

**Massachusetts Bay
Transportation Authority**

Safety Update: Internal Safety Audit Program

Fiscal Management Control Board

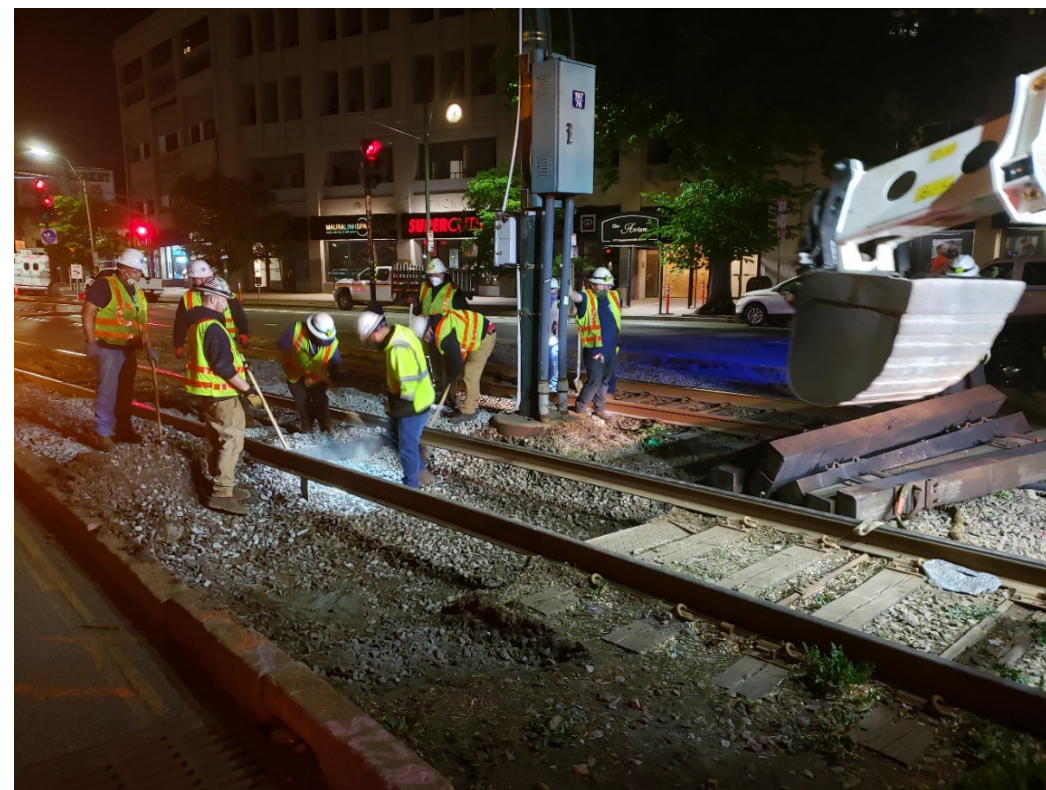
June 7, 2021

Ronald Ester, Chief Safety Officer

Michael Catsos, Deputy Director of Safety Assurance and SMS
Implementation

Internal Safety Audits: Background

- Federal and state regulations at 49 CFR Part 673 and 22 CMR 151 require internal audits to evaluate compliance with safety program and associated policies / procedures
- MBTA's audit program applies to all directly operated and contract services for:
 - Heavy Rail
 - Light Rail
 - Bus
 - Paratransit



Internal Safety Audits: Timeline

- Departments and functions audited according to a rolling three-year schedule, with all areas audited at least once triennially

2020 (Complete)	2021 (In Progress)	2022
Operations Control Center (OCC)	Rail Vehicle Maintenance (RVM) (Heavy & Light)	Heavy Rail Transportation & Training
Transit Facilities Maintenance (TFM)	Maintenance of Way (MOW)	Capital Delivery
Procurement & Logistics	Light Rail Transportation and Training	Power
Bus Maintenance	Occupational Health Services	Signals
E&M Training	Paratransit “The Ride”	Safety
		Bus Operations



Internal Safety Audits: Process

2021 MBTA Safety Internal Audit Checklist
Light Rail Transportation

Department: Light Rail Transportation
Department Representative(s):
Review Date(s):
Reference Criteria: 2021 MBTA Safety Plan

Item #	SSPP Element	General Requirement Policy (Includes act plans/procedures in Safety Plan (TSP Section 5.1.1), Safety Management System, Safety Performance, Organizational Structure)
1.1	Element 1: Introduction	Are you familiar with how it is made available to the public?
1.2	Element 1: Introduction	How are safety standards communicated to employees?
1.3	Element 1: Introduction	How are safety goals communicated to the public to promote safety?
1.4	Element 2: Purpose, Scope, and Performance	Are safety goals reviewed? How do you monitor a safety goal?

2021 Internal Safety Audit Document Request

Note: The items listed below represent broad categories of documents which may be maintained by Light Rail Transportation. While Light Rail Transportation may not have written documents for each item, the review team encourages Light Rail Transportation to respond with related documents corresponding to each category whenever possible. If a requested item does not exist, please mark "N/A" in the Comments column. In addition, please identify any documents which may only be made available to the team during the on-site portion of the review. Feel free to include any additional documents not identified here related to the department's safety programs and activities.

Item #	Documents Requested
1	Sample of Any Communication to Employees re: Safety Activities or Issues (e.g. Memo, Job Briefing, Special Order, etc.)
2	Copy of Department Goals and Objectives
3	Sample of Agendas, Minutes, and/or Action Items for Safety-Related Committees (i.e. facility specific, etc.)
4	Light Rail Transportation Organizational Chart
5	Sample Job Postings for Motorpersons, Supervisory Staff, etc.
6	Copy of Procedures / Communications re: Employee Safety Reporting
7	Sample Document Related to a Recent System Process Modification (e.g. Rule Procedure Physical Change)
8	Documentation related to LR Transportation participation in Safety Certification process, if applicable (Type 9s, etc.)
9	Copy of Safety Information Data Shared with Senior Management (e.g. Report, Presentation, Correspondence, Briefing)

massDOT
Massachusetts Department of Transportation

MEMORANDUM

TO: Andrea Gordon
AGM - Rail

FROM: Michael Catsos
Deputy Director of Safety Assurance and SMS Implementation

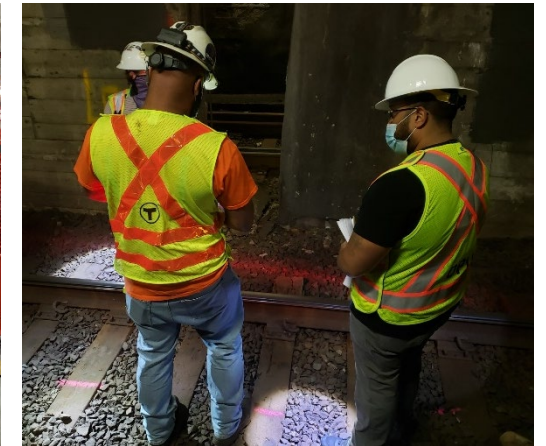
DATE: April 30, 2021

SUBJECT: 2021 Internal Safety Audit Notification— Light Rail Transportation

OVERVIEW:
Pursuant to 49 CFR 673 and 220 CMR 151.05 (*Internal Safety Audits*), MBTA Safety is required to perform annual internal safety audits to evaluate compliance with and implementation of the MBTA Transit Safety Plan. MBTA Safety hereby provides 30-day notice of an upcoming audit.

As part of its comprehensive internal audit program, this year MBTA Safety will audit **Light Rail Transportation** on all components of the MBTA Transit Safety Plan (enclosed for your reference), which include the following:

- Safety Management Policy Statement
- MBTA Safety Management System (SMS) Implementation
- Organizational Structure & Responsibilities
- Safety Risk Management



Annual Kickoff Meeting, Internal Training, and Scoping

Checklist, Document Request, and Schedule Development

Management Interviews

Records Reviews and Field Activities

Checklist Completion

Draft and Final Report Completion

Corrective Action Plan Development + Review

Internal Safety Audits: Process

2021 MBTA Safety Internal Audit Checklist
Rail Vehicle Maintenance

Department: Rail Vehicle Maintenance
Department Representative(s): Steve Hicks, Joseph Gentilucci, Timothy Davis, Gary Yentile
Review Date(s): 3/22/21 – 3/24/21
Reference Criteria: 2021 MBTA Safety Plan

Reviewer(s): Michael Catsos, Meghan McDonnell, Anya Umacher, Oceana Sanchez

#	SSPP Element	General Requirements / Safety Management Policy (Includes activities and associated plans/procedures identified in Transportation Safety Plan (TSP) Sections 1. Introduction, 2. Safety Management System (SMS) Policies, 3. Safety Performance and Documentation, 4. Organizational Structure and Responsibilities)	Department Response / Review Team Observations	Key
1.1	Element 1: Introduction	Are you familiar with the MBTA Safety Plan? How is it made available to all employees?	The MBTA Safety Plan is available to all Rail Vehicle Maintenance (RVM) personnel via the MBTA Intranet and will be soon available on the MBTA TStop webpage. The Intranet is updated by Safety when changes are made to the Safety Plan.	COM
1.2	Element 1: Introduction	How are safety standards and policies communicated to Rail Vehicle Maintenance employees?	Safety standards and policies are communicated through trainings, toolbox talks, and message boards. Critical standards or policies require employees to sign off on policy verification receipts. As an example, there is a Standard Operating Procedure (SOP) created for accessing the underside of a light rail streetcar outside of the carhouse facility. The purpose of the SOP was to familiarize employees with the correct methods.	COM

Charles D. Baker, Governor
Kathryn E. Polito, Lieutenant Governor
Stephanie Poltak, MassDOT Secretary & CEO
Steve Potbak, General Manager

massDOT
Massachusetts Department of Transportation

MBTA SAFETY
2020 Internal Safety Interview Report

Date: December 28, 2020

TO: Steve Hicks
Chief Mechanical Officer
Howard Pransky
Chief Maintenance Officer
FROM: Ronald Ester
Chief Safety Officer

CC: D. Hart
H. Sumner
M. Catsos
O. Sanchez
T. Zentz
K. Chronley
S. Baker

Area Audited: Bus Maintenance

Audit Approach:
Assessment of the department's adequacy in meeting safety program requirements as outlined in the MBTA Safety Plan, derived from the referenced documents listed below.

Reference Documents:

- 2019 MBTA Safety Plan
- Department of Public Utilities (DPU) Regulation 220 CMR 151.03
- Federal Transit Administration (FTA) Regulation 49 CFR 673

Audit Date: September 16, 2020 – September 18, 2020

Summary:
MBTA's Bus Maintenance function is responsible for managing the condition of the transit bus fleets, all major/minor repairs, and the records for the maintenance activities performed. Bus Maintenance is comprised of a management group, eight (8) bus repair facilities, two (2) non-revenue repair facilities, a Bus Maintenance Engineering group and a Bus Maintenance Training group.

MA DPU
Transportation Oversight

CORRECTIVE ACTION PLAN

MBTA CAP NUMBER	DATE	SAFETY OFFICIAL
7371 - 7374	5/10/21	Michael Catsos

DPU REFERENCE NUMBERS

MBTA REFERENCE NUMBERS

MITIGATED HAZARD

Item 1: At the time of the audit, Bus Maintenance did not maintain a schedule for review and update of Emergency Response Plans.

Item 2: Bus Maintenance maintains several effective processes for hazard identification, but the results of hazard identification and tracking activities are not consistently communicated to Safety.

Item 3: MBTA Safety observed minor housekeeping and safety issues during the Albany facility inspection. 1. A worker was observed performing maintenance beneath a bus without wearing proper eye protection. 2. Several unlabeled containers containing unknown liquids were identified in the central area of the facility.

Item 4: During the Albany facility inspection, Bus Maintenance management and MBTA Safety observed two safety-related conditions for which Bus Maintenance requires additional support from outside departments to resolve. 1. A steel plate installed on the floor of the fuel alley to manage structural deterioration presents a slip, trip, and fall hazard when wet. 2. Spool-mounted electrical cables were installed several months ago in one of the facility's maintenance bays to power lifts and remove the slip, trip, and fall hazard of power cables on the floor. However, Bus Maintenance has not succeeded in coordinating with Engineering & Maintenance to have the cables wired and activated.

LIST OF CORRECTIVE ACTIONS

Please include a numbered list of all corrective action items related to this plan. Fill out an individual form for each corrective action item attached to this document.

Corrective Action

Item 1 - Bus Maintenance has scheduled an annual Facility Emergency Plan process that will be updated and posted by 12/31 of each year. Individual facility managers will be responsible for making these updates. Access to the updated plans will be shared with MBTA Safety.

Item 2 - Bus Maintenance will utilize existing meetings between maintenance management and MBTA Safety, including the Weekly Safety Report review meeting, the Bi-weekly Safety / Operations Coordination Meeting, and daily Operations coordination calls, to raise hazards with MBTA Safety for logging and management. The results of these discussions will be

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Internal Safety Audits: Process

Assessment Scale Level	Description
Noncompliant (NC)	Not in compliance with applicable regulations or MBTA safety program requirements.
Compliant with Recommendation (CWR)	Technically in compliance with applicable regulations and requirements, but: <ul style="list-style-type: none">• No written plan, policy, or procedure is in place;• Practices not fully consistent with industry best practices and standards;• Organizational and resource issues inhibit performance of safety activities.
Compliant (COM)	Resources in place to accomplish all objectives. Employees trained and knowledgeable on the policies and procedures which facilitate compliance with safety requirements.

- In 2020:
 - Zero (0) Findings of Noncompliance
 - Twenty-one (21) Findings of Compliance with Recommendation across five audited departments and functions



Internal Safety Audits: Reporting

- Summary Reports for individual audits issued within 90 days
- Annual ISA Report summarizing all activities in previous year due annually to DPU by February 15
 - Signed by MBTA Accountable Executive / General Manager
 - Reviewed by Safety Management Review Committee and Chief Safety Officer



Internal Safety Audits: Program Enhancements

- Checklist Completion Process
 - Expanded Safety input and extended interviews
- Training
 - Enhanced virtual course required for all MBTA Safety auditors
- Safety Lead Investigator Support
 - Independent MBTA Safety expertise in key technical areas
- External Support
 - Additional subject matter expertise and coverage capacity

