	Moderate

Required Action(s): Develop a Standard Operating Procedure that defines the process for the reconciliation of inventory discrepancies across all SCMF storerooms.

- F-TRUC-19-03: Development of a documented inventory discrepancy reconciliation process for the effective inventory management of parts and materials.

      Measure: *Work Standards*   Risk: *Service Delivery – Moderate (3,3)*

Action Plan Overview

- SCMF team will develop a process for the reconciliation of inventory discrepancies.
- SCMF will develop and utilize a check list for investigating inventory discrepancies. Inventory adjustment threshold authorization levels will be monitored for compliance.

Business Impact – Budget/Cost Estimate

Process Improvement – A current process/procedure needs to be optimized to address the Required Action(s). This type of initiative does not need additional resources because current manpower will be used to improve the process.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 61 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1.	Meeting with Storeroom Supervisors and Managers	Action(s): Revise the current process and map out the steps for the reconciliation of inventory discrepancies in SCMF storerooms. Deliverable(s): Meeting agenda, minutes and meeting roster will be submitted to QICO.	Myrna Guzman SCMF Nichole Williams SCMF	04/8/2019	04/09/19
2.	Develop SOP	Action(s): Creation of a new SOP in compliance with QICO assessment. The new process will include the steps for the reconciliation of inventory discrepancies, and a checklist to investigate potential issues. The new process will also be added in the Countbook procedure section in the SCFM manual. Deliverable(s): SCMF will provide QICO the approved and signed SOP.	Myrna Guzman SCMF	04/10/2019	06/30/19
3.	Issue SOP Staff Notice	Action(s): This phase will include communication with all SCMF storeroom personnel and Supervisors' training of the new process. Training will be provided by Courtney Chavis, Business System Analyst. Supervisors will provide awareness refresher training to the SCMF storeroom clerks. Refresher training will be provided to the clerks after the June Pick is done and during the Clerk induction meeting on July 2019. Deliverable(s): Staff Notice, meeting agenda, minutes and meeting roster will be submitted to QICO.	Myrna Guzman SCMF Courtney Chavis SCMF	07/1/2019	07/31/19
4.	Monitoring	Action(s): Storerooms Supervisors will ensure the process is followed during the 90 days implementation phase. The new SOP will include an additional line item for the monthly storeroom inspection. Deliverable(s): SCMF will submit monthly storeroom inspection records for the 90-day monitoring period.	Myrna Guzman SCMF	07/1/2019	09/30/19

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 62 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
5.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	10/1/2019	10/31/19

Performance Measures

- QICO will verify compliance for the three (3) consecutive monthly storeroom inspection records prior to closure of this QICO-TRUC-19-02.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 63 of 103

Responsible Parties[1]

SCMF	Myrna Guzman	████████ 4-4-19
		(Signature/Date)
SCMF	Nichole Williams	████████ 4/4/19
		(Signature/Date)
SCMF	Courtney Chavis	████████ 4-4-19
		(Signature/Date)
SCMF	Gerald Verno	████████ 4-4-19
		(Signature/Date)

Second-Level Responsibility

SCMF	James Saenz	████████ 4/5/19
		(Signature/Date)

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 64 of 103

METRO NON-REVENUE VEHICLES UTILIZATION iCAPAs

Return to *Summary of Required Actions*

INTERNAL REVIEW

Service Delivery

In response to the internal review report regarding Non-Revenue Vehicle Utilization, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) has coordinated the development of two (2) iCAPA's. The iCAPA's have been developed to address required action and the associated finding(s).

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Internal Corrective and Preventive Action (iCAPA) Commitment

_____   4/30/2019
Joseph Leader   Date
Executive Vice President & Chief Operating Officer

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Internal Corrective and Preventive Action (iCAPA) Commitment

_____   4/30/2019
Hakim Davis   Date
Vice President, Quality Assurance, Internal Compliance & Oversight (QICO)

_____   5/2/19
Eric Christensen   Date
Executive Vice President, Internal Compliance (INCP)

_____   5/2/19
Paul J. Wiedefeld   Date
General Manager & Chief Executive Officer (GM/CEO)

wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 66 of 103

Purpose and Scope

On March 20, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an Internal Review report regarding Non-Revenue Vehicle Utilization. This internal Corrective and Preventive Action (iCAPA) has been developed to address required action QICO-NRV-19-01 and the associated finding(s).

Required Action

QICO-NRV-19-01	*Action Owner(s) – SVMT / STIN*	Moderate

Required Action(s): Authority-wide training/awareness on the new Non-Revenue Fleet Management and use policy (P/I 1.9/8) is important to promote compliance.

- F-NRV-19-01: The utilization of the policy's standardized data collection forms is essential for data completeness and accuracy.

Measure: *Document Control*   Risk: *Service Delivery – Moderate (3,4)*

Action Plan Overview

As part of the new non-revenue fleet (NRF) policy roll-out, the Offices of Service Vehicles Maintenance (SVMT) and Strategic Initiatives (STIN) will brief senior leaders and Vehicle Monitors on major policy changes and each group's updated roles and responsibilities. SVMT, with support from STIN, will use current monthly meeting opportunities or host sessions for senior leaders and Vehicle Monitors, and assign Vehicle Monitors to share information with their respective offices' personnel. Finally, SVMT will include a compendium of all briefing materials on their MetroWeb page for future reference.

