



Inspection Form

Form WMSC-IR-1

Washington Metrorail Safety Commission

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20200724-WMSC-MAL-1		
	2020	07	24				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	CMNT	Sub-Department	Greenbelt Shops and Yard
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED] [REDACTED]		[REDACTED] [REDACTED]		[REDACTED] [REDACTED]		[REDACTED] [REDACTED]
Inspection Location	Greenbelt Shops and Yard - Railyard E99 5801 Sunnyside Ave, College Park, MD 20740						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	VM-WI-PI					
Inspection Units	1					
Inspection Subunits	1					
Defects (Number)	9					
Recommended Finding	No					
Remedial Action Required¹	No					
Recommended Reinspection	No					

Activity Summaries

Inspection Activity #	1	Inspection Subject	Virtual Shop / Yard Inspection				Activity Code		VM	WI	PI
Job Briefing Employee Name/Title	WMATA Inspection			Accompanied Inspector?	N/A	Out Brief Conducted	N/A	Time	Virtual	Outside Shift	No
Related Reports	N/A			Related CAPS / Findings							
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference		
	MetroRail Safety Rules and Procedures Handbook (MSRPH). Section 4— Safety Rules										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	WMSC Office	Track Type	At-grade	Tunnel	Elevated	N/A
		X									X
Line(s)	E99	Track Number	N/A	Chain Marker and/or Station(s)		From		To			
						N/A		N/A			
Vehicles	Head Car Number		Number of Cars		Equipment		N/A				
	N/A		N/A								



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Description	<p>WMSC Inspector conducted a virtual rules compliance inspection of the Greenbelt Shops and Yard Facilities. The inspector requested numerous documents from daily activities performed at the Shop and yard for compliance with Metrorail Safety Rules and Procedures Handbook (MSRPH), as well as equipment maintenance activities, special tools, and documentation.</p> <p>General Information:</p> <ul style="list-style-type: none"> ○ WMSC's inspector requested and received several documents from the Greenbelt facility. ○ WMSC will address Greenbelt's facility concerns at the next CMNT/CENV Zoom meeting. <p>The following documents were reviewed:</p> <p><u>CMNT Daily Shop Safety Inspection & Housekeeping Checklist for July 15 and 17, 2020</u></p> <ul style="list-style-type: none"> ○ Reviewed CMNT's Daily Shop Safety Inspection & Housekeeping Checklist and the following deficiencies were provided (Attachment #1). ○ Lighting on the shop floor is flickering and causing the employees to become nauseated. The Greenbelt facility received a recent new LED lighting upgrade. A similar LED lighting flickering issue was previously observed and reported by WMSC at the New Carrollton facility. The flickering issue was corrected at the New Carrollton facility. ○ Lighting at the open pits area is inadequate, especially if a train is over the open pits blocking the overhead lighting. A similar poor lighting issue was previously observed and reported by WMSC at the open pits area at the Shady Grove facility. ○ Railroad crossing equipment at the entrance of the Greenbelt yard is malfunctioning. ○ There are excessive weeds outside the S&I shop apron by track #6, North. The weeds are up to 4 feet in tall. ○ Door exit signs are out by Track #2 North and South. <p><u>Periodic Inspections (PIs) Type A data was provided for railcars 7420-21 7040-41 7494-95 for 5-05 and 5-07-2020 and for railcars 7544-45 for 3-07-2020</u></p> <ul style="list-style-type: none"> ○ Reviewed PIs Type A data for railcars 7420-21, 7040-41, 7494-95 and 7544-45 and the following information is provided. ○ Task 80 – There is no pass/fail criterial for the car body height measurements. See attachment 2. ○ Railcars 7040-41 – Front truck and rear truck center pin sleeve is sliding out. ○ Railcars 7040-41 – Uncoupling arm missing locking pin and retainer. Add a work order to correct this deficiency if it is still open. <p><u>Special Tools List</u></p> <ul style="list-style-type: none"> ○ Reviewed the special tools list and the following comments are provided. There are many special tools missing that are needed to conduct Periodic Inspections on 7K railcars. ○ A total of 25 special tools, marked in red or not available, are needed to conduct Periodic Inspections on 7K railcars at the Greenbelt facility. See Attachment #3. <p><u>Greenbelt Railcars Out of Service Display Screen</u></p> <ul style="list-style-type: none"> ○ The Greenbelt railcars out of service display screen, which is in the Inspection Office, is used to keep track of the status of all railcars in the shops and yard that require repairs or maintenance. ○ The display screen properly identifies the railcar number, date, defect, railcar location, and clearly describes the status of railcar and required repairs or maintenance action. See Attachment #4. 	Number of Defects	9
		Recommended Finding?	No
		Remedial Action Required?	No
		Recommended Reinspection?	No
Remedial Action	N/A		



