



## Inspection Form

**Form WMSC-IR-1**

Washington Metrorail Safety Commission

### Agency/Department Information

<b>Inspection Date</b>	YYYY	MM	DD	<b>Report Number</b>	20200205-WMSC-MAL-1		
	2020	02	05				
<b>Rail Agency Name</b>	Washington Metropolitan Area Transit Authority			<b>Rail Agency Department</b>	CMNT	<b>Sub- Department</b>	Greenbelt MRO Shop
<b>Rail Agency Department Contact Information</b>	<b>Name</b>		<b>Email</b>	<b>Office Phone</b>		<b>Mobile Phone</b>	
	[REDACTED]		[REDACTED]	[REDACTED]		[REDACTED]	
	[REDACTED]		[REDACTED]	[REDACTED]		[REDACTED]	
	[REDACTED]		[REDACTED]	[REDACTED]		[REDACTED]	
	[REDACTED]		[REDACTED]	[REDACTED]		[REDACTED]	
	[REDACTED]		[REDACTED]	[REDACTED]		[REDACTED]	
<b>Inspection Location</b>	Greenbelt MRO Shop - Railyard E99 5801 Sunnyside Ave, College Park, MD 20740						

### Inspection Summary

Inspection Activity #	1	2	3	4	5	6
<b>Activity Code</b>	VM-WI-PI					
<b>Inspection Units</b>	1					
<b>Inspection Subunits</b>	1					
<b>Defects (Number)</b>	4					
<b>Recommended Finding</b>	No					
<b>Remedial Action Required<sup>1</sup></b>	No					
<b>Recommended Reinspection</b>	No					

### Activity Summaries

<b>Inspection Activity #</b>	1	<b>Inspection Subject</b>	Shop / Yard Inspection Observation				<b>Activity Code</b>		VM	WI	PI
<b>Job Briefing Employee Name/Title</b>	WMATA Inspection		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	08:00-11:30	<b>Outside Shift</b>	No	
<b>Related Reports</b>	N/A		<b>Related CAPS / Findings</b>		TOC-COL-15-003-A						
<b>Related Rules, SOPs, Standards, or Other</b>	<b>Ref</b>		<b>Rule or SOP</b>		<b>Standard</b>		<b>Other / Title</b>		<b>Checklist Reference</b>		
	MetroRail Safety Rules and Procedures Handbook (MSRPH). Section 4– Safety Rules										
<b>Inspection Location</b>	<b>Main Track</b>	<b>Yard</b>	<b>Station</b>	<b>OCC</b>	<b>RTA Facility</b>	<b>WMSC Office</b>	<b>Track Type</b>	<b>At-grade</b>	<b>Tunnel</b>	<b>Elevated</b>	<b>N/A</b>
		X									X
<b>Line(s)</b>	E99	<b>Track Number</b>	N/A	<b>Chain Marker and/or Station(s)</b>	<b>From</b>			<b>To</b>			
					N/A			N/A			