Business Impact – Budget/Cost Estimate

Process Improvement – A current process/procedure needs to be optimized to address the Required Action(s). This type of initiative does not need additional resources because current manpower will be used to improve the process.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency
Page 67 of 103

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1. Senior leadership awareness	Brief senior leadership—from COO Assistant General Managers to Executive Management Team—on major policy changes and leadership role/responsibilities at a spring/summer 2019 BudSTAT meeting, as well as the first "NRF Quarterly Call" in summer/fall 2019. Post briefing materials on SVMT website for future reference. To support these actions, SVMT will submit meeting materials and sign-in sheets.	Kevin Newman (SVMT) Laura Moeini[4] (STIN)	08/01/19	11/27/19
2. Vehicle Monitor briefings	Hold briefing sessions for all Vehicle Monitors (VMs) listed in Maximo in summer 2019 on major policy changes and VM roles/responsibilities. Post materials on SVMT website for future reference. To support these actions, SVMT will submit session materials and sign-in sheets.	Kevin Newman (SVMT) Laura Moeini[4] (STIN)	08/01/19	01/08/20
3. QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	01/09/20	02/05/20

Performance Measures
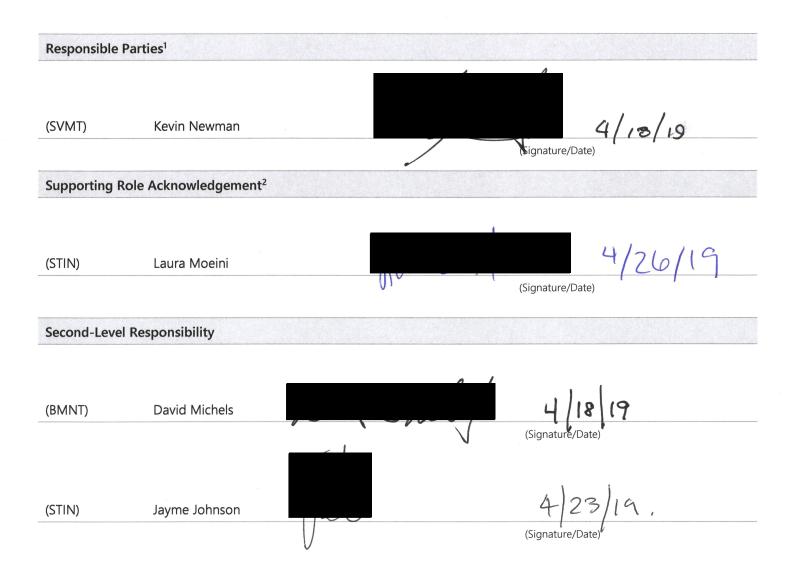
- 95% of active Vehicle Monitors (as listed on the date of the first session) have participated in a briefing session.

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

Responsible Parties[1]

(SVMT)   Kevin Newman   4/18/19
_____
                                                  (Signature/Date)

Supporting Role Acknowledgement[2]

(STIN)   Laura Moeini   4/26/19
_____
                                                  (Signature/Date)

Second-Level Responsibility

(BMNT)   David Michels   4/18/19
_____
                                                  (Signature/Date)

(STIN)   Jayme Johnson   4/23/19.
_____
                                                  (Signature/Date)

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

Purpose and Scope

On March 20, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an Internal Review report regarding Non-Revenue Vehicle Utilization. This internal Corrective and Preventive Action (iCAPA) has been developed to address required action QICO-NRV-19-02 and the associated finding(s).

Required Action

| QICO-NRV-19-02 | *Action Owner – SVMT / STIN / IT* | Moderate | |

Required Action(s): Development of a driver login solution to capture the drivers' information and trip details for NRV utilization.

- F-NRV-19-02: Review of detailed trip logs is essential to ensure data completeness and accuracy.

Measure: *Data Assurance*   Risk: *Service Delivery – Moderate (3,3)*

Action Plan Overview

The Office of Service Vehicle Maintenance (SVMT), with help from Strategic Initiatives (STIN), will focus on both short- and long-term solutions to improve non-revenue trip logging completeness and accuracy. In the short-term, SVMT will update the policy and release guidance documents to both 1) improve the paper trip logging process and 2) increase driver and Vehicle Monitor accountability with regards to logging trips. At the same time, SVMT will work long-term to implement vehicle tracking technology that allows easy driver sign-in with an electronic log-in device.

Business Impact – Budget/Cost Estimate

New/Expanded Initiative or Process – A new initiative needs to be created or a current process/procedure needs to be substantially expanded to address the Required Action(s). Additional resources will be required to address these initiatives.

SVMT estimates that will this initiative will cost ███████████ of up to ████████. The CIP has not been established.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Page 70 of 103

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

|	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1.	Improving manual trip logging (short-term)	Improve manual trip log process and clarify instructions in new policy attachment and announcement, both released summer/fall 2019. In both, establish and/or strengthen reporting requirements. To support these actions, SVMT will submit new policy on Non-Revenue Fleet Management and Use and related announcement.	Kevin Newman (SVMT) Laura Moeini[4] (STIN)	05/01/19	11/06/19
2.	Identify electronic login device (long-term)	Identify a sustainable long-term electronic login solution from current or another vendor. To support these actions, SVMT will collaborate with IT to submit a plan that includes viable options, cost info, and implementation schedule.	Kevin Newman (SVMT) Laura Moeini (STIN) Martin Barnes[4] (IT)	05/01/19	01/06/21
3.	Implementation of electronic driver login system	Install hardware or software systems in all non-revenue street vehicles and test functionality. SVMT will submit evidence of vehicles completed using Maximo data for this campaign.	Kevin Newman (SVMT)	01/06/21	06/02/21
4.	Release announcement	Release an announcement explaining the newly implemented electronic driver login system.	Laura Moeini (STIN)	04/07/21	06/31/21
5.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	06/03/21	06/30/21

Performance Measures

- SVMT will submit evidence of 90% completion of Maximo campaign as per actionable item #3.
- STIN will submit the announcement explaining the electronic driver login system per item #4.