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Effective Practices

Effective Practices

- Good accomplishment. The documents provided depict that the Greenbelt facility is a well-organized and managed facility. These documents clearly describe processes, identifies issues, safety concerns, and action that needs to be taken to mitigate the safety concerns.

Photos:

Attachment 1 – CMNT Daily Shop Safety Inspection & Housekeeping Checklist at Greenbelt Facility

CMNT Daily Shop Safety Inspection & Housekeeping Checklist

Date Inspected: Jul 15, 2020 Inspected by: [Signature]

AL S&I [] BA S&I [] BWS&I [] GB S&I [] GB T&M [] GB Annex [] GB Paint Booth []

NC S&I [] SG S&I [] WFC S&I [] WFC Annex []

Place an "S" = Satisfactory or "U" = Unsatisfactory inspection finding next to each area.
Notes / Comments are encouraged where helpful.
Notes / Comments are required for any Unsatisfactory mark. Must include details and corrective action(s).

Exterior Areas of Building

Housekeeping	S	Shop Aprons / Leads	S
Hazardous Waste Storage	N/A	Cigarette Butt Containers	S
Fire Lanes / Parking	S	Lighting	N/A
Sidewalks	S	Dumpsters / Trash Cans	S

NOTES / COMMENT

Shop Floor

Housekeeping	U	Overhead Doors	S
Housekeeping - Floor	U	Exit Doors	S
Power Boxes	S	Oil Room	S
Stingers	U	Wheel Lathe	S
Drop Lights / Extension Cords	N/A	Walkways	S
Lighting	U	Blow Pit	U
Used Oil Storage	N/A	Used Part Tag & Storage	N/A
Eyewash Stations	S	Lockout / Tagout	S
Equipment Tag	S	Train Lifts	S
Blue Flag / SOP 12	S	Flammable Cabinets	S
Food Prep Equipment	S	Bottle Labeling	S

NOTES / COMMENT

Housekeeping throughout the shop needs attention (This will be addressed tomorrow during shop clean up)
Multiple lights out/flickering (Reached out to power and contractor for timeline to replace the lights)
Blow pit drains are clogged (Ticket called in)

Car Wash / Cleaning Tank / Steam Cleaning Booths

Housekeeping	U	Walkways	S
Exit Doors	S	Appropriate PPE	N/A
Drains	S	Overhead Doors (if applicable)	S

NOTES / COMMENT

Housekeeping will be addressed during shop clean up tomorrow.

Office / Administrative Areas of Building

Housekeeping	S	Pathways / Exits	S
First Aid Kits Sealed (wherever located)	S	Storage	S

NOTES / COMMENT

CMNT Form: 51.007, Rev. 9

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June 6, 2019

CMNT Daily Shop Safety Inspection & Housekeeping Checklist

Date Inspected: 7/17/2020 (EVE Shift) Inspected by: [Signature]

AL S&I [] BA S&I [] BWS&I [] GB S&I [] GB T&M [] GB Annex [] GB Paint Booth []

NC S&I [] SG S&I [] WFC S&I [] WFC Annex []

Place an "S" = Satisfactory or "U" = Unsatisfactory inspection finding next to each area.
Notes / Comments are encouraged where helpful.
Notes / Comments are required for any Unsatisfactory mark. Must include details and corrective action(s).

Exterior Areas of Building

Housekeeping	S	Shop Aprons / Leads	U
Hazardous Waste Storage	S	Cigarette Butt Containers	S
Fire Lanes / Parking	S	Lighting	S
Sidewalks	U	Dumpsters / Trash Cans	S

NOTES / COMMENT

APRON CONCRETE CRACKING @ ON TRACK 4 SOUTH LEAD AND 5 SOUTH LEAD
165 Sulfuric Acid Bank of Byronic Light. Excessive Weeds growing on the Land.

Shop Floor

Housekeeping	S	Overhead Doors	S
Housekeeping - Floor	S	Exit Doors	S
Power Boxes	S	Oil Room	S
Stingers	U	Wheel Lathe	U
Drop Lights / Extension Cords	S	Walkways	S
Lighting	S	Blow Pit	S
Used Oil Storage	S	Used Part Tag & Storage	S
Eyewash Stations	S	Lockout / Tagout	S
Equipment Tag	S	Train Lifts	S
Blue Flag / SOP 12	S	Flammable Cabinets	S
Food Prep Equipment	S	Bottle Labeling	S

NOTES / COMMENT

Stinger Broken in Blowpit Area, Wheel Lathe OOS.

Car Wash / Cleaning Tank / Steam Cleaning Booths

Housekeeping	U	Walkways	U
Exit Doors	S	Appropriate PPE	S
Drains	S	Overhead Doors (if applicable)	S

NOTES / COMMENT

Excessive Bird droppings on the South end of Cleaning Tank And Walkways

Office / Administrative Areas of Building

Housekeeping	S	Pathways / Exits	S
First Aid Kits Sealed (wherever located)	S	Storage	S

NOTES / COMMENT

All Locks OK

CMNT Form: 51.007, Rev. 9

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June 6, 2019

Attachment 2 – Periodic Inspections Type A, Task #80, Carbody Height Measurements, Railcar 7420-21; 5-5-2020

CHECKLIST TABLES

Carbody Height

A-Car		B-Car	
Left Side	Right Side	Left Side	Right Side
Wheel Diameter	Wheel Diameter	Wheel Diameter	Wheel Diameter
N/A	N/A	N/A	N/A
Air Spring Height	Air Spring Height	Air Spring Height	Air Spring Height
51	50	N/A	N/A
Carbody Height	Carbody Height	Carbody Height	Carbody Height
40	39 7/8	N/A	N/A
Wheel Diameter	Wheel Diameter	Wheel Diameter	Wheel Diameter
N/A	N/A	N/A	N/A
Air Spring Height	Air Spring Height	Air Spring Height	Air Spring Height
50	50	N/A	N/A
Carbody Height	Carbody Height	Carbody Height	Carbody Height
39 7/8	40	N/A	N/A

CL80-1

Periodic Inspection – 7000 Series – V 6.0

CHECKLIST TABLES

Carbody Height

A-Car		B-Car	
Left Side	Right Side	Left Side	Right Side
Wheel Diameter	Wheel Diameter	Wheel Diameter	Wheel Diameter
N/A	N/A	N/A	N/A
Air Spring Height	Air Spring Height	Air Spring Height	Air Spring Height
52	52	N/A	N/A
Carbody Height	Carbody Height	Carbody Height	Carbody Height
40	40	N/A	N/A
Wheel Diameter	Wheel Diameter	Wheel Diameter	Wheel Diameter
N/A	N/A	N/A	N/A
Air Spring Height	Air Spring Height	Air Spring Height	Air Spring Height
52	51	N/A	N/A
Carbody Height	Carbody Height	Carbody Height	Carbody Height
40	40 7/8	N/A	N/A

CL80-1

Periodic Inspection – 7000 Series – V 6.0



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Attachment 3 – Railcars Special Tools List at Greenbelt

GREENBELT 7K PI TOOLS ACCORDING TO PI PROCEDURE REV 4.0		
Task 20		
TOOLS	LOCATION	ASSIGNED LOCATION
Pin Gauge Set	Truck Shop tool Room	Tool Cabinet #1
Parallel Gauge Tool	NOT AVAILABLE	
0.005 in Feeler Gauge	NOT AVAILABLE	
Torque Wrench	Truck Shop tool Room	Tool Cabinet #2
Calibrated Back-to-Back Gauge	Yellow cabinet on shop floor	Tool Cabinet #3
Shoe Height Tool - 3.5"	GB PI Floor	GB PI Floor
Calibrated Spring Scale (50 lbs range)	Truck Shop tool Room	Tool Cabinet #1
Calipers	Truck Shop tool Room	Tool Cabinet #1
Calibrated Spring Scale (25 lbs range)	Truck Shop tool Room	Tool Cabinet #1
PI Tape	Each assigned their own	Each assigned their own
AAR Narrow Flange Steel Wheel Gauge	Truck Shop tool Room	Tool Cabinet #2
Dial Indicator	Truck Shop tool Room	Tool Cabinet #2
Guide Pin Go/No-Go Gauges	Truck Shop tool Room	Tool Cabinet #2
Brake Pad Slack Adjuster Go/No-Go Gauge	NOT AVAILABLE	
Brake Pad Thickness Go/No-Go Gauge	NOT AVAILABLE	
Coupler Hook Buff & Pull Go Gauge	Truck Shop tool Room	Tool Cabinet #1
Coupler Hook Buff & Pull No-Go Gauge	Truck Shop tool Room	Tool Cabinet #1
Stopwatch	NOT AVAILABLE	
Straight Edge	NOT AVAILABLE	
"T-shaped" Straight Edge	GB PI Floor	GB PI Floor
Throat Opening "No-Go" Gauge	Truck Shop tool Room	Tool Cabinet #1
Coupler Hook "No-Go" Gauge	Truck Shop tool Room	Tool Cabinet #1
Coupler Hook Extension Tool	Truck Shop tool Room	Tool Cabinet #1
Task 25		
TOOLS	LOCATION	ASSIGNED LOCATION
Ultrasonic Diagnostic Tool		
Task 30		
TOOLS	LOCATION	ASSIGNED LOCATION
Digital Multimeter	Each assigned their own	
Handle for Electrical Couplers		
SAFT Filler Pistol		
Task 35		
TOOLS	LOCATION	ASSIGNED LOCATION
Digital Multimeter	Each assigned their own	
Armature Gap Gauge, Sécheron 4H3S2028		
Main Contact Tip Gauge, Sécheron 4H3S2029		
Interlock Overtravel Gauge, Sécheron 4H3S2030		
Task 40		
TOOLS	LOCATION	ASSIGNED LOCATION
PTU Laptop with Connecting Cables (Ethernet and Fastenal)		
Signal Generator, GRATTEN ATF20B DDS or equivalent		
VEAM Circular Connector FRICR06F-10SL-3S-F80-VD		
Task 50		
TOOLS	LOCATION	ASSIGNED LOCATION
PTU Laptop with Connecting Cables (Ethernet and Fastenal)		
HVAC Manifold Gauge Set	Each assigned their own	
Differential Air Pressure Switch Tester		
Digital Thermometer		
Infrared Thermometer		
Cooling Spray		
Thermal (Infrared) Gun		
Task 60		
TOOLS	LOCATION	ASSIGNED LOCATION
Grease Gun (PSI-20-0023)	On grease cart/ Grease Room	Grease Room
Torque Wrench, 80 ft-lbs	Truck Shop tool Room	Tool Cabinet #2
Task 70		
TOOLS	LOCATION	ASSIGNED LOCATION
Direct Reading Gauges – Brake Plates	Truck Shop tool Room	Tool Cabinet #1
Task 80		
TOOLS	LOCATION	ASSIGNED LOCATION
Threshold Height T-Square Gauge	GREENBELT PI FLOOR	GREENBELT PI FLOOR
Threshold Height Reference Bar	GREENBELT PI FLOOR	GREENBELT PI FLOOR
Go/No-Go Gauge, Air Spring Height	NOT AVAILABLE	



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Task 90		
TOOLS	LOCATION	ASSIGNED LOCATION
Torque Wrench	Truck Shop tool Room	Tool Cabinet #2
Limit Switch Gauge(1.2mm to 2.2mm)		
Anti-Rattle Block/Door Height Gauge		
Straight Edge		
Nose Seal/V-Shape Gauge		
Push/Pull Force Gauge		
3/8" Flat Plate Obstruction		

Task 110		
TOOLS	LOCATION	ASSIGNED LOCATION
None Required		

Attachment 4 – Greenbelt Railcars Out of Service Display Screen.

The screenshot shows the 'CMNT Shop Planning' web application. The 'Shop Planning' tab is selected, and the 'Greenbelt (E99)' filter is active. The table lists railcars with their OOS From date, Work Status, Defect description, Loc, Plan Loc, Move Status, and Action icons. The total OOS cars are 38.

Car	OOS From	Work Status	Defect	Loc	Plan Loc	Move Status	Action
6132	3/13/2020 9:37:41 PM	Awaiting Triage	6K SMP (5123/20 XFER TO GB FOR TRUCK CHANGE OUT	12			
6138	3/23/2020 11:03:32 AM	Awaiting Triage	POST SMP >> NEEDS WHEEL WEAR	6n			
6140	3/26/2020 11:48:47 AM	Awaiting Triage	6K SMP (3/20/20) / DRSW	04			
7038	4/20/2020 11:48:02 AM	Awaiting Triage	Y-INSP REAR TRUCK BC C/O HANDLE BINDING (NEEDS BCCO CABLE) RIO 6 DI-1-1 BOARD (K60804028) ER (K60804061): CCP BOARD, 2K10FLOOR HEATER CONTACTOR & SEATS/FAULTY ER PWR SUPPLY K60804089) //30 DAY AUDIT	17	07N	Executed	
7008	5/22/2020 7:29:17 PM	Awaiting Triage	POST PI >> AIR COMPRESSOR OIL IS MILKY: REDUCED PROPULSION FAULT:ATPCORLATPCOR2EMRFSR, AND RDVR CALIBRATION DATE EXPIRED:EMR AND FSR RELAYS DUE CALIBRATION (DATE 10/23/2013).	7n			
7014	5/23/2020 7:17:47 AM	Awaiting Triage	POST PI >> FRONT FAD #1 GEARS BROKEN, CLICKING, WON'T CLOSE:FRONT HVAC J1 CONNECTOR PIN FLASH:	5n			
7010	5/24/2020 11:04:27 PM	Awaiting Triage		17			
7540	6/28/2020 10:57:26 PM	Awaiting Triage	FMI PROGRAM (BUMP POST)	18			
7738	7/6/2020 9:56:20 AM	Awaiting Triage	TCN NETWORK SINGLE FAULT--NEED BELLED FOR MLTT	18			
6174	7/9/2020 2:38:32 PM	Awaiting Triage	POST PL RIGHT REAR CAR WINDOW GLASS CRACKED // XFER TO PAINT SHOP, F. SIERRA ACCEPTS	12			
7018	7/9/2020 2:47:24 PM	Awaiting Triage	PHASE 4 EMI PROGRAM	19			
7614	7/15/2020 2:52:21 AM	Awaiting Triage	REPORT OF SMOKE EMITTING FROM THE TRUCKS, 20/10, E07, CMD, BRAK, 502	16	055	Executed	
7016	7/18/2020 9:03:29 AM	Awaiting Triage	PHASE 4 EMI PROGRAM/PI INPRG	19			
7598	7/18/2020 5:12:17 PM	Awaiting Triage	CEILING TILE DELAMINATED-PI 07/23/2020	2n			
7630	7/20/2020 3:40:36 PM	Awaiting Triage	FLOOR INSPECTION	5n			
7640	7/20/2020 11:18:23 PM	Awaiting Triage	INTERCOM INOP, 0/0, E09, CMD, PAIC, 501	05	YARD - RELEASED	Executed	
7486	7/21/2020 3:11:32 AM	Awaiting Triage	ATC FAILURE	06	07SL	Confirmed	
7690	7/21/2020 4:52:46 AM	Awaiting Triage		4n	03N	Executed	
7618	7/21/2020 5:02:02 AM	Awaiting Triage		5n	045	Confirmed	

¹ 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 07/24/2020
Inspector in Charge – Name Manuel Lopez	Inspection Team Manuel Lopez	