



RAIL SYSTEM SAFETY PROGRAM PLAN

October 2011

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Rail Safety Department
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TABLE OF CONTENTS

Section		Page
1	SYSTEM SAFETY PROGRAM PLAN OVERVIEW	1
1A	Policy Statement and Authority of SSPP	1
1B	Purpose and Scope	2
1C	Goals	3
1D	Objectives	3
1E	Control and Update Procedures	3
1F	Reference Documents	4
2	SYSTEM OVERVIEW	5
2A	System Description	5
2B	Joint Operations	7
2C	Organization Structure	8
2D	Reference Documents	10
3	HAZARD MANAGEMENT PROCESS	11
3A	Hazard Resolution Matrix	11
3B	Reference Documents	13
4	ACCIDENT INVESTIGATION AND ANALYSIS	15
4A	Accident/Incident Reporting and Investigation	15
4B	Safety Data Acquisition and Analysis	18
4C	Reference Documents	19
5	INSPECTIONS AND MAINTENANCE	20
5A	Facilities Maintenance and Inspections	20
5B	Vehicle Maintenance Inspections and Repair	21
5C	Highway-Rail Grade Crossings	22
5D	Inspection Records	23
5E	Reference Documents	24
6	TRAINING AND CERTIFICATION	25
6A	Rules and Procedures Review	25
6B	Training and Certification	26
6C	Contract Safety (Contractor) Requirements	34
6D	Reference Documents	35
7	EMERGENCY PLANNING AND RESPONSE	36
8	ENVIRONMENTAL MANAGEMENT PROGRAM	39

Section	Page
9	41
SECURITY	
9A NJ TRANSIT Police	41
10	44
WORKPLACE SAFETY PROGRAMS	
10A Regulatory Required Activities (OSHA, PEOSHA)	44
10B Safety Department Functions, Safety Committees	47
10C Medical Services Department	50
10D Drug and Alcohol Policy	51
10E Fatigue Program	53
10F Safety Responsibilities of Departments Other Than Safety	53
10G Reference Documents	56
11 PASSENGER AND PUBLIC SAFETY PROGRAMS	57
11A Safety Education Program	57
11B Operation Lifesaver Program	59
11C Passenger/Community Safety	60
11D Platform / Train Gap Management Program	61
11E Passenger Train Side Door Control Procedures	62
11F Customer Safety Fencing Initiative	63
11G New Service Hazard Analysis	63
11H Grade Crossing Safety	64
11-I Trespasser and Intrusion Programs	64
11J Reference Documents	65
12	66
LOSS PREVENTION AND CONTROL	
12A Fire Prevention and Casualty Management	66
12B Safety Contract (Contractor) Requirements	66
13	68
SYSTEM CHANGE MANAGEMENT	
13A System Modification Review Process	68
13B Procurement	70
13C Configuration Management	71
13D Safety Certification	73
13E Reference Documents	74
14.	75
INTERNAL SAFETY MANAGEMENT ASSESSMENT PROCESS	
15.	76
DEFINITIONS	
APPENDIX A – HAZARD ANALYSIS WORKSHEET	78

SECTION 1 SYSTEM SAFETY PROGRAM PLAN OVERVIEW

1A POLICY STATEMENT AND AUTHORITY OF SYSTEM SAFETY PROGRAM PLAN

As New Jersey's public transportation corporation, NJ TRANSIT is committed to providing a safe and healthy environment for its employees, its customers and the communities it serves.

NJ TRANSIT's mission is to provide safe, reliable, convenient and cost-effective transit service with a skilled team of employees, dedicated to the customers' needs and committed to excellence.

Safety is a primary concern that affects all areas of NJ TRANSIT Rail (NJTR) including planning, design, construction, testing, operations and maintenance. Therefore, all NJTR personnel and appropriate contractors are charged with the responsibility of ensuring the safety of customers, employees, property and the general public that come in contact with the system.

The NJ TRANSIT Rail Safety Department is empowered and authorized to develop, implement and administer a comprehensive, integrated and coordinated System Safety Program, including a specific plan to identify, prevent, control and resolve unsafe conditions during design, construction, testing, operations and maintenance of the system.

However, all employees and supervisors are empowered to identify and prevent unsafe activities, behavior, and conditions which are evaluated as presenting an immediate and serious hazard to employees and customers and to conduct inspections and audits aimed at identifying and eliminating unsafe activities, behavior and conditions.

James W. Weinstein
Executive Director

Kevin J. O'Connor
Vice President & General Manager

1B

PURPOSE AND SCOPE FOR SYSTEM SAFETY PROGRAM PLAN

System Safety refers to the concept of applying operating, technical and management techniques and principles to the safety aspects of a system. These techniques and principles are applied throughout the system's life to reduce hazards to the lowest possible level through the most effective use of available resources.

The underlying philosophy essential to the success of System Safety is the concept that every employee, supervisor, and manager throughout the organization is responsible for safety. The identification and resolution of hazards are conducted by each department with the Rail Safety Department working as a facilitator to ensure that each department is achieving the safest working environment possible.

System Safety is an overall, integrated, coordinated effort on the part of all managers and the Rail Safety Department and is designed to:

- Preserve life and property.
- Control, eliminate or reduce hazards to the lowest possible level.
- Reduce and prevent accidents.
- Minimize and control the effects of accidents and incidents.
- Maintain the safe operation of the system.
- Ensure that safety is an integral part of all personnel decisions, plans, specifications, designs, tests, procedures and operations.

The purpose of maintaining a written System Safety Program Plan at NJ TRANSIT Rail (NJTR) is to ensure the communication and implementation of our safety policy to all supervisors and employees. More specifically, it is designed to:

- Establish the System Safety Program on a system-wide basis.
- Identify individual departmental responsibilities to achieve System Safety.
- Identify the relationships and responsibilities of NJTR with other organizations and agencies that have an impact on our operations.
- Provide a written document demonstrating NJTR's commitment to safety.
- Provide a framework for the implementation of safety policies and the goals and objectives necessary to achieve them.
- Comply with federal and state laws and regulations.
- Meet or exceed accepted industry standards.

1C SYSTEM SAFETY PROGRAM PLAN GOALS

The overall goal of the System Safety Program Plan is to identify, minimize, eliminate and/or control safety hazards and their associated risks by establishing requirements, lines of authority, levels of responsibility and accountability and methods of documentation. NJ TRANSIT Rail's specific goals are as follows:

- To maintain the highest level of safety for our customers.
- To maintain the highest level of safety for our employees.
- To control, reduce or eliminate hazards to the lowest possible level.
- To minimize and control the effects of accidents and incidents.
- To realize a specific reduction in employee injuries annually, as identified in the (Annual) Rail Safety Program.

1D SYSTEM SAFETY PROGRAM PLAN OBJECTIVES

In order to meet its goals, NJ TRANSIT Rail has established the following objectives:

- Develop and implement a Rail Safety Program which is updated annually.
- Continuing safety training of employees and supervisors.
- Continued adherence to safety standards, safety rules and federal regulations.
- Total commitment to the system safety process.
- Ensure the System Safety Program Plan is provided to all new employees, ensuring that safety is an integral part of all personnel decisions, plans, specifications, designs, tests, procedures and operations.
- Introduction of new or innovative techniques and equipment to reduce risks.
- Continue to focus on employee injury reduction through safe work practices.
- Participation of labor and management employees at monthly safety committee meetings.

1E SYSTEM SAFETY PROGRAM PLAN CONTROL AND UPDATE PROCEDURES

The System Safety Program Plan will be reviewed by the Director of Safety to ensure that changes in operational configuration, management organization or other factors which have an impact on NJ TRANSIT Rail are incorporated as necessary into the SSPP. All affected departments responsible for adherence to the System Safety Program Plan as provided will ensure the Rail Safety Department is provided with procedural and technical changes on an ongoing basis.

At a date determined by the Rail Safety Department, and after thorough review and input from the affected departments, a revised System Safety Program Plan will be prepared. Upon approval, the Vice President and General Manager of NJ TRANSIT Rail will authorize the issuance of a revised System Safety Program Plan. The revised

plan will be provided to affected departments within NJ TRANSIT, the American Public Transportation Association and the required regulatory agencies.

During the interval between the revisions to the SSPP, the Rail Safety Department generates and distributes the (Annual) Rail Safety Program. Issues that have developed during the previous calendar year and corrective action to be implemented are identified in order to ensure a uniform response to the issues identified across all Rail departments.

1F

REFERENCE DOCUMENTS

- APTA Manual for the Development of System Safety Program Plans for Commuter railroads (May 2006)
- USA Military Standard 882C - January 1993
- Mass Transit System Safety Glossary – October 1995

SECTION 2

SYSTEM OVERVIEW

2A

SYSTEM DESCRIPTION

New Jersey Transit Corporation (NJ TRANSIT) was created by the state legislature in 1979. It replaced the previous Commuter Operating Agency (COA), which was part of the New Jersey Department of Transportation. NJ TRANSIT is charged with the responsibility of overseeing most bus and rail service in New Jersey. Under the New Jersey Public Transportation Act of 1979, NJ TRANSIT was created and empowered to acquire and operate private bus and rail carriers when it was deemed to be in the public's interest, or to contract private carriers or counties to provide subsidized service.

At that time, NJ TRANSIT did not plan to operate the rail lines directly, but expected to continue contracting with Conrail for service in New Jersey. However, on August 13, 1981, Congress passed the Northeast Rail Services Act, which ordered Conrail, the federal operator, to cease operating passenger service by December 31, 1982.

NJ TRANSIT's Board of Directors, formed in 1980, voted to assume direct operating responsibility instead of contracting with a newly created Amtrak subsidiary.

NJ TRANSIT Rail Operations, Inc. a subsidiary of NJ TRANSIT successfully coordinated the transfer of operating responsibilities from Conrail on January 1, 1983.

Currently, NJ TRANSIT is the third largest provider of bus, rail, and light rail transit in the nation - linking major points in New Jersey, New York and Philadelphia. NJ TRANSIT Rail Operations serves 285,000 daily passenger trips in 15 of the state's 21 counties, operating approximately 693 scheduled daily trains on 10 rail lines with stops in 117 communities. NJ TRANSIT trains annually provide 82 million passenger trips covering more than 2.0 billion miles. The agency is responsible for 544 miles of track including 12 moveable bridges, 669 stationary bridges, 164 rail stations, and more than 1,200 signals.

The NJ TRANSIT Rail system is divided into two divisions. They are: the Hoboken Division (which includes the Morristown, Gladstone, Montclair, Main/Bergen, Southern Tier and Pascack Valley Lines and Sport Line); and the Newark Division (which includes the Amtrak Northeast Corridor, Princeton Line, North Jersey Coast Line, Raritan Valley Line and the Atlantic City Rail Line).

The Southern Tier and the Pascack Valley Lines, which serve New York's Orange and Rockland Counties, are operated by NJ TRANSIT as part of the Hoboken Division, and are subsidized by Metro-North. Rockland County is served by both the Pascack Valley and the Southern Tier with four stations; one station on the Port Jervis Line, and three on the Pascack Valley Line. Orange County, served by the Southern Tier, has seven stations. In addition, NJT has a Sports Line to the Meadowlands for events.

The NJ TRANSIT Rail rolling equipment or revenue fleet consists of approximately 75 electrically powered locomotives and 230 "Arrow"-designated multiple-unit cars. These are used in electrified territory on the AMTRAK Northeast Corridor, Princeton Line, and the North Jersey Coast Line (which utilize both a 12KV and a 25 KV overhead catenary system), and the Morristown, Gladstone and Montclair Lines (which utilize a 25 KV overhead catenary system). Additionally, 105 diesel-electric locomotives, along with approximately 1083 "Comet" and Multi-Level-designated (including Metro North) push-pull coaches are used system wide. NJ TRANSIT adheres to the American Public Transportation Association (APTA) Manual of Standards and Recommended Practices for Rail Passenger Equipment.