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Page 71 of 103

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Responsible Parties[1]

(SVMT)	Kevin Newman	████████████████	4/18/19
			(Signature/Date)
(STIN)	Laura Moeini	████████████████	4/26/19
			(Signature/Date)

Supporting Role Acknowledgement[2]

(IT)	Martin Barnes	██████████████	4/15/19
			(Signature/Date)

Second-Level Responsibility

(BMNT)	David Michels	██████████████	4/18/19
			(Signature/Date)
(STIN)	Jayme Johnson	██████	4/23/19
			(Signature/Date)
(IT)	Roderic Allsopp	████████████	4/18/19
			(Signature/Date)

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Page 72 of 103

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

METRORAIL VEHICLE PROGRAM SERVICES iCAPAs

Service Delivery

In response to the internal safety review report regarding Vehicle Program Services (CENV), the Office of Quality Assurance, Internal Compliance & Oversight (QICO) has coordinated the development of four (4) iCAPA's. The iCAPA's have been developed to address required action QICO-CENV-19-01 and the associated finding(s).

INTERNAL REVIEW

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

_____   5-2-2019

Joseph Leader   _Date_
Executive Vice President & Chief Operating Officer

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Internal Corrective and Preventive Action (iCAPA) Commitment

_____   5/2/2019

Hakim Davis   _Date_
Vice President, Quality Assurance, Internal Compliance & Oversight (QICO)

_____   5/6/19

Eric Christensen   _Date_
Executive Vice President, Internal Compliance (INCP)

_____   5/6/19

Paul J. Wiedefeld   _Date_
General Manager & Chief Executive Officer (GM/CEO)

wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 74 of 103

Purpose and Scope

On April 4, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an Internal Safety Review report regarding Vehicle Program Services (CENV). This internal Corrective and Preventive Action (iCAPA) has been developed to address required action QICO-CENV-19-01 and the associated finding(s).

Required Action

QICO-CENV-19-01	*Action Owner - CENV*	Moderate

Required Action(s): Develop a documented process to record and audit required safety training and certifications of employees and contractors.

- F-CENV-19-01: Maintaining a training and certification program for employees and contractors is necessary to maintain the competency level of employees.

  Measure: *Safety Training & Certification*   Risk: *Safety – Moderate (3,3)*

Action Plan Overview

CENV will update mandatory training matrix and establish a defined review process for keeping safety training and certifications maintained for all assigned personnel.

Business Impact – Budget/Cost Estimate

Process Improvement – A current process/procedure needs to be optimized to address the Required Action(s). This type of initiative does not need additional resources because current manpower will be used to improve the process.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019   **Quality Assurance, Internal Compliance & Oversight (QICO)**
wmata.com/transparency   *Promoting Transparency, Accountability, & Public Confidence*

Page 75 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1.	Update training matrix	Review the current mandatory Safety Training profile to ensure the safety training matrix is current. CENV will submit updated mandatory Safety Training Matrix	Diane Holland (CENV)	04/29/19	07/03/19
2.	Establish review process for safety training and certifications	Establish a review process to ensure mandatory safety training and certifications of employees and contractors are maintained and up to date. CENV will submit newly created procedure or revision to existing procedure.	Diane Holland (CENV)	04/15/19	01/01/20
3.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	01/02/20	01/31/20

Performance Measures

- N/A

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

Responsible Parties[1]

CENV   Diane Holland   4/29/19

(Signature/Date)

Second-Level Responsibility

CENV   Anthony Johnson   4/29/19

(Signature/Date)

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 77 of 103

Purpose and Scope

On April 4, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an Internal Safety Review report regarding Vehicle Program Services (CENV). This internal Corrective and Preventive Action (iCAPA) has been developed to address required action QICO-CENV-19-02 and the associated finding(s).

Required Action

QICO-CENV-19-02	*Action Owner - CENV*	Moderate

Required Action(s): Determine how each work group will provide representation to attend designated local safety committee monthly meetings and establish a consistent presence at the monthly SCRC meetings.

- **F-CENV-19-02:** Regular attendance by required personnel at all mandatory safety committee meetings is essential to promote a culture of safety.

           Measure: *Assets & Activities*   Risk: *Safety – Moderate (3,3)*

Action Plan Overview

CENV will attend Safety Certification Review Committee (SCRC) meetings (either in person or via Conference Call) as required by Policy/Instruction 10.2/4. CENV will have management and non-management attendance at Local Safety Committee (LSC) meetings as required by Policy/Instruction 10.2/4. LSC meetings attendance will occur at maintenance yards with fulltime CENV representation.

Business Impact – Budget/Cost Estimate

Process Improvement – A current process/procedure needs to be optimized to address the Required Action(s). This type of initiative does not need additional resources because current manpower will be used to improve the process.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 78 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1.	Mandatory attendance of SCRC meetings	Chief, Vehicle Program Services or designee will attend all SCRC meetings either in person or via conference call. CENV will submit attendance documented from Meeting minutes or sign in sheets over a span of 90 days	Anthony Johnson CENV	05/01/19	07/31/19
2.	Mandatory and representative attendance of LSC meetings	LSC meetings will be attended by management and non-management at yards with CENV representation (Greenbelt and New Carrollton). CENV will submit attendance documented from Meeting minutes or sign in sheets over a span of 90 days	David Eisenhauer CENV	05/01/19	07/31/19
3.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	08/01/19	04/30/19

Performance Measures

- Sign-in sheets demonstrating consistent attendance at all required safety committee meetings.

