

## INTERNAL CORRECTIVE AND PREVENTIVE ACTIONS (iCAPAs)

## AFCS iCAPAs



## Internal Safety Review

In response to the Internal Safety Review report regarding the Office of Automatic Fare Collection Section (AFCS), the Office of Quality Assurance Internal Compliance & Oversight (QICO) has coordinated the development of five (5) iCAPAs. The iCAPAs have been developed to address required actions and the associated findings.

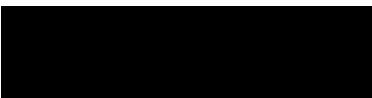
## EXECUTIVE LEADERSHIP COMMITMENT

### RESPONSIBLE PARTIES



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

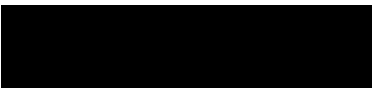
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**Andy Off**  
*Executive Vice President, Capital Delivery*

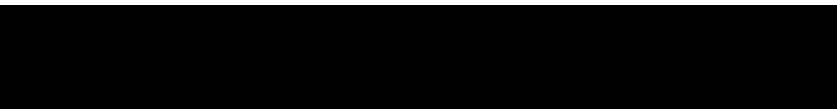
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## INTERNAL OVERSIGHT



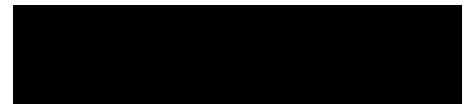
**Hakim Davis**  
*Vice President, Quality Assurance, Internal Compliance & Oversight (QICO)*

*Date*



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

*Date*



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

*Date*

1/27/22

PURPOSE  
AND SCOPE

On November 5, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Automatic Fare Collection Section (AFCS) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated findings and required action for **QICO-AFCS-21-01**.

## FINDINGS

**FS-AFCS-21-01:** Utilizing proper safety equipment in accordance with approved Preventive Maintenance Inspections (PMIs) promotes safety culture and enhances risk mitigation.

**FS-AFCS-21-03:** Adherence to the SMNT's MCP, AFCS governing documents and QMSP promotes consistent maintenance practices and quality records.

REQUIRED  
ACTION**QICO-AFCS-21-01*****Automatic Fare Collection Section (AFCS)***[Risk: Yellow](#)

Enforce implementation of quality control and compliance checks to include PPE, tools and equipment, and PMI checklist population.

*Measure: Safety Risk Management      Risk Category: Safety [3,C]*

## ACTION PLAN OVERVIEW

Automatic Fare Collection Section (AFCS) will implement the use of their current Weekly Activity Report (WAR) to cover compliance checks and inspections of all safety equipment deemed necessary to perform Preventive Maintenance (PM) activity in work areas; this will ensure that safety equipment is readily available when needed. In addition, AFCS will address their plan to record and streamline the process for entering PMIs in Maximo using the current PMI checklist template as a guide.

**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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Weekly Compliance Checks	AFCS will update the Weekly Activity Report (WAR) to include the inspection of vehicles for the storage of safety equipment. AFCS will submit three months' worth of the WAR demonstrating compliance.	Keon Day (AFCS)	12/01/21	04/06/22
2.	Preventative Maintenance Inspection (PMI) Checklist	Upon completion of QICO-AFCS-21-02 Actionable Item #1, AFCS will address, reinforce, and document the process for entering PMIs checklist into Maximo. AFCS will submit signed acknowledgement of the applicable job function PMI procedures from all AFCS active personnel.	Michael Lynch (AFCS)	04/20/22	07/20/22
3.	Safety Equipment Purchase & Utilization	AFCS will obtain barrier equipment to optimize the safety condition of work areas. AFCS will provide photos as evidence of safety equipment/barrier use as required by the performance measures below.	Keon Day (AFCS)	12/01/21	06/15/22
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	07/21/22	08/26/22

## PERFORMANCE MEASURES

AFCS will provide three months' worth of sample photos from at least three different locations showing the use of safety equipment/barriers as per Actionable Item #3.

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

AFCS      Keon Day

(Signature/Date)

AFCS      Michael Lynch

(Signature/Date)

**FIRST-LEVEL RESPONSIBILITY**

SMNT      Unriquee Butts

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

FSVT      Rodolfo Bitar

(Signature/Date)

BPDV      Lisa Woodruff

(Signature/Date)



PURPOSE AND SCOPE	On November 5, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Automatic Fare Collection Section (AFCS) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated finding and required action for <b>QICO-AFCS-21-02</b> .			
FINDING	FS-AFCS-21-02: Reviewing and updating governing documents within the required frequency optimizes applicability and incorporates changes in a timely manner.			
REQUIRED ACTION	QICO-AFCS-21-02	<i>Automatic Fare Collection Section (AFCS)</i>	<a href="#">Risk: Yellow</a>	
	Develop and implement a review and revision process for AFCS governing documents. <i>Measure: Safety Management Policy      Risk Category: Safety [4,B]</i>			
ACTION PLAN OVERVIEW	Automatic Fare Collection Section (AFCS) will follow the Office of Systems Maintenance (SMNT) Document Control Process for developing, revising AFCS governing documents listed below.			
	<ul style="list-style-type: none"> <li>• Money Spills SOP 204-01</li> <li>• AFCS Ticket Vending Machine PMI Procedure</li> <li>• AFCS SmarTrip® Sale and Reload Machine PMI Procedure</li> <li>• AFCS Station Operator Console PMI Procedure</li> <li>• AFCS Faregate PMI Procedure</li> <li>• AFCS Parking Lot Equipment PMI Procedure</li> <li>• AFCS Exitfare PMI Procedure</li> </ul> <p><b>Business Impact – Budget/Cost Estimate: Operating</b> 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.</p>			



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Document Control Procedure	SMNT will develop and submit a document control procedure that outlines the review and revision frequency of all SMNT governing documents.	<b>Tonia Jennings (SMNT)</b>	12/01/21	02/16/22
2.	Update PMI Documents	AFCS Engineering will review and revise the outdated PMI documents (mentioned in the Action Plan Overview above) to clarify the utilization of PM Checklist as per QICO-AFCS-21-01 Actionable Item #2 and submit the updated PMI documents.	<b>Dennis Nguyen (ENGA/COMM)</b> <b>Supporting Office<sup>4</sup>:</b> <b>Michael Lynch (AFCS)</b>	12/15/21	04/20/22
3.	Update SOP	AFCS will update and submit the Money Spills SOP 204-01.	<b>Michael Lynch (AFCS)</b> <b>Tonia Jennings (SMNT)</b>	12/01/21	03/16/22
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.	<b>QICO</b>	04/20/22	05/20/22

## PERFORMANCE MEASURES

N/A

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.




<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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.





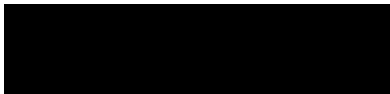
**RESPONSIBLE PARTIES**

SMNT	Tonia Jennings	
		(Signature/Date)
ENGA/COMM	Dennis Nguyen	
		(Signature/Date)
AFCS	Michael Lynch	
		(Signature/Date)

**FIRST-LEVEL RESPONSIBILITY**

SMNT	Unriquea Butts	
		(Signature/Date)
ENGA	Van Johnson	
		(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

FSVT	Rodolfo Bitar	
		(Signature/Date)
ENGA	Nichalos Gardner	
		(Signature/Date)
BPDV	Lisa Woodruff	
		(Signature/Date)

PURPOSE  
AND SCOPE

On November 5, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Automatic Fare Collection Section (AFCS) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated findings and required action for **QICO-AFCS-21-03**.

## FINDINGS

**FS-AFCS-21-04:** Maintaining and complying with an accurate training matrix for AFCS assures compliance with governing documents, the SMNT MCP hazard management, and promotes safety.

**FS-AFCS-21-05:** Maintaining current Roadway Worker Protection (RWP) training safeguards WMATA personnel from the hazards on and around the roadway and promotes a safe working environment.

REQUIRED  
ACTION**QICO-AFCS-21-03*****Automatic Fare Collection Section (AFCS)****Risk: Yellow*

Update the AFCS training matrix to reflect the current business practice.

*Measure: Safety Promotion      Risk Category: Safety [3,D]*

## ACTION PLAN OVERVIEW

Automatic Fare Collection Section (AFCS) will provide its training requirements in accordance with the refresher courses developed by ELM for AFCS and other training standards based on their most current business practices.

**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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Training Matrix	AFCS will update and submit the AFCS training matrix to reflect all current training requirements.	Michael Lynch (AFCS)	12/01/21	01/26/22
2.	Training Records	AFCS will submit the ELM training records of all AFCS active personnel with a memorandum of all the training titles that changed throughout the years.	Michael Lynch (AFCS)	11/29/21	01/26/22
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	01/26/22	02/25/22

## PERFORMANCE MEASURES

N/A

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

AFCS Michael Lynch

(Signature/Date)

**FIRST-LEVEL RESPONSIBILITY**

SMNT Uniquea Butts

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

FSVT Rodolfo Bitar

(Signature/Date)

BPDV Lisa Woodruff

(Signature/Date)

PURPOSE  
AND SCOPE

On November 5, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Automatic Fare Collection Section (AFCS) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated finding and required action for **QICO-AFCS-21-04**.

## FINDING

**FS-AFCS-21-06:** Mitigating hazards and retaining electronic records to include backups of personnel records safeguards from accidents and accidental loss of documents due to flooding or fire and protects the privacy of AFCS personnel.

REQUIRED  
ACTION**QICO-AFCS-21-04*****Automatic Fare Collection Section (AFCS)****Risk: Yellow*

Create and utilize an electronic repository for handwritten training and personnel documentation.

*Measure: Safety Management Policy      Risk Category: Safety [3,D]*

## ACTION PLAN OVERVIEW

Automatic Fare Collection Section (AFCS) will develop and manage an electronic record keeping system for personnel records.