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Vehicles	Head Car Number	Number of Cars	Equipment	N/A		
	N/A	N/A				
Description	<p>WMSC Inspectors conducted a rules compliance observation at the Greenbelt MRO Shop. The inspectors observed activities at the MRO Shop for compliance with Metrorail Safety Rules and Procedures Handbook (MSRPH), as well as equipment maintenance activities, special tools, and documentation. WMSC inspectors observed status of Corrective Action Plans (CAPs).</p> <p>General Information:</p> <ul style="list-style-type: none"> <li>WMSC's team met with Greenbelt's S&amp;I Assistant Superintendent, S&amp;I PI Supervisor, Greenbelt's MRO Superintendent, MRO Assistant Superintendent, MRO Supervisor, and MRO Environmental Compliance Supervisor, and Inspection Office Supervisor.</li> <li>WMSC inspectors provided a pre-briefing and an out-briefing to S&amp;I Assistant Superintendent and MRO Assistant Superintendent.</li> <li>Inspection Office Supervisor provided a job safety briefing.</li> <li><b>Good accomplishment.</b> The MRO shop conducts safety inspections of their facility every morning. The Assistant superintendent provided a sample of a completed form.</li> </ul> <p>Shop Equipment, Hazard, and Safety Observations</p> <ul style="list-style-type: none"> <li>Received good support at the Greenbelt MRO Shop. Observed professional conduct between supervisors and mechanics.</li> <li>The following observations were noted.</li> <li><i>The MRO shop has some safety concerns, such as the overhead crane is not safe to operate due to functionality problems, such as gear grinding noises and cable strands are broken or fraying. See Work Orders provided as Attachment 1. See also Photos 1 and 2.</i></li> <li><i>The MRO shop entrance ramp has large sections of concrete missing from the floor, which can cause the forklift to tilt and drop components while they are being transported. See Work Orders provided as Attachment 1. See also Photo 3.</i></li> <li><i>The component shop has several roof leaks, one comes over the Master Controller overhaul area. See Work Orders provided as Attachment 1.</i></li> <li><i>The fire sprinkler head in paint booth has been painted and made inoperable. See Work Orders provided as Attachment 1. See also Photos 4 and 5.</i></li> <li>Hazardous material storage cabinets included the proper NFPA 704 label for the hazard level and individual material labels for proper storage and separation.</li> <li><i>The railyard had missing third rail covers. See attached photo 6.</i></li> </ul> <p>Railcar Equipment</p> <ul style="list-style-type: none"> <li>MRO Component Shop 555 takes care of overhauling and repairing most major components from the SMS overhaul program for 2K, 3K and 6K series railcars. They are also beginning to handle some components from 7K railcars coming out of warranty.</li> <li><b>Notable/positive.</b> The MRO shop overhauls both mechanical and electrical components such as, Master Controllers, Propulsion Common Case, Line Contactors, IGBTs, HVAC Control Boards, Electrical and Mechanical Couplers, Air Compressors, Traction Motors, Evaporator Motors, Speed Sensors, Leveling Valves, etc., <u>using only "OEM" parts.</u> Once the component is overhauled, it is labeled as completed, and waits for shipment to Brentwood for installation on an SMS railcar. Most major components are serially tracked, which means the component keeps a history of repairs and maintenance records.</li> </ul> <p>Maintenance Procedures, Special Tools and Documentation</p>				Number of Defects	4
					Recommended Finding?	No
					Remedial Action Required?	No
					Recommended Reinspection?	No



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	<ul style="list-style-type: none"><li>• <b>Notable/positive.</b> Special tools were organized, calibrated, and properly stored for easy access and use for the task being performed. <b>See attached photo 7.</b></li></ul>		
Remedial Action	N/A		
Effective Practices	<p>Effective Practices</p> <ul style="list-style-type: none"><li>• The MRO shop overhauls both mechanical and electrical components using only "OEM" parts.</li><li>• Special tools were organized, calibrated, and stored for easy access and use for the task being performed.</li><li>• Hazardous material storage included the proper NFPA 704 label for the hazard level and individual material labels for proper storage and separation.</li></ul>		

Photos:



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Attachment 1 – MRO Open Work Orders

DEPT	REPORTED ITEM	LOCATION	MAXIMO W/O #	PRIORITY	FOLLOW UP ACTION	DATE REPORTED
PLNT	Roof needs evaluation multiple locations water leaks	Building G	14639652	MEDIUM	Emailed Bruce Rowe for assistance on 6/6/19 & 10/28/19 No reply. Changed to Michael Brummel Emailed 12/9/19 Then Changed to Andre Jordan on 12/10/19 Requested feedback on 12/27/20 & 2/5/20. No action	11/6/2018
PLNT	Westside rollup door concrete floor area needs repaired	G139	14687316	HIGH	Emailed Bruce Rowe for assistance on 6/6/19 & 10/28/19 No reply. Changed to Michael Brummel Emailed 12/9/19 Then Changed to Andre Jordan on 12/10/19 Requested feedback on 12/27/20 & 2/5/20. No action	11/30/2018
PLNT	Gear grinding noise from Crane #1	G117	14857051	HIGH	Last update "Awaiting PO" 6/11/19 VREP	2/18/2019
PLNT	Install a valve to all paint booths sprinkler systems and replace the sprinkler heads	Building G	14859457	HIGH	3/5/19 unable to get comm support, Fire safety rep to follow up on.	2/19/2019
PLNT	Crane #1 cable trans worn and damaged	G117	15527706	HIGH		2/3/2020

Photos 1 and 2– Overhead crane is not safe to operate due to functionality problems, such as gear grinding noises and hoist cable strands are broken or fraying





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Photo 3 - MRO shop entrance ramp has large sections of concrete missing from the floor, which can cause the forklift to tilt and drop components while they are being transported



Photos 4 and 5 – The fire sprinkler head in paint booth has been painted







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Photo 6 – The railyard had missing third rail covers



Photo 7 – Special tools were organized, calibrated, and properly stored for easy access and use for the task being performed





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<sup>1</sup> The rail transit agency must provide WMSC with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing WMSC verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
		02/5/2020
Inspector in Charge – Name	Inspection Team	
Manuel Lopez	Manuel Lopez and Tino Sahoo	