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 79 of 103

Responsible Parties[1]

CENV	David Eisenhauer	████████████	4/30/19
		(Signature/Date)	
CENV	Anthony Johnson	██████	4/29/19
		(Signature/Date)	

Second-Level Responsibility

CENV	Sachit Kakkar	████████████	4/29/19
		(Signature/Date)	

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019   **Quality Assurance, Internal Compliance & Oversight (QICO)**
wmata.com/transparency   *Promoting Transparency, Accountability, & Public Confidence*

Page 80 of 103

Purpose and Scope

On April 4, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an Internal Safety Review report regarding Vehicle Program Services (CENV). This internal Corrective and Preventive Action (iCAPA) has been developed to address required action QICO-CENV-19-03 and the associated finding(s).

Required Action

QICO-CENV-19-03	*Action Owner - CENV*	Moderate

Required Action(s): Develop a documented process to determine which document approval signatures are required and implement a method to record any revisions to the document approval signature page. Establish a method of verifying rail vehicle safety certifications are completed prior to releasing vehicles into service.

- **F-CENV-19-03:** Accurate and complete rail car safety certification records are essential for ensuring identified hazards have been mitigated.

<div align="center">

Measure: *Document Control*   Risk: *Safety – Moderate (3,3)*

</div>

Action Plan Overview

In response to the request to develop a documented process to determine which approval signatures are required, for Safety Certifications, and to implement a method to record revisions to the process, CENV will either update existing documentation or create a new policy (OAP), to address the finding. This process will also clarify (and re-emphasize) existing methods regarding the acceptance (& releasing into service) of new rail cars.

Business Impact – Budget/Cost Estimate

Process Improvement – A current process/procedure needs to be optimized to address the Required Action(s). This type of initiative does not need additional resources because current manpower will be used to improve the process.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 81 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1.	Develop documented process	Update existing documentation or create new policy, regarding the certificate of compliance before acceptance/release of new rail cars. CENV will submit updated document or new policy (OAP).	Lucien Barthelemy (CENV)	05/1/2019	10/23/19
2.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	10/24/2019	11/20/19

Performance Measures
- N/A

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

Responsible Parties[1]

CENV   Lucien Barthelemy

(Signature/Date)   4/30/19

Second-Level Responsibility

CENV   David Sauter

(Signature/Date)   4/30/19

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 83 of 103

Purpose and Scope

On April 4, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an Internal Safety Review report regarding Vehicle Program Services (CENV). This internal Corrective and Preventive Action (iCAPA) has been developed to address required action QICO-CENV-19-04 and the associated finding(s).

Required Action

QICO-CENV-19-04	*Action Owner - CENV*	Moderate

Required Action(s): Develop a documented quality control process to verify rulebook compliance.

- **F-CENV-19-04:** Develop a documented quality control process to verify rulebook compliance.

          Measure: *Safety Training & Certification*   Risk: *Safety – Moderate (3,3)*

Action Plan Overview

Continue to use PeopleSoft ELM to track Roadway Worker Protection (RWP) certification for Metrorail Safety Rules and Procedures (MSRPH) rule knowledge. Create and implement procedure to capture supervisory monitoring of employees entering the roadway for adherence to personal protective equipment (PPE) requirements and radio protocol.

Business Impact – Budget/Cost Estimate

Process Improvement – A current process/procedure needs to be optimized to address the Required Action(s). This type of initiative does not need additional resources because current manpower will be used to improve the process.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 84 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1.	Demonstrate MSRPH rule knowledge with RWP certification	Maintain CENV RWP certification list with expiration dates. CENV will submit current CENV RWP compliance list over a span of 90 days.	David Eisenhauer CENV	05/15/19	09/18/19
2.	Establish procedure	Create new or revise existing procedure for supervisory rulebook quality control checks as per Policy/Instruction 1.15/0. CENV will submit updated or new procedure for supervisory rulebook quality control checks.	David Eisenhauer CENV	05/15/19	09/18/19
3.	Random monitoring of employee roadway work habits for MSRPH compliance.	Perform spot inspections as per actionable item #2 above. CENV will submit samples of completed supervisory QC checks as per procedure over a span of 90 days.	David Eisenhauer CENV	05/15/19	09/18/19
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	09/19/19	09/30/19

Performance Measures

- For actionable item #1, 95% compliance for current RWP certifications.
- For actionable item #3, a quantity representing 95% of completed checks as per procedure submitted for actionable item #2.

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 85 of 103

Responsible Parties[1]

CENV	David Eisenhauer	████████ 4/30/19
		(Signature/Date)

Second-Level Responsibility

CENV	Anthony Johnson	████ 4/29/19
		(Signature/Date)

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 86 of 103

METRO MATERIALS MANAGEMENT iCAPAs

Return to Summary of Required Actions

INTERNAL REVIEW

Service Delivery

In response to the Internal Safety Review Report (ISR) issued by the Office of Quality Assurance, Internal Compliance & Oversight (QICO) to the Office of Supply Chain Management, Warehousing and Facilities (SCMF), QICO has coordinated the development of two (2) iCAPA's. The iCAPA's outline the findings, recommendation and requirements to be addressed, and a detailed action plan outlining responsible parties and specific actionable items.