**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.



Actionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1. Electronic Records Repository	<p>AFCS will develop an electronic record keeping system that captures paper records of:</p> <ul style="list-style-type: none"> <li>On-The-Job (OJT) training for AFCS applicable personnel</li> <li>30-60-80 days training for AFCS applicable personnel</li> <li>An initial scan and archive of current personnel training records</li> </ul> <p>AFCS will submit a list of all AFCS personnel with hard copy training records converted to electronic format and provide a link to the electronic file repository.</p>	<b>Michael Lynch (AFCS)</b>	12/02/21	12/14/22
2. Quality Control	<p>AFCS will conduct a Quality Control (QC) check as per Actionable Item #1 to ensure that all hard copy training records are scanned and saved electronically.</p> <p>AFCS will submit the QC report of 100% conversion from hard copy to the electronic file.</p>	<b>Keon Day (AFCS)</b>	12/15/22	01/18/23
3. QICO CAP Verification Report	<p>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.</p>	<b>QICO</b>	01/18/23	02/17/23

## PERFORMANCE MEASURES

N/A

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

AFCS      Keon Day

(Signature/Date)

AFCS      Michael Lynch

(Signature/Date)

**FIRST-LEVEL RESPONSIBILITY**

SMNT      Unriquea Butts

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

FSVT      Rodolfo Bitar

(Signature/Date)

BPDV      Lisa Woodruff

(Signature/Date)

PURPOSE  
AND SCOPE

On November 5, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Automatic Fare Collection Section (AFCS) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated finding and required action for **QICO-AFCS-21-05**.

## FINDING

**FS-AFCS-21-07:** Periodically updating AFCS job descriptions to comply with the Human Resources (HR) procedure fulfills qualifications' accuracy and job performance.

REQUIRED  
ACTION**QICO-AFCS-21-05****Automatic Fare Collection Section (AFCS)**[Risk: Yellow](#)

Update AFCS job descriptions to fulfill qualifications' accuracy and job performance.

*Measure: Safety Management Policy      Risk Category: Safety [4,D]*

## ACTION PLAN OVERVIEW

Automatic Fare Collection Section (AFCS) will revise job descriptions to ensure that they accurately depict current qualification requirements and job performance.

**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.





Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Job Description Update	AFCS will update and submit job descriptions for all AFCS job codes in accordance with the Department of Human Capital (HC) and compensation requirements.	Michael Lynch (AFCS)	02/16/22	11/30/22
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	11/30/22	01/06/23

## PERFORMANCE MEASURES

N/A

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

AFCS Michael Lynch

(Signature/Date)

**FIRST-LEVEL RESPONSIBILITY**

SMNT Uniquea Butts

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

FSVT Rodolfo Bitar

(Signature/Date)

BPDV Lisa Woodruff

(Signature/Date)

## Office of Vehicle Program Services (CENV) iCAPAs

**Internal Safety Review**

In response to the Internal Safety Review report regarding the Office of Vehicle Program Services (CENV), the Office of Quality Assurance, Internal Compliance & Oversight (QICO) has coordinated the development of three iCAPAs. The iCAPAs have been developed to address the required actions and the associated findings.

**EXECUTIVE LEADERSHIP COMMITMENT****RESPONSIBLE PARTIES**

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

*Date*

**INTERNAL OVERSIGHT**

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

*Date*

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

*Date*

**GENERAL MANAGER & CHIEF EXECUTIVE OFFICER (GM/CEO)**

03/08/2022

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

*Date*



**PURPOSE  
AND SCOPE**

On December 15, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Vehicle Program Services (CENV) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding(s) and required action(s) for **QICO-CENV-21-01**.

**FINDING(S)**

**FS-CENV-21-01:** Performing regular workplace inspections helps reduce incidents, injuries, and illnesses, through the identification and recording of hazards for adequate analysis and timely mitigation.

**FS-CENV-21-06:** Development and continuous update of a Hazard Log/Risk Register contributes to the proper recording and assessment of all potential hazards and their associated risks, so that all responsible parties are identified, and effective mitigation response are anticipated.

**FS-CENV-21-07:** Participating in all mandatory Safety Committee meetings will further engage personnel and promote WMATA's safety culture.

**REQUIRED  
ACTION**

**QICO-CENV-21-01**

**Vehicle Program Services (CENV)**

Risk: Red



Meet or exceed standards for workplace safety inspection, safety committee participation, and hazard management processes defined in the Agency Safety Plan (PTASP).

*Measure: Safety Assurance      Risk Category: Safety [3,B]*

**ACTION PLAN OVERVIEW**

CENV will review and submit CENV SOP 202.18 Emergency Action Plan for Greenbelt E95 Railcar Commissioning Facility Building H, perform safety inspections based on the CENV checklist, and record documentation.

CENV will develop a documented process addressing hazard identification that is aligned with the PTASP and in consultation with SAFE. A hazard tracker will also be developed that captures identified hazards and corresponding mitigations.

CENV will identify facilities where CENV personnel are assigned and attend the respective local safety committee meetings for these locations. CENV will submit the list of locations and respective local safety committee attendance and meeting minutes records.

**Business Impact – Budget/Cost Estimate: Operating**

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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Develop Workplace Safety Inspections Checklist	CENV will develop and submit a checklist to record the workplace safety inspections as per Actionable Item #2 (Update Workplace Safety Inspections SOP ).	<b>Cameron Akins (ODCM)</b>	02/02/22	04/06/22
2.	Update Workplace Safety Inspections SOP	CENV will update and submit CENV Standard Operating Procedure (SOP) 202.18 <i>Emergency Action Plan for Greenbelt E95 Railcar Commissioning Facility Building H</i> to include requirements for workplace safety inspections at facilities under the control of CENV.	<b>Cameron Akins (ODCM)</b>	02/02/22	08/31/22
3.	Workplace Safety Inspections Report I	CENV will conduct workplace safety inspections as specified in updated SOP 202.18 <i>Emergency Action Plan for Greenbelt E95 Railcar Commissioning Facility Building H</i> . CENV will submit 6 months' worth of workplace safety inspection records for review.  CENV will submit first quarterly report	<b>Anthony Johnson (CENV)</b>	04/06/22	08/10/22
4.	Workplace Safety Inspections Report II	CENV will submit second quarterly report.	<b>Anthony Johnson (CENV)</b>	07/06/22	11/02/22
5.	Local Safety Committee Meeting Attendance Report I	CENV will designate at least one representative per location where CENV has personnel assigned to attend and participate in the respective Local Safety Committee (LSC) meeting(s).  CENV will submit 6 months' worth of attendance logs and meeting minutes records for review from each LSC as per above.  CENV will submit the first three months' worth of records including locations list.	<b>Anthony Johnson (CENV)</b>	03/01/22	06/15/22

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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.

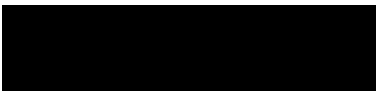
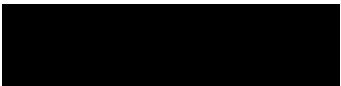
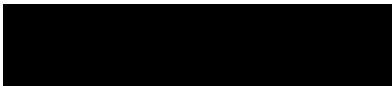


Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
6.	Local Safety Committee Meeting Attendance Report II	CENV will submit the second three months' worth of records including locations list.	<b>Anthony Johnson (CENV)</b>	06/01/22	10/19/22
7.	Documented Process	CENV will develop and submit a documented Safety Risk Assessment process to include Hazard Identification, Hazard Analysis, Safety Risk Evaluation, and Safety Risk Mitigation in alignment with the Public Transit Agency Safety Plan (PTASP) and in consultation with SAFE.	<b>Anthony Johnson (CENV)</b> <b>Supporting Office4</b> <b>Wayne Bolander (CMOR)</b> <b>Francine James (SAFE)</b>	11/30/22	08/02/23
8.	Develop Safety Risk Register	CENV will develop a safety risk register in accordance with Actionable Item #7 (Documented Process) capturing hazards and corresponding mitigations. CENV will submit three months' worth of hazards identified.	<b>Anthony Johnson (CENV)</b> <b>Supporting Office4</b> <b>Wayne Bolander (CMOR)</b>	08/02/23	12/06/23
9.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	12/06/23	01/05/24

**PERFORMANCE MEASURES**

N/A




**RESPONSIBLE PARTIES**

CENV	Cameron Akins	
		(Signature/Date)
CENV	Anthony Johnson	
		(Signature/Date)
CMOR	Wayne Bolander	
		(Signature/Date)

**SUPPORTING ROLE ACKNOWLEDGEMENT**

SAFE	Francine James	
		(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

CENV	Shushil Ramnaress	
		(Signature/Date)
CMOR	John Doherty	
		(Signature/Date)
RAIL	Michael Hass	
		(Signature/Date)



PURPOSE  
AND SCOPE

On December 15, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Vehicle Program Services (CENV) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding(s) and required action(s) for **QICO-CENV-21-02**.

## FINDING(S)

**FS-CENV-21-02:** Proper Test, Measurement and Diagnostic Equipment (TMDE) calibration is important to promote the accuracy and reliability of the instrument. Accurate measurements are essential to the quality and safety of the activities performed by CENV.

**FS-CENV-21-03:** Current and controlled policies, procedures, and standards provide clear direction and result in more consistent process control.

**FS-CENV-21-04:** Proper documentation and use of standardized templates are crucial in the creation of controlled records to verify all necessary information is registered.

**FS-CENV-21-05:** Availability of formal courses for employees to be trained for the specific tasks they perform, and maintaining an updated employee training log, helps improve operations, compliance, safety, and employee engagement.

REQUIRED  
ACTION**QICO-CENV-21-02****Vehicle Program Services (CENV)**[Risk: Red](#)

Align training, inspection, process control, measuring & testing equipment, and document control management with organization-wide quality management system plan standards.

*Measure: Safety Assurance      Risk Category: Safety [3,B]*

## ACTION PLAN OVERVIEW

CENV will develop and submit equipment calibration list as per CENV SOP 203.01 *Inspection and Calibration* for Precision Measuring Devices and submit calibration records.

Closure of iCAPA QICO PAP 21-06 will satisfy the required actions for FS-CENV-21-03 and FS-CENV-21-04.

Closure of Washington Metrorail Safety Commission (WMSC) corrective action plan WMSC-21-C0142 Actionable Items #2 and #4 will satisfy the required actions for FS-CENV-21-05.

**Business Impact – Budget/Cost Estimate: Operating**

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.



Actionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1. Inventory of CENV Equipment Subject to Calibration	CENV will develop and submit a list of Precision Measuring Devices (PMD) and other equipment subject to periodic calibration as per CENV Standard Operating Procedure (SOP) 203.01, <i>Inspection and Calibration for Precision Measuring Devices</i> .	<b>Anthony Johnson (CENV)</b>	08/08/22	10/12/22
2. Calibration Compliance Report I	CENV will submit 6 months' worth of completed calibration records and, if applicable, an updated equipment list per Actionable Item #1, (Inventory of CENV Equipment Subject to Calibration). CENV will submit the 1st quarterly worth of reporting.	<b>Anthony Johnson (CENV)</b>	10/01/22	01/18/23
3. Calibration Compliance Report II	CENV will submit the next 2nd quarterly worth of reporting.	<b>Anthony Johnson (CENV)</b>	01/01/23	04/19/23
4. QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	04/19/23	05/19/23

**PERFORMANCE MEASURES**

N/A

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

CENV Anthony Johnson

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

CENV Shushil Ramnaress

(Signature/Date)

CMOR John Doherty

(Signature/Date)

RAIL Michael Hass

(Signature/Date)



PURPOSE  
AND SCOPE

On December 15, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Vehicle Program Services (CENV) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding(s) and required action(s) for **QICO-CENV-21-03**.

FINDING(S)

**FS-CENV-21-08:** A reliable Vehicle Monitoring System (VMS)/Event Recorder (ER) is essential for a complete data download and thorough analysis of a railcar systems' operation, particularly for incident/accident investigation.

REQUIRED  
ACTION

QICO-CENV-21-03

Vehicle Program Services (CENV)

[Risk: Yellow](#)



Develop a solution to improve reliability of 2K/3K event recorder systems to comply with requirements of National Transportation Safety Board recommendation NTSB R-10-21.

*Measure: Safety Risk Management      Risk Category: Safety [3,D]*

ACTION PLAN OVERVIEW

CENV will prepare an engineering analysis to produce recommendations for improving reliability of the 2K3K Vehicle Monitoring System (VMS) Event Recorder (ER) through the remaining lifecycle of the 2K3K railcar fleet.

CENV will develop an action plan based on the recommendations issued from the engineering analysis.

**Business Impact – Budget/Cost Estimate: Operating**

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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Conduct Engineering Analysis	CENV will prepare and submit an engineering analysis to produce recommendations for improving reliability of the 2K3K Vehicle Monitoring System (VMS) Event Recorder (ER) through the remaining lifecycle of the 2K3K fleet.	Anthony Johnson (CENV)	02/02/22	02/01/23
2.	Develop Action Plan	Based on the results of Actionable Item #1, (Conduct Engineering Analysis), CENV will develop and submit an action plan after review and assessment of the recommendation(s).	Anthony Johnson (CENV)	02/01/22	09/06/23
3.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	09/06/23	10/06/23

## PERFORMANCE MEASURES

N/A

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

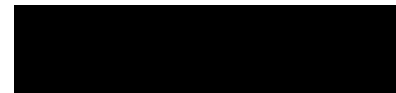
CENV      Anthony Johnson



(Signature/Date)

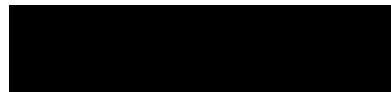
**SECOND-LEVEL RESPONSIBILITY**

CENV      Shushil Ramnaress



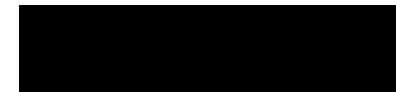
(Signature/Date)

CMOR      John Doherty



(Signature/Date)

RAIL      Michael Hass



(Signature/Date)

## **Offices of Environmental Management & Compliance and Occupational Safety & Health iCAPAs**

**Internal Safety Review**

In response to the Internal Safety Review report regarding the Offices of Environmental Management & Compliance (EMAC) and Occupational Safety & Health (OSH), the Office of Quality Assurance, Internal Compliance & Oversight (QICO) has coordinated the development of six iCAPAs. The iCAPAs have been developed to address the required actions and the associated findings.

**EXECUTIVE LEADERSHIP COMMITMENT****RESPONSIBLE PARTIES**

[Redacted Signature]

**Theresa Impastato**  
*Executive Vice President & Chief Safety Officer*

*Date*

**INTERNAL OVERSIGHT**

[Redacted Signature]

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

*Date*

[Redacted Signature]

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

*Date*

**GENERAL MANAGER & CHIEF EXECUTIVE OFFICER (GM/CEO)**

[Redacted Signature]

03/11/2022

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

*Date*





**PURPOSE  
AND SCOPE**

On February 23, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Offices of Environmental Management and Compliance (EMAC) and Occupational Safety and Health (OSH) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding(s) and required action(s) for **QICO-SAFE-22-01**.

**FINDING(S)**

**FS-SAFE-22-01:** Development of documented departmental procedures is necessary for consistent safety oversight within all processes.

**REQUIRED  
ACTION**

**QICO-SAFE-22-01**    *Environmental Management and Compliance (EMAC)*

[3D Marginal/Remote](#)

3D

**Required Action(s):**

Develop and implement documented processes for all EMAC core functions.

*Measure:* Safety Assurance    *Risk Category:* Safety 3, D

**ACTION PLAN OVERVIEW**

As part of the Department of Safety Quality Management Plan (QMP) implementation, Environmental Management and Compliance (EMAC) will identify and document a list of their specific internal core processes. EMAC will submit the list of core processes. Once the core processes have been identified, EMAC will develop a documented procedure for each and submit the completed documents.

**Business Impact – Budget/Cost Estimate: Operating**

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.



Actionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1. Identify Internal Core Processes	EMAC will conduct an assessment to identify all internal core processes. EMAC will submit the final assessment, listing all identified core processes.	<b>Claire Fox (EMAC)</b>	04/01/22	05/04/22
2. Develop Documented Procedures	As per Actionable Item #1 (Identify Internal Core Processes), EMAC will develop and submit documented procedures for the identified core functions.	<b>Claire Fox (EMAC)</b>	05/04/22	03/01/23
3. QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	03/01/23	03/31/23

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

[Redacted Signature/Date]

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

[Redacted Signature/Date]

(Signature/Date)



PURPOSE  
AND SCOPE

On February 23, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Offices of Environmental Management and Compliance (EMAC) and Occupational Safety and Health (OSH) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding(s) and required action(s) for **QICO-SAFE-22-02**.

FINDING(S)

**FS-SAFE-22-01:** Development of documented departmental procedures is necessary for consistent safety oversight within all processes.

REQUIRED  
ACTION

QICO-SAFE-22-02

*Occupational Safety and Health (OSH)*

[3D Marginal/Remote](#)

3D

**Required Action(s):**

Develop and implement documented processes for all OSH core functions.

*Measure:* Safety Assurance *Risk Category:* Safety 3, D

ACTION PLAN OVERVIEW

As part of the Department of Safety Quality Management Plan (QMP) implementation, Occupational Safety and Health (OSH) will identify and document a list of their specific internal core processes. OSH will submit the list of core processes. Once the core processes have been identified, OSH will develop a documented procedure for each and submit the completed documents.

**Business Impact – Budget/Cost Estimate: Operating**

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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Identify Internal Core Processes	OSH will conduct an assessment to identify all internal core processes. OSH will submit the final assessment, listing all identified core processes.	<b>Valerie Steele (OSH)</b>	04/01/22	05/04/22
2.	Develop Documented Procedures	As per Actionable Item #1 (Identify Internal Core Processes), OSH will develop and submit documented procedures for the identified core functions.	<b>Valerie Steele (OSH)</b>	05/04/22	03/01/23
3.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	03/01/23	03/31/23

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

[Redacted Signature/Date]

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

[Redacted Signature/Date]

(Signature/Date)

PURPOSE  
AND SCOPE

On February 23, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Offices of Environmental Management and Compliance (EMAC) and Occupational Safety and Health (OSH) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding(s) and required action(s) for **QICO-SAFE-22-03**.

## FINDING(S)

**FS-SAFE-22-02:** Conducting further investigations after identifying chemical hazards can lead to identification of root cause and in turn mitigation or elimination of the hazards.

REQUIRED  
ACTION**QICO-SAFE-22-03***Environmental Management and Compliance (EMAC)*[3D Marginal/Remote](#)**3D****Required Action(s):**

Develop and implement a root cause analysis investigative requirement and process.

*Measure:* Safety Assurance *Risk Category:* Safety 3, D

## ACTION PLAN OVERVIEW

As part of the identification and development of documented procedures identified as part QICO-SAFE-22-01, EMAC will develop a procedure, to include the following elements: performing a spot check, the threshold triggering a root cause analysis, and the process for conducting a root cause investigation.

**Business Impact – Budget/Cost Estimate: Operating**

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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Develop Documented Procedure	As per QICO-SAFE-22-01 Actionable Item #2 (Develop Documented Procedures), EMAC will develop and submit a procedure, to include the following elements: performing a spot check, the threshold triggering a root cause analysis, and the process for conducting a root cause investigation.	<b>Claire Fox (EMAC)</b> <b>Supporting Office<sup>4</sup>:</b> <b>Valerie Steele (OSH)</b>	05/04/22	03/01/23
2.	Staff Communication	As per Actionable Item #1 (Develop Documented Procedure), SAFE will develop and distribute a communication to notify WMATA staff of the chemical spot check root cause investigation procedure.	<b>Claire Fox (EMAC)</b> <b>Supporting Office<sup>4</sup>:</b> <b>Valerie Steele (OSH)</b>	03/01/23	04/05/23
3.	Implementation	As per Actionable Item #1 (Develop Documented Procedure), EMAC will submit six months' worth of evidence reflecting compliance with the new procedure. Evidence will consist of completed spot checks or, if applicable, root cause investigations provided the determined triggering criteria in the procedure has been met.	<b>Claire Fox (EMAC)</b>	04/05/23	11/15/23
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	11/15/23	12/15/23

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

[Redacted Signature/Date]

(Signature/Date)

**SUPPORTING ROLE ACKNOWLEDGEMENT**

[Redacted Signature/Date]

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

[Redacted Signature/Date]

(Signature/Date)



PURPOSE  
AND SCOPE

On February 23, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Offices of Environmental Management and Compliance (EMAC) & Occupational Safety and Health (OSH) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding(s) and required action(s) for **QICO-SAFE-22-04**.

FINDING(S)

**FS-SAFE-22-04:** A documented training matrix which includes required departmental safety training is essential to ensure personnel are incorporating safe practices within their assigned work.

REQUIRED  
ACTION

QICO-SAFE-22-04

*Occupational Safety and Health (OSH)*

[4D Negligible/Remote](#)

4D

**Required Action(s):**

Develop an OSH specific training matrix.

*Measure:* Safety Promotion *Risk Category:* Safety 4, D

ACTION PLAN OVERVIEW

Occupational Safety and Health (OSH) will develop and submit a training matrix to track the required training requirement for OSH personnel. The training matrix will identify the required training for specific positions within OSH.

**Business Impact – Budget/Cost Estimate: Operating**

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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Develop Training Matrix	OSH will develop and submit a training matrix which will identify and track the required training for job positions within OSH.	<b>Valerie Steele (OSH)</b>	05/04/22	11/02/22
2.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	11/02/22	12/02/22

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

[Redacted Signature/Date]

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

[Redacted Signature/Date]

(Signature/Date)



PURPOSE AND SCOPE

On February 23, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Offices of Environmental Management and Compliance (EMAC) and Occupational Safety and Health (OSH) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding(s) and required action(s) for **QICO-SAFE-22-05**.

FINDING(S)

**FS-SAFE-22-05:** Performing internal SMS compliance audits promotes compliance with requirements, provides consistency of performance, and helps identify improvement opportunities.

REQUIRED ACTION

QICO-SAFE-22-05

*Department of Safety (SAFE)*

[3D Marginal/Remote](#)

3D

**Required Action(s):**

Revise PTASP (rev 2.0), section 4.1.2, to clarify SMS audit requirements.

*Measure:* Safety Management Policy *Risk Category:* Safety 3, D

ACTION PLAN OVERVIEW

SAFE will draft the proposed changes to WMATA's Public Transportation Agency Safety Plan (PTASP) Section 4.1.2 *Monitoring of Operational Safety Risk Mitigations*, which will include the clarification of the Safety Management System (SMS) audit requirements and present them at the General Review meeting, as part of WMATA's annual PTASP update. Per the requirements of the Program Standard Section 4 A.2, SAFE will present the updated PTASP for review and approval by WMATA leadership and the WMSC. SAFE will publish the approved PTASP to MetroDocs along with SSOA certification.

**Business Impact – Budget/Cost Estimate: Operating**

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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	PTASP General Review Meeting	SAFE will review and revise language in Section 4.1.2 <i>Monitoring of Operational Safety Risk Mitigations</i> of the PTASP to include the requirements for SMS audits and present them for concurrence at the General Review Meeting conducted as part of the annual PTASP revision. SAFE will submit the meeting notes from General Review meeting.	<b>James Wojciechowski (SAFE)</b>	05/20/22	06/01/22
2.	PTASP Draft	As per Actionable Item #1 (PTASP General Review Meeting), SAFE will present the updated PTASP for review and approval by WMATA leadership and the WMSC. SAFE will submit the revised draft document.	<b>James Wojciechowski (SAFE)</b>	06/01/22	07/06/22
3.	Publish Updated PTASP	As per Actionable Item #2 (PTASP Draft), SAFE will publish the approved PTASP to MetroDocs along with State Safety Oversight Agency (SSOA) certification. SAFE will submit the fully approved PTASP.	<b>James Wojciechowski (SAFE)</b>	10/03/22	01/04/23
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	01/04/23	02/03/23

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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



(Signature/Date)



PURPOSE  
AND SCOPE

On February 23, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Offices of Environmental Management and Compliance (EMAC) & Occupational Safety and Health (OSH) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding(s) and required action(s) for **QICO-SAFE-22-06**.

FINDING(S)

**FS-SAFE-22-06:** Creating and maintaining a comprehensive collection of Job Hazard Analyses will promote a safe work environment by identifying specific hazards and mitigations prior to the start of the task.

REQUIRED  
ACTION

QICO-SAFE-22-06

*Occupational Safety and Health (OSH)*

3C Marginal/Occasional

3C

**Required Action(s):**

Facilitate the development and maintenance of a library of JHAs that are available to all employees.

*Measure:* Safety Risk Management *Risk Category:* Safety 3,C

ACTION PLAN OVERVIEW

Occupational Safety and Health (OSH) will develop an internal directive for WMATA organizational departments to identify, create, and store Job Hazard Analyses (JHA). SAFE will roll-out the directive to appropriate departments via a staff communication notice. SAFE will also create a centralized library for the storage of completed and current JHA.

**Business Impact – Budget/Cost Estimate: Operating**

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.





Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Develop JHA Internal Directive	OSH will develop an internal directive for organizational departments to identify, create, and store Job Hazard Analyses. SAFE will provide evidence of completion.	<b>Valerie Steele (OSH)</b>	03/16/22	12/21/22
2.	Create JHA Library	As per Actionable Item #1 (Develop JHA Internal Directive) Create library for the storage of completed and current Job Hazard Analyses. SAFE will provide electronic storage location of the library.	<b>Valerie Steele (OSH)</b>	12/21/22	02/01/23
3.	Staff Communication	As per Actionable Item #1 (Develop JHA Internal Directive), SAFE will roll-out the directive to appropriate departments and submit the communication notice.	<b>Valerie Steele (OSH)</b>	12/21/22	02/01/23
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	02/01/23	03/03/23

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

[Redacted Signature/Date]

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

[Redacted Signature/Date]

(Signature/Date)

## Track Maintenance and Inspections: Office of Track and Structure iCAPAs



## Internal Safety Review

In response to the Internal Safety Review report regarding the Office of Track & Structures, the Office of Quality Assurance Internal Compliance & Oversight (QICO) has coordinated the development of four (4) iCAPAs. The iCAPAs have been developed to address required actions and the associated findings.

## EXECUTIVE LEADERSHIP COMMITMENT

### RESPONSIBLE PARTIES



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

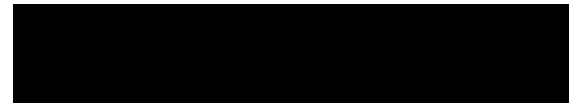
*Date*



**Theresa Impastato**  
*Executive Vice President & Chief Safety Officer*

*Date*

## INTERNAL OVERSIGHT



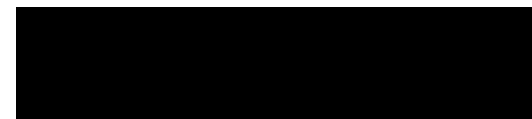
**Hakim Davis**  
*Vice President, Quality Assurance, Internal Compliance & Oversight (QICO)*

*Date*



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

*Date*



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

03/21/2022

*Date*



**PURPOSE  
AND SCOPE**

On February 28, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Track Maintenance (TRMN) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated findings and required action for **QICO-TRMN-22-01**.

**FINDINGS**

**FS-TRMN-21-01:** Following established safety protocols and procedures when operating or working around track equipment reduces risk to employee safety.

**FS-TRMN-21-02:** Consistent communication between the Equipment Operator and the Vehicle Flag Person while operating on track equipment supports a safe working environment.

**REQUIRED  
ACTION**

**QICO-TRMN-21-01**

**Track & Structures (TRST)**

[Risk: Red](#)



**Required Action(s):**

Enforce developed safety procedures in the MSRP and standard operating procedures to protect employees, passengers and WMATA property.

*Measure: Safety Risk Management      Risk Category: Safety 2,C*

**ACTION PLAN OVERVIEW**

**Must be completed by Action Owner:**

The office of Track and Structures (TRST) will partner with SAFE and perform a hazard analysis of the rail loading process and evaluate if safety improvements can be made. TRST will create a maintenance bulletin to re-enforce safety protocols on the roadway. This will include roadway worker activity around moving equipment in a work zone and proper communication between Equipment Operators and Vehicle Flag Persons.

**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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	SAFE Analysis	TRST will partner with SAFE to analyze TRST rail loading activities to distinguish any hazards and establish a mitigation plan. TRST will submit the analysis and hazard mitigation plan.	<b>Michael Thomas</b> TRST <b>Supporting Office</b> <b>Matthew Swanhart</b> SAFE	03/14/22	06/22/22
2.	Rail Loading Activity Maintenance Bulletin	TRST will develop and submit a maintenance bulletin identifying any safety standard updates, if necessary, as per Actionable Item #1 (SAFE Analysis), and disseminate to all employees. TRST will also submit the applicable Track personnel roster, and acknowledgements from 95% of active applicable TRST personnel. Submission of this Actionable Item is contingent upon the outcome of Actionable Item # 1.	<b>Bruce Buck</b> TRST	06/22/22	09/07/22
3.	Roadway Communication Maintenance Bulletin	TRST will develop and submit a maintenance bulletin describing clear communication standards and disseminate to all employees. TRST will also submit the applicable Track personnel roster, and acknowledgements from 95% of active applicable TRST personnel.	<b>Bruce Buck</b> TRST	03/14/22	06/01/22
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	09/08/22	10/14/22

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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

[Redacted Signature/Date]

(Signature/Date)

[Redacted Signature/Date]

(Signature/Date)

SUPPORTING ROLE ACKNOWLEDGEMENT

[Redacted Signature/Date]

(Signature/Date)

SECOND-LEVEL RESPONSIBILITY

[Redacted Signature/Date]

(Signature/Date)

[Redacted Signature/Date]

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PURPOSE  
AND SCOPE

On February 28, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Track Maintenance (TRMN) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated findings and required action for **QICO-TRMN-22-02**.

## FINDINGS

**FS-TRMN-21-03:** Following track repair work instructions would support quality work and consistent results.

**FS-TRMN-21-05:** Completing exception forms for Heat Ride inspections according to governing documentation provides traceability and verification of compliance.

REQUIRED  
ACTION**QICO-TRMN-21-02***Track & Structures (TRST)*[Risk: Yellow](#)**Required Action(s):**

Enforce established work instructions and standard operating procedures when performing routine maintenance and inspections to provide a safer work environment and support quality standards.

*Measure: Safety Assurance      Risk Category: Safety 3,C*

## ACTION PLAN OVERVIEW

**Must be completed by Action Owner:**

The office of Track and Structures (TRST) will re-enforce maintenance repair work instructions and provide associated quality control checks to verify compliance. TRST will submit rail documentation recording ambient temperatures, heat ride inspections, and completed exception forms where required.

**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.



Actionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1. Fastener Bolt Installation	<p>TRST will perform quality control checks to verify fastener bolt installation compliance with WTIK-701.2 <i>Stud Replacement Core Drilling and Setting of New Anchor Studs on Direct Fixation Track</i> and 701.3 <i>New Anchor Stud Locations Rock Drilling on Direct Fixation Track</i>.</p> <p>TRST will submit three months' worth of completed fastener bolt installation quality control checklists.</p>	Joseph Fowler TRST	03/14/22	08/03/22
2. Fastener Shim Installation	<p>TRST will perform quality control checks to verify proper fastener shim installation compliance with WITK-701.4.1 <i>Fastener Replacement on Direct Fixation Track-Anchor Studs or Concrete Inserts</i>.</p> <p>TRST will submit three months' worth of completed fastener installation quality control checklists.</p>	Joseph Fowler TRST	03/14/22	08/03/22
3. Fastener Stud Torque Marking	<p>TRST will perform quality control checks to verify proper stud torque marking compliance with WTIK-701.2 <i>Stud Replacement Core Drilling and Setting of New Anchor Studs on Direct Fixation Track</i> and 701.3 <i>New Anchor Stud Locations Rock Drilling on Direct Fixation Track</i>.</p> <p>TRST will submit three months' worth of completed fastener stud torque quality control checklists.</p>	Joseph Fowler TRST	03/14/22	08/03/22

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
4.	Heat Ride Inspections	<p>TRST will complete heat ride inspection exception forms, when applicable, to verify compliance with SOP 208-06 Heat Ride Inspection Procedure.</p> <p>TRST will submit documentation showing ambient temperatures for May-September 2022 with corresponding heat ride compliance for all days with temperatures 90 degrees and above.</p>	<p><b>Joseph Fowler</b></p> <p><b>TRST</b></p>	05/02/22	10/12/22
5.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	10/13/22	11/18/22



**RESPONSIBLE PARTIES**

[Redacted Signature/Date]

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

[Redacted Signature/Date]

(Signature/Date)

[Redacted Signature/Date]

(Signature/Date)



**PURPOSE  
AND SCOPE**

On February 28, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Track Maintenance (TRMN) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated findings and required action for **QICO-TRMN-22-03**.

**FINDINGS**

**FS-TRMN-21-04:** Utilizing a specific tool for a particular job activity reduces the risk of a work-related injuries.

**FS-TRMN-21-06:** Performing regular tool and equipment inspections prior to work initiation demonstrates effective hazard mitigation and reduces the potential for injuries.

**REQUIRED  
ACTION**

**QICO-TRMN-21-03**

**Track & Structures (TRST)**

Risk: Yellow



**Required Action(s):**

Assure the availability of the proper tools for specific jobs and routine inspections.

*Measure: Safety Assurance      Risk Category: Safety 3,C*

**ACTION PLAN OVERVIEW**

**Must be completed by Action Owner:**

The office of Track and Structures (TRST) will issue a maintenance bulletin to refresh track maintenance employees of proper/safe tool and equipment use. TRST will perform compliance checks of track maintenance activity to verify adherence to standards outlined in the maintenance bulletin.

**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.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Proper Tool Use Maintenance Bulletin	TRST will develop and submit a maintenance bulletin outlining the proper/safe use and condition of tools and equipment used within TRST. TRST will also submit the applicable Track personnel roster, and acknowledgements from 95% of active applicable TRST personnel.	<b>Bruce Buck</b> TRST	03/14/22	06/01/22
2.	Compliance Checks	TRST will perform compliance checks identifying proper tool use for the individual jobs and verifying non-usage of damaged equipment. TRST will submit three months' worth of completed compliance checks.	<b>Darryl Suggs</b> TRST	06/06/22	10/05/22
3.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	10/06/22	11/11/22

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

[Redacted Signature/Date]

(Signature/Date)

[Redacted Signature/Date]

(Signature/Date)

**SECOND-LEVEL RESPONSIBILITY**

[Redacted Signature/Date]

(Signature/Date)

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**PURPOSE  
AND SCOPE**

On February 28, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Track Maintenance (TRMN) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated finding and required action for **QICO-TRMN-22-04**.

**FINDING**

**FS-TRMN-21-07:** Reviewing and updating governing documents within the required frequency optimizes applicability and incorporates changes in a timely manner.

**REQUIRED  
ACTION**

**QICO-TRMN-21-03**

*Track & Structures (TRST)*

[Risk: Green](#)



**Required Action(s):**

Revise and update TRST governing documents as per OAP-108-02.

*Measure: Safety Management Policy      Risk Category: Safety 4,C*

**ACTION PLAN OVERVIEW**

**Must be completed by Action Owner:**

The office of Track and Structures (TRST) will update governing documents past due for review.

**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.





Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Document Update	TRST will update and submit SOP 108-03 <i>Quality Assurance of Track Inspections</i> and SOP 208-14 <i>Establishing and Maintaining Positive Communication between Equipment Operator and Flag Person of Class II Vehicles</i> .	<b>Bruce Buck</b> <b>TRST</b>	03/01/22	08/03/22
2.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	<b>QICO</b>	08/04/22	09/09/22

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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

[Redacted Signature/Date]

(Signature/Date)

SECOND-LEVEL RESPONSIBILITY

[Redacted Signature/Date]

(Signature/Date)

[Redacted Signature/Date]

(Signature/Date)

[Redacted Signature/Date]

(Signature/Date)

## **Restraining Rail Installation and Maintenance (RRIM) iCAPAs**

**Engineering & Maintenance**

In response to the internal review report regarding Restraining Rail Installation and Maintenance the Office of Maintenance of Way Engineering (MOWE), the Office of Engineering and Architecture (ENGA), the Office of Track and Structures (TRST), and the Office of Quality Assurance Internal Compliance & Oversight (QICO) have coordinated the development of four (4) iCAPAs. The iCAPAs have been developed to address the required actions and the associated findings.

**EXECUTIVE LEADERSHIP COMMITMENT****RESPONSIBLE PARTIES**

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

*Date*

**Andrew Off**  
*Executive Vice President, Capital Delivery*

*Date*

**INTERNAL OVERSIGHT**

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

*Date*

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

*Date*

**GENERAL MANAGER & CHIEF EXECUTIVE OFFICER (GM/CEO)**

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

04/18/2022

*Date*

PURPOSE  
AND SCOPE

On September 8, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Restraining Rail Installation and Maintenance Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding and required action for QICO-RRIM-21-01.

## FINDING

**FQ-RRIM-21-01:** Implementing modifications through adequate change and configuration management processes, following an Engineering Modification Instruction (EMI) reduces potential errors and promotes compliance.

REQUIRED  
ACTION

QICO-RRIM-21-01

**Maintenance of Way Engineering (MOWE)  
Track and Structures (TRST)**Risk: High

Create and disseminate maintenance bulletins to communicate modifications in standards and maintenance practices.

*Measure: Design Control      Risk Category: Safety [5,4]*

## ACTION PLAN OVERVIEW

MOWE will create a maintenance bulletin to address the latest change to the restraining rail flangeway gap as interim solution before updating the other governing maintenance documents referencing this specification. Any additional changes to restraining rail maintenance standards in the time frame of this required action will also be submitted.

TRST will disseminate and provide acknowledgement of the maintenance bulletin(s) from track supervisors and field personnel.

**Business Impact – Budget/Cost Estimate: Operating**

Process Execution – A current process/procedure exists that meets the Required Action(s), but needs to be executed. This type of initiative does not need additional resources.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Flangeway Width Maintenance Bulletin	MOWE will create and submit a maintenance bulletin for the modification in restraining rail flangeway width. Other interim updates to maintenance standards will be created and submitted if needed. Maintenance bulletins will be submitted to TRST management.	<b>Ravi Amin MOWE</b>	09/27/21	12/01/21
2.	Maintenance Bulletins Acknowledgement	TRST will disseminate the maintenance bulletins to all active TRST track maintenance/inspection personnel and submit evidence of acknowledgement.	<b>Bruce Buck TRST</b>	12/01/21	02/02/22
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.	<b>QICO</b>	02/02/22	03/04/22

## PERFORMANCE MEASURES

Evidence that 95% of active TRST track maintenance/inspection supervisory and field personnel acknowledge receipt of maintenance bulletins as per Actionable Item #2.





<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

MOWE	Ravi Amin	
(Signature/Date)		
MOWE	Sariah TambreLeigh	
(Signature/Date)		
TRST	Bruce Buck	
(Signature/Date)		
TRST	Joseph Fowler	
(Signature/Date)		

**SECOND-LEVEL RESPONSIBILITY**

RIME	Nathan Williams	
(Signature/Date)		

**THIRD-LEVEL RESPONSIBILITY**

RAIL	Michael Hass	
(Signature/Date)		

PURPOSE  
AND SCOPE

On September 8, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Restraining Rail Installation and Maintenance Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding and required action for QICO-RRIM-21-02.

## FINDING

**FQ-RRIM-21-02:** Adherence to Restraining Rail installation requirements within design criteria establishes consistency and compliance.

REQUIRED  
ACTION

QICO-RRIM-21-02.

***Maintenance of Way and Engineering (MOWE)  
Engineering & Architecture (ENGA)***

[Risk: Elevated](#)



Conduct a curved rail study and update design criteria based upon the results of the study.

*Measure: Document Control      Risk Category: Service Delivery [4,3]*

ACTION PLAN  
OVERVIEW

MOWE will develop a scope of work for a third-party contract for evaluation and recommendations on a curved restraining rail study. MOWE will oversee the evaluation and collect the report from the contractor. MOWE will formally submit any recommendations to ENGA for review by the Configuration Change Control Board.

ENGA will conduct a Configuration Change Control Board meeting to review any recommendations from MOWEs notification for approval. If the changes are approved, interim notification will be sent out to fill the gap between the next design criteria update.

**Business Impact – Budget/Cost Estimate: Capital**

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.





Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Curved Restraining Rail Study Scope of Work	MOWE will develop and submit the scope of work for a third-party contractor to conduct a curved restraining rail study.	Ravi Amin MOWE	12/01/21	04/06/22
2.	Curved Restraining Rail Study	MOWE will partner with a consultant and submit a final report of the curved restraining rail study.	Ravi Amin MOWE	04/06/22	04/10/24
3.	Design Criteria Notification	MOWE will formally notify ENGA on the necessary updates to the design criteria based upon the results of the curve restraining rail study. MOWE will submit the formal notification.	Ravi Amin MOWE	04/10/24	07/10/24
4.	Configuration Change Control Board Meeting Results	Based on Actionable Item #3, the revised design criteria will be reviewed by the Configuration Change Control Board. ENG A will submit the results of the Configuration Change Control Board meeting.	Nick Gardner ENG A	07/10/24	01/08/25
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	01/08/25	02/05/25

## PERFORMANCE MEASURES

N/A

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

MOWE      Ravi Amin



(Signature/Date)

MOWE      Sariah TambreLeigh



(Signature/Date)

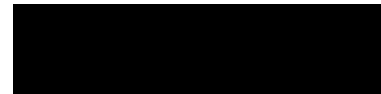
**SECOND-LEVEL RESPONSIBILITY**

ENGA      Nichalos Gardner



(Signature/Date)

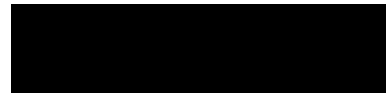
RIME      Nathan Williams



(Signature/Date)

**THIRD-LEVEL RESPONSIBILITY**

RAIL      Michael Hass



(Signature/Date)

PURPOSE  
AND SCOPE

On September 8, 2021, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Restraining Rail Installation and Maintenance Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding and required action for QICO-RRIM-21-03.

## FINDING

**FQ-RRIM-21-03:** Alignment of design criteria, maintenance standards, work instructions, and issuance of consistent governing documents would improve efficiency and reduce uncertainty performing inspections and maintenance.

REQUIRED  
ACTION

QICO-RRIM-21-03.

***Maintenance of Way Engineering (MOWE)  
Track and Structures (TRST)***

[Risk: Elevated](#)



Update controlled documents to reflect the consistent design and maintenance standards throughout.

*Measure: Inspection, Testing & Status      Risk Category: Service Delivery [5,4]*

## ACTION PLAN OVERVIEW

MOWE will conduct a review of restraining rail installation, inspection, and maintenance governing documents to verify alignment and consistency throughout. Change control logs will be submitted as governing documents are reviewed within their respective periodicity.

TRST will disseminate and provide acknowledgement of the updated governing documents from track supervisors and field personnel.

**Business Impact – Budget/Cost Estimate: Operating**

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.



Actionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1. Restraining Rail Governing Documents	MOWE will update and submit the change control logs of reviewed TRST 1000 Volume 2, Volume 3, and restraining rail related work instructions to ensure alignment and consistency throughout.  MOWE will also submit updated governing documents related to the restraining rail inspection and maintenance.	<b>Ravi Amin MOWE</b>	10/13/21	02/01/23
2. Distribution and Acknowledgement	TRST will disseminate all updated documentation to all track inspection/maintenance supervisory and field personnel as per Actionable Item #1  TRST will submit evidence of acknowledgement of the governing documents.	<b>Bruce Buck TRST</b>	02/01/23	04/26/23
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.	<b>QICO</b>	04/26/23	05/31/23

## PERFORMANCE MEASURES

Evidence that 95% of active TRST track inspection/maintenance supervisory and field personnel acknowledge receipt of updated documentation as per Actionable Item #2.

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.




<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

MOWE	Ravi Amin	
		(Signature/Date)
MOWE	Sariah TambreLeigh	
		(Signature/Date)
TRST	Bruce Buck	
		(Signature/Date)
TRST	Joseph Fowler	
		(Signature/Date)


**SECOND-LEVEL RESPONSIBILITY**

RIME	Nathan Williams	
		(Signature/Date)

**THIRD-LEVEL RESPONSIBILITY**

RAIL	Michael Hass	
		(Signature/Date)



PURPOSE AND SCOPE	<p>On September 8, 2021, the Office of Quality Assurance, Internal Compliance &amp; Oversight (QICO) issued the Restraining Rail Installation and Maintenance Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding and required action for QICO-RRIM-21-04.</p>			
FINDING	<p><b>FQ-RRIM-21-04:</b> Provide guidance on restraining rail inspection and proper documentation of conditions and any defects.</p>			
REQUIRED ACTION	QICO-RRIM-21-04.	<i>Track and Structures (TRST)</i>	<u><a href="#">Risk: Elevated</a></u>	
	<p>Review all rail inspection and maintenance documents for alignment of designated tasks with current practices, and conduct quality assurance checks to verify adherence to approved restraining rail maintenance and repair documents.</p> <p><i>Measure: Inspection, Testing &amp; Status      Risk Category: Service Delivery [4,4]</i></p>			
ACTION PLAN OVERVIEW	<p>Alignment of restraining rail inspection governing documents is covered by QICO-RRIM-03. The quality control checks will be completed with the form included in Track Work Instruction 700.4.8 and per SOP 208-15 guidelines. TRST is to provide three (3) months of quality control checks on restraining rail maintenance.</p> <p><b>Business Impact – Budget/Cost Estimate: Operating</b></p> <p>Process Execution – A current process/procedure exists that meets the Required Action(s), but needs to be executed. This type of initiative does not need additional resources.</p>			



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Conduct Quality Control Checks	TRST will submit three (3) months of quality control checklists for Restraining Rail maintenance.	<b>Demond Lyles TRST</b>	10/13/21	03/02/22
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.	<b>QICO</b>	02/16/22	03/16/22

**PERFORMANCE MEASURES**

N/A

<sup>1</sup> In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

<sup>2</sup> Est Start – Estimated Start Date.

<sup>3</sup> Est End – Estimated Completion Date.

<sup>4</sup> 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**

TRST      Demond Lyles



(Signature/Date)

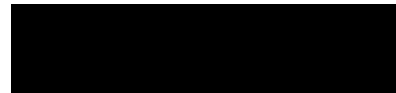
TRST      Joseph Fowler



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**SECOND-LEVEL RESPONSIBILITY**

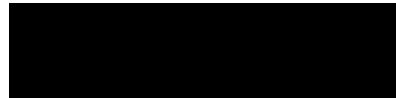
RIME      Nathan Williams



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**THIRD-LEVEL RESPONSIBILITY**

RAIL      Michael Hass



(Signature/Date)



## SUPPLEMENTAL MATERIALS

## APPENDIX A: SAFETY MANAGEMENT SYSTEM COMPONENTS

### Pillar 1: Safety Management Policy

- **ASP Management:** Updates and revisions to the safety plan and establishment of targets.
- **Responsibilities:** Specific and common departmental responsibilities for all employees.
- **Emergency Management:** Development, maintenance, and implementation of all security and emergency management documentation.
- **Documentation:** General document maintenance as it pertains to the ASP.

### Pillar 2: Safety Risk Management

- **Hazard Risk Assessment:** The methodology and process which outlines how safety risk is assessed.
- **Hazard Identification:** Process of how hazards are identified.
- **Hazard Reporting:** Employee and customer hazard reporting programs/process.
- **Hazard Resolution and Tracking:** The mitigation and ongoing tracking of identified hazards.

### Pillar 3: Safety Assurance

- **Safety Data Analysis:** Departmental responsibility to identify and analyze data on their safety critical functions.
- **Compliance:** Ongoing performance monitoring activities and maintenance control plans.
- **Analysis & Risk Mitigation:** Risk identification, investigation, analysis, mitigation, corrective action plans, and continuous improvement.
- **Configuration Management:** Change management, system modification, and safety and security certification.
- **Procurement:** Development of measures to ensure that the safety principles, requirements and representatives are included in the transit agency's procurement process.

### Pillar 4: Safety Promotion

- **Training:** Establishment of safety-training requirements, communication, and recordkeeping for personnel, adhering to all applicable safety and health statutes and regulations.
- **Hazardous Materials:** Processes, training, approval, protective equipment, and documentation of chemicals and hazardous or toxic substances.
- **Environmental Management:** Processes, training, approvals, and compliance checks as they relate to environmental management and regulation compliance.
- **Drug and Alcohol Compliance:** Departmental training and compliance with the established Substance Abuse Policy and Employee Assistance Program.



## APPENDIX B: THE 15 CORE QMS STANDARDS PER THE QUALITY MANAGEMENT SYSTEM PLAN

1. **Management Responsibilities:** Commitment of senior management to implement, maintain, and continually improve upon WMATA's Quality Management System
2. **Documented Quality Management System:** The combined set of quality documents, including a Quality Management System Plan, subordinate Quality Management Plans, Policies & Procedures, Work Instructions, Forms, etc.
3. **Design Control:** Processes to ensure the consistent development and maintenance of quality design documentation for projects and assets based on requirements, standards, criteria, etc.
4. **Document Control:** Managing information to ensure the most current approved documents are used
5. **Purchasing:** Providing for timely procurement of the right items/assets and services required for proper performance
6. **Identification & Traceability of Assets & Materials:** The ability to track the unique history, location performance, and configuration of any asset over its lifecycle
7. **Process Control:** Management and documentation of inter-related resources and activities to turn inputs into outputs/outcomes
8. **Inspection, Testing & Status:** Verification and documentation that practices, processes, assets, and materials comply with applicable procedures, specification, etc. and are fit for service
9. **Inspection, Measuring & Test Equipment:** Identification and periodic testing and calibration of measuring and test equipment to assure readiness for use
10. **Non-Conformance:** Systematic tracking of work performed or material that does not meet procedures, specs, contract requirements, etc.
11. **Corrective & Preventive Actions:** Measures taken to modify processes/procedures to correct and prevent recurrence of non-conformances and failures
12. **Quality Records:** Documents generated by Quality functions that provide objective evidence of fulfillment of requirements
13. **Internal Reviews & Quality Assessments:** Independent, objective review of conformance to quality standards and/or the overall effectiveness of processes in delivering acceptable levels of quality
14. **Training:** Providing skills and knowledge required for staff to successfully perform a job
15. **Customer Focus:** Proactively addressing the needs and wants of internal and external customers, always



## APPENDIX C: RISK ASSESSMENT (ISR)

### Risk Assessment Methodology

Internal Safety Reviews performed by QICO utilize a safety risk evaluation method based on MIL-STD-882E, which categorizes all identified hazards in terms of severity and probability of occurrence.

- A hazard probability may be derived from the analysis of transit system operating experience, evaluation of WMATA safety data, the analysis of reliability and failure data, or from historical safety data from other passenger rail systems or bus systems.
- Hazard severity is a subjective determination of the worst case that could be anticipated to result from human error, design inadequacies, component failure or malfunction. The categorization of hazards is consistent with risk-based criteria for severity; it reflects the principle that not all hazards pose an equal amount of risk to personal safety.

### Risk Management Likelihood Scale

Probability	Value	Qualitative Meaning	Quantitative Meaning
Frequent	A	Opportunity for risk to be realized expected to occur often	Probability of occurrence greater than or equal to 10 <sup>-1</sup> (10%)
Probable	B	Opportunity for risk to be realized expected on a recurring basis	Probability of occurrence less than 10 <sup>-1</sup> (10%) but greater than or equal to 10 <sup>-2</sup> (1%)
Occasional	C	Opportunity for risk to be realized expected to occur	Probability of occurrence less than 10 <sup>-2</sup> (1%) but greater than or equal to 10 <sup>-3</sup> (0.1%)
Remote	D	Opportunity for risk to be realized not expected to occur but possible	Probability of occurrence less than 10 <sup>-3</sup> (0.1%) but greater than or equal to 10 <sup>-6</sup> (0.0001%)
Improbable	E	Opportunity for risk to be realized not expected to occur and almost inconceivable	Probability of occurrence less than 10 <sup>-6</sup> (0.0001%)

### Risk Management Severity Scale




Probability	Value	Meaning
Catastrophic	1	Risk realization expected to result in one or more of the following: death, permanent total disability, loss of occupied volume with equipment damage causing separations in structure, infrastructure damage that suspends service through the affected area for greater than 24 hours.
Critical	2	Risk realization expected to result in one or more of the following: permanent partial disability, injuries/illness that results in hospitalization, loss of occupied volume with equipment damage that causes openings but no separations in structure, infrastructure damage that suspends service through the affected area for greater than 2 and up to 24 hours.
Marginal	3	Risk realization expected to result in one or more of the following: injury or illness resulting in one or more lost work day(s), occupied volume with equipment damage that causes no openings in structure, infrastructure damage that suspends service through the affected area for more than 30 minutes and up to 2 hours.
Negligible	4	Risk realization expected to result in one or more of the following: injury or occupational illness that does not result in a lost work day, no loss of occupied volume, equipment or infrastructure damage that does not suspend service nor cause a delay through the affected area for more than a maximum of 30 minutes.

## APPENDIX C: RISK ASSESSMENT (ISR)

### Risk Assessment Matrix

Frequent (A)	Risk Probability	1A	2A	3A	4A
Probable (B)		1B	2B	3B	4B
Occasional (C)		1C	2C	3C	4C
Remote (D)		1D	2D	3D	4D
Improbable (E)		1E	2E	3E	4E
Probability	Risk Severity				
	Severity	Catastrophic (1)	Critical (2)	Marginal (3)	Negligible (4)

### Risk Index

Red		1A, 2A, 3A, 1B, 2B, 3B, 1C, 2C, 1D	GM, COO, and CSO acceptance required to continue activity without level-changing mitigations in place.
Yellow		4A, 4B, 3C, 2D, 3D, 1E, 2E, 3E	VP level acceptance required to continue activity without level-changing mitigations in place.
Green		4C, 4D, 4E	Risk effectively mitigated or considered so unlikely its acceptable as-is.

## APPENDIX D: RISK ASSESSMENT (IR)

### 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 (IMP 4, PROB 3)" would mean a 'significant (4)' impact along with a 'possible (3)' probability of occurrence).



## APPENDIX D: RISK ASSESSMENT (IR)

### Risk Assessment Matrix

Almost Certain (5)	Probability of Occurrence	Low	Moderate	Elevated	High	High
Likely (4)		Low	Low	Moderate	Elevated	High
Possible (3)		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            | (4) Likely – Reasonable assumption that this risk will likely occur |
| (2) Unlikely – Reasonable assumption that this risk will likely not occur | (5) Almost Certain – Reasonable assumption that this will occur     |
| (3) Possible – Reasonable assumption that this risk may occur             |   |



## APPENDIX E: TECHNICAL TERMINOLOGY

### DESCRIPTION

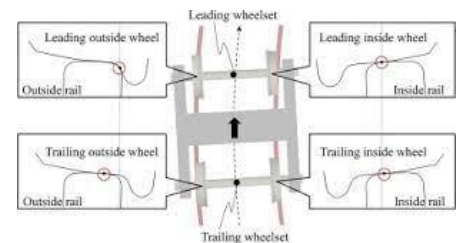
- **AFCS Maintenance Field Office Dispatch Center (Helpdesk):** Where all failures relating to Rail AFCS equipment are reported (L'Enfant Plaza). It is manned by dispatchers and at least one AFCS supervisor during the hours of revenue operation. Station Managers and possibly other WMATA personnel call the center to report problems with AFCS devices. Work orders are then generated, and technicians are dispatched to investigate. The dispatch center provides a secure "Keywatcher" system for managing the keys to fare vendors, which each technician must pick up at the beginning of their shift and return at the end of their shift.



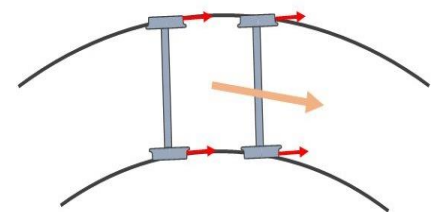
- **Chain Markers:** Chain Markers identify the distance, in multiples of 100 ft., to the middle of the Metro Center platform (or to the most inbound end of the rail line, if the line does not pass-through Metro Center). In the illustration, B, represents the line of revenue service, the 2, denotes track 2 and 132+00 represents 132 x 100 feet from Metro Center.



- **Climb Derailment:** The loss of relationship between the wheel and rail, whereas the wheel lifts (climb) from the guidance of the track and derails.



- **Curve:** Any uniformed change in direction of alignment measured in degrees or radius.



- **Exitfare Machine:** Automated machine located on station platforms or mezzanines where customers can reload farecards with money in order to exit the station.



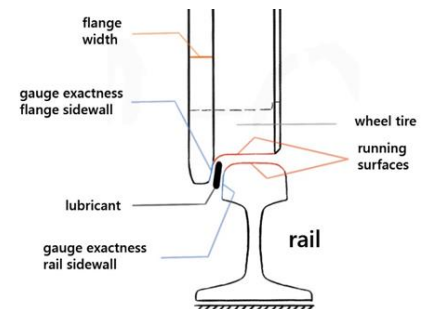


## DESCRIPTION

- **Farecard Vendor:** Automated machine located within the station mezzanine where customers can purchase a disposable farecard for a user defined amount of money.



- **Flangeway Width:** The distance between head of low rail and Restraining Rail. The open way or channel through a track structure which provides a passageway for wheel flanges.



- **Horizontal Restraining Rail:** WMATA uses two forms of Restraining Rail in its system being the Horizontal and Vertical designs. Both are located on mainline and yard tracks, weather ballasted or direct fixation. The older design in the process of being replaced, is a horizontal 115 lbs. tee rail bolted on a chair adjacent to the low running rail. The newer design is 132 lbs. bolted through a web spacer block web connect to the low running rail.



- **Interlocking:** Various locations around the system and in rail yards where trains can crossover from one track to the other.

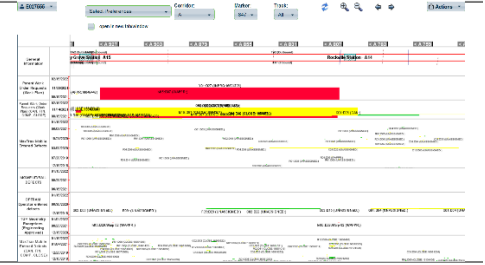


- **Low Rail Curve:** Inside low rail in a curve. In a design system of curve, the design raise level of the outer rail to the inner rail in a curve. The inner rail maintains its original level.



## DESCRIPTION

- **MaxTrax:** Data repository where track defects are identified and stored by location and defect type.



- **Pandrol Clip:** A clip (shown in red) which is used to secure and properly seat the rail on to the tie plate. The Pandrol Clip also aids in preventing the rail from expanding and contracting during periods of extreme heat or cold, respectively.



- **Roadway:** The WMATA Roadway is anywhere a rail vehicle may travel, whether at-grade, through tunnels or on aerial structures. It also includes arrival and departure tracks between terminals and yard identification signs.



- **SmarTrip Card:** A contactless, closed-loop prepaid card used to access both WMATA's Metrobus and Metrorail system. The card uses near-field RFID to communicate with readers on each faregate or bus farebox machine.



- **SmarTrip Dispenser:** Automated machine where customers can purchase plastic reusable farecards to utilize throughout the system.

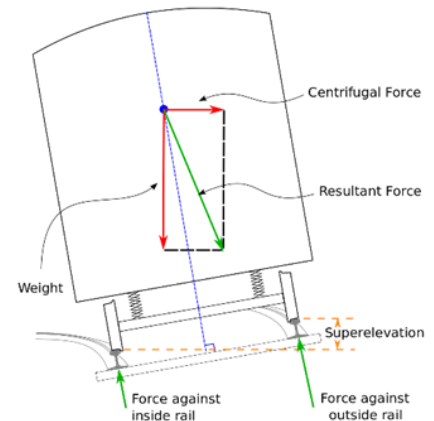


## DESCRIPTION

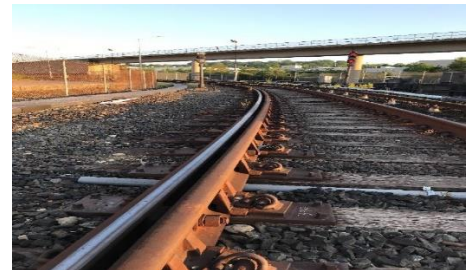
- **Station Operator Console:** The SOC is a computer within the Kiosk of Metro stations which provides monitoring and control functions for all AFCS devices associated with a single station. It allow Station Managers and other authorized personnel to place fare vendors and faregates in or out of service, configure faregates for entry or exit operation (control direction), and read patron's smartcards on the SOC's attached card reader.



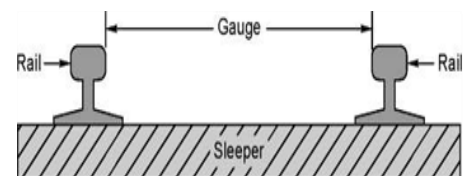
- **Superelevation:** The vertical distance that the outer rail is above the inner rail in a curve.



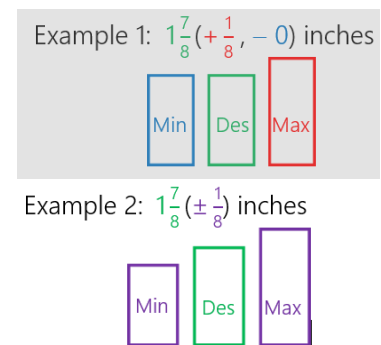
- **Vertical Restraining Rail:** WMATA uses two forms of Restraining Rail in its system being the Horizontal and Vertical designs. Both are located on mainline and yard tracks, weather ballasted or direct fixation. The older design in the process of being replaced, is a horizontal 115 lbs. tee rail bolted on a chair adjacent to the low running rail. The newer design is 132 lbs. bolted through a web spacer block web connect to the low running rail.



- **Track Gauge:** Gauge is measured between the heads of the rails at right-angles to the rails in a plane  $\frac{5}{8}$ " below the top of rail.



- **Tolerance Notation:** Nomenclature to denote the ranges of acceptable measurement for manufactured components. In example 1, the desired measurement (green) is  $1\frac{7}{8}$  inches. There is design tolerances (red) of plus  $\frac{1}{8}$  inch yielding a maximum acceptable measurement of 2 inches. There is another design tolerance (blue) of minus 0 inches, yielding a minimum of  $1\frac{7}{8}$  inches. In example 2, the tolerance is uniform (purple), denoted with the plus or minus symbol with maximum acceptable measurement of 2 inches and a minimum acceptable measurement of  $1\frac{3}{4}$  inches.



## Additional Terms

- **Area of Refuge (AOR):** Sometimes known as an Area of Rescue Assistance, AOR is a location in a building designated to hold occupants during an emergency, when evacuation may not be safe or possible. Occupants can wait there until rescued or relieved by first responders.
- **Controlled Document:** Is any digital or hard-copy entity which is required by a company, a standard organization, or a regulatory agency to be managed within a tightly controlled process that maintains the integrity of the document's content through revisions
- **Corrective Action Plan (CAP):** A plan or set of tasks that outline corrective measures planned or already taken to address external audit recommendations and related deficiencies or findings
- **Corrective Maintenance (CM):** Maintenance which is carried out after "failure" of an asset and is aimed at restoring an asset to a condition in which it can perform its intended function reliably (state of good repair).
- **COVID Clean Program:** A leadership-driven joint effort between SAFE and Plant (PLNT) for the notification, cleaning, and disinfection of work areas after an employee reports COVID-19 exposure
- **Documentum:** Electronic document management system software that provides a single source for documentation storage and controlled access.
- **Documented Process:** The comprehensive and consistent development of documentation of procedures and/ or policies that specify the work conducted by a department
- **Engineering Modification Instruction (EMI):** The system of record for approval and validation of changes in components, assemblies (including fit, form or function), or documents such as processes, part numbers including the Parts Action Form (PAF) process and work instructions and/or changes in specifications.
- **Fatigue Risk Management:** Data driven means of continuously monitoring and maintaining fatigue related safety risks
- **Hazard Log:** Is the continually updated record of all safety management activities, hazards identified, risk assessment and risk reduction activities, as well as solutions and decisions taken
- **Internal Corrective and Preventive Action (iCAPA):** A plan or set of tasks that outline corrective measures planned or already taken to address internal audit recommendations and related deficiencies or findings
- **Job Hazard Analysis (JHA):** A documented list of potential hazards or conditions specific to a particular job, project, or task
- **Limited Maintenance (LM):** Maintenance that is performed to bring an AFCS asset in-service for use, although some functionality may not be present in the equipment (Limited Service)
- **Maximo:** The current System of Record for work accomplishment as well as the current System of Record for all non-mainline defects.
- **Operations Administrative Policy (OAP):** Is a set of administrative policies, applicable to specified departmental administrative and management activities, which applies to employees at all levels, and provide uniform guidance for the daily operations.
- **OPTRAM:** The current System of Record for defects on the Mainline. Mainline are tracks other than yard tracks and storage tracks.
- **Policy/Instruction:** a set of principles, rules, and guidelines formulated or adopted by an organization to reach its long-term goals and typically published in a booklet or other form that is widely accessible. They are usually designed to influence and determine all major decisions and actions, and all activities take place within the boundaries set by them.
- **ProCore:** A construction management software application.
- **Public Transit Agency Safety Plan (PTASP):** Documented comprehensive agency safety plan for a transit agency.
- **Risk Register:** Is a document used as a risk management tool and to fulfill regulatory compliance acting as a repository for all risks identified and includes additional information about each risk.
- **Safety Bulletin:** A supplemental notification delivered by the company that contains new information, recommendations, or safety awareness and guidance for current workplace safety and health regulations.
- **Safety Committee:** Is an organizational group within a workplace who work together through the regularly scheduled meetings to identify and recommend solutions to health and safety problems.
- **Safety Risk Coordinator:** Is an individual charged with managing safety within a workplace



## Additional Terms

- **Standard Operating Procedure (SOP):** Is a set of step-by-step instructions compiled by an organization to help workers carry out routine operations.
- **Subject Matter Expert (SME):** A person who has special skills or in-depth knowledge on a particular job or topic.
- **System Safety Program Plan (SSPP):** Is the blueprint for the Authority's efforts in strengthening its overall safety management and its goal of continuous improvement in safety performance. It sets forth the requirements for systematically identifying, evaluating, and minimizing safety risks throughout all elements of the Metrorail, Metrobus and Metro Access systems.
- **Test, Measurement and Diagnostic Equipment (TMDE):** All devices, including diagnostic and prognostic equipment, used to measure, test, gauge, inspect, or otherwise examine the operational condition of an end-item, to identify and isolate any actual or potential malfunctions.
- **Test, Training Matrix/Log:** A tool used in an organization to track training and skills, both required, and the team's desired skills needed to complete a particular project.