



INTERNAL REVIEW

Car Track Equipment Maintenance (CTEM)

In response to the internal review report for Metro's Car Track Equipment Maintenance (CTEM) practices and processes dated August 17, 2017, the office of Quality Assurance, Internal Compliance & Oversight (QICO) has coordinated with the Operations department to develop four comprehensive CAPs. Each CAP outlines the findings, recommendations and requirements to be addressed, ad a detailed action plan outlining responsible parties and specific actionable items.

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Corrective Action Plan Commitment

9/12/17
Date

Joseph Leader
Chief Operating Officer (COO)

WMATA INTERNAL OVERSIGHT

Corrective Action Plan Acknowledgement

09/12/17
Date

Angel Peña
Managing Director, Quality Assurance, Internal Compliance & Oversight (QICO)

9/12/17
Date

Eric Christensen
Chief, Internal Compliance (INCP)

9/13/17
Date

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



CORRECTIVE ACTION PLAN

Purpose and Scope

On August 17, 2017 QICO issued a comprehensive Report from an internal review into assessment of the Car Track Equipment Maintenance (CTEM) practices and processes. This Corrective Action Plan (CAP) has been developed to address the finding and required action per **QICO-CTE-17-01**.

QICO Finding

QICO Recommendation

F-CTE-17-01: While CTEM practices fall under CMNT governing documents, these documents lack sufficient detail to document some CTEM-specific processes.

- To ensure effective and consistent workflow, develop documentation for CTEM-specific practices including a comprehensive process flow, a quality control plan and training to ensure consistent application.

F-CTE-17-02: CTEM performs some equipment modifications without the involvement of Vehicle Engineering (CENV), compromising the consistency and reliability of uncontrolled modifications.

- To ensure future modifications of track equipment produce results that are consistent and reliable, develop formal requirements to govern the modification process, and conduct analysis of dedicated manpower required to properly support CTEM.

Required Action

QICO-CTE-17-01: To ensure consistent and reliable work results, develop formal instructions to outline CTEM processes, including requirements for equipment modification, designating roles and responsibilities, manpower analysis, and for establishing quality control plans to ensure consistent application.

(Risk Rating: Moderate)

Plan Description

CTEM will develop standard operating procedures (SOPs) to outline the Engineering Request (ER), Maximo records and the Quality Control processes. These SOPs will also include identification of roles and responsibilities. CTEM will train all personnel on new and revised processes.

The office of Chief Mechanical Officer (CMO) will develop a staffing analysis to determine additional engineers CTEM needs.

Business Impact – Budget/Cost Estimate

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

PLAN SCHEDULE

Actionable items		Description	Responsible Party	Estimated Start	Estimated Completion
1	Staffing Assessment	Staffing analysis to determine additional engineers CTEM needs of the CENV engineers to reflect appropriate roles and responsibilities.	John Doherty (CMO)	11/1/17	12/04/17
2	Quality Control SOP	Develop a quality control (QC) procedure to ensure consistent application of CTEM processes.	Larry Skelton (CMNT)	08/28/17	10/02/17
3	Quality Control SOP Acknowledgement	Present and discuss with CTEM personnel new QC SOP, including employee signature acknowledgement of new SOP in the meeting roster.	Larry Skelton (CMNT)	10/02/17	11/16/17



PLAN SCHEDULE

Actionable items		Description	Responsible Party	Estimated Start	Estimated Completion
4	Maximo SOP	Develop CTEM SOP for Maximo to include work order and labor data entry procedures.	Larry Skelton (CMNT)	10/02/17	11/16/17
5	Maximo SOP Acknowledgement	Present and discuss with CTEM personnel new CTEM SOP for Maximo, including employee signature acknowledgement of new SOP in the meeting roster.	Larry Skelton (CMNT)	11/16/17	12/27/17
6	Engineering Request SOP	SOP will describe the CTEM Equipment Modification Engineering Review (ER) process.	Sachit Kakkar, Larry Skelton (CENV, CMNT)	08/28/17	11/20/17
7	Engineering Request SOP Acknowledgement	Present and discuss with CTEM personnel new ER SOP, including employee signature acknowledgement of new SOP in the meeting roster.	Sachit Kakkar, Larry Skelton (CENV, CMNT)	11/20/17	12/27/17
8	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	12/27/17	01/29/18

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

COMPLETION DOCUMENTATION

Performance Measures

- 90% of active CTEM personnel provide signature acknowledgement of updated SOPs developed under actionable items #3, #5, and #7.

RESPONSIBLE PARTIES

Chief Mechanical Officer	John Doherty	
CMNT	Larry Skelton	
CENV	Sachit Kakkar	

SECOND LEVEL RESPONSIBILITY

AGM, RAIL	Andrew Off	
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CORRECTIVE ACTION PLAN

Purpose and Scope

On August 17, 2017 QICO issued a comprehensive Report from an internal review into assessment of the Car Track Equipment Maintenance (CTEM) practices and processes. This Corrective Action Plan (CAP) has been developed to address the finding and required action per QICO-CTE-17-02.

QICO Finding

F-CTE-17-03: Failure information and equipment status is not effectively communicated from customer maintenance groups to CTEM, resulting in additional requirements to diagnose and repair equipment.

QICO Recommendation

- To improve the communication of defects and efficiency of troubleshooting/repair, coordinate with customer maintenance groups (ATCM, TRST, and PLNT) to develop written procedures for reporting equipment failure, making necessary revisions to repair logs to include description fields.

Required Action

QICO-CTE-17-02: To improve the communication of defects and efficiency of troubleshooting/repair, coordinate with customer maintenance groups (ATCM, TRST, and PLNT) to develop written procedures for reporting equipment failure, making necessary revisions to repair logs to include description fields.

(Risk Rating: Moderate)

Plan Description

CTEM will update the current SOP 1.01 "Reporting on Roadway Maintenance Machines Unusual Occurrence(s) and/or Equipment Malfunctions", and collaborate with TRST, PLNT and ATCM for execution. In addition CTEM will edit the small equipment repair log to include a column to report the detailed description of failure.

Business Impact – Budget/Cost Estimate

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

PLAN SCHEDULE

Actionable items		Description	Responsible Party	Estimated Start	Estimated Completion
1	Revise SOP 1.01	CTEM will collaborate with TRST, PLNT and ATCM to update SOP 1.01 for reporting equipment failures. This will include reporting on failures involving small equipment.	Larry Skelton (CMNT)	08/28/17	12/13/17
2	Maintenance Bulletin	Generate a bulletin, distributed to all maintenance groups to communicate the requirements for equipment failure reporting outlined in SOP 1.01.	Andy Off, (RAIL)	12/13/17	01/24/18
3	Revise Small Equipment Log Book	Edit the small equipment repair log book to include a column to report the detailed description of failure.	Larry Skelton (CMNT)	08/28/17	10/25/17
4	Tool Box/ Safety Briefing and SOP Acknowledgement	Present and discuss with CTEM personnel new SOP, including employee signature acknowledgement of new SOP in the meeting roster.	Larry Skelton (CMNT)	12/13/17	01/24/18



PLAN SCHEDULE

Actionable items		Description	Responsible Party	Estimated Start	Estimated Completion
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	01/24/18	02/28/18

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

COMPLETION DOCUMENTATION

Performance Measures

- Evidence of equipment failure reporting in accordance with updated requirements, as outlined in actionable item #1 and #2.
- 85% of active CTEM personnel provide signature acknowledgment of updated SOP, as outlined in actionable item #3.

RESPONSIBLE PARTY

CMNT	Larry Skelton	
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SECOND LEVEL RESPONSIBILITY

AGM, RAIL	Andrew Off	
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CORRECTIVE ACTION PLAN

Purpose and Scope

On August 17, 2017 QICO issued a comprehensive Report from an internal review into assessment of the Car Track Equipment Maintenance (CTEM) practices and processes. This Corrective Action Plan (CAP) has been developed to address the finding and required action per **QICO-CTE-17-03**.

QICO Finding

QICO Recommendation

F-CTE-17-04: Select heavy lifting equipment was out of compliance with inspection requirements, introducing safety concerns for equipment operation.

- To provide for the safe operation of shop equipment, establish methods to ensure all heavy lifting equipment that require regular inspection are monitored for compliance.

F-CTE-17-05: Current placement of emergency eyewash stations presents accessibility and safety concerns

- To ensure eyewash stations are accessible and safely located, assess current the location and placement of all CTEM eyewash stations and establish formal measures to resolve, maintain and inspect the stations on a periodic basis.

Required Action

QICO-CTE-17-03: To provide a safe environment for work in CTEM shop areas, develop formal methods to ensure that all tools, equipment and documentation are accessible, up-to-date and in compliance with applicable inspection and calibration requirements.

(Risk Rating: Elevated)

Plan Description

CTEM will develop a plan to ensure Lifting equipment not maintained by CTEM is regularly inspected for certification or maintenance compliance.

CTEM will assess locations of eye wash stations and relocate or remove any deemed improperly placed. Inspection and maintenance of eyewash stations is reviewed and addressed during the monthly 12 point inspection procedure.

Business Impact – Budget/Cost Estimate

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

PLAN SCHEDULE

Actionable items		Description	Responsible Party	Estimated Start	Estimated Completion
1	12 Point Inspection	Revise Monthly 12 Point Inspection requirements to include inspection of equipment not maintained by CTEM (e.g. shop cranes). Implementation will be through on-the-job training (OJT) for persons who perform 12 Point Inspections.	Larry Skelton (CMNT)	09/05/17	12/04/17
2	Monthly Inspection Reports	Provide 3 months of data-Completed monthly 12 Point Inspection Reports	Larry Skelton (CMNT)	12/04/17	03/05/18



PLAN SCHEDULE

Actionable items		Description	Responsible Party	Estimated Start	Estimated Completion
3	Eyewash Station Report	Report outlining the evaluation and resolution of eyewash station locations, providing solutions for stations currently inaccessible or otherwise hazardous for use.	Larry Skelton (CMNT)	09/05/17	12/05/17
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	03/05/18	04/09/18

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

COMPLETION DOCUMENTATION

Performance Measures

- Completed inspection reports indicate examination of heavy lifting equipment for inspection/certification requirements.
- Evidence of accessibility and safe placement of eyewash stations in all CTEM facilities.

RESPONSIBLE PARTIES

CMNT	Larry Skelton	
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SECOND LEVEL RESPONSIBILITY

AGM, RAIL	Andrew Off	
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CORRECTIVE ACTION PLAN

Purpose and Scope

On August 17, 2017 QICO issued a comprehensive Report from an internal review into assessment of the Car Track Equipment Maintenance (CTEM) practices and processes. This Corrective Action Plan (CAP) has been developed to address the finding and required action per **QICO-CTE-17-04**.

QICO Finding

QICO Recommendation

F-CTE-17-06: Shelf life considerations for parts and materials are inadequately monitored and controlled, increasing the likelihood expired materials are available for use.

- Develop tracking mechanisms to ensure materials and components with shelf life limitations or other expirations are used or replaced appropriately.

Required Action

QICO-CTE-17-04: Develop tracking mechanisms to ensure materials and components with shelf life limitations or other expirations are used or replaced appropriately.

(Risk Rating: Low) ■

Plan Description

CMNT has developed a Shelf Life Management Procedure, Standard Operating Procedure (SOP) 1.08 to improve management of inventory with shelf life limitations, and will provide training to staff in the requirements of this SOP to ensure it is being followed and adhered to consistently.

Business Impact – Budget/Cost Estimate

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

PLAN SCHEDULE

Actionable items		Description	Responsible Party	Estimated Start	Estimated Completion
1	Shelf Life Inspection	Provide on the job training (OJT) on SOP 1.08 will be provided to all CTEM personnel and recorded and filed as required.	Larry Skelton (CMNT)	8/28/17	10/05/17
2	Shelf Life Checklists	Completed shelf life inspection checklists, developed as part of SOP 1.08, demonstrating regular inspection of inventory.	Larry Skelton (CMNT)	8/28/17	10/25/17
3	QICO CAP Verification Report	QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable item descriptions and performance measures.	QICO	10/25/17	11/29/17

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



COMPLETION DOCUMENTATION

Performance Measures

- 90% of active CTEM personnel provide signature acknowledgement of requirements established under SOP 1.08.
- Completed checklists from all four (4) CTEM shop locations indicate adherence to requirements established under SOP 1.08.

RESPONSIBLE PARTY

CMNT	Larry Skelton	
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SECOND LEVEL RESPONSIBILITY

Chief Mechanical Officer	John Doherty	
AGM, RAIL	Andrew Off	