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Internal Corrective and Preventive Action (iCAPA) Commitment

_____   4/29/2019
Joseph Leader   Date
Executive Vice President & Chief Operating Officer

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Internal Corrective and Preventive Action (iCAPA) Commitment

_____   4/29/2019
Hakim Davis   Date
Vice President, Quality Assurance, Internal Compliance & Oversight (QICO)

_____   5/7/19
Eric Christensen   Date
Executive Vice President, Internal Compliance (INCP)

_____   5/6/19
Paul J. Wiedefeld   Date
General Manager & Chief Executive Officer (GM/CEO)

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

wmata.com/transparency

Purpose and Scope

On April 10, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an Internal Safety Review (ISR) report for the office of Supply Chain Management, Warehousing and Facilities (SCMF). The ISR assessed SCMF's compliance with WMATA's System Safety Program Plan (SSPP). This internal Corrective and Preventive Action (iCAPA) report is developed to address the associated finding(s) and required action for **QICO-MATM-19-01**.

Required Action

QICO-MATM-19-01	*Action Owner - SCMF*	Moderate

Required Action(s): Develop a documented process pertaining to storage, handling, and transportation of hazardous materials.

- F-MATM-19-01: Developing a documented procedure for the Acquisition, Storage and Handling of Flammable Chemicals and Hazard Communication Program promotes a safe work environment.

    Measure: *Safe Work Standards*　　　Risk: *Safety Risk – Moderate (3,3)*

- F-MATM-19-03: Developing a documented procedure for handling hazardous materials during transport enhances the employee and material safety.

    Measure: *Safe Work Standards*　　　Risk: *Safety Risk – Moderate (3,3)*

Action Plan Overview

- SCMF will develop a process that addresses storage, handling, and transportation of hazardous materials.

Business Impact – Budget/Cost Estimate

New/Expanded Initiative or Process – A new initiative needs to be created or a current process/procedure needs to be substantially expanded to address the Required Action(s). Additional resources will be required to address these initiatives.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 89 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1.	Meeting with Storeroom Supervisors and Managers	Action(s): Review the current processes and discuss steps required for proper storage, handling, and transportation of hazardous materials in SCMF warehouses and storerooms. Deliverable(s): Meeting agenda, minutes and meeting roster will be submitted to QICO.	Myrna Guzman SCMF	04/18/2019	04/19/19
2.	Develop Documented Process	Action(s): Creation of a new documented process in compliance with QICO assessment. The new process will include the specific instructions required to provide for proper storage, handling, and transportation of hazardous materials. The new process will be added in the Storeroom and Distribution Safety procedure section in the SCFM manual. Deliverable(s): SCMF will provide QICO the finalized documented process.	Myrna Guzman SCMF	04/10/2019	06/30/19
3.	Issue Documented Process Staff Notice	Action(s): This phase will include communication with all SCMF warehouse and storeroom personnel and Supervisors' training of the new process. Supervisors will provide awareness refresher training to the SCMF warehouse and storeroom clerks. Deliverable(s): Staff Notice, meeting agenda, minutes and meeting roster will be submitted to QICO.	Myrna Guzman SCMF	07/1/2019	08/31/19
4.	Monitoring	Action(s): Storerooms Supervisors will ensure the process is followed during the 90 days implementation phase. The new SOP will include an additional line item for the monthly storeroom inspection. Deliverable(s): SCMF will submit monthly storeroom inspection records for the 90-day monitoring period.	Myrna Guzman SCMF	09/1/2019	11/30/19

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 90 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
5.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	10/1/2019	10/31/19

Performance Measures

- 90% attendance by all active SCMF personnel in accordance with actionable item #3. SCMF personnel are considered inactive if personnel are on long term leave.
- QICO will verify three (3) personnel's knowledge how to access the new documented process by conducting follow up interviews at three (3) locations. One (1) personnel will be randomly selected from each location.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 91 of 103

Responsible Parties[1]

SCMF   Myrna Guzman   4-11-19
_____
                                                      (Signature/Date)

SCMF   Gerald Verno   4-11-19
_____
                                                      (Signature/Date)

Second-Level Responsibility

SCMF   James Saenz   4/15/2019
_____
                                                      (Signature/Date)

_____

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019   **Quality Assurance, Internal Compliance & Oversight (QICO)**
wmata.com/transparency   *Promoting Transparency, Accountability, & Public Confidence*

Page 92 of 103

Purpose and Scope

On April 10, 2019, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an Internal Safety Review (ISR) report for the office of Supply Chain Management, Warehousing and Facilities (SCMF). The ISR assessed SCMF's compliance with WMATA's System Safety Program Plan (SSPP). This internal Corrective and Preventive Action (iCAPA) report is developed to address the associated finding and required action for **QICO-MATM-19-02**.

Required Action

QICO-MATM-19-02	*Action Owner - SCMF*	Moderate

Required Action(s): Develop a documented process for reporting incidents and accidents.

- F-MATM-19-02: Creating a documented procedure to define the process for reporting incidents or accidents creates traceability, lessons learned, and promotes a safer environment.

    Measure: *Safe Work Standards*   Risk: *Safety Risk – Moderate (3,3)*

Action Plan Overview

- SCMF will develop a process for reporting safety incidents and accidents.