Seven diesel-electric locomotives and approximately 85 pieces of various types of equipment such as gondolas, hoppers and flat cars are used by the Engineering and Mechanical Departments in non-revenue service.

In addition to providing connections to business and employment centers within the state, NJ TRANSIT Rail also provides interstate service to the region's other public transit systems, including Amtrak, Metro North Railroad (MNR), Long Island Railroad (LIRR), Port Authority Trans Hudson (PATH), Southeastern Pennsylvania Transit Authority (SEPTA) and Port Authority Transit Corporation (PATCO).

NJ TRANSIT Rail is subject to the authority of the Federal Railroad Administration (FRA), the Federal Transit Administration (FTA), the New Jersey State Department of Health, Public Employees Occupational Safety and Health Administration (PEOSHA), Environmental Protection Agency, the Federal Environmental Protection Agency, the New York State Public Transportation Safety Board (NY-PTSB) and the National Transportation Safety Board (NTSB).

Since 1983, NJ TRANSIT's capital rail improvement program has focused on modernizing and expanding the system. The program has enabled the agency to:

- Open Meadowlands Maintenance Complex (MMC) as the primary repair facility for rolling equipment.
- Initiate MIDTOWN DIRECT service, providing direct access to midtown Manhattan from the Morris & Essex Lines.
- Open the Newark Liberty International Airport Station.
- Open the 50,000 square-foot East End Concourse at Penn Station New York.
- Open Secaucus Junction - a rail transfer station which links the Main/Bergen Lines and Amtrak's Northeast Corridor Line. It provides direct access to Midtown New York from Bergen County rail lines.
- Construction of a new Rail Operations Center (ROC) which houses the train and power dispatchers, Rules Department, Operations Communications Group, Consist Coordinators Group, Hearing office, Bridge Desk and crew assignment group.
- Construction of a new train storage yard and Service and Inspection (S&I) Facility in Morrisville, PA.

- Open a new station at Montclair State University.
- Implementation of a state-of-the-art dispatching system known as the Train Management and Control System (TMAC).
- Increase Pascack Valley Line service by 126 additional weekday and weekend trains.
- Implementation of Automatic Train Control/Cab signal System on all lines. This system provides speed enforcement and brake activation features.
- Meadowlands Sports Line connecting Meadowlands Sports Complex.

Current initiatives include the following:

- Passenger Service restoration on 7.3 miles of the Lackawanna Cut-off connecting Port Morris and Andover Townships in the northwest portion of the state.
- Procure additional 100 Multi-Level passenger cars for modernizing the fleet and increasing the seating capacity.
- Procure 26 dual-powered locomotives that can operate on electrified as well as non-electrified lines.
- Install a Positive Train Control (PTC) System mandated by the Federal Government on all NJ TRANSIT mainline tracks that carry passenger trains.

2B JOINT OPERATIONS

NJ TRANSIT Rail operates eleven rail lines over which certain freight carrier railroads provide service under a joint facility or trackage rights agreement. As the owner of the rail properties over which passenger and freight operations are performed, NJ TRANSIT Rail retains the right to establish the overall policies governing the management and operational control of the properties including the dispatching and control of all trains.

- Norfolk Southern provides through and local freight service on the Main Line and Bergen County Line and local freight service on the Pascack Valley Line, Morristown Line, Montclair Line, Gladstone Line and Raritan Valley Line (west of Bound Brook).
- Conrail (Shared Assets) provides local freight service on the North Jersey Coast Line and Raritan Valley Line (between Aldene and Bound Brook).
- The Morristown and Erie Railroad provides local freight service on the Morristown Line.
- Southern Railroad of New Jersey provides local freight service on the Atlantic City Line between Winslow (North Wins) and Pleasantville (Griff).

When operating on NJ TRANSIT Rail properties, the above-mentioned carriers are governed by NORAC Operating Rules and NJT Rail Timetable Special Instructions. Equipment instructions and related procedures manuals are provided by individual freight carrier railroads for their employees. Operational testing is performed by NJT

Rail supervisors as required by 49 CFR 217.9 and the NJT Rail TQS (Test Qualification System) program as administered by the NJT Rules Department.

NJ TRANSIT Rail operates commuter rail service on lines owned by the following carriers:

- Amtrak – Northeast Corridor Line, between Sunnyside Yard, Long Island City, NY and 30th Street Station, Philadelphia, PA.
- Conrail (Shared Assets) – NJT Rail Raritan Valley Line trains utilize the Lehigh Line between CP-NK (Amtrak Connection) and CP-Aldene (Raritan Valley Line Connection)

NJ TRANSIT Rail operates commuter rail service for Metro-North on the Southern Tier Line between Suffern, NY and Port Jervis, NY. Although Metro-North owns the Southern Tier Line, NJT Rail Timetable Special Instructions and bulletins are in effect, and the line is under control of the NJT Rail Train Dispatcher.

Except as noted on the Metro North Southern Tier Line, NJ TRANSIT Rail train movements on other railroads are under the jurisdiction of the respective Amtrak or Conrail Train Dispatcher. Train movements are governed by NORAC Operating Rules and Amtrak or Conrail Timetable Special Instructions. However, NJ TRANSIT Rail personnel are governed by NJT equipment instructions and related procedures manuals.

All contractual issues concerning joint facilities or trackage rights agreements are coordinated through the Director – Rail Contract Administration located in Newark.

2C ORGANIZATION STRUCTURE

NJ TRANSIT, New Jersey's public transportation agency, is governed by a seven-member Board of Directors, appointed by the Governor. Four members are from the general public and three members are state officials.

The Executive Director is the chief executive of NJ TRANSIT and is responsible for NJ TRANSIT Bus Operations, Inc., NJ TRANSIT Rail Operations, Inc., and corporate administrative and support departments. The Vice President and General Manager of Rail Operations has responsibility for the management of rail operations for NJ TRANSIT.

NJ TRANSIT Rail has both operating and capital funded positions. Employees in operating positions address the day-to-day activities of providing services and routine maintenance for the fleet of rolling equipment and the infrastructure. Employees in capital positions work on major projects associated with replacing infrastructure and acquiring and overhauling the fleet of rolling equipment. As of October 31, 2011, there

are approximately 4,400 total employees and supervisors employed by NJ TRANSIT Rail Operations. This is made up of Transportation (1,888), Mechanical (1,408), Engineering (990) and support staff (71).

NJ TRANSIT Rail has three primary functional areas: Transportation, Infrastructure Engineering and Mechanical. The Transportation Department has the responsibility for train operations, train dispatching and power dispatching. The Infrastructure Engineering Department is responsible for the physical plant of the railroad, which includes the track structure, signal system, catenary system, bridges, stations and other structures. The Mechanical Department is responsible for maintenance and inspection and heavy repair of all rail cars and locomotives. The other support departments within Rail Operations include safety, finance, labor relations, planning and contracts.

The Deputy General Managers and other direct reports to the Vice President and General Manager are responsible for the following areas:

The *Deputy General Manager - Transportation* is responsible for overall transportation issues, including crew assignments, train dispatching and operating rules procedures.

The *Deputy General Manager - Infrastructure Engineering* is responsible for engineering standards and infrastructure capital projects and maintenance.

The *Deputy General Manager - Equipment* is responsible for overall mechanical standards, including rolling stock projects and maintenance of equipment and rolling stock rehabilitation along with Quality Assurance/Quality Control.

The *Deputy General Manager - Safety and Training* is responsible for safety related activities and technical training.

The *Deputy General Manager - Labor Relations and Administration* is responsible for contract maintenance with 15 labor unions and interfaces with senior management on personnel issues, administrative projects, and for the hearing officers.

The *Senior Director – Rail Finance* reviews, controls and manages all financial activities and work activities for Rail operating and capital budgets.

The *Senior Director – System Operations* is responsible for Train Dispatching, TMAC control and maintenance and maintenance of the Rail Operations Center (ROC).

The *Chief of Staff - Rail Operations* is responsible for leading longer-term projects and programs that involve multiple departments and crafts including special initiatives around fare technology, customer communications, capital investment strategy, and major events.

The *General Superintendent - Equipment* is responsible for all periodic inspections and heavy repair of rail cars and locomotives at the Meadows Maintenance Complex.

The *General Superintendent – Mechanical Field Operations* is responsible for daily inspections, maintenance and repairs to rail cars and locomotives at outlying locations.

The *Senior Director- Technical Services and QA/QC (Mechanical)* is responsible for the development and implementation of an effective quality control /quality assurance (QA/QC) program for the mechanical department.

The *General Superintendent - Hoboken Division (Transportation)* is responsible for Hoboken Terminal, the Morris and Essex Lines (the Morristown, Montclair and Gladstone Lines) the Main/Bergen, Southern Tier and Pascack Valley Lines.

The *General Superintendent - Newark Division (Transportation)* is responsible for the Northeast Corridor, the Princeton Line, the North Jersey Coast Line, the Raritan Valley Line and the Atlantic City Rail Line.

The *Senior Director - Infrastructure Engineering* coordinates daily and routine maintenance activities for track, structures, signal and catenary systems.

The *Director - Rail Contract Administration* is responsible for managing the business relationship between NJ TRANSIT rail operations and its freight and passenger partner railroads.

Due to the interrelationships of railroad and non-railroad operations and the various corporate support services provided by NJ TRANSIT to NJ TRANSIT Rail personnel, the detailed organizational structure showing position titles and diagrams showing lines of communication between the organizational units may be found in the comprehensive NJ TRANSIT organizational charts.

2D REFERENCE DOCUMENTS

- NJ TRANSIT System Timetable Special Instructions and Schedules
- Amtrak Northeast Corridor Timetable Special Instructions and Schedules
- Conrail (Shared Assets) Timetable Special Instructions
- NORAC Operating Rules - used by all railroads referred to in 2B
- Airbrake Instructions: NJT (TRO-4), Amtrak (AMT-3), CR (NS-1)
- Electrical Operating Instructions: NJT (TRO-3), Amtrak (AMT-2)
- Safety Rules: NJT (TRO-5), Amtrak (AMT-5), CR (S-7)
- Hazardous Material Instructions: NS (HM-1)
- NJT “Facts at a Glance”
- NJT Organization Chart

SECTION 3 HAZARD MANAGEMENT PROCESS

3A HAZARD RESOLUTION MATRIX

Accident and injury prevention are the responsibility of each employee at NJ TRANSIT Rail. When an accident occurs, it can result in personal injury, damage to equipment or the rail infrastructure. In addition to pain and suffering caused by the accident, the result can be very costly for the agency in terms of monetary losses, loss of rider confidence, and lost productivity. Therefore, a proactive approach to system safety is extremely beneficial. For this reason it is very important to ensure that a process is in place to identify, categorize and resolve safety hazards.

At NJ TRANSIT Rail, there are safety committees for each division and major facility that meet frequently to discuss safety issues and to identify safety hazards. In most cases, safety hazards are identified and resolved during inspections. This is governed by the need to adhere to various federal and state regulations and NJ TRANSIT Rail standards.

The information provided through the safety meetings regarding critical safety items is monitored by the Director of Safety and the Rail Safety Staff. Hazard Analysis also occurs in the form of scheduled inspection procedures, code compliance and adherence to various governmental regulations.

Both the Rail Safety and Customer Service Departments address public or customer concerns regarding safety issues. These concerns are then forwarded to the responsible department for corrective action.

A critical element in the NJ TRANSIT Rail System Safety Program Plan is the mechanism by which hazards are formally identified, analyzed and resolved. There are basically three components of this process: hazard identification, hazard categorization and hazard resolution.

The Vice President and General Manager and staff support this process. Hazards are identified in terms of severity and probability of occurrence. If corrective action of a safety issue or root-cause of an accident/incident is not obvious or cannot be agreed upon by the designated committee reviewing the item, a Hazard Analysis will be performed.

Once a hazard is identified, an analysis is performed to determine the potential severity and the probability of its occurrence. To determine what action should be taken to correct identified hazards, or to document the acceptance of them, this system of determining the level of risk involved has been adopted.

Hazard severity is defined as a subjective measure of the worst result possible from an event. It can result from personal error, environmental conditions, design inadequacies and/or procedural inefficiencies for the system. It is categorized as follows:

Category 1, Catastrophic — may cause death or system loss

Category 2, Critical — may cause severe injury or illness or major system damage

Category 3, Marginal — may cause minor injury or illness or minor system damage

Category 4, Negligible — will result in less than minor injury, illness or system damage

Hazard probability is defined as the probability that a specific hazard will occur during the life expectancy of the system. It is described subjectively by the review committee's consensus and is ranked as follows:

DESCRIPTION	LEVEL	INDIVIDUAL ITEM	FLEET OR INVENTORY
Frequent	A	likely to occur frequently	continuously experienced
Probable	B	will occur several times in the life of an item	will occur eventually
Occasional	C	likely to occur sometime in the life of an item	will occur occasionally
Remote	D	unlikely but possible to occur in the life of an item	unlikely, but may occur
Improbable	E	so unlikely it can be assumed the occurrence may not be experienced	unlikely to occur

Hazard Analysis allows the committee to understand the amount of risk involved with accepting the hazard relative to what resources are required to reduce it to an acceptable level. The committee decides based on the probability of occurrence and the severity of the hazard whether to correct the hazard or to accept the risk. This determination is based on the following chart:

HAZARD RESOLUTION MATRIX				
	1	2	3	4
A	UN	UN	UN	AC/WR
B	UN	UN	UD	AC/WR
C	UN	UD	UD	AC
D	UD	UD	AC/WR	AC
E	AC/WR	AC/WR	AC/WR	AC

Codes: **UN** - unacceptable **UD** - undesirable **AC/WR** - acceptable with review by management staff **AC** - acceptable

The documentation of hazards, injuries and accidents is accomplished through the use of accident/injury reports, daily operations reports and inspection reports generated by all departments. This information is used to evaluate system modifications. In addition to scheduled safety meetings, the documentation of hazards provides information regarding hazards and conditions throughout the system.

Frequency of occurrence and hazard severity categories are identified for Hazard Analysis and risk assessment through the Rail Safety Department. Employee and passenger injuries are tracked through the Safety Reporting System. These injury reports are reviewed and are provided by in the Rail Safety Department. These reports along with the information gathered from field inspections and safety committee reports provide the information necessary to identify and correct hazards or potential hazards.

3B

REFERENCE DOCUMENTS:

Appendix–A Hazard Analysis Worksheet

Hazard Analysis Procedure

Step 1 - Hazard identification

Identify a real or potential condition that exists and which may cause injury, death or damage/loss to property or equipment.

Step 2 - Hazard Severity

Determine the worst possible result that could occur because of a particular hazard.

Step 3 - Hazard probability

Determine the probability that a hazard (particular event) will occur.

Step 4 - Hazard Resolution Matrix

Based on the matrix, determine whether to accept the risk associated with the hazard or determine what measures can be taken to minimize or eliminate the hazardous condition.

Note: This hazard analysis and resolution process does not supersede compliance with any applicable federal, state or other inspection, maintenance and testing requirements.

A separate Hazard Analysis Worksheet is utilized to develop a detailed analysis of the condition being evaluated. (See Appendix A)

Hazard Identification/Resolution Process

Hazard severity is defined as a subjective measure of the worst result possible from an event. It can result from personal error, environmental conditions, design inadequacies and/or procedural inefficiencies of the system. It is categorized as follows:

Category 1, Catastrophic — may cause death or system loss

Category 2, Critical — may cause severe injury or illness or major system damage

Category 3, Marginal — may cause minor injury or illness or minor system damage

Category 4, Negligible — will result in less than minor injury, illness or system damage

Hazard probability is defined as the probability that a specific hazard will occur. It is described subjectively by the committee's consensus and is ranked as follows:

Description Level

Frequent	A
Probable	B
Occasional	C
Remote	D
Improbable	E

HAZARD RESOLUTION MATRIX

	1	2	3	4
A	UN	UN	UN	AC/WR
B	UN	UN	UD	AC/WR
C	UN	UD	UD	AC
D	UD	UD	AC/WR	AC
E	AC/WR	AC/WR	AC/WR	AC

Codes: **UN** - unacceptable **UD** - undesirable **AC/WR** - acceptable with review by management staff **AC** - acceptable

SECTION 4

ACCIDENT INVESTIGATION AND ANALYSIS

4A

ACCIDENT/INCIDENT REPORTING AND INVESTIGATION

Based on the requirements of 49 CFR Part 225, NJ TRANSIT Rail strives to ensure the accurate investigation and reporting of accidents/incidents, casualties, injuries, occupational illnesses and highway-rail grade crossing accidents. NJ TRANSIT Rail is committed to completely and accurately reporting all accidents/incidents, injuries and occupational illnesses arising from its operation. It is the goal of NJ TRANSIT Rail to maintain a total Rail Safety Program emphasizing that safety is everyone's responsibility.

Procedures

The following outlines the general procedures for NJ TRANSIT Rail personnel subsequent to any injury or accident:

Employees are required to report all accidents and injuries to their supervisor or to the Assistant Chief Dispatcher and to adhere to the guidance of their supervisor during the investigation and reporting process.

In the event of a rail equipment accident, incident, injury or occupational illness arising from the operation of the railroad, the supervisor in charge will take immediate action to ensure the safety of the employee and any other persons involved in the accident (i.e. customers, contractors, trespassers, etc.). The supervisor immediately reports the situation to the Assistant Chief Dispatcher, who makes the required notification to the Mechanical and Engineering Trouble Desks, and to appropriate personnel within and/or outside NJ TRANSIT. When assistance from an outside agency is determined to be necessary (i.e., police, fire, EMS), notification to this agency is made through the Assistant Chief Dispatcher. The supervisor in charge at the scene ensures that prompt medical attention is provided to the employee and accompanies the employee to the appropriate medical facility. Management personnel investigate the cause of the incident/accident and prepare a preliminary report. Upon completion of the investigation, all details are documented using the prescribed forms.

When equipment or property damage occurs as a result of an accident/incident, a cost estimate is completed by each affected department and is included in the preliminary report. After the final costs are determined, documentation stating actual costs is forwarded to the Rail Safety Department.

All reports are promptly forwarded to the Director-Safety. Additional and/or revised information relating to any accident, incident, injury or occupational illness developed after the initial report is submitted must be forwarded to the Director-Safety, who will distribute to the affected departments.

Responsibilities

The following NJ TRANSIT Rail personnel are governed by these procedures:

Employees

The employee involved must report any accident or injury to his or her supervisor. If the supervisor is not available, the injury is reported to the Assistant Chief Dispatcher. The employee must follow the guidance of supervisors during the accident/investigation and reporting process.

Supervision

After the initial report by an employee of an accident or injury, the supervisor must make appropriate arrangements for medical attention, if required. An initial investigation of the accident or injury must be conducted, with the goal of ensuring that the conditions which may have resulted in the accident or injury, are corrected. Proper documentation and recommended action is provided.

Assistant Chief Dispatcher – Rail Operations Center

After receiving notification of an accident or injury, personnel at this location coordinate the notification of appropriate supervisors and outside agencies where required.

Director-Safety

The Director-Safety coordinates the collection of all pertinent information necessary to complete and accurately report all accident/incidents, injuries and occupational illnesses. The Director-Safety also interfaces with the Manager-Safety Reporting and Analysis to review for accuracy all the required forms provided prior to processing and submission to the FRA. Finally, the Director-Safety is responsible for ensuring that the performance of the reporting function is reviewed on a monthly basis. The Director of Safety also ensures that two random samples of personal injury files per year by designated safety staff are conducted for compliance with this procedure.

Deputy General Manager Infrastructure Engineering, Deputy General Manager Transportation, Deputy General Manager Labor Relations and Administration, Deputy General Manager Safety and Training, Deputy General Manager Mechanical, Chief Superintendent – Rail Planning and Resource Optimization, Senior Director – Finance.

This group meets at the beginning of each workday to review and discuss the previous day's occurrences. This panel of officers coordinates and authorizes additional

accident/incident investigation procedures when required. Each accident/incident is evaluated based on frequency and severity. These positions are responsible for ensuring that all accidents/incidents, injuries and occupational related illnesses involving Transportation, Engineering, Mechanical and support personnel are investigated, accurately and documented completely on the required forms and promptly provided to the Director-Safety.

Medical Services, Risk Management, Labor Relations, Human Resources, Operating Departments (Engineering, Mechanical, Transportation)

These departments provide assistance and expertise as necessary throughout the accident/incident investigation process.

These departments ensure that all pertinent information relative to all accidents/incidents, injuries, and occupational-related illnesses involving NJ TRANSIT Rail personnel received in their respective areas is promptly provided to the Director-Safety.

These departments' representatives meet on a monthly basis as the "Lost Time Committee" with the Director of Safety (or designee) to review the status of employees who are unavailable for work due to accident, injury or illness.

In addition, the Director-Safety (and designee) meet monthly with the Risk Management Department to review the status of all employee and non-employee accidents, incidents and occupational illnesses within the previous twelve (12) month period.

Records

One or more of the following forms are required to process an accident/incident, injury, or occupational illness affecting NJ TRANSIT Rail personnel.

- TRO 75 Report of Personal Injury
- Investigation Report of Employee Injury
- TRO 78 Unusual Occurrence Report (UOR)
- Y2234 Request for Medical Service
- TRO 2102 Injured Employee's Ten-Day Report
- MP 100 Equipment Inspection Report
- TRO 503 Rail Equipment Accident/Incident Report
- TRO 504 Highway Grade Crossing Accident/Incident Report

Internal review prior to submission to the Federal Railroad Administration (FRA) is conducted by the Director of Safety, Managers of Safety and the Manager of Safety Reporting and Analysis which is reported internally on a daily basis and externally at the end of each month to the Federal Railroad Administration (FRA) on one or more of the following forms:

- FRA 6180.54 Rail Equipment Accident/Incident Report
- FRA 6180.55 Railroad Injury and Illness Summary
- FRA 6180.55A Railroad Injury and Illness Summary Continuation Sheet
- FR 6180.56 Annual Railroad Report of Man-hours
- FRA 6180.57 Rail Highway Grade Crossing Accident/Incident Report
- FRA 6180.78 Employee Statement Supplementing Railroad Report
- FRA 6180.81 Employee Human Factor Attachment
- FRA 6180.150 Highway User Inquiry Form

Reports approved by the Director of Safety are sent to the FRA in Washington, DC. All concerns are clarified with the FRA by the Manager of Safety Reporting and Analysis.

The Rail Safety Department provides status adjustment of the incident which is forwarded electronically to the FRA. All other related documents are then adjusted accordingly. Records of accidents/incidents are maintained by the Rail Safety Department at One Penn Plaza, Newark, New Jersey.

4B

SAFETY DATA ACQUISITION AND ANALYSIS

In compliance with Federal Railroad Administration 49 CFR (Code of Federal Regulations) Part 225, Railroad Accidents/Incidents Reporting Regulations, the NJ TRANSIT Rail Safety Department collects, updates, maintains and distributes data concerning accidents/incidents on the rail system. All accidents and incidents are reported to the Rail Operations Center and written accident/incident reports are submitted directly to the Rail Safety Department by rail supervisors.

The Safety Reporting System (SRS) provides the Rail Safety Department the capability to perform in-depth analysis of employee and non-employee injuries. Periodic analysis of employee and non-employee injuries are conducted to determine injury trends and underlying causes. This helps management enhance its efforts in reducing and preventing injuries. The Rail Safety Department keeps active computerized documentation on all injuries and accidents involving employees and customers. This information is routinely distributed to affected supervisors, reviewed at safety meetings and used to institute any improvements, modifications, etc., to the railroad system. The overall objective for maintaining safety data is to identify problem areas (frequency and severity) so that procedures for prevention may be developed and implemented effectively.

Safety data is reported to the Federal Railroad Administration and the New Jersey Department of Transportation on a monthly basis, as required. All mandated federal and state reports are maintained on file in the Rail Safety Department. NJ TRANSIT Rail reviews external data from other rail properties, the National Transportation Safety Board, the Federal Transit Administration, the Federal Railroad Administration and the

Association of American Railroads. The data is used for analysis of information, which can assist NJ TRANSIT in the process of hazard resolution. Information regarding the cost of accidents/incidents is analyzed and categorized by the Risk Management Department, One Penn Plaza, Newark, New Jersey.

Amendments and revisions to the NJ TRANSIT Rail accident/incident investigation process may be implemented internally or as required by local, state or federal law.

4C

REFERENCE DOCUMENTS

- 49 CFR Part 225 - "Railroad Accidents/incidents" (FRA)
- "Guide for Preparing Accident/incident Reports" (FRA)
- "Accident/Injury Reporting Instructions" (NJ Transit Rail Safety Dept.)
- "Internal Control Plan for Accident/Incident Reporting" (NJ Transit Rail Safety Dept.)
- "Timetable Special Instructions" - R2, R3, R4 (NJ Transit Rules Dept.)
- "Rail Operations Center Notification List" (NJ Transit Rail System Operations)
- Rail Employee Safety Rules and On-Track Safety Procedures Manual (TRO-5)

SECTION 5

INSPECTIONS AND MAINTENANCE

NJ TRANSIT Rail must comply with approximately thirty federal regulations directly related to the operation of a commuter railroad. Jurisdiction for enforcing these regulations falls under the authority of the Federal Railroad Administration (FRA). These regulations cover such areas as rolling equipment, track structure, the signal system, accident/incident reporting and drug testing requirements. The FRA assigns inspectors to monitor NJ TRANSIT Rail compliance with these regulations.

5A

FACILITIES MAINTENANCE AND INSPECTIONS

With regard to fire/life safety, and as an agency of the State of New Jersey, NJ TRANSIT Rail is under the jurisdiction of the NJ Department of Community Affairs, Division of Fire Safety (NJDC-DFS). NJDC-DFS has the authority to enforce the requirements of the New Jersey Uniform Fire Code (NJUFC) at NJ TRANSIT Rail facilities. This includes maintaining a registry of all NJ TRANSIT Rail facilities and conducting annual inspections with appropriate NJ TRANSIT Rail personnel. In addition, the NJ TRANSIT Rail insurance carrier performs annual property inspections at all facilities valued at \$500,000 or more.

Facilities with escalators and elevators also come under the jurisdiction of the NJ Department of Community Affairs, Elevator Safety Unit (NJDC-ESU) that has the authority to enforce the requirements of the Elevator Subcode of the New Jersey Uniform Construction Code (NJUCC). This includes maintaining a registry of all elevators and escalators at NJ TRANSIT Rail facilities and conducting semi-annual inspections with appropriate NJ TRANSIT Rail personnel. NJ TRANSIT Rail maintains multiple service contracts with several elevator companies to inspect, maintain, and repair the escalators and elevators.

Periodic inspections, custodial services, maintenance and repairs of passenger facilities are coordinated by the Infrastructure Engineering Department and are based on facility size, frequency of use and ownership status. Facility inspections consist of formal (scheduled) inspections performed at regular intervals and random (unscheduled) inspections performed as part of ongoing maintenance and repair processes. Each year the high level platforms are inspected by CP&P in conjunction with Infrastructure Engineering. In addition, the Rail Safety Department conducts comprehensive facility inspections. Line Engineering staff and contractors perform necessary repairs. Stations are also monitored by closed circuit television. New construction and rehabilitation of existing passenger facilities is governed by the NJ TRANSIT Rail Stations Guidelines and Standards Manual provided by the Capital Planning and Programs Department.

In addition to station inspections, ticket vending machines (TVM) staff and ticket agents frequently inspect and report to the Response Center any defective conditions at passenger facilities. The Response Center is also utilized to receive system wide telephone reports of defective conditions, which are then reviewed to determine the

level of attention necessary to ensure a safe operation. In addition, inspections required subsequent to a personal injury occurring in a station facility are coordinated through the Response Center.

Defect/repair records are maintained by Engineering – Station Management. NJ TRANSIT Rail has developed a “station inventory” process to identify and quantify the overall condition, components and specifications of various station facilities. Finally, the Employee Safety Committees of the Newark and Hoboken Divisions may inspect passenger and employee facilities under their jurisdiction and provide recommendations to make them safer for NJ TRANSIT’s customers and employees.

The Rail Infrastructure Engineering Department is responsible for maintaining the track structure, catenary system and signal system in compliance with applicable federal regulations. All scheduled inspections and maintenance are governed by these regulations, which are further enhanced by the technical specifications provided by the manufacturers and suppliers. In addition, the Infrastructure Engineering Department internally develops and implements Standard Operating Procedures through their Quality Control /Assurance staff.

The Track, Catenary, Signal and Communications, and Structures groups are each headed by a Chief Engineer who reports to the Deputy General Manager - Infrastructure Engineering. Engineering records of a long term nature (those required by Federal regulations 49 CFR Parts 213, 214, 233, 234, 235, 236 are available through these Chief Engineers, and are generally located in Newark, NJ.

Routine inspection and maintenance of the infrastructure is the responsibility of engineering employees who work under the authority of the respective division engineer. Records of a daily, weekly, monthly short-term nature are maintained at various locations system wide and are available through the Division Engineer for the specific line involved.

The main repair location for the work equipment of the Infrastructure Engineering Department is Wood Ridge, NJ, which is accessible from the Bergen County Line, west of Rutherford Station. Personnel employed at this location report to the Director, Work Equipment.

The Environmental Services Unit conducts twice-yearly environmental audits of operating locations to ensure that they are operating in compliance with environmental regulations, site-specific permit conditions, and NJ TRANSIT’S environmental management program. Audit results are transmitted to upper management, and the ESU follows up to ensure that major violations are corrected in a timely manner.

5B

VEHICLE MAINTENANCE INSPECTION AND REPAIR

The Rail Mechanical Department is responsible for maintaining rolling equipment in compliance with applicable federal regulations. All scheduled inspections and maintenance are governed by these regulations, which are further enhanced by

technical specifications provided by the manufacturers and suppliers. In addition, the Quality Assurance/Quality Control Department develops and implements Standard Maintenance Procedures for the Mechanical Department.

The Mechanical Department also uses the Rail Asset Management System (RAMS) to support its equipment maintenance effort. This all-encompassing system emphasizes planning and scheduling multiple interrelated work tasks to ensure that when rolling equipment is scheduled for maintenance, the material, labor and equipment resources are readily available.

Any malfunctions to rolling equipment on the NJ TRANSIT Rail system or to equipment operating on the Amtrak Northeast Corridor are reported by the operating crews via telephone, radio or written defect form TRO-1055 to the Mechanical Department Trouble Desk located in the Rail Operations Center, Kearny, NJ. This information is inputted into RAMS for immediate attention.

The main mechanical repair facility for rolling equipment is the Meadows Maintenance Complex, (MMC) located in Kearny, NJ. It is accessible from the Amtrak Northeast Corridor and the Morristown Line. With the exception of certain field locations which are indicated below, all periodic inspections and repairs are performed at this location, which is under the direction of the General Superintendent - Equipment. This location is also responsible for all long-term mechanical inspection, repair and testing records, as required by 49 CFR Parts 229, 232, 236 and 238.

Daily inspections and repairs of rolling equipment are performed at the following locations: Bay Head, Long Branch, Raritan, Morrisville, County Yard, Penn Station, New York, NY, and Sunnyside Yard, Long Island City, NY, all located on the Newark Division. Gladstone, Dover, Port Morris, Great Notch, Hoboken, Port Jervis (NY), Suffern (NY), and Spring Valley (NY) provide daily inspections/repairs of rolling equipment on the Hoboken Division. In addition to the MMC, Mechanical records of a daily, short-term nature are also maintained at these locations, and mechanical employees at these locations are under the general charge of the General Superintendent – Mechanical Field Operations.

5C HIGHWAY—RAIL GRADE CROSSINGS

NJ TRANSIT Rail has approximately 330 highway rail grade crossings on the system. These are the responsibility of the Deputy General Manager for Infrastructure Engineering and the Chief Engineer, Signal and Communications. NJ TRANSIT must ensure safe operation at each of these crossings. The Code of Federal Regulations (49 CFR Part 234) provides maintenance, inspection and testing standards for highway—rail grade crossing warning systems. It also prescribes standards for reporting failures and actions the railroad must take when the warning systems malfunction. In addition, signal inspection and maintenance employees are guided by NJ TRANSIT Rail's Communications and Signal Department Instructions S-23 and S-27.

NJ TRANSIT Rail operating employees are governed by the instructions provided by the Northeast Operating Rules Advisory Committee (NORAC) operating rules, NJ TRANSIT Rail Timetable Special Instructions and various physical characteristics publications regarding the location, apparatus and special procedures for every highway-rail grade crossing on the system.

Any grade-crossing malfunctions on the system are reported to the Engineering Trouble Desk located at the Rail Operations Center, Kearny. Appropriate personnel are notified of the problem, investigate the report, determine the nature of the malfunction and correct the problem. Until the problem is corrected, alternative means of warning highway traffic of an approaching train are provided by the NORAC Operating Rules and Timetable Special Instructions.

Each activation failure of a highway-rail grade crossing warning system is reported on FRA Form No. 6180-83 in accordance with instructions 26, 27 and 610 on the forms. Maintenance and inspections are recorded on forms specified in the S-27 instructions.

5D INSPECTION RECORDS

- Station Inspection Report
- Facility Safety Inspection Report
- Daily Train/Locomotive Inspection Report
- Locomotive Inspection and Repair Record (FRA F6180-49A)
- Cab Signal Inspection Report
- Equipment Inspection Report - After Accident (MP-100)
- Locomotive Inspection Wheel Report
- Track Inspection Record
- Monthly Track Inspection Record
- Switch Inspection Record
- Miter Rail Inspection Report
- Report of Other Conditions noted during Track Inspection
- Highway-Rail Grade Crossing Warning System Failure Report (FRA 6180.83)
- False Proceed Signal Report (FRA F6180.14)
- U.S. DOT-AAR Crossing Inventory Form (FRA F6180.71)
- NJDCA Fire Inspection Report
- NJDCA Elevator /Escalator Inspection Report
- High Level Platform Inspection Reports
- Environmental Audit Reports

5E

REFERENCE DOCUMENTS

- Code of Federal Regulations - 49 CFR Parts 200-299
- NJT Rail Quality Assurance Manual
- NJT Rail Quality Assurance Procedures
- NJT Rail Standard Operating Procedures
- NJT Rail Standard Maintenance Procedures
- APTA Manual of Standards and Recommended Practices for Rail Passenger Equipment
- NJT Rail Manual for Constructions and Maintenance of Track (MW-4)
- NJT Rail Signal Department Instructions for Testing, Maintenance and Construction (S-23 and S-27)
- NJT Rail Stations Guidelines and Standards Manual
- NJT Rail Timetable Special Instructions
- NJT Rail Electrical Operating Instructions (TRO-3)
- NJT Rail Physical Characteristics TRO-7/TRO-8
- NJT Rail Airbrake and Train Handling Instructions (TRO-4)
- NJT Rail Crane Maintenance Instructions (MW 252)
- AREA Recommended Practices “Manual for Railway Engineering”
- AREA Recommended Practices “Portfolio of Trackwork Plans”
- NJT Infrastructure Engineering Track Charts
- Manual of Uniform Traffic Control Devices
- NORAC Operating Rules

SECTION 6 TRAINING AND CERTIFICATION

6A RULES AND PROCEDURES REVIEW

NJ TRANSIT, the rail system, firmly believes that a thorough knowledge of all rules and instructions affecting an employee's job functions is vitally important to the safe operation of the rail system. The following procedures are in effect to ensure proper review and implementation:

Operating Rules and Instructions:

Since NJ TRANSIT Rail is considered a "railroad" by definition, its procedures and practices are governed by the Federal Railroad Administration. The "CFR" (Code of Federal Regulations) parts 200-299 provide the minimum standards for NJ TRANSIT Rail's operations and maintenance practices.

Based on the 49 CFR Part 217, NJ TRANSIT Rail publishes and annually trains employees on operating rules and special instructions. The agency is a full member of the Northeast Operating Rules Advisory Committee (NORAC). NORAC rules are designed by a committee representing member railroads to ensure uniform operating practices on interconnecting carriers. Although NORAC Rules are designed to provide for safe movement of trains, this publication also provides familiarization of NJ TRANSIT terminology and procedures.

Special Instructions and General Orders are used by NJ TRANSIT Rail to modify or enhance NORAC Operating Rules for specific applications. Familiarity with this publication ensures that employees will be able to determine if specific conditions or restrictions are in effect at a particular work location.

Bulletin Orders/Supplemental Bulletin Orders/ Division Notices modify and enhance operating procedures and practices on a daily, weekly and monthly basis. Also, they provide information about specific conditions such as avoidance of hazards and the locations where employees or contractors are working on the right of way.

Committees are formed and coordinated on the basis of the type of revision needed and departments that may be involved. Changes to these instructions are coordinated by the Rules Department, located at the Rail Operations Center in Kearny, NJ.

Safety Rules and Instructions

In the interest of the enhanced protection and safety of personnel in all areas of NJ TRANSIT Rail, safety instructions are uniformly distributed regardless of craft/job distinction. A committee consisting of representatives of Transportation, Mechanical, Engineering and Safety Departments is formed to review and develop any changes as needed. The Director - Safety coordinates the activities of the committee.

Mechanical (Maintenance) Rules and Instructions

In addition to federal regulations pertaining to the inspections, maintenance and repair of rolling equipment, the Mechanical Department is guided by technical specifications provided by equipment manufacturers, suppliers, and remanufacturers who may modify OEM equipment during overhaul. Also, Standard Maintenance Procedures (SMP's) are developed and implemented jointly with the Quality Assurance/Quality Control Department. The Mechanical Department is provided with training and examination by the Rules Department or their designee in order to comply with CFR Title 49 Part 218 on specific operating rules and procedures. Employees are trained in a 3 year cycle.

Mechanical Department E-Learning Initiatives

In addition to the technical training provided by the Rail Training and Mechanical Departments, NJ TRANSIT Rail employees are also provided computer-based training in technical and safety-related subjects. With more than twenty courses offered to date, employees can enhance or refresh their skills and experience on a variety of topics from Blue Signal Protection to Lock-out/Tag-out procedures. Each course is self-paced and employees are tested for understanding of the subject matter. E-Learning is available for all employees and can be accessed from any computer at NJ TRANSIT facility, including the E-Learning Labs at Mechanical Department locations currently in MMC, Hoboken Terminal and Morrisville. Employees can also access the system via the internet from their home computers.

Engineering (Maintenance) Rules and Instructions

In addition to federal regulations pertaining to the inspections, maintenance and repair of track structure and signal systems, Rail Infrastructure Engineering is guided by technical specifications provided by manufacturers and suppliers. Also, Standard Operating Procedures are developed and implemented internally. In addition to the NORAC operating rules class and examination, the Engineering Department is being provided training and examination by the Rules Department or their designee in order to comply with CFR Title 49 Part 218 on specific operating rules and procedures. Employees are provided with a written test and employees are trained in a three year cycle.

6B TRAINING AND CERTIFICATION

The NJ TRANSIT Rail System requires that all affected employees and contractors receive appropriate training before performing their job functions. This training is provided / offered based on varied regulatory requirements, labor agreements, or on an "as needed" or "as requested" basis. Three departments have responsibility for providing this training: Rail Safety Department, Rail Training Department and the Rules Department.

6B1.

The **Rail Safety Department** and **Rail Training Department**, located in Newark, NJ provide the following safety-oriented training:

Roadway Worker Training

The NJ TRANSIT Rail Training Department provides training to both employees and contractors who perform service as roadway workers in accordance with 49 CFR Part 214. This training certifies these workers in accordance with FRA requirements.

Bridge Worker Training

As provided for in 49 CFR Part 214, this training is provided to Engineering employees and contractor personnel required to perform inspections and maintenance on railroad bridges.

New Hire Safety Training

This training is provided to all new rail employees, and includes basic safety awareness and reviewing applicable safety rules and safety procedures in a railroad environment. Trainees are also given field training, which includes an introduction to the railroad environment including the track structure, catenary, switches and rail equipment. Employees assigned to specific jobs also receive technical and job-related training, which stresses the importance of safety.

New Hire Assistant Conductor Training

In addition to providing instruction on position responsibilities, this training provides safety instruction and a performance-based examination on trainperson safety procedures. Classes also review the Emergency Evacuation Procedures found in the Special Instructions. Trainees are taken on each type of equipment and shown the location and use of emergency exits (doors and windows), fire extinguishers, emergency tools, and first aid kits. They may also access the Bergen or North River tunnels for instruction on evacuation procedures. They are also given a part 218 class and examination by the Rules Department or their designee in order to comply with CFR title 49 part 218 on specific operating rules and procedures.

System Security Awareness Training

This FTA/NTI training is provided to new employees and front line employees to be conscious of their surroundings. It covers skill sets for observing, determining and reporting people and objects that are suspicious or out-of-place.

Contractor Safety Training

Private contractors working on or in the vicinity of NJ TRANSIT Rail property are required to attend Contractor Safety Training. The Rail Training Department conducts the program, which explains the inherent hazards of the railroad environment. Railroad terms are explained and safety rules are provided and reviewed with each contractor employee or their representative. Procedures to protect trains, passengers and employees are outlined and explained. (See Section 6C for additional information.)

Hazard Communication Training (Including Bloodborne Pathogens, PEOSH RTK, and Hearing Conservation)

PEOSH-required initial training and re-training courses are provided to appropriate employees, including all new employees within 30 days of their hire. Hazard Communication Program is discussed in more detail in Section 10 - Workplace Safety Programs.

Blue Signal Training

This training is provided to mechanical employees and applicable contractors during new hire training and technical training to ensure the personal safety of the employee while working on, under or between equipment in compliance with 49 CFR Part 218. This training is provided to applicable contractors also.

First Aid/CPR Training / AED Training

This training is provided bi-annually to employees attending the Continuing Safety Education Training.

Locomotive Engineer Training

In addition to providing training and written examinations on the requirements of the Locomotive Engineer position as required by 49 CFR Part 240, this training provides safety instruction and performance-based examinations on Locomotive Engineer safety procedures.

Locomotive Engineer Re-Certification Training

As provided for in 49 CFR Part 240, all locomotive engineers receive enhanced instructions and written examinations on safety procedures related to their job function every third year in order to obtain re-certification.

Hearing Conservation for Operating Employees

All operating crews receive specific training in hearing conservation in the operating locomotive cab environment in two (2) year cycles during rules class.

Train Dispatcher Training

In addition to providing training and written examinations on the requirements of the Train Dispatcher position, this training program, developed jointly with System Operations, provides instructions in safety rules and procedures, along with accident/incident notification procedures and emergency response requirements of the Train Dispatcher position.

Supervisor Safety Training Program

This program is designed to improve first-line supervisors' management skills in their safety responsibilities, accident/incident investigations, safety inspections and creating a safety climate. This program also reviews pertinent FRA regulations relating to accident/incident reporting, including the company's rail accident/injury reporting procedures.

Foreman Safety Responsibilities Training

This training is provided to Foremen and frontline supervisors of the Mechanical and Engineering Departments. This training focuses on how to properly conduct Safety Job Briefings (SJB), Personal Protective Equipment (PPE) and Injury/Illness Reporting Procedures.

Continuing Safety Education Training

This program is provided to affected rail employees annually (Engineering and Mechanical) to ensure their knowledge of appropriate PEOSH (OSHA) requirements and is structured to address their specific work environments. It also covers CPR, First Aid and Automated Defibrillator Training every two years.

Trackperson Training

This course is designed to provide the new employee with the fundamentals of safety necessary for working on or about the tracks, basic principles of track maintenance and construction and the basic techniques of track work.

Track Foreman Training Program

This course is designed to develop the employee's knowledge and skills associated with the position of Track Foreman as required by NJ TRANSIT and FRA track safety standards.

FRA Track Inspector Training Program

This course is designed to develop the employee's knowledge and skills associated with the position of Track Inspector as required by NJ TRANSIT and FRA track safety standards.

Chain Saw Training Program

This course is designed to serve as training on the safe use of chain saws to employees who operate chain saw equipment and are then qualified by our Work Equipment Department.

Backhoe/Loader Training Program

This program is designed to develop the employee's knowledge and skills required for the safe operation of backhoe/loaders and OSHA Excavation Standards.

Boom Truck/Mobile Crane

This program is designed to develop the employee's knowledge and skills required for the safe operation of boom trucks and mobile cranes.

Hi-Rail Training Program

This course is designed to provide safe operation criteria for operators of hi-rail equipment and are then qualified by our Work Equipment Department.

Industrial Truck Training Program

This course is designed to serve as qualification criteria for employees who operate industrial trucks.

Commercial Drivers License Training Program

This course is designed to assist NJ TRANSIT employees in preparing for and passing the federally mandated Commercial Drivers License Examination.

Groundman Airbrake Qualification Training Program

This course is designed to serve as qualification criteria for employees who assist crane operators in hoisting operations and work-equipment airbrake test procedures.

Speed Restriction and Stop Sign Placement Qualification Training Program

This course provides the authorized qualifying program required by NORAC Operating Rules as well as FRA Track Safety Standards Rule 213.5. This program consists of a review of the procedures required for the safe passage of trains.

Employee Fire Safety Training

This training is available to all employees and provides instruction on general fire safety on the job and at home, including safe use of portable fire extinguishers. This annual training is part of Continuing Safety Education Training and is available to all employees.

Formal Safety Training

As part of the NJ TRANSIT Rail Employee Injury Policy, employees who meet specified injury criteria are provided with enhanced safety training with the goal of improving their work performance, as determined by their supervisor and the Rail Safety Department.

(Functional) Technical Training

All courses provided to employees include components which stress the importance of job-related safe working procedures.

Training course outlines and programs are located at Newark, Hoboken and Kearny, NJ, along with attendance and examination records. Pertinent portions of this information are also provided to Personnel Department - Records Management, located in Maplewood, and to the employee's supervisor.

Passenger Train Emergency Preparedness Training

This course provides training on handling passenger train emergencies, evacuations, emergency equipment and access/egress procedures, as required by FRA 49 CFR part 239.

Passenger Equipment Safety Standards

This training provides the FRA regulations for passenger rail equipment containing comprehensive safety, maintenance, training, and testing standards which are contained in 49 CFR 238, "Passenger Equipment Safety Standards".

Several courses have been developed to ensure compliance with these regulations. This course was developed under FRA/APTA guidelines and are designed to ensure that railroad employees (and contractors) have been properly instructed on inspection and maintenance requirements. Each course covers the Code of Federal Regulations (49CFR Part 238) as well as the APTA Inspection and Maintenance Standards that govern passenger rail equipment inspection, testing and maintenance.

The Rail Training Department provides this training for mechanical employees who conduct air brake tests, calendar day mechanical inspections, periodic inspections and perform single car testing on passenger equipment.

6B2

PASS/FAIL CRITERIA - RAIL TRAINING DEPARTMENT

Based on the type of training program being provided, the Rail Training Department will utilize one of the following Pass/Fail criteria:

- A training program that requires a score of at least 80% passing grade on written quizzes, and a score of at least 85% on written examination. Trainees who fail to achieve this score are provided with a re-examination within the time period specified by the Rail Training Department, which will require a score of at least 90%. Based on appropriate regulatory requirements, applicable labor agreements, and departmental policies, the trainee who fails the re-examination is subject to non-promotion or termination of employment.
- A training program of short duration without a written examination component, but which requires a passing score of at least 80% on any written quiz or work exercise. These are provided to ensure the trainee's comprehension level prior to subsequent work activity.
- A training program of short duration without a written examination component account of no regulatory requirements, or a training program offered on an "as needed" or "as requested" basis. However, written quizzes or work exercises are typically provided without a pass/fail criteria to ensure trainee comprehension prior to subsequent work activity.
- A training program solely of a technical nature that requires extensive training and subsequent certification. This training is typically provided for crafts of employees in the Mechanical and Engineering departments in order to achieve promotion within their respective crafts. This training consists of written examination with a passing score (generally) of 85%, which along with practical (proficiency) examinations are designed to ensure competency in a specific craft. Failure to pass the required written examinations or practical testing component results in non-promotion of the employee.

The pass/fail criteria for a specific training program is determined by and available from the Director- Rail Training and applicable labor contracts.

6B3

The **Rules Department**, located at the Rail Operations Center in Kearny provides the following operations-oriented training:

Annual Operating Rules (NORAC) Training

Instructions and written examinations as required by CFR Title 49 Parts 217 and 218 on the NORAC Operating Rules and NJ TRANSIT Special Instructions are provided to required transportation, engineering, and specific supervisors on an annual basis.

New Hire/Promotion Operating Rules (NORAC) Training

Within a specified training time-period after initial hire or when required to receive promotion, Transportation personnel (train crew members) are provided with instructions and written examinations on the NORAC Operating Rules and NJ TRANSIT Special Instructions.

Locomotive Engineer Re-certification (NORAC) Training

As provided for in 49 CFR Part 240, all Locomotive Engineers receive enhanced instruction and written examination on the NORAC Operating Rules and NJ TRANSIT Special Instructions every third year in order to obtain re-certification. In addition to enhanced instructions and written examinations, locomotive Engineers are required to take and pass a written physical characteristics examination.

Physical Characteristics Examinations

In addition to developing written physical characteristics examinations, the Rules Department provides verbal examinations for Operators (Block) and Engineering Department employees.

Test Qualification System

In addition to providing training in NORAC Operating Rules and NJ TRANSIT Rail Timetable Special Instructions, the Rules Department administers the operational testing program for specific employees. 49 CFR Part 217 requires that each railroad conduct operational tests and inspections to determine the extent of compliance by its employees with its operating rules and instructions. The program is designed to prevent train accidents and personal injuries by improving employee operating and safety habits through supervisory observation.

Specified supervisors are responsible for observing employees under their jurisdiction and ensuring that they comply with the rules and instructions that are in effect.

Supervisors whose regular duties afford them the opportunity to observe the performance of employees also are required to take corrective action in the form of personal instructions upon noting an instance of noncompliance. Supervisors may also take disciplinary action when the employee repeats a violation.

Specific instructions concerning this program are found in the TEST Qualification System (TRO-10) Instructions, published by the Rules Department.

All records pertaining to Operating rules training programs, examination results, and operating testing programs and record keeping are maintained by the Rules Department located in Kearny, NJ.

6B4

PASS/FAIL CRITERIA - RULES DEPARTMENT

Employees required to take a written examination on the NORAC Operating Rules must obtain a score of at least 85%. Employees who fail this examination are required to take a re-examination within 30 days. If the re-examination results in a failure, the employee is not allowed to perform service until the examination is successfully completed.

Employees required to take a New Hire (Trainpersons) or promotion (Engineer, Conductor, Train Dispatcher) NORAC Operating Rules examination must obtain a score of at least 85%. Employees who fail this promotional examination will be required to take a re-examination within the time period specified by the Rules Department. However, by labor agreement, those employees requiring promotion to conductor will be afforded three opportunities to pass this examination. Employees who fail the required number of examinations will not be promoted. Dependent on prior employment status and appropriate NJ TRANSIT Rail labor agreements, this failure can result in termination of employment.

During the Locomotive Engineer Recertification Training, an employee who fails to pass the written NORAC Operating Rules examination will be immediately removed from service until the examination is successfully completed with a score of at least 85%. Engineering and Mechanical Department personnel requiring 49 CFR Part 218 written examination must achieve a score of 80 percent.

6C

CONTRACT SAFETY (CONTRACTOR) REQUIREMENTS

NJ TRANSIT frequently utilizes outside contractors for new projects and also for ongoing maintenance programs. All railroad-related construction contracts handled by the NJ TRANSIT Capital Planning and Programs (CP&P) Department include a General Provision clause, specifically Section 2.36 (Maintenance of Railroad Traffic) that requires contractors to attend a railroad safety training course and be certified. In addition, the NJ TRANSIT contractual Special Provision clause also pertains to federal Roadway Worker Safety regulations that will also be provided to contractor personnel. This safety training is provided by the Rail Training Department. Records of training are on file at the Ferry Street Training Facility in Newark, NJ and all contractor personnel are provided with photo identification cards indicating that they have received the appropriate safety training. This identification is checked "on-site" by NJ TRANSIT supervisors to ensure compliance.

The Rail Safety Department and the CP & P Department work closely to ensure the level of safety for a specific project are commensurate with the hazards that may be identified during the initial contract review of the project.

Contractors hired by NJ TRANSIT must file a Site Specific Work Plan (SSWP) identifying the particular means and methods that they plan to use to accomplish their work. This SSWP is reviewed by NJ TRANSIT for the degree to which it complies with work practice requirements on rail infrastructure, stations and facilities, and in terms of the particular challenges posed by that specific work task on that specific area of the rail system. Combined with Contractor Safety Training, this practice allows both parties to identify any hazardous conditions and how they will be handled with minimal risk of injury or adverse effect to operations.

6D REFERENCE DOCUMENTS

- Code of Federal Regulations - 49 CFR Parts 200-299
- NORAC Operating Rules
- NJT Rail Timetable Special Instructions and related employee procedures, publications, safety rules, etc.
- NJT Regulations for Conductors/Assistant Conductors (TRO-12)
- NJT Rail Test Qualifications System Instructions (Rules Department)
- NJT Rail Standard Operating Procedures (Engineering Department)
- NJT Rail Standard Maintenance Procedures (Mechanical Department)
- NJT Rail Employee Safety Rules and On-Track Safety Procedures Manual (TRO-5)
- NJT Contractor General and Special Provisions (Capital Planning and Programs Department)
- NJT Rail Training Department – Course Outlines of Training Programs

SECTION 7

EMERGENCY PLANNING AND RESPONSE

Emergency Response is a primary component of the Rail System Safety Program Plan. NJ TRANSIT Rail must comply with the Federal Railroad Administration Passenger Train Emergency Preparedness regulations 49 CFR Parts 223 and 239. These regulations establish criteria for employee training, emergency preparedness exercises, and emergency window and door exit markings, inspection, maintenance and repair. NJ TRANSIT complies with this regulation through the Passenger Train Emergency Preparedness Plan.

Emergency Responder Training Program

NJ TRANSIT Rail Safety and Training Departments, along with NJ TRANSIT Police, provide municipal emergency services throughout the state with training presentations regarding the NJ TRANSIT rail system and equipment. The presentations focus on the electric traction system, methods to gain access into passenger cars, the safety features of locomotives and recommendations to ensure safe response and rescue operations along the right of way, including grade crossing safety.

Upon arrival at an incident involving an NJ TRANSIT train, first responders are instructed to locate a crew member and to coordinate efforts with the operating crew. The train crew provides technical information about the train, the current status of the incident, what actions have been taken and the approximate number of passengers on the train. Since the crew has keys to open the train doors and also has direct radio contact with the Train Dispatcher (located at Rail Operations Center in Kearny, NJ), it is important that emergency responders coordinate with them.

Emergency Preparedness Exercises

NJ TRANSIT Rail Safety and Training and Police Departments develops and coordinates at least one full-scale Emergency Preparedness Exercise to provide municipal emergency response agencies with a practical application of previous training regarding passenger rail accidents and to test internal emergency operating procedures including the Incident Command Process. The Rail Safety and Training Departments along with NJ TRANSIT Police Office of Emergency Management (OEM) coordinate activities between the affected internal departments and the municipal agencies participating in the exercise.

First Responder Expos

The NJ TRANSIT Rail Safety and Training Departments sponsor at least one Rail Safety Expo for first responders at a selected rail equipment maintenance facility. The expo focuses on the electric traction system, the safety features of locomotives, methods to gain access into passenger cars, recommendations to ensure safe response and rescue operations along the right of way including grade crossing safety.

Practical demonstrations of the emergency devices on the passenger equipment are also presented. Representatives from Rail Training and Rail Safety coordinate this event.

Penn Station New York Emergency Response Committee

NJ TRANSIT Rail and NJ TRANSIT Police OEM actively participates on the PSNY Emergency Response Committee. The Emergency Response Committee is a multi-agency group with representatives from all railroads operating in Penn Station New York, the New York City Fire Department, Emergency Medical Services and the Office of Emergency Management and is responsible for developing Emergency Action Operating Procedures for incidents within the station and tunnels. A joint training program is provided to familiarize emergency responders with passenger rail equipment and the physical characteristics of the tunnels. A multi-agency exercise is held annually.

Emergency Response Team

The Customer Resources Department assembles the Emergency Response Team (ERT), which consists of approximately 175 employees, to assist customers in the event of a major service disruption or emergency situation. The team consists of volunteers from throughout the agency. The Chief – Customer Resources, in consultation with the Rail Operations Center, determines whether the situation warrants the deployment of the Emergency Response Team.

Team members are contacted by the Customer Support Programs Manager. Team members are responsible for information dissemination, directing customers to alternate services, crowd control, public address announcements, resolving customer concerns and for ensuring the safety of passengers. All members of this group receive Community Emergency Response Training (CERT) from the NJ TRANSIT Police. In addition, members are trained in working with customers with disabilities and complete mandatory site tours of major stations and terminals, which includes training on emergency evacuation procedures.

Emergency Action Plans And Procedures

NJ TRANSIT Rail provides for the safety of its customers, employees and emergency responders by developing Emergency Action Plans and procedures concerning life safety issues. The Rail Safety Department, in conjunction with facility supervision, NJ Transit Police and agencies such as Amtrak, PATH and the Long Island Railroad have developed the following plans:

- Atlantic City Terminal, Atlantic City, NJ
- Bay Head, NJ Maintenance Facility
- Dover, NJ Maintenance Facility
- Great Notch, NJ Maintenance Facility
- Hoboken Engineering Building

- Hoboken Terminal, NJ Passenger Facility
- Long Branch, NJ Maintenance Facility
- Meadows Maintenance Complex, Kearny, NJ
- Morrisville, PA Maintenance Facility
- Penn Station New York/North and East River Tunnels
- Penn Station Newark, New Jersey Passenger Facility
- Port Morris, NJ Maintenance Facility
- Raritan, NJ Maintenance Facility
- Red Bank, NJ Maintenance Facility
- Rail Operations Center Facility
- Secaucus, NJ Passenger Facility
- Summit, NJ Passenger Facility
- Trenton Transit Center
- Woodbridge Maintenance facility

Standard Operating Procedures

The Rail Safety Department and Systems Operations developed Standard Operating Procedures in order to ensure the safety of NJ TRANSIT Rail customers, employees and emergency responders. They are as follows:

- “Code Black” Emergency Procedures (provided in the NJT Rail Timetable Special Instructions).
- Bergen Tunnel Emergency Procedures (provided in the NJT Rail Timetable Special Instructions).
- Emergency Evacuation Procedures (provided in the NJT Rail Timetable Special Instructions)

Emergency Operating Plan

In conjunction with affected groups representing NJ TRANSIT Rail, Bus and Light Rail and corporate staff departments, NJ TRANSIT Police contracted with the Office for Domestic Preparedness to develop an all-encompassing agency-wide Emergency Operations Plan. The plan ensures optimum use of agency resources, along with the critical command structure necessary to provide life safety, incident stabilization and mitigate environmental impacts. The plan is reviewed and updated on a continuous basis in order to keep current and adjust areas that may need improvement.

SECTION 8

ENVIRONMENTAL MANAGEMENT PROGRAM

NJ TRANSIT Rail has a comprehensive hazardous materials and environmental management program. The corporation must comply with both state and federal laws and regulations, and must adhere to their respective standards. Where New Jersey has stricter standards than the federal government (as, for example, in the area of waste water discharge management), the stricter state rules apply.

The NJ TRANSIT Environmental Services Unit (ESU) located in Newark, New Jersey is responsible to carry out this program. The program includes: basic permit and regulatory compliance, emergency spill response planning and associated training; NJDEP and USEPA issues, hazardous materials inventory and compatible storage; regulated waste collection, handling and disposal; spill prevention and spill response, investigation and clean up of soil and groundwater contamination, and regulatory reporting. This comprehensive approach ensures adequate protection of employees, the general public, and the environment.

The ESU is responsible for programs aimed at protecting the natural environment - primarily the air, land and waters of the State of New Jersey. It handles general environmental compliance and response plans, and procedures and compliance auditing associated with general field operations.

The ESU is responsible for securing and monitoring compliance with all air and waste water discharge permits, for industrial waste water pre-treatment system design and installation, for regulated waste handling and disposal, and, in coordination with operating location supervision, for petroleum storage tank and piping installation, upgrade, testing and maintenance.

The ESU maintains, with cooperation from regulated operating locations, required preparedness plans: Spill Prevention, Control and Countermeasure (SPCC) plans, Resource Conservation and Recovery Act (RCRA) hazardous waste contingency plans, and Storm Water Pollution Prevention Plans (SPPP). The ESU provides training programs under these regulations and retains records of employee training. Where ever these plans require routine inspections of grounds or equipment, the ESU drafts inspection procedures to be followed by each affected operating location.

The ESU is responsible for ensuring that waste water pre-treatment plant operators are properly licensed in accordance with New Jersey licensing requirements, establishing minimal training requirements for industrial and sanitary treatment plant operators, and determining that NJ TRANSIT operates its waste water treatment systems in compliance with waste water discharge permits issued under the Federal 1972 Clean Water Act and associated New Jersey Clean Water Enforcement and Water Pollution Control Acts.

The ESU maintains an inventory of all underground storage tanks and piping; operating locations maintain records of monthly tests of leak detection equipment and of any

repairs or maintenance performed on the leak detection or other ancillary systems installed pursuant to the federal Resource Conservation and Recovery Act and the state's companion Underground Storage Tank regulations.

The ESU is responsible for maintaining all required wastewater discharge permits, air pollution control permits, storm water discharge permits, and underground storage tank registrations. They may conduct unannounced audits to ensure that operating locations are adhering to the requirements of their permits.

The ESU conducts twice-yearly environmental audits of operating locations to ensure that they are operating in compliance with environmental regulations, site-specific permit conditions, and NJ TRANSIT'S environmental management program. Audit results are transmitted to upper management, and the ESU follows up to ensure that major violations are corrected in a timely manner.

Except where required to be stored at operating locations, required records and reports concerning environmental compliance are maintained at the ESU in Newark, NJ.

The Rail Safety Department is responsible for protecting the health of workers and customers. It coordinates all efforts relating to the New Jersey Worker and Community Right to Know Act, personal protective equipment and established work practices. This is discussed in more detail under Workplace Safety Programs in Section 10 of this document. This section includes regulatory required activities such as NJ Worker and Community Right To Know Act and Hazard Communication Standard, Respiratory Protection Program, Hearing Conservation Program, Lock-out/Tag-out Program, Confined Space Entry Program, Worker Lead Exposure Compliance program, Fall Protection and other OSHA compliance programs.

Section 10 also discusses the Rail Safety Department's functions relating to health and environmental issues that include personal protective equipment and established work practices. The Rail Training Department works with the Rail Safety Department to train employees on these programs and to ensure that employee training is in accordance with federal and state regulations.

Emergency Planning and Response was previously discussed in Section 7. These initiatives are coordinated with the NJ TRANSIT Police Department, ESU, and Rail Safety and Training Departments and include the Emergency Responder Training Program, Emergency Preparedness Exercises, Spill Response and RCRA Contingency Response, the First Responder Expos, the PSNY Emergency Response Committee, and the Emergency Response Team.

SECTION 9 SECURITY

9A NJ TRANSIT POLICE

The NJ TRANSIT Police Department (NJTPD) is the only transit policing agency in the country with statewide authority and jurisdiction. The Department was created on January 1, 1983, and it evolved as a result of the passage of the Public Transportation Act of 1979 and subsequent legislation on the state and federal levels. At that time, the original complement included thirty-nine Commissioned Rail Police Officers. On January 12, 1990, NJSA 27:25-15.1 was enacted into law, and it established the NJ Transit Police Department as a sworn law enforcement agency with the "general authority, without limitation, to exercise police powers and duties, as provided for police officers and law enforcement officers, in all criminal and traffic matters at all times throughout the State..." The current, authorized strength of the Department includes 256 sworn officers and 67 non-sworn members (which include Fare Enforcement Inspectors) serving the more than 900,000 commuters who use the NJ TRANSIT system daily and nearly 11,000 employees.

The NJ TRANSIT Police Department has its headquarters and central communications center located out of One Penn Plaza East, Newark, New Jersey. However, the department has many different commands located over the entire state to provide coverage to NJ TRANSIT's extensive system of railways, light rail and bus terminals.

North Region 1: Penn Station Command - Newark

North Region 2: Hoboken Command - Hoboken
Secaucus Junction - Secaucus

South Region: Atlantic City Command – Atlantic City
Camden Command - Camden
Trenton Command – Trenton

The NJ TRANSIT Police Department has dedicated time and training to all of its members in order to improve the capabilities of the department. Emergency response has become a center piece for this training and is evolving. Prevention and Planning has enabled the effective guide needed to deploy our assets to the most vulnerable areas on our system. NJTPD currently conducts random baggage checks throughout the state in search of detecting Radiological and Incendiary Devices. In addition to the sworn law enforcement personnel the Department is able to deploy Transit employees through the CERT program. The CERT program is the Citizens Emergency Response Team which can assist in tasks that they have been trained in during an emergency situation.

The NJ TRANSIT Police Department has implemented the use of the National Incident Management System (NIMS) and has successfully trained every Officer in the department. NJTPD has developed Emergency Operation Plans with annexes for an all hazard approach. In addition to the all hazard approach, NJTPD has developed annexes for specific hazards such as derailments and power interruptions. NJTPD continues to analyze and plan for any type of contingencies utilizing the National Response Framework focus.

During an incident NJ TRANSIT Police will maintain operations as the primary Incident Command. Incident Command will be relinquished during a fire event in which the local fire department will assume command. NJ TRANSIT Police will continue to provide representation in the Command during this time to ensure the proper flow of information and help resolve any transit issues.

To prepare for a hazard response, NJ TRANSIT Police has received cooperation from agencies that will assist in its efforts. In order to ensure a smooth operational incident, NJTPD has built relationships with agencies that are affected by rail, bus and light rail. Several exercises are held throughout the year involving regional, state, county and local agencies in a variety of disciplines. The exercises allow for proper safety training, communication and a coordinated effort by the responding agencies. The safety of emergency responders is paramount at an incident and it is important that local responders make notification to the Transit Police at the onset of a call.

The following internal training requirements are also in effect and are offered internally:

- General Orders are issued and updated on a continuing basis.
- CPR/First Aid Training/Defibrillator
- Firearms Qualifications biannually
- Hazardous Material Awareness and Operations Training
- CBRNE Awareness and Operations Training
- Hazard Communication Training
- Defensive Driving Training
- NIMS ICS Training
- Use of Force Training
- Rail, Bus and Light Rail Safety

In order to protect and ensure system resiliency, the NJ TRANSIT Police has invested in training and equipment for specialized units through Homeland Security Funding. The NJ TRANSIT Police Special Operations Division which includes Explosive Detection K-9, NJ TRANSIT Police Department Emergency Service Unit (NJTPD-ESU), Office of Emergency Management (OEM), High Visibility Train Patrol (TP) and a Conditions Team Unit (CTU) are able to respond to all incidents on the NJ TRANSIT

system. The mission for the Special Operations Division is to detect, deter, respond and mitigate any potential threats to the NJ TRANSIT System. Members of the Emergency Service Unit (ESU) are highly trained in the areas of Hazmat, CBRNE, Fire Fighting, Rope Rescue, Heavy Rescue, Confined Space Rescue, Special Weapons and Tactics, and Crisis Negotiation.

The Emergency Operations Center (EOC) Plan is for use by personnel within NJ TRANSIT who have EOC responsibilities during an emergency incident or event. The NJTPD Emergency Operations Center in coordination with command posts, municipal, county, state, regional and federal operations centers, will act as the direction, control and coordination center for NJTPD operations during emergency incidents and events.

When a major emergency incident or event occurs, centralized management is necessary. The EOC provides this needed centralized management. When activated, representatives from NJ TRANSIT departments will report to the EOC to coordinate NJ TRANSIT decision making, simultaneously coordinate department activities, and liaison with different levels of government as well as with private entities.

The EOC provides a centralized focus of authority and information and allows for face-to-face coordination among personnel who must set priorities for the deployment of personnel, the management of resources and evaluate the need to request mutual aid.

NJ TRANSIT Police Department is also able to handle small scale incidents by utilizing a mobile command vehicle located at each of the command locations throughout the state. During larger scale incidents NJ TRANSIT Police Department also utilizes a mobile command bus or the Continuity of Operations Trailer. The mobile command vehicles are activated in emergency situations. They play a vital role in taking the company's communications network directly to the site of the emergency. Notification is made to NJ TRANSIT Police Department's Central Communications Center.

The mobile command vehicle is a refurbished bus equipped with outside phone lines, a fax machine, portable computers and a printer, an on-board radio system with several frequency bands, televisions, DVD's and camera's to record the incident.

The vehicle's radio system can tie into NJ TRANSIT Rail Operations' dispatching center, Bus Operations' Control Center and NJ TRANSIT Police Department Central Communications Center. It can also patch into outside agencies' radio systems, including the NJ State Police, Conrail, Amtrak, Metro North and New York City Office of Emergency Management (NYCOEM).

SECTION 10

WORKPLACE SAFETY PROGRAMS

The Rail Safety Department works to ensure a safe working environment for NJT Rail employees. The department is responsible for developing, implementing and auditing safety, health, industrial hygiene and operating programs. The purpose is to reduce injuries and to ensure compliance with state and federal regulations.

10A

REGULATORY REQUIRED ACTIVITIES

New Jersey Worker and Community Right to Know Act

The New Jersey Worker and Community Right to Know Act gives employees information on what chemicals are located in their workplace and how to work with these hazardous substances. It helps firefighters, police and other emergency personnel responding to incidents. The act also provides data for monitoring and tracking hazardous substances in the workplace and in the environment. Each year NJ TRANSIT Rail must complete workplace surveys that list the chemicals present and the quantities stored at each work location. Copies of these surveys are then sent to the Department of Health, local police, fire and emergency planning committees.

The act requires that NJ TRANSIT Rail maintain a central file of all information regarding chemicals stored and used at each work site. The file must contain copies of the workplace surveys, Hazardous Substance Fact Sheets, Material Safety Data Sheets and the Right to Know Hazardous Substance List. The MSDS must be made available to all employees upon written request, and is available electronically on NJ TRANSIT internal website “@TRANSIT”.

In addition, every container at NJ TRANSIT Rail bears a label indicating the chemical name and the Chemical Abstract Service (CAS) Number of the five most predominant chemical substances in the container whether or not they are hazardous.

FRA Compliance

The Federal Railroad Administration regulates certain functions of workplace safety of NJ TRANSIT employees. These regulations include Bridgeworker Safety, Roadway Worker Safety, Hearing Conservation for Operating Employees, Railroad Operating Practices, and Blue Signal Protection. FRA conducts periodic audits of the above work practices and procedures to ensure compliance, with the imposition of monetary penalties for all instances of non-compliance. (These programs are identified in Section 6 – Training and Certification).

OSHA Compliance

The NJ Public Employees' Occupational Safety and Health (PEOSH) regulate the workplace safety of NJ TRANSIT employees. PEOSH adopted Federal OSHA Standards and set forth a wide variety of safety standards, compliance activities and training programs which are designed to protect the safety and health of employees. The NJ Departments of Health and Labor are responsible for NJ TRANSIT Rail compliance. This is ensured by periodic workplace audits with the imposition of fines should hazards be identified.

Medical Testing Policy

The NJ TRANSIT Rail Safety and Medical Services Departments provide affected employees throughout the rail organization with appropriate medical examinations (audiometric, pulmonary function, vision, physical) during the month of their date of birth, or as designated by Timetable special Instruction in order to monitor their medical condition on a long term basis.

Respiratory Protection Program (OSHA 1910.134)

NJ TRANSIT Rail has a written program that includes medical testing, respirator selection, fit testing, maintenance and training on the use of respirators.

Hearing Conservation Program (OSHA 1910.95)

NJ TRANSIT Rail has a Hearing Conservation Program that is designed to prevent noise-induced hearing loss. This is accomplished by audiometric testing, engineering controls, specifying proper hearing protection and monitoring workplace and equipment noise levels. There is also a special FRA mandated provision related to Hearing Conservation for operating employees in locomotive cabs.

Permit-Required Confined Space Program (OSHA 1910.146)

This NJ TRANSIT Rail program requires that employees who enter confined space work areas be protected from the hazards that may occur. The program includes permit-required, non-permit-required confined space and proper documentation of an Entry permit and a Hot Work Permit. Monitoring is conducted by the supervisor or attendant. Training is provided to employees who may enter a permit-required confined space.

Lock-out / Tag-out Program (OSHA 1910.147)

The NJ TRANSIT Rail Lock-out/Tag-out program is designed for employees performing repairs or maintenance on equipment and machines. This program includes lockout/tagout evaluation, identification of lockout/tagout devices and employee training.

Worker Lead Protection Program (OSHA 1926.62)

NJ TRANSIT Rail has a Worker Lead Protection Program that protects workers from the effects of lead. The program includes medical monitoring, lead exposure monitoring, engineering controls, respiratory protection, personal protective equipment and annual employee training.

Bloodborne Pathogens - Exposure Control Program (OSHA 1910.1030)

NJ TRANSIT Rail has a Bloodborne Pathogens - Exposure Control Program to prevent the spread of bloodborne pathogens related diseases (i.e. AIDS, Hepatitis, etc.) in the workplace by providing training to those employees who routinely may come into contact with the general public or whose job duties may expose them to contaminated/infectious or dangerous materials (i.e. broken glass, needles, etc.).

Hazard Communication Program (PEOSH Hazard Communication Standard) (N.J.A.C 12:100-7)

The act requires that NJ TRANSIT Rail train all employees who are exposed or potentially will be exposed to chemical hazards before they start work and biennially. The training program includes MSDS information on the types of chemicals stored and used in the workplace, safe handling and storage of chemicals, workplace controls and practices, including the use of personal protective equipment and the written Hazard Communication Program. MSDS sheets are available to employees in designated binders at their work locations and are also available through MSDS Online.

Fall Protection Program (OSHA 1926 Subpart M)

The NJ TRANSIT Rail Fall Protection Program ensures that uniform requirements are established and that affected work locations are evaluated to ensure employee exposure to fall hazards are minimized.

NJ TRANSIT Rail employees frequently need to climb on locomotives, rail cars and catenary structures for inspection, routine maintenance and/or repair. In such instances, they are exposed to fall hazards and are required to take necessary precautions and procedures to preventing falling.

Hazards of all elevated work activities (four (4) feet or more in height in General Industry; and six (6) feet or more in Construction), within our facilities are evaluated, and that information concerning their hazards are transmitted to affected employees. Railroad Bridgeworkers must also be protected by an effective fall protection system when they work twelve (12) feet or more above the ground or water surface.

NJ TRANSIT Rail has developed Fall Protection systems for fixed locations and developed a portable Fall Prevention_System for emergency field use. NJ TRANSIT Rail adheres to the FRA Railroad Workplace Safety Compliance manual, Chapter 2 “Bridge Worker Safety”.

10B SAFETY DEPARTMENT FUNCTIONS

Inspections

The NJ TRANSIT Rail Safety Department inspects rail facilities for hazardous conditions and for unsafe work practices. Inspections are conducted at employee facilities such as shops, offices and yards and on rolling stock and on-track equipment. In addition, inspections are performed at passenger stations and terminals. All unsafe conditions, hazards or unsafe work practices are reported and recommendations are made regarding corrective actions to be taken. The Hazard Management Process (Section 3) is utilized where beneficial. These recommendations are provided to the facility manager or appropriate supervisor for action. Follow-up inspections are then scheduled.

In addition, as part of the new Scorecard Initiative launched in 2011, there is a new “Injury reduction Workgroup” committed to review our current procedures and develop recommendations that will reduce the severity, frequency and reoccurrence of injuries to customers and employees.

Data Assessments

The Safety Reporting System (SRS) gives NJ TRANSIT Rail the capability to perform in–depth analysis on employee injuries. Periodic audits of certain types of injuries (such as slips, trips, and falls) are conducted to determine the underlying causes. This helps management identify trends and enhances its efforts in reducing and preventing injuries.

Safety Committees – General

NJ TRANSIT Rail employee safety committees are utilized to identify and correct hazardous conditions and unsafe work practices. In addition to Mechanical (MMC), and Infrastructure Engineering groups, both the Newark and Hoboken Divisions have safety committees in place. The purpose of safety meetings is to increase employees’ safety awareness and to demonstrate management’s commitment to safety. The committee members identify possible safety hazards at maintenance facilities, rail yards, terminals, and stations, along rights of way and on equipment. The committees also conduct on-site inspections of potential hazardous conditions and unsafe work practices and recommend corrective action as required.

The Rail Safety Department provides support and guidance to the safety committees, injury analysis, discusses current programs and reviews employees' concerns. The Rail Safety Department also helps coordinate the Hazard Management Process when applicable, any corrective action required, and provides follow up to ensure that the conditions or hazards are corrected.

Newark Division Safety Committees

There are four Line Safety Committees on the Newark Division: on the Atlantic City Line, North Jersey Coast Line, Northeast Corridor (including MMC and the Princeton Line), and Raritan Valley Line. These four safety committees are comprised of craft employees, representing their peers on the respective line, along with "agreement" (union) supervisors and "non-agreement" (management) supervisors, who have the authority to affect change and enhance safety.

These safety committees identify safety issues relevant to their respective line. Any safety issue that cannot be rectified at the committee level is pursued through the General Superintendent - Newark Division, and the Rail Safety Department. Safety issues addressed at the Line Safety Committee meeting are recorded by the Chairperson of the committee and are disseminated at specific safety meetings for the various crafts (Mechanical, Engineering, Transportation groups) throughout the Newark Division.

Safety inspections are based on two criteria: Safety issues discussed at the Line Safety Committee meetings and routine/scheduled inspections designed to cover specified locations on the Newark Division on an annual basis. Results of these inspections are recorded by memorandum or standardized checklists.

Hoboken Division Safety Committees

Safety Committees on the Hoboken Division are structured to focus on safety-related issues raised by employee representatives. There are two safety committee levels on a divisional basis:

One Division safety committee representing the M & E Lines, the Main/Bergen/ Pascack Valley Lines and Hoboken Terminal which meet monthly have representatives in the areas of engineering, transportation and mechanical crafts. The general population of Hoboken Division employees have representation on this committee on a craft-basis.

The second level consists of Safety meetings for the general population of employees at various individual facilities.

Safety inspections are held on a monthly basis after the meeting, which may be held at various locations. The Division Safety Committee coordinates these safety inspections to ensure prompt attention to safety-related concerns.

Personal Protective Equipment

NJ TRANSIT Rail is responsible for requiring the use of appropriate personal protective equipment (PPE). PPE is required in all operations where there is an exposure to hazardous conditions or where the OSHA standards, FRA regulations, or NJ TRANSIT Rail Safety Rules indicate the need for using this equipment to reduce the possibility of injury to employees.

The Rail Safety Department recommends the use of specific products and ensures that all personal protective equipment is of safe design and construction. The American National Standards Institute and Occupational Safety and Health Administration standards guide internal standards for the purchase of this equipment. The Procurement Department also maintains a list of approved safety equipment that may be purchased by any department.

Safety Shoe Program

The Rail Safety Department administers a safety shoe program which allows employees to receive a discount on safety shoes purchased through a selected vendor. Employee participation is encouraged by having the vendor's shoe mobile visit various work sites system wide. Approximately 800 employees participate in the program annually.

Employee Injury Policy

The Employee Injury Policy addresses employees having multiple injuries. It is designed to promote a safer work environment for employees as well as their co-workers. The policy outlines progressive actions for affected employees, ranging from reinstruction and training through formal discipline. Under the policy, three criteria are used to identify employees who require Formal Safety Reinstruction sessions and Formal Safety Training: (1) any employee who has had two or more injuries within a one year period, (2) any employee who has had three or more injuries within a five-year period, or (3) any employee who has had 5 or more injuries in a ten year period. The Rail Safety Department provides employee personal injury data and coordinates the Formal Safety Re-instruction sessions with the employee's supervisors.

Accident Prevention And Investigation

The Rail Safety Department focuses on the prevention of accidents and injuries based on recent accident and injury trends. This is accomplished through routine safety inspections and through injury analysis. This information is provided to affected departments for use in developing safe work practices and for injury reduction and prevention.

NJ TRANSIT Rail Supervision is trained in techniques needed to conduct effective accident/incident investigations. The Injury Investigation Team determines the root cause of an accident to prevent similar accidents from occurring in the future.

When an accident occurs, a supervisory management representative from the injured employee's department and a Rail Safety Supervisor investigate the injury. They discuss with the injured employee the facts surrounding the incident, and review the work processes, procedures, conditions and PPE required at the time of the incident. The root cause of the accident is determined and submitted on the final report.

Injury Reduction Workgroup

As part of the new Scorecard Process launched in 2011, there is a new "Injury Reduction Workgroup" committed to the development of recommendations and a list of actionable items that will reduce the severity, frequency and recurrence of injuries to customers and employees.

Rolling Equipment Specifications

The Rail Safety Department provides recommendations in new equipment design regarding passenger safety issues utilizing the Hazard Identification/Resolution Process and based on federal safety requirements.

Facility Design Review

The Rail Safety Department reviews proposed new or reconstructed employee and customer facilities, providing recommendations and revisions to the proposed plans, utilizing the Hazard Identification/Resolution Process.

10C

MEDICAL SERVICES DEPARTMENT

The Medical Services Department provides medical care associated with occupational injuries, illnesses and case management as well as services to employees who are covered under Federal Employees Liability Act (FELA). Medical services are provided in conjunction with disability benefits programs including return-to-work medical examinations and consultations. The department also provides supervisors with information regarