



QICO-SLSC-22

_	•		
COL	1/1/20	ווארו	VAN
261	vice	Dell	VEIV

In response to the Internal Review report regarding Silver Line Safety Certification Oversight, the Department of Safety & Environmental Management (SAFE), the Office of Quality Assurance Internal Compliance & Oversight (QICO) have coordinated the development of three (3) iCAPAs. The iCAPAs have been developed to address the required actions and the associated findings.

EXECUTIVE LEADERSHIP COMMITMENT	
RESPONSIBLE PARTIES	
Theresa M. Impastato	 Date
Executive Vice President & Chief Safety Officer	2 0.00
INTERNAL OVERSIGHT	
Halina Davia	Data
<b>Hakim Davis</b> Vice President, Quality Assurance, Internal Compliance & Oversight (QICO)	Date
Eric Christensen Executive Vice President, Internal Compliance (INCP)	Date
Executive Fiee Frestaering internate Compitative (inter)	

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

*Interim General Manager & Chief Executive Officer (GM/CEO)* 

Andrew B. Off
Date



PURPOSE AND SCOPE

On February 10, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Silver Line Safety Certification Oversight (SLSC) Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated findings and required action for QICO-SLSC-22-01.

**FQ-SLSC-21-01:** Performing quality audits promotes compliance with requirements, provides consistency of performance, and helps identify improvement opportunities.

FINDINGS

**FQ-SLSC-21-02:** Establishing and implementing processes to oversee and monitor SAFE's contractor K&J performance would provide a standard, promote efficiency, and assist in maintaining compliance throughout the life of the project.

**FQ-SLSC-21-03:** Creating detailed work instructions describing the Certifiable Item List approval/rejection process would reduce rework and waste while encouraging consistency of work performed.

REQUIRED ACTION QICO-SLSC-22-01

Office of Safety Certification and Engineering (OSCE)

**Moderate** 

Enforce implementation of quality control audits and establish departmental controls to include contractor oversight as well as detailed work instructions for item review and approval

Measure: Process Control Risk Category: Service Delivery [3,3]

ACTION PLAN OVERVIEW

Process control measures will be implemented in order to enforce the implementation of quality assurance audits and office controls in reference to contractor oversight. Review and approval procedures will also be strengthened.

#### Business Impact - Budget/Cost Estimate: Operating



Acti	ionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Update SOP 200-18	SAFE will update and submit SOP 200-18: Development of Certifiable Elements and Items List to include a step-by-step process describing the approval/rejection procedure for items on the Certifiable Items List (CIL).	Angel Gonzalez (SAFE)	05/04/22	09/14/22
2.	Contractor Oversight Documented Process	SAFE will develop and submit a documented process for SAFE contractor oversight.	Angel Gonzalez (SAFE)	05/04/22	09/28/22
3.	Quality Audits Documented Process	SAFE will develop and submit a documented process to fulfill quality audit requirements for future projects which require safety certification.	Angel Gonzalez (SAFE)	05/04/22	10/26/22
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	10/26/22	12/02/22

#### **PERFORMANCE MEASURES**

N/A

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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.



QICO-SLSC-22-01

## **RESPONSIBLE PARTIES**

SAFE Angel Gonzalez



(Signature/Date)

## SECOND-LEVEL RESPONSIBILITY

SAFE James R. Wojciechowski





PURPOSE AND SCOPE

On February 10, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Silver Line Safety Certification Oversight (SLSC) Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated finding and required action for QICO-SLSC-22-02.

FINDING

**FQ-SLSC-21-04:** Having a master repository of all project documents is essential in storing, organizing, tracing, and accessing project data.

REQUIRED ACTION QICO-SLSC-22-02

Office of Safety Certification and Engineering (OSCE)

Low



Create and maintain a master repository throughout the project life cycle for all safety certification documents and records.

Measure: Document Control Risk Category: Service Delivery [2,2]

ACTION PLAN OVERVIEW

A master repository will be created and maintained to retain safety certification records for all projects.

#### Business Impact - Budget/Cost Estimate: Operating



Acti	onable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Master Repository Documented Process	SAFE will identify a master repository and submit a documented process for document upload and storage of SAFE documentation including Certification related items.	Angel Gonzalez (SAFE)	05/04/22	10/05/22
2.	Implementation of Master Repository Documented Process	of Master as they become finalized, to the identified master repository throughout the lifecycle of the project.		10/05/22	01/25/23
3.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	01/25/23	02/24/23

#### **PERFORMANCE MEASURES**

N/A

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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.

QICO-SLSC-22-02

## **RESPONSIBLE PARTIES**

SAFE Angel Gonzalez



## SECOND-LEVEL RESPONSIBILITY

SAFE James R. Wojciechowski



PURPOSE AND SCOPE

On February 10, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Silver Line Safety Certification Oversight (SLSC) Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated finding and required action for QICO-SLSC-22-03.

FINDING

**FQ-SLSC-21-05:** Developing and maintaining the required training matrix for each safety and security certification position allows for uniformity and promotes compliance with all training requirements.

REQUIRED ACTION QICO-SLSC-22-03

Office of Safety Certification and Engineering (OSCE)

Low



Develop a training matrix for all safety and security certification positions.

Measure: Training Risk Category: Service Delivery [2,2]

ACTION PLAN OVERVIEW

The Office of Safety Certification and Engineering (OSCE) will develop and submit a training matrix to track the required training requirement for OSCE personnel. The training matrix will identify the required training for specific positions within OSCE.

#### Business Impact - Budget/Cost Estimate: Operating

Acti	onable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Training Matrix	The Office of Safety Certification and Engineering (OSCE) will develop and submit a training matrix which will identify and track the required training for all job positions within OSCE.	Angel Gonzalez (SAFE)	05/25/22	11/02/22
2.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	11/02/22	12/02/22

#### **PERFORMANCE MEASURES**

N/A

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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.

SAFE

# SAFE Angel Gonzalez (Signature/Date) SECOND-LEVEL RESPONSIBILITY

James R. Wojciechowski



## **Engineering & Maintenance**

In response to the internal safety review report regarding the office of Car Track Equipment Maintenance (CTEM) the Office of Quality Assurance Internal Compliance & Oversight (QICO) have coordinated the development of five iCAPAs. The iCAPAs been developed to address the required actions and the associated findings.

#### **EXECUTIVE LEADERSHIP COMMITMENT**

#### **RESPONSIBLE PARTIES**



#### **Brian Dwyer**

Executive Vice President & Chief Operating Officer

## INTERNAL OVERSIGHT



#### **Hakim Davis**

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



#### **Eric Christensen**

Executive Vice President, Internal Compliance (INCP)



PURPOSE AND SCOPE

On May 12, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Car Track Equipment Maintenance (CTEM) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding and required action for **QICO-CTEM-22-01**.

FINDING

**FS-CTEM-22-01:** The utilization of a fall protection system supports a proactive safety management system and compliance with regulatory standards.

REQUIRED ACTION QICO-CTEM-22-01

Car Track Equipment Maintenance (CTEM)

3C Marginal/Occasional

3C

Implement a fall protection system, which includes approved equipment, documented procedures, training, storage, and preventive maintenance requirements in all CTEM facilities.

Measure: Safety Risk Management, Safety Risk Mitigation 3, C

ACTION PLAN OVERVIEW

CTEM will obtain fall protection equipment to include the mobile gantry and lifeline retractors; and record that equipment as assets in Maximo. CTEM will establish a maintenance and inspection plan for their fall protection equipment in Maximo. All active CTEM supervisors and mechanics will receive On-the Job Training (OJT) on the use, maintenance, and inspection of fall protection equipment. CTEM will submit the asset record, maintenance plan document, and the training records as evidence.

#### Business Impact - Budget/Cost Estimate: Operating



Acti	ionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Obtain Fall Protection Equipment	CTEM will obtain the required fall protection equipment as listed in the Action Plan Overview. CTEM will submit evidence of obtaining the equipment.	Steven Redman (CTEM)	06/01/22	07/27/22
2.	Maintenance and Inspection Plan	As per Actionable Item #1 (Obtain Fall Protection Equipment), fall protection equipment will be recorded in Maximo and a periodic maintenance and inspection plan will be established. CTEM will provide the asset record and Maximo job plan.	Anthony LoCastro (CTEM)	07/27/22	09/14/22
3.	Training	TSMT will conduct training on the use and inspection of the Fall Protection System and related equipment for all active CTEM supervisors and mechanics. TSMT will submit Enterprise Learning Management (ELM) training records.	Bruce Lyons (TSMT)	07/27/22	09/28/22
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	09/28/22	10/28/22

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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**

CTEM	Steven Redman	
		(Signature/Date)
CTEM	Anthony LoCastro	
		(Signature/Date)
TSMT	Bruce Lyons	
		(Signature/Date)

## SECOND-LEVEL RESPONSIBILITY

CMOR	Shushil Ramnaress	
		(Signature/Date)
TSMT	Joseph Robinson	
		(Signature/Date)

PURPOSE AND SCOPE

On May 12, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Car Track Equipment Maintenance (CTEM) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the findings and required actions for **QICO-CTEM-22-02**.

FINDINGS

**FS-CTEM-22-02:** The inspection of fire extinguishers inside the Roadway Maintenance Machines (RMMs) promotes risk mitigation and compliance with regulatory standards.

**FS-CTEM-22-04:** Conducting regular and thorough inspections of maintenance facilities strengthens the ongoing risk management process and provide compliance with OSHA requirements.

**FS-CTEM-22-06:** The presence of designated Deputy Compliance Officers (DCOs) will enhance the process of hazard identification, mitigation, and compliance with existing environmental management policies.

REQUIRED ACTION OICO-CTEM-22-02

Car Track Equipment Maintenance (CTEM)

3C Marginal/Occasional

30

Develop and implement a plan to maintain compliance with safety and environmental regulations as it pertains to fire extinguisher inspections, facility safety inspections, and designation of compliance officers.

Measure: Safety Assurance, Compliance 3, C

ACTION PLAN OVERVIEW

CTEM will include Roadway Maintenance Machine (RMM) fire extinguisher inspections as part of the Quality Control (QC) inspection and will record the results on the CTEM supervisory QC inspection checklist. CTEM will submit a memo issued to supervisors outlining the requirements for fire extinguisher inspection and provide three months of completed checklists. CTEM will recruit and staff a Safety Coordinator who will be responsible for conducting periodic maintenance facility inspections and who will also be the Deputy Compliance Officer (DCO) certified to perform related duties. CTEM will submit three months of facility safety inspections and three months of environmental inspections for all five facilities.

#### Business Impact - Budget/Cost Estimate: Operating

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. Cost estimate - TBD



Acti	onable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	RMM Fire Extinguisher Inspection	As part of the Quality Control (QC) inspection CTEM supervisors will include inspection of Roadway Maintenance Machines (RMMs) fire extinguishers. The inspection results will be recorded on the CTEM supervisory QC inspection checklist. CTEM will submit a memo issued to supervisors outlining the requirements for fire extinguisher inspection and submit three months of completed checklists.	Steven Redman (CTEM)	07/01/22	10/12/22
2.	Recruit Safety Coordinator	CTEM will recruit and staff a Safety Coordinator who will be responsible for conducting periodic inspection at all maintenance facilities and will also be responsible for obtaining Deputy Compliance Officer (DCO) certification (in November 2023) and performing duties related to DCO. CTEM will submit the Position Control Number and proof of staffing as evidence.	Wayne Bolander (CMNT)  Supporting Office <sup>4</sup> : Andrada Cunning (HC)	07/01/22	01/17/24
3.	Inspection Reports	The CTEM Safety Coordinator will conduct and submit three months' worth of safety inspection reports for all five active CTEM facilities and three months' worth of DCO inspections for the five facilities.	Wayne Bolander (CMNT)	02/07/24	05/22/24
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	05/22/24	06/28/24

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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**

CTEM Steven Redman (Signature/Date)

CMNT Wayne Bolander

(Signature/Date)

## SUPPORTING ROLE ACKNOWLEDGEMENT

HC Andrada Cunning

(Signature/Date)

## SECOND-LEVEL RESPONSIBILITY

CMOR Shushil Ramnaress



PURPOSE AND SCOPE

On May 12, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Car Track Equipment Maintenance (CTEM) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding(s) and required action for QICO-CTEM-22-03.

FINDING(S)

**FS-CTEM-22-03:** The creation and usage of standardized maintenance instruction manuals for all equipment will promote safe maintenance practices.

**FS-CTEM-22-07:** A Maintenance Control Plan (MCP) is essential for consistency and traceability of maintenance activities.

REQUIRED ACTION QICO-CTEM-22-03

Car Track Equipment Maintenance (CTEM)

2E Critical/Improbable

2E

Required Action:

Establish and implement a comprehensive maintenance control plan and standardized manuals for all equipment.

Measure: Safety Assurance, Compliance 2, E

**ACTION PLAN OVERVIEW** 

CTEM will review the documentation for the equipment they maintain and identify any missing procedures and instructions. Based on that review, CTEM will create standardized procedures and instructions for the identified equipment. CTEM will also develop and submit a Maintenance Control Plan (MCP).

#### Business Impact - Budget/Cost Estimate: Operating



Acti	onable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Documentation Review	CTEM will review the documentation for the equipment they maintain as of the date of the report and identify any missing procedures and instructions. CTEM will provide a list of the missing documentation.	Anthony LoCastro (CTEM) Supporting Office: David Eisenhauer (CENV)	07/01/22	09/07/22
2.	Create Standardized Procedures and Instructions	As per Actionable Item #1 (Documentation Review), CTEM will create and submit standardized procedures and instructions. CTEM will submit documents as they are finalized.	Anthony LoCastro (CTEM) Supporting Office: David Eisenhauer (CENV)	09/07/22	12/13/23
3.	Maintenance Control Plan	CTEM will develop and submit a Maintenance Control Plan (MCP) in accordance with the PTASP.	Anthony LoCastro (CTEM) Supporting Office: David Eisenhauer (CENV)	07/01/22	06/26/24
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	06/26/24	07/26/24

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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.

QICO-CTEM-22-03

RESPONSIBLE PART
------------------

CTEM Anthony LoCastro

(Signature/Date)

## SUPPORTING ROLE ACKNOWLEDGEMENT

CENV David Eisenhauer

(Signature/Date)

## SECOND-LEVEL RESPONSIBILITY

CMOR Shushil Ramnaress



PURPOSE AND SCOPE

On May 12, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Car Track Equipment Maintenance (CTEM) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated finding and required action for **QICO-CTEM-22-04**.

FINDING(S)

**FS-CTEM-22-05:** Performing shelf life inspections as outlined in the internal procedure prevents utilizing expired parts and materials.

REQUIRED ACTION QICO-CTEM-22-04

Car Track Equipment Maintenance (CTEM)

3C Marginal/Occasional

3C

Develop a plan to maintain compliance with established shelf-life procedures.

Measure: Safety Assurance, Compliance 3, C

ACTION PLAN OVERVIEW

CTEM will develop and submit a documented procedure to include shelf life limitations and material inspection requirements. CTEM will provide three months' worth of shelf life inspections for each of the five active CTEM shops.

#### Business Impact - Budget/Cost Estimate: Operating



Act	ionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Shelf Life Standard	CTEM will develop and submit a documented procedure to include shelf life limitations and material inspection requirements.	Anthony LoCastro (CTEM) Supporting Office <sup>4</sup> : (CENV) David Eisenhauer	07/01/22	07/26/23
2.	Shelf Life Inspections	CTEM will submit three months' worth of shelf life inspections per the five active CTEM shops.	Anthony LoCastro (CTEM)	08/02/23	11/15/23
3.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	11/15/23	12/15/23

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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.

QICO-CTEM-22-04

		<b>D</b>	~ A	-		 D /	, D:		•
ĸ	- `	$\boldsymbol{\nu}$	11/	•	ıĸ.	 $\nu_L$	v	ΓΙΕ	•

CTEM Anthony LoCastro



(Signature/Date)

## SUPPORTING ROLE ACKNOWLEDGEMENT

CENV David Eisenhauer



(Signature/Date)

# SECOND-LEVEL RESPONSIBILITY

CMOR Shushil Ramnaress



PURPOSE AND SCOPE

On May 12, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Car Track Equipment Maintenance (CTEM) Internal Safety Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated finding and required action for **QICO-CTEM-22-05**.

FINDING

**FS-CTEM-22-08:** Completing Maximo work orders with specific data element promotes maintenance data quality and safety performance reporting.

REQUIRED ACTION QICO-CTEM-22-05

Car Track Equipment Maintenance (CTEM)

3C Marginal/Occasional

3C

Develop and implement a process to improve work order data capture in Maximo for accuracy and consistency.

Measure: Safety Assurance, Safety Data Analysis 3, C

ACTION PLAN OVERVIEW

CTEM will review and revise the options for component codes chosen for Maximo work orders. CTEM will provide the revised list of component codes. CTEM will revise SOP 401-02 *Procedures for Recording Work Order(s) for Class 2 Rail Vehicles* to include review of component codes before the work order is closed. CTEM will submit the revised SOP.

## Business Impact - Budget/Cost Estimate: Operating



Act	ionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Maximo Component Code Review	CTEM will review and revise options available for component codes chosen for Maximo work orders. CTEM will submit the revised list of component codes and provide evidence of distribution to relevant parties.	Anthony LoCastro (CTEM)	07/01/22	12/14/22
2.	Update SOP	CTEM will update and submit SOP 401-02 Procedures for Recording Work Order(s) for Class 2 Rail Vehicles to include review of component codes before the work order is closed.	Anthony LoCastro (CTEM)	07/01/22	02/22/23
3.	Maximo Component Code Update	As per Actionable Item # 1 (Maximo Component Code Review), TAMO will revise component code options in Maximo and submit the updated component code list.	Billy Gannom (TAMO)	12/14/22	07/12/23
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	07/12/23	08/11/23

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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**

CTEM Anthony LoCastro

(Signature/Date)

TAMO Billy Gannom

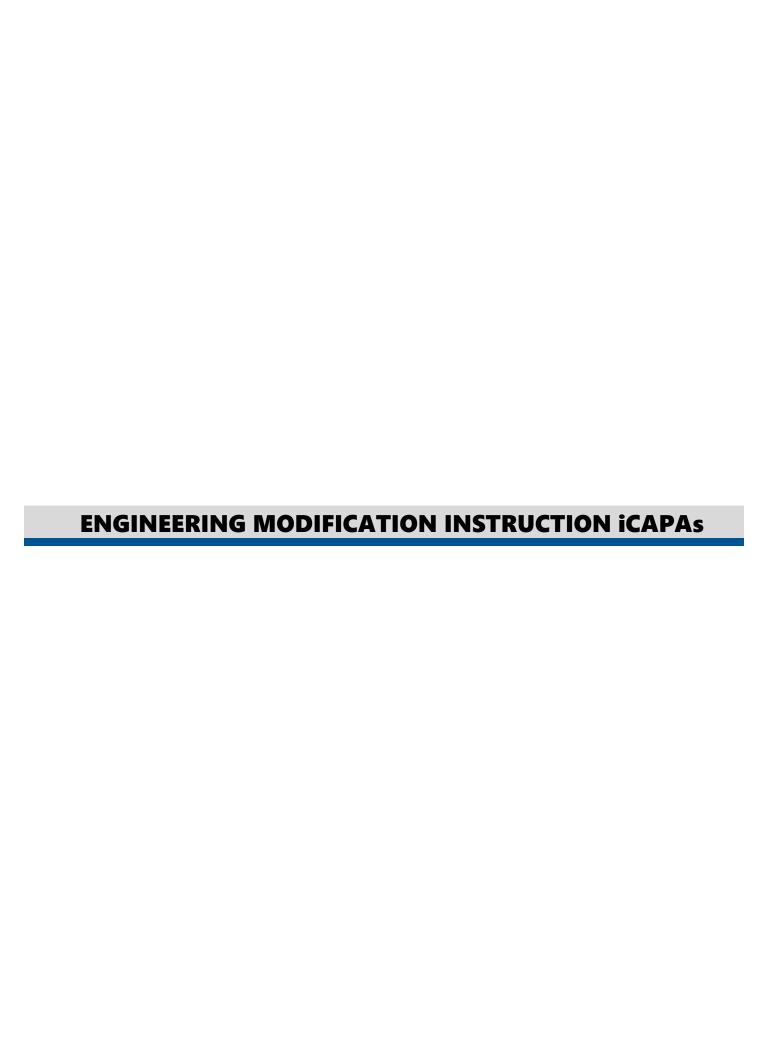
(Signature/Date)

## SECOND-LEVEL RESPONSIBILITY

CMOR Shushil Ramnaress

(Signature/Date)

TAMO Doojin Han



QICO-EMI-22

Date

## **Engineering & Maintenance**

Theresa M. Impastato

In response to the Internal Review report regarding Engineering Modification Instruction (EMI), the Office of Engineering and Architecture(ENGA), Maintenance of Way Engineering (MOWE), 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.

SPONSIBLE PARTIES	
Andrew B. Off  Executive Vice President & Chief Infrastructure Officer	Date
FERNAL OVERSIGHT	
Hakim Davis Vice President, Quality Assurance, Internal Compliance & Oversight (QICO)	Date

Executive Vice President & Chief Safety and Readiness Officer

PURPOSE AND SCOPE

On June 23, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Engineering Modification Instruction (EMI) Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated findings and required action for QICO-EMI-22-01.

FINDINGS

**FQ-EMI-22-01:** -Having well-defined criteria necessitating the utilization of an EMI and aligning the EMI SOP with governing P/Is would support process consistency.

**FQ-EMI-22-02:** -Adherence to established processes for emergency repair enhances process compliance and reduces potential safety risks.

REQUIRED ACTION QICO-EMI-22-01

Maintenance of Way Engineering (MOWE)

Office of Engineering and Architecture (ENGA)

**Elevated** 



# Required Action:

Update SOP 114-02 to include clear circumstances of when an EMI is required and enforce adherence to P/I 4.14/3 instructions for emergency repairs.

Measure: Process Control / Identification & Traceability of Assets & Materials Risk Category: Service Delivery [4,4]

ACTION PLAN OVERVIEW

Update SOP 114-02, *Engineering Modification Instruction*, to include clear information of when an Engineering Modification Instruction (EMI) should be initiated (EMI is required in particular situations such as changes in materials or manufacture availability, improvements to materials, change of fit, form or function). Corrective actions will be applied to enforce adherence to the updated SOP 114-02 instructions for emergency repairs.

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



Actionable Items		Description	Responsible Party. <sup>1</sup>	Est Start. <sup>2</sup>	Est End. <sup>3</sup>	
1.	Update SOP 114-02	<ul> <li>ENGA will update and submit SOP 114-02:</li> <li>Engineering Modification Instruction to reflect the following changes:</li> <li>step-by-step instructions describing the criteria and requirements for initiating an EMI</li> <li>will update SOP 114-02 to revise the section on addressing emergency repairs</li> </ul>	Michelle Corum (ENGA)	03/01/23	05/03/23	
2. SOP 114-02 Acknowledgment		ENGA will issue the updated SOP 114-02 Engineering Modification Instruction to applicable ENGA personnel (except ATCE), and MOWE.  As per updated SOP 114-02, ENGA will submit an applicable personnel roster, and acknowledgements from 95% of active applicable personnel.	Michelle Corum (ENGA)	05/10/23	07/26/23	
3.	ENGA Enforcement and Evidence	ENGA will issue a memorandum to enforce adherence to the instruction's requirements for emergency repairs in accordance with SOP 114-02 <i>Engineering Modification Instruction</i> .  ENGA will provide six months' worth of records of any emergency repairs performed in accordance with revised SOP 114-02.	Michelle Corum (ENGA)	07/26/23	02/21/24	
4.	SOP 114-02 Acknowledgment	MOWE will issue the updated SOP 114-02 Engineering Modification Instruction to applicable MOWE personnel.  As per updated SOP 114-02, MOWE will submit an applicable personnel roster, and acknowledgements from 95% of active applicable personnel.	Moustapha Ouattara (MOWE)	05/10/23	07/26/23	

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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.



Act	ionable Items	Description	Responsible Party. <sup>1</sup>	Est Start. <sup>2</sup>	Est End. <sup>3</sup>
5.	MOWE Enforcement and Evidence	MOWE will issue a memorandum to enforce adherence to the instruction's requirements for emergency repairs in accordance with SOP 114-02 <i>Engineering Modification Instruction</i> .  MOWE will provide six months' worth of records of any emergency repairs performed in accordance with revised SOP 114-02.	Moustapha Ouattara (MOWE)	07/26/23	02/21/24
6.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	02/21/24	03/22/24

#### **RESPONSIBLE PARTIES**

ENGA	Michelle Corum	
		(Signature/Date)
MOWE	Moustapha Ouattara	e e e e e e e e e e e e e e e e e e e
		(Signature/Date)

## SECOND-LEVEL RESPONSIBILITY

ENGA	Nichalos D. Gardner	
		(Signature/Date)
RIME	Nathan Williams	
		(Signature/Date)
RAIL	Michael J. Hass	
		(Signature/Date)



PURPOSE AND SCOPE

On June 23, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Engineering Modification Instruction (EMI) Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding and required action for **QICO-EMI-22-02**.

FINDING

**FQ-EMI-22-03:** Adherence to the established record storage process assures compliance and traceability of documents.

REQUIRED ACTION OICO-EMI-22-02

Maintenance of Way Engineering (MOWE)

**Moderate** 

Office of Engineering and Architecture (ENGA)

## **Required Action:**

Enforce adherence to EMI record archive according to existing guidance of SOP 114-02 and ATC 4000.

Measure: Quality Records Risk Category: Service Delivery [3,3]

ACTION PLAN OVERVIEW

Configuration Management (CFGM) will update Documentum database and store completed EMIs in this repository.

# **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.



Acti	onable Items	Description	Responsible Party. <sup>1</sup>	Est Start. <sup>2</sup>	Est End. <sup>3</sup>
1.	Past EMI Records in Documentum	ENGA Configuration Management (CFGM) will store past and current completed EMI records in Documentum.  CFGM will submit a list of completed EMIs from September 2020 to September 2023 and a link to Documentum where these EMIs are stored.	Michelle Corum (ENGA)	01/11/23	01/17/24
2.	Enforcement and Evidence	ENGA will enforce adherence to the instructions of SOP 114-02 Engineering Modification Instruction through a Memorandum.  As per the issued memorandum, ENGA will submit an applicable personnel roster, and acknowledgements from 95% of active applicable personnel.	Michelle Corum (ENGA)	05/03/23	09/13/23
3.	Enforcement and Evidence	MOWE will enforce adherence to the following instructions of SOP 114-02 Engineering Modification Instruction through a Memorandum:  • EMIs that have been approved and fully implemented shall be placed in the document repository Documentum.  As per the issued memorandum, MOWE will submit an applicable personnel roster, and acknowledgements from 95% of active applicable personnel.	Moustapha Ouattara (MOWE)	05/03/23	09/13/23
4.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	01/17/24	02/16/24

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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**

ENGA Michelle Corum

(Signature/Date)

MOWE Moustapha Ouattara

(Signature/Date)

(Signature/Date)

### SECOND-LEVEL RESPONSIBILITY

RIME Nathan Williams

(Signature/Date)

(Signature/Date)

(Signature/Date)

(Signature/Date)

PURPOSE AND SCOPE

On June 23, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Engineering Modification Instruction (EMI) Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding and required action for **QICO-EMI-22-03**.

FINDING

FQ-EMI-22-04: Establishing a training and certification matrix for personnel promotes proper skill management.

REQUIRED ACTION QICO-EMI-22-03

Maintenance of Way Engineering (MOWE)

Moderate

Office of Engineering and Architecture (ENGA)

Required Action:

Develop a training matrix for all ENGA and MOWE roles.

Measure: Training Risk Category: Service Delivery [3,3]

ACTION PLAN OVERVIEW

ENGA & MOWE will each develop a training matrix which identifies all required training by job position for all personnel within each department. The training matrix must include the frequency for recertifications as required.

#### **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.



Acti	ionable Items	Description	Responsible Party. <sup>1</sup>	Est Start. <sup>2</sup>	Est End. <sup>3</sup>
1.	ENGA Training Matrix	ENGA will develop and submit a training matrix which identifies all required training by job position within ENGA.	Michelle Corum (ENGA)	12/01/22	09/27/23
2.	MOWE Training Matrix	MOWE will develop and submit a training matrix which identifies all required training by job position within MOWE.	Moustapha Ouattara (MOWE)	12/01/22	09/27/23
3.	ENGA Training Implementation	As per Actionable Item #1 (Training Matrix), ENGA will submit training records showing all active personnel have completed all the required training.	Michelle Corum (ENGA)	10/04/23	02/28/24
4.	MOWE Training Implementation	As per Actionable Item #2 (Training Matrix), MOWE will submit training records showing all active personnel have completed all the required training.	Moustapha Ouattara (MOWE)	10/04/23	02/28/24
5.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	02/28/24	03/29/24

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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.

**RIME** 

**RAIL** 

#### **RESPONSIBLE PARTIES**

ENGA Michelle Corum

(Signature/Date)

MOWE Moustapha Ouattara

(Signature/Date)

SECOND-LEVEL RESPONSIBILITY

ENGA Nichalos D. Gardner

(Signature/Date)

(Signature/Date)

(Signature/Date)

**Nathan Williams** 

Michael J. Hass

PURPOSE AND SCOPE

On June 23, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Engineering Modification Instruction (EMI) Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address associated finding and required action for **QICO-EMI-22-04**.

FINDING

**FQ-EMI-22-05:** Updating Policy Instructions and governing documents within the required frequency assures accuracy and efficiency.

REQUIRED ACTION QICO-EMI-22-04

Maintenance of Way Engineering (MOWE)

IMOGG!

**Moderate** 

Required Action:

Enforce revision of Policy Instructions and governing documents in accordance with the required revision periodicity and enforce implementation of SOP 121-10 document control guidelines.

Office of Engineering and Architecture (ENGA)

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

ENGA and MOWE will revise the following outdated documents:

- P/I 1.20/0 Configuration Change Control Board (CCCB) (02/08/2019) (ENGA)
- P/I 4.10/4 Configuration Control Management (01/11/2019) (ENGA)
- P/I 4.14/3 Design Control Board (DCB) (01/15/2019) (ENGA)
- OAP 121-01 Track Asset Condition Data Management (Rev. 2, 09/20/2019) (MOWE)
- OAP 121-03 Key Track Asset Management Programs Planning and Analysis (Rev. 0, 09/20/2019) (MOWE)

MOWE will update the following documents in accordance with the SOP 121-10 document control guidelines:

- OAP 121-01 Track Asset Condition Data Management (Rev. 2, 09/20/2019)
- OAP 121-03 Key Track Asset Management Programs Planning and Analysis (Rev. 0, 09/20/2019)
- SOP 121-11 *Rail Grinding Procedure* (Rev. 0, 05/11/2021)
- SOP 121 -13 Tamping and Surfacing Needs Analysis and Planning (Rev. 0, 10/01/2021)

#### **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.



Acti	ionable Items	Description	Responsible Party. <sup>1</sup>	Est Start. <sup>2</sup>	Est End. <sup>3</sup>
1.	Update Documents	ENGA will update and submit the outdated documents in accordance with the action plan overview.	Michelle Corum (ENGA)	10/12/22	03/29/23
2.	Update Documents	MOWE will update and submit the documents mentioned above in the action plan overview in accordance with SOP 121-10 Document Control and Record Retention Procedures.	Moustapha Ouattara (MOWE)	10/12/22	03/29/23
3.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	03/29/23	04/28/23

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

<sup>&</sup>lt;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 ENGA** Michelle Corum (Signature/Date) **MOWE** Moustapha Ouattara (Signature/Date) SECOND-LEVEL RESPONSIBILITY **ENGA** Nichalos D. Gardner (Signature/Date) **RIME Nathan Williams** (Signature/Date) **RAIL** Michael J. Hass



QICO-STLM-22

#### **Engineering & Maintenance**

In response to the Internal Review report regarding Structures Maintenance Leak Mitigation Process, the Office of Track and Structure (TRST), the Office of Quality Assurance Internal Compliance & Oversight (QICO) have coordinated the development of three (3) iCAPAs. The iCAPAs have been developed to address the required actions and the associated findings.

# **EXECUTIVE LEADERSHIP COMMITMENT RESPONSIBLE PARTIES** Andrew B. Off Date Executive Vice President & Chief Infrastructure Officer INTERNAL OVERSIGHT

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

Theresa M. Impastato Executive Vice President & Chief Safety and Readiness Officer

PURPOSE AND SCOPE

On July 20, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Structures Maintenance Leak Mitigation Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated findings and required action for QICO-STLM-22-01.

FINDINGS

**FQ-STLM-22-01:** Defect reporting into the appropriate system of record in accordance with the Standard Operating Procedures supports accurate tracking and timely scheduling of leak mitigation activities.

**FQ-STLM-22-02:** Regularly reviewing, tracking, investigating, and documenting the status of aged work plans would promote on-time completion of scheduled work providing a good state of repair.

REQUIRED ACTION QICO-STLM-22-01

Track and Structures (TRST)

**Elevated** 

#### Required Action:

Appropriately reporting defects into the system of records, eliminating any duplicate work orders, performing regular reviews, and evaluating the status of aged work plans for accurate traceability.

Measure: Process Control Risk Category: Service Delivery [3,5]

TRST will enforce adherence to Standard Operating Procedure 208-07 Structures Inspection and update TRST 2000 Maintenance Control Plan to include a step-by-step process for addressing aged work plans.

#### 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.



Acti	onable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1.	Memorandum Enforcing Adherence with SOP 208-07	TRST will issue a memorandum to TRST employees to enforce adherence to SOP 208-07 Structures Inspection Section 12.1.3 TRST Assets.  TRST will submit a roster of applicable personnel and evidence of acknowledgement from 95% of active applicable personnel.	Yaser Cabral (TRST)	10/03/22	01/25/23
2.	Perform Quality Assurance/Quality Control (QA/QC)	TRST will submit six months' worth of Maximo reports reflecting compliance to SOP 208-07 <i>Structures Inspection</i> Section 12.1.3 TRST Assets.	Yaser Cabral (TRST)	12/01/22	06/21/23
3.	Aged Work Plans Verification/ Reclassification	TRST will review aged work plans (past 90 days) to reclassify work plans to defects when appropriate and close any unnecessary work plans.  TRST will submit a report of updating aged work plans based on reclassification.	Yaser Cabral (TRST)	10/03/22	04/05/23
4.	Justification of Open Aged Work Plans	TRST will review all aged work plans (past 90 days) to determine if they should remain open, and either have them closed, or add a Work Order task and document why they should remain open.  TRST will submit justification for aged work plans (past 90 days) that will remain open.	Rory Damico (TRST)	04/05/23	08/02/23
5.	Update TRST 2000	TRST will update the TRST 2000 Maintenance Control Plan to include steps for addressing aged work plans past 90 days as determined by Action Items #3 and #4. TRST will submit the updated MCP.	Bruce Buck (TRST)	12/07/22	06/28/23

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

 $<sup>^{3}</sup>$  Est End – Estimated Completion Date.



Actionable Items		Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
6.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	08/02/23	09/01/23

#### **RESPONSIBLE PARTIES**

TRST	Yaser Cabral	
		(Signature/Date)
TRST	Bruce Buck	
		(Signature/Date)
TRST	Rory Damico	
		(Signature/Date)

## SECOND-LEVEL RESPONSIBILITY

TRST	Joseph Fowler	
		(Signature/Date)
RAIL	Nathan Williams	
		(Signature/Date)
RAIL	Michael J. Hass	
		(Signature/Date)

PURPOSE AND SCOPE

On July 20, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Structures Maintenance Leak Mitigation Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated finding and required action for QICO-STLM-22-02.

FINDING

**FQ-STLM-22-03:** Following leak mitigation Work Instructions would support quality work, produce consistent results, and prevent employee injury.

REQUIRED ACTION QICO-STLM-22-02

Track and Structures (TRST)

**Moderate** 

#### **Required Action:**

Follow the guidance provided in the Standard Operating Procedures and Work Instructions when performing job functions.

Measure: Process Control Risk Category: Safety [3,3]

TRST will enforce adherence to Work Instruction MOWE-SOE-SMI-WI-44 Typical Leak Repair by providing associated quality control checks to verify compliance.

#### **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.	Quality Control Checks	TRST will complete quality control checks to verify leak mitigation repairs are compliant with Work Instruction MOWE-SOE-SMI-WI-44 <i>Typical Leak Repair</i> .  TRST will submit three months' worth of completed leak mitigation repair quality control checklists.	Joseph Fowler (TRST)		03/29/23
2.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.	QICO	03/29/23	04/28/23

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

RESPONSIBL	E PARTIES	
TRST	Joseph Fowler	
		(Signature/Date)

SECOND-LEVEL RESPONSIBILITY			
RAIL	Nathan Williams	(Signature/Date)	
RAIL	Michael J. Hass		

PURPOSE AND SCOPE

On July 20, 2022, the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued the Structures Maintenance Leak Mitigation Internal Review report. This internal Corrective and Preventive Action (iCAPA) is developed to address the associated finding and required action for QICO-STLM-22-03.

FINDING

**FQ-STLM-22-04:** Performing tool and equipment inspections prior to utilization enhances work production and decreases job hazards.

REQUIRED ACTION QICO-STLM-22-03

Track and Structures (TRST)

**Moderate** 

#### Required Action:

Perform inspections and assure the removal of defective tools to avoid use at job locations.

Measure: Inspection, Measuring & Test Equipment Risk Category: Service Delivery [3,3]

TRST will issue a memorandum to enforce compliance with the *Metrorail Safety Rules and Procedures Handbook* (MSRPH) Section 4.88 and 4.89: Material Handling and Storage.

QICO will perform random field assessments of work locations and storage facilities to verify defective tools have been removed from service and properly tagged.

### 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.	Memorandum Enforcing Adherence to the MSRPH	TRST will issue a memorandum to employees to enforce compliance with sections 4.88 and 4.89 Material Handling and Storage in the <i>MSRPH</i> to assure inspection and removal of defective tools prior to utilization.  TRST will submit a roster of applicable personnel, and acknowledgements from 95% of active applicable personnel.	Joseph Fowler (TRST)	10/03/22	01/11/23
2.	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is evidence of completion.  QICO will perform field assessments of TRST work locations and storage facilities to verify that defective equipment is tagged for repair or removal.	Wafaa Sabir (QICO)	01/11/23	02/10/23

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

<sup>&</sup>lt;sup>2</sup> Est Start – Estimated Start Date.

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

QICO-STLM-22-03

RESP	ONS	IRIF	PΔR	TIFS
ILLOI	$\mathbf{v}_{1}\mathbf{v}_{2}$	,,,,,,,	1 71	ILLI

TRST Joseph Fowler



(Signature/Date)

### SECOND-LEVEL RESPONSIBILITY

RAIL Nathan Williams

(Signature/Date)

RAIL Michael J. Hass