Business Impact – Budget/Cost Estimate

New/Expanded Initiative or Process – A new initiative needs to be created or a current process/procedure needs to be substantially expanded to address the Required Action(s). Additional resources will be required to address these initiatives.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 93 of 103

	Actionable Items	Description	Responsible Party[1]	Est Start[2]	Est End[3]
1.	Meeting with Storeroom Supervisors and Managers	Action(s): Review the current processes and discuss steps required for proper reporting of incidents and accidents. Deliverable(s): Meeting agenda, minutes and meeting roster will be submitted to QICO.	Myrna Guzman SCMF	04/18/2019	04/19/19
2.	Develop Documented Process	Action(s): Creation of a new documented process in compliance with QICO assessment. The new process will include the specific instructions for the reporting of incidents and accidents, to include instructions for the completion of reporting within the SMS system. The new process will be added in the Storeroom and Distribution Safety procedure section in the SCFM manual. Deliverable(s): SCMF will provide QICO the finalized documented process.	Myrna Guzman SCMF	04/20/2019	06/10/19
3.	Issue Documented Process Staff Notice	Action(s): This phase will include communication with all SCMF warehouse and storeroom personnel and Supervisors' training of the new process. Supervisors will provide awareness refresher training to the SCMF warehouse and storeroom clerks. Deliverable(s): Staff Notice, meeting agenda, minutes and meeting roster will be submitted to QICO.	Myrna Guzman SCMF	06/11/2019	07/31/19
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	10/1/2019	10/31/19

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

[2] Est Start – Estimated Start Date.

[3] Est End – Estimated Completion Date.

[4] Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 94 of 103

Performance Measures

- 90% attendance by all active SCMF personnel in accordance with actionable item #3. SCMF personnel are considered inactive if personnel are on long term leave.
- QICO will verify three (3) supervisory personnel's knowledge how to access the new documented process by conducting follow up interviews at three (3) locations. One (1) personnel will be randomly selected from each location.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 95 of 103

Responsible Parties[1]

SCMF	Myrna Guzman	████████████	4-11-19
			(Signature/Date)
SCMF	Gerald Verno	████████	4-11-19
			(Signature/Date)

Second-Level Responsibility

SCMF	James Saenz	████████	4/15/20 19
			(Signature/Date)

---

[1] In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

QICO-REG-TMP01-01 iCAPA, Rev. 1, 3/25/2019
wmata.com/transparency

Quality Assurance, Internal Compliance & Oversight (QICO)
Promoting Transparency, Accountability, & Public Confidence

Page 96 of 103

SUPPLEMENTAL MATERIALS

APPENDIX A: INTERNAL REVIEW - QUALITY MEASURES

Policies, Procedures & Standards

- Work Standards: The existence and effectiveness of department policies, procedures, manuals, work instructions, quality control measures, and other requirements that define department activities.
- Work Measurement: The existence and effectiveness of operational goals (indicators) and sound management routines to achieve these goals.
- Change Management: The existence and effectiveness of processes, tools and techniques to manage changes to a system to achieve intended outcomes.
- Skills Management: The existence and effectiveness of a training strategy to ensure personnel are adequately qualified to perform work.

Quality & Compliance

- Application & Fulfillment: Adherence to existing/adopted policies, procedures, and standards; including applicable engineering or other technical requirements that specify material and/or workmanship standards.
- Job Safety: Adherence to safety requirements, including enterprise-wide standards (e.g. MSRPH) or those specific to a particular type of work (e.g. PPE).
- Quality Control: The performance of quality control functions to ensure the consistency and reliability of work performed; including the usage of properly calibrated equipment and compliant materials/parts.
- Regulations & Oversight: Adherence to requirements, guidelines, and recommendations from external/regulatory authorities and internal oversight functions, including items issued for corrective and preventive actions.

Traceability

- Data Assurance: Assessment of the validity, accuracy, consistency, relevance, and completeness of data used to schedule, document, and track work activities.
- Assets and Activities: Assessment of the ability to verify the history, location, or application of an item by means of documented recorded identification; including the quality and validity of data capturing this information.
- Document Control: Assessment of version control, ownership and approval, dissemination, storage and accessibility of business-critical documents.

APPENDIX B: INTERNAL SAFETY REVIEW - SYSTEM SAFETY MEASURES

Policies, Procedures & Standards (SSPP Elements 1-5, 12, 13, 15 & 17)

- **Safe Work Standards:** The existence and effectiveness of department policies, procedures, manuals, work instructions, safety and security practices, and other safety and security requirements that define department safe work practices.

- **Work Measurement:** The existence and effectiveness of operational safety goals and sound management routines to achieve these goals.

- **Configuration Management:** The existence and effectiveness of processes, tools, and techniques to manage changes to a system to achieve intended outcomes.

- **Safety Management:** The existence and effectiveness of supervision strategy to ensure personnel are adequately equipped to perform work safely and qualified to perform work to standard.

Training, Certification & Compliance (SSPP Elements 16, 18, 20 & 21)

- **Application & Fulfillment:** Adherence to existing/adopted policies, procedures, and standards; including applicable engineering or other technical requirements that specify material and/or workmanship standards.

- **Job Safety:** Adherence to safety requirements, including enterprise-wide standards (e.g. MSRPH) or those specific to a particular type of work (e.g. PPE).

- **Safety Training & Certification:** The existence and effectiveness of a training strategy to ensure personnel are adequately qualified to perform work.

- **Regulations & Oversight:** Adherence to requirements, guidelines, and recommendations from external/regulatory authorities and internal oversight functions, including items issued for corrective and preventive actions.

Hazard Management (SSPP Elements 6, 10, 11 & 19)

- **Data Assurance:** Assessing the existence of a hazardous condition that has been identified.

- **Assets and Activities:** The performance of gathering all data, conducting interviews & field inspections to determine the risk level and prioritize hazardous conditions and focus available resources on the most serious hazards requiring resolution.

- **Document Control:** Assessing the effectiveness of hazard tracking and documentation of all systems to mitigate and prevent reoccurrence.

Safety (SSPP Elements 7, 8, 9 & 14)

- **Managing Safety in System Modification:** Evaluating and assuring that a proposed modification does not adversely affect the system, vehicle, equipment or facility previously certified under the System Safety & Security process.

- **Emergency Management:** Assessing the management of operational emergencies and preparedness to maintain and continue safe operation under such conditions.

- **Occupational Safety & Health:** Validating the development of Safety programs and the administration of training to required personnel to assure safe and healthful working conditions for employees and contractors.

APPENDIX C: RISK ASSESSMENT

Risk Assessment Methodology

Risk is defined as an uncertain event or condition that, if it occurs, has a positive or negative effect on the organization's objectives and operations (both threats and opportunities). It is assessed on the combination of the probability of occurrence of risk and the severity of the risk. Risk management is an attempt to answer the following questions:

- What can go wrong? – The Risk
- How often does/will it happen? – The Probability of Occurrence
- How bad are the consequences? – The Impact
- Is the risk acceptable? – The Risk Treatment, Remediation

Categories of Risk

- *Service Delivery* – A broad range of risks with direct or indirect impact on daily transit and/or business operations. The risk of direct or indirect losses or other negative effects due to inadequate or failed internal business or transit operations, or from external events that impair internal processes, people, or systems.
- *Financial* – The risk to achievement of the Authority's mission arising from an inability to manage credit, debt and financial leverage, and other financial resources. Financial risk would also include risk arising from adverse movements in market rates or the Authority's inability to meet its obligations.
- *Legal & Compliance* – Risks arising from a failure to comply with applicable laws and regulations and a failure to detect and report activities that are not compliant with statutory, regulatory, or internal policy requirements. Failure to comply with prescribed guidelines and established practices. This would also include a lack of awareness or ignorance of the relevant standards, guidelines or regulations.
- *Safety* - The risk of achievement of the Authority's mission arising from failures to prevent hazards that may cause harm to human, equipment, or the environment. This would also include risk arising from the Authority's inability to comply with safety-related legal or regulatory standards.
- *Strategic* – Risks arising from failure to achieve strategic or tactical objectives, an adverse business decision, or a lack of strategic direction and leadership. This would also include the ineffective implementation of the strategic plans, a lack of business strategies developed to achieve goals, and inadequate resources deployed against the achievement of those goals. Strategic risks can be affected by changes in the political environment such as changes in administration and resulting changes in strategic priorities. Strategic risks can also be triggered by actions of key stakeholders such as the Tri-Jurisdictional law makers or the Federal Transit Administration (FTA).
- *Technology* – The risk of unexpected losses from inadequate systems, breaches in information technology security, and inadequate business continuity planning. This would also include risks to the achievement of the Authority's mission arising from the inability of networks, security, and technologies to meet Metro's evolving needs.
- *Reputation* – The risk to the achievement of the Authority's mission arising from negative internal or external stakeholder opinion. Reputation risk affects the Authority's ability to establish new and/or sustain existing relationships.

Risk Assessment Process

The following risk matrix is used to assess risks within the universe of review areas. The universe (see Table 1) is comprised of the potential range of all review activities and review business units (or departments) that fall within QICO's scope and oversight authority. These business units consist of programs, processes, assets and people which together contribute to the fulfilment of the departments' strategic goals (Goal 1 - Build Safety Culture; Goal 2 - Deliver Quality Service; Goal 3 - Improve Regional Mobility; and Goal 4 - Ensure Fiscal Stability).

Risks are assessed based on the significance of their impact (see horizontal axis in Figure 1) and the probability of occurrence (see vertical axis in Figure 1). The probability ratings are rated on a scale of 1 (minimum) to 5 (maximum) and are driven by the metrics shown on the next page. The impacts ratings are also rated on a scale of 1 (minimum) to 5 (maximum) and are driven by the category of risks, which are then aligned on the metrics shown on the next page.

Each finding is given a severity rating of Insignificant, Low, Moderate, Elevated or High. All areas with Elevated/High ratings are considered to be high risk to the organization's objectives; and need to be mitigated/reduced in severity at the earliest. The risk ratings to the findings are provided as "Type of Risk" followed by "Severity Rating (Impact, Probability)" (e.g. a finding with *"Elevated (4,3)"* would mean a 'significant (4)' impact along with a 'possible (3)' probability of occurrence).

Risk Assessment Matrix

		Negligible (1)	Minor (2)	Moderate (3)	Significant (4)	Major (5)
Almost Certain (5)		Low	Moderate	Elevated	High	High
Likely (4)		Low	Low	Moderate	Elevated	High
Possible (3)	Probability of Occurrence	Low	Low	Moderate	Elevated	Elevated
Unlikely (2)		Insignificant	Low	Low	Moderate	Moderate
Rare (1)		Insignificant	Insignificant	Low	Moderate	Moderate
Probability		**Potential Impact of Risk**				
	Impact	**Negligible (1)**	**Minor (2)**	**Moderate (3)**	**Significant (4)**	**Major (5)**

Risk Scale Definitions

Insignificant		Reasonable assumption that this risk will not occur and unlikely to cause the activity to fail to meet part of its objective.
Low		Reasonable assumption that this risk will likely not occur & may cause a failure of the business process to meet part of its objectives.
Moderate		Reasonable assumption that this risk may occur & may cause a failure of the business process to meet a significant part of its objectives.
Elevated		Reasonable assumption that this risk will likely occur & likely to cause a failure of the business process to meet a significant part of its objectives.
High		Reasonable assumption that this will occur & will cause a failure of the business process to meet its objectives or cause objective failure in other activities.

Potential Impact

(1) Negligible – Unlikely to cause the activity to fail to meet part of its objectives.
(2) Minor – May cause a failure of the business process to meet part of its objectives, which may expose Metro to minor financial losses, less- effective or efficient operations, some non- compliance with laws and regulations, waste of resources, etc.
(3) Moderate – May cause a failure of the business process to meet a significant part of its objectives, or negatively impact the objectives of other activities, which may expose Metro to moderate financial losses, reductions to or ineffectiveness of operations, non- compliance with laws and regulations, sizable waste of resources, etc.
(4) Significant – Likely to cause a failure of the business process to meet a significant part of its objectives, or negatively impact the objectives of other activities, which may expose Metro to significant financial losses, reductions to or ineffectiveness of operations, non- compliance with laws and regulations, sizable waste of resources, etc.
(5) Major – Will cause a failure of the business process to meet its objectives, or cause objective failure in other activities, which may cause or expose Metro to major financial losses, interruptions in operations, failure to comply with laws and regulations, major waste of resources, failure to achieve stated goals, etc.

Probability of Occurrence

(1) Rare – Reasonable assumption that this risk will not occur
(2) Unlikely – Reasonable assumption that this risk will likely not occur
(3) Possible – Reasonable assumption that this risk may occur
(4) Likely – Reasonable assumption that this risk will likely occur
(5) Almost Certain – Reasonable assumption that this will occur
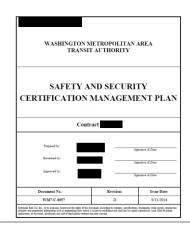
DESCRIPTION

██████████ Project Safety & Security Certification Management Plan: Kawasaki Rail Car's approach to developing a Safety and Security Certification Program (SSCP). The output of the SSCP will include the completion of a Hazard Tracking Log (HTL) that will satisfy the requirements of Contract Data Requirements List (CDRL) 403, and a Specification Conformance Checklist that will satisfy the requirements of CDRL 408. In addition, it details the Safety Certification documentation required stating that 7K rail cars are ready for passenger operation and that it complies with safety and security requirements defined in the contract documentation and applicable codes. Safety and Security certification shall verify that the design is finalized, all inspections and testing are complete and documented, operation and maintenance personnel are trained, and all necessary maintenance documentation is available to WMATA.

Non-revenue vehicle (NRV): Vehicles used in the support of administrative, maintenance, construction, and operational functions that do not generate revenue. The non-revenue fleet consists of three categories:

   a) Non-emergency passenger transport;
   b) Non-emergency tool/equipment transport; and emergency response.

Safety Data Sheet (SDS): A safety data sheet, material safety data sheet, or product safety data sheet is a document that lists information relating to occupational safety and health for the use of various substances and products. SDSs are a widely used system for cataloging information on chemicals, chemical compounds, and chemical mixtures. All chemical or hazardous materials at WMATA must first be submitted for approval by SAFE prior to procurement and use. All SDSs are retained and accessed through the MetroWeb home page.

Safety Measurement System (SMS): The Safety Measurement System (SMS) is suite of applications that enable the Department of System Safety and Environmental Management (SAFE) to measure the overall system safety of WMATA. SMS provides both WMATA and SAFE with a means to track and manage safety incidents, safety hotline reports, and hazards. The advantages of SMS are direct tracking of identified problems, centralizing of safety critical data, and improving communication from the field to management and safety personnel. In addition, SMS has the added benefits of reducing paperwork, and eliminating redundant work efforts.

Additional Terms

Certificate of Compliance (COC): A document by a competent authority that the supplied good or service meets the required specifications.

Change management process: The sequence of steps or activities that an individual or team follows to implement change in order to drive individual transitions and ensure the project meets its intended outcome.

Engineering Configuration Notice (ECN): Notification about a change to the rail rolling stock vehicles that results in the need to revise documentation (i.e. drawings, manuals, training material, etc.).

Engineering Modification Instructions (EMI): Instructions related to the substitution, modification, or replacement of equipment and/or systems including software to rail rolling stock vehicles.

Engineering Request (ER): Requests related to the development of recommendations/responses to issues of safety, ergonomics, and efficiency.

Engineering Test Procedure & Results (ETP/ETR): The process for initiating, evaluating, and approving a proposal for substitution, modification, or replacement of equipment and/or systems including software to rail rolling stock vehicles.

Local Safety Committee (LSC): Establishes and fosters a close working relationship with front-line employees, unions, safety, and middle management regarding safety issues.

Maintenance Service Instructions (MSI): Instructions related to processes or procedures of maintaining or overhauling rolling stock or their components.

Policy Instruction (P/I): Metro's library of Authority-wide governing policy and work instruction documents.

Propulsion inverter: Electromechanical control system of a rail car that converts third-rail voltage to suitable output for powering the rail car's drive motors.

Safety and Security Certification Review Committee (SCRC): Provides guidance for the safety and security certification of major construction and rehabilitation projects and vehicle procurement.

Vehicle Justification Form: A record, required to be resubmitted annually, used to document the criteria used to justify an employee's vehicle privileges.

Trip Logs: Hand-written or electronically collected detailed data that is required to be kept for each NRV trip.