



U.S. Department
of Transportation

**Federal Transit
Administration**

Headquarters

1200 New Jersey Avenue, SE
Washington, DC 20590

SENT VIA EMAIL

August 26, 2022

Mr. Steve Poftak
General Manager
Massachusetts Bay Transportation Authority
10 Park Plaza
Boston, MA 02116

Subject: Resubmission for Special Directive 22-5 Corrective Action Plans

Dear Mr. Poftak,

Thank you and your team for resubmitting submitting corrective action plans (CAPs) to address the following required actions from Federal Transit Administration's (FTA) Special Directive 22-5 related to Vehicle Securement for Disabled Trains:

- FTA-VSC-22-001: The Massachusetts Bay Transportation Authority (MBTA) must develop and implement specific written procedures for yard movements of rail vehicles with known or suspected defective brakes or propulsion equipment.
- FTA-VSC-22-002: The MBTA must develop training and train personnel on the policies and procedures to safely move rail vehicles with known or suspected defective brakes or propulsion equipment. Personnel is inclusive of all employees, contractors, oversight, or other individuals who access the rail system and facilities.
- FTA-VSC-22-003: The MBTA must create and implement a compliance program to ensure personnel consistently and accurately use policies and procedures for yard movements of rail vehicles with known or suspected defective brakes or propulsion equipment. Personnel is inclusive of all employees, contractors, oversight, or other individuals who access the rail system and facilities.

FTA Approval of MBTA's CAPs for Special Directive 22-5

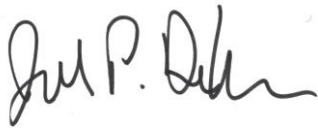
The FTA has completed its review of the MBTA's CAPs and resubmittals for the three (3) required actions in Special Directive 22-5.

The FTA finds that these CAPs adequately address the findings and required actions identified in Special Directive 22-5, and therefore, FTA approves them for implementation.

Conclusion

We appreciate your efforts to enhance MBTA's safety performance, and we look forward to working with you and your team as the MBTA addresses these findings and required actions. Please contact our SMI CAP Manager, Mr. Elliott Shepherd, by phone at (202) 253-7002 or by email at Elliott.Shepherd@dot.gov with any questions.

Sincerely,



Joe DeLorenzo
Associate Administrator and
Chief Safety Officer
Office of Transit Safety and Oversight

Enclosure: Special Directive 22-5 Corrective Action Plan Evaluation Table

cc: Peter Butler, Regional Administrator, FTA Region 1
Jeffrey Gonneville, Deputy General Manager, MBTA
Ron Ester, Chief Safety Officer, MBTA
Steve Hicks, Chief Mechanical Officer
Dave Carney, Chief of Transit Services, MBTA
Andrea Gordon, Assistant General Manager, Rail Operations, MBTA
Elizabeth Cellucci, Director, Transportation Oversight Division, Massachusetts Department of Public Utilities



Corrective Action Plan (CAP) Evaluation Matrix
Special Directive 22-5: Vehicle Securement of Disabled Trains

Identification Number	Finding and Required Action	Proposed CAP Items	Proposed Due Dates	FTA Comments	MBTA Response (if needed)
FTA-VSC-22-001	<p><u>Finding:</u> MBTA does not have or use specific procedures for yard movements of rail vehicles with known or suspected defective brakes or propulsion equipment</p> <p><u>Required Action:</u> MBTA must develop and implement specific written procedures for yard movements of rail vehicles with known or suspected defective brakes or propulsion equipment</p>	1. Investigations: Transportation held fact finding on yard incidents from 5/28, 5/30, 5/31, 6/1 and 6/8	Completed on 6/10/22	<p>August 3, 2022 Action Required</p> <ol style="list-style-type: none"> 1. Update with any fact finding and lessons learned from the July 25, 2022 unintended train movement and the safety standdown. 2. Provide FTA with investigation reports and results of fact finding and lessons learned from July 25, 2022 event and from safety standdown. 3. Revise dates and deliverables as necessary. <p>Revised Action Item Approved</p>	<p>August 12, 2022 Response</p> <ol style="list-style-type: none"> 1. See new CAP action item #1a 2. See new CAP action item #1b 3. See dates in #1b
		2. Frontline engagement: Vehicle Maintenance senior staff spoke with all forepersons	Completed on 6/2-6/5/22	Action Item Approved	
		3. Frontline engagement: Transportation senior staff spoke with all yard personnel	Completed on 6/9-6/21/22	Action Item Approved	
		4. Updated procedures: Transportation memo issued regarding uncoupling vehicles	Completed on 6/5/22	<p>August 3, 2022 Action Required</p> <ol style="list-style-type: none"> 1. Determine and submit documentation to FTA if memo needs to be updated or re-issued based on revisions to procedure in Action Item #5 below and results of safety standdown. 2. Revise dates and deliverables as necessary. <p>Revised Action Item Approved</p>	<p>August 12, 2022 Response</p> <ol style="list-style-type: none"> 1. Re-issued special order (22-148) which included procedure requiring any MBTA employee coupling or uncoupling a rail transit vehicle to complete a checklist 2. See action item #9a



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		<p>5. Updated procedures: Issued uncoupling special order</p>	<p>Completed on 6/22/22</p>	<p>August 3, 2022 Action Required</p> <ol style="list-style-type: none"> 1. Revise procedure to include checklist required in FTA’s July 28, 2022 immediate action letter. 2. Revise procedure to include requirement that any MBTA employee coupling or uncoupling a rail transit vehicle must complete the checklist. 3. Revise procedure to include directions for how employees should maintain and submit completed checklists and how supervisors should review them. 4. Provide verification that updated procedures went through MBTA's change management process. 5. Revise dates and deliverables as necessary. <p>Revised Action Item Approved</p>	<p>August 12, 2022 Response</p> <ol style="list-style-type: none"> 1. Issued safety inspection forms (checklist) for light rail & heavy rail yard moves which must be utilized prior to coupling or uncoupling rail vehicles 2. Re-issued special order (22-148) which included procedure requiring any MBTA employee coupling or uncoupling a rail transit vehicle to complete a checklist 3. See action item #9a 4. All Special Orders are issued through the Process Director (see signature page on submittals) 5. See revised dates in #9a, 9b, 9c
		<p>6. Updated procedure: Developed procedure for pin hitching for all service rail vehicle types</p>	<p>12/1/22</p>	<p>August 3, 2022 Action Required</p> <ol style="list-style-type: none"> 1. Provide an incremental schedule showing completion dates for the pin hitching procedures for the Red, Orange, Blue, and Green Line fleets through December 1, 2022. 2. Amend the procedure for each rail transit line fleet to direct the actions to take if the pin is unable to be inserted into the coupler or the procedure is unable to be implemented. 3. Provide FTA with its plan for designing and procuring new pins for the Red Line and perhaps other 	<p>August 12, 2022 Response</p> <ol style="list-style-type: none"> 1. See revised dates in action item #6b 2. See revised dates in action item #6b 3. See new action item #6a 4. See revised dates in action item #6c 5. See revised dates in action item #6d 6. See revised dates in 6a, 6b, 6c, 6d



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				<p>rail transit fleets to support this procedure.</p> <p>4. Provide FTA with documentation on the number of successful pin hitch procedure tests conducted with new pins and schedule another demonstration for FTA.</p> <p>5. Ensure training is updated to reflect changes in procedure for pin hitch.</p> <p>6. Revise dates and deliverables as necessary.</p> <p>Revised Action Item Approved</p>	
		7. Updated Procedures: Issued rerail list of required action items for Vehicle Maintenance	Completed 6/15/22	<p>August 3, 2022 Action Required</p> <p>1. Provide verification that updated procedures went through MBTA's change management process.</p> <p>Response Approved</p>	<p>August 12, 2022 Response</p> <p>Rerail list or required action items for VM did not go through change management process: It is not an engineering document or a special order.</p> <ul style="list-style-type: none"> Submitted PDF checklist to DPU, Safety Department and VM training department staff All relevant training was tracked in Learning Management System (LMS)
		8. Updated procedure: Carhouse moves	Completed 6/22/22	<p>August 3, 2022 Action Required</p> <p>1. Provide verification that updated procedures went through MBTA's change management process.</p>	<p>August 12, 2022 Response</p> <p>HR & LR Special Orders for movement within yard limits were approved through the Process Director.</p> <ul style="list-style-type: none"> Trainings is in progress



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					<ul style="list-style-type: none"> SO will be released once training is completed by location
		<p>9. Update Procedures: Develop Heavy Rail Special Order which provides clear direction on procedure to move equipment within yard limits and into/out of the car houses utilizing a version of blue flag/blue signal procedures and provides clear direction for moving equipment with brake or propulsion issues</p>	8/1/22	<p>Response Approved</p> <p>August 3, 2022 Action Required</p> <ol style="list-style-type: none"> Revise draft procedure to include checklists for coupling / uncoupling, safety inspection, and circle check required in FTA’s July 28, 2022 immediate action letter. Revise draft procedure to include requirement that MBTA employees must complete the checklist. Revise draft procedure to include directions for how employees should maintain and submit completed checklists and how supervisors should review them. Provide verification that updated procedures went through MBTA's change management process. Revise dates and deliverables as necessary. <p>Note that this is the same as FTA-VSC-22-002 #1 and FTA-VSC-22-003 #1.</p> <p>Revised Action Item Approved</p>	<p>August 12, 2022 Response</p> <p>Actions required 1-5: See new action items #9a, 9b, 9c</p>
		<p>10. Update Procedures: Develop Light Rail Special Order which provides clear direction on procedure to move equipment within yard limits and into/out of</p>	9/1/22	<p>August 3, 2022 Action Required</p> <ol style="list-style-type: none"> Ensure procedure includes checklists for coupling / uncoupling, safety inspection, and circle check required in FTA’s July 28, 2022 immediate action letter. 	<p>August 12, 2022 Response</p> <p>Actions required 1-5: See new action items #10a, 10b, 10c</p>



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		the car houses utilizing a version of blue flag/blue signal procedures and provides clear direction for moving equipment with brake or propulsion issues		<ol style="list-style-type: none"> 2. Ensure procedure includes requirement that MBTA employees must complete the checklist. 3. Ensure procedure includes directions for how employees should maintain and submit completed checklists and how supervisors should review them. 4. Provide verification that updated procedures went through MBTA's change management process. 5. Revise dates and deliverables as necessary. <p>Note that this is the same as FTA-VSC-22-002 #2 and FTA-VSC-22-003 #2.</p> <p>Revised Action Item Approved</p>	
		11. Updated Procedures: Vehicle Maintenance will include a coupler wiring modification	10/24/22	Action Item Approved	
		12. Staffing/Personnel: Build plan for increasing capacity for forepersons and yard staff to support additional workload	9/1/22	Action Item Approved	
		13. Staffing/Personnel: Hire all relevant positions	12/30/23	Action Item Approved	
		14. Communication: Transportation memo issued regarding brake cutout	Completed 6/8/22	Action Item Approved	



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		15. Communication: All forepersons received and signed for receipt of two safety directives from CSO	Completed 6/21-6/23/22	Action Item Approved	
		16. Communication: All yard staff received and signed for receipt of two safety directives from CSO	Completed 6/21-6/23/22	Action Item Approved	
		17. Communications: Heavy Rail Transportation will update rule book	4/1/23	Action Item Approved	
		18. Communications: Light Rail Transportation will update rule book	4/1/23	Action Item Approved	
FTA-VSC-22-002	<p><u>Finding:</u> MBTA does not adequately train personnel on the policies and procedures to safely move and secure rail cars with known or suspected defective brakes or propulsion equipment.</p> <p><u>Required Action:</u> MBTA must develop training and train personnel on the policies and procedures to safely move rail vehicles with known or suspected defective brakes or propulsion equipment. Personnel is inclusive of all employees, contractors, oversight, or other</p>	1. Update Procedures: Develop Heavy Rail Special Order which provides clear direction on procedure to move equipment within yard limits and into/out of the car houses utilizing a version of blue flag/blue signal procedures and provides clear direction for moving equipment with brake or propulsion issues	8/1/22	<p>August 3, 2022 Action Required See comments on FTA-VCS-22-001, Action Item #9 above.</p> <p>Note that this is the same as FTA-VSC-22-001 #9 and FTA-VSC-22-003 #1.</p> <p>Revised Action Item Approved</p>	August 12, 2022 Response Actions required 1-5: See new action items #9a, 9b, 9c
		2. Update Procedures: Develop Light Rail Special Order which provides clear direction	9/1/22	<p>August 3, 2022 Action Required See comments on FTA-VCS-22-001, Action Item #10 above.</p>	August 12, 2022 Response Actions required 1-5: See new action items #10a, 10b, 10c



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	individuals who access the rail system and facilities.	on procedure to move equipment within yard limits and into/out of the car houses utilizing a version of blue flag/blue signal procedures and provides clear direction for moving equipment with brake or propulsion issues		Note that this is the same as FTA-VSC-22-001 #10 and FTA-VSC-22-003 #2. Revised Action Item Approved	
		3. Develop Heavy Rail syllabus & hands-on training	9/15/22	Action Item Approved	
		4. Develop Light Rail syllabus & hands-on training	10/14/22	Action Item Approved	
		5. Develop Heavy Rail vehicle maintenance syllabus & hands-on training	9/15/22	Action Item Approved	
		6. Develop Light Rail vehicle maintenance syllabus & hands-on training	10/14/22	Action Item Approved	
		7. Develop training schedule for Transportation and OCC	10/14/22	Action Item Approved	



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		8. Develop training schedule for Vehicle Maintenance	10/14/22	Action Item Approved	
		9. Train Heavy Rail, Vehicle Maintenance, & OCC personnel	1/27/23	Action Item Approved	
		10. Train Light Rail, Vehicle Maintenance, & OCC personnel	2/24/23	Action Item Approved	
		11. Training completion tracking	10/14/22	Action Item Approved	
		12. Define recertification process and cadence	10/14/22	Action Item Approved	
		13. Embed process into new hire training	10/14/22	Action Item Approved	
FTA-VSC-22-003	<p><u>Finding:</u> MBTA does not verify that personnel consistently use policies and procedures for movement of trains that do not have working brakes and working propulsion equipment.</p> <p><u>Required Action:</u> MBTA must create and implement a compliance program to ensure personnel consistently and accurately use policies and procedures for yard</p>	1. Update Procedures: Develop Heavy Rail Special Order which provides clear direction on procedure to move equipment within yard limits and into/out of the car houses utilizing a version of blue flag/blue signal procedures and provides clear direction for moving equipment with brake or propulsion issues	8/1/22	<p>August 3, 2022 Action Required See comments on FTA-VCS-22-001, Action Item #9 above.</p> <p>Note that this is the same as FTA-VSC-22-001 #9 and FTA-VSC-22-001 #1.</p> <p>Revised Action Item Approved</p>	<p>August 12, 2022 Response Actions required 1-5: See new action items #9a, 9b, 9c</p>



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<p>movements of rail vehicles with known or suspected defective brakes or propulsion equipment. Personnel is inclusive of all employees, contractors, oversight, or other individuals who access the rail system and facilities.</p>	<p>2. Update Procedures: Develop Light Rail Special Order which provides clear direction on procedure to move equipment within yard limits and into/out of the car houses utilizing a version of blue flag/blue signal procedures and provides clear direction for moving equipment with brake or propulsion issues</p>	<p>9/1/22</p>	<p>August 3, 2022 Action Required See comments on FTA-VCS-22-001, Action Item #10 above. Note that this is the same as FTA-VSC-22-001 #10 and FTA-VSC-22-002 #1. Revised Action Item Approved</p>	<p>August 12, 2022 Response Actions required 1-5: See new action items #10a, 10b, 10c</p>
	<p>3. Rewrite existing SRCP audit</p>	<p>10/14/22</p>	<p>Action Item Approved</p>	
	<p>4. Write new SRCP audit for movement of equipment within yard limits</p>	<p>10/14/22</p>	<p>Action Item Approved</p>	
	<p>5. Vehicle Maintenance will develop an SRCP to audit equipment movement</p>	<p>10/14/22</p>	<p>Action Item Approved</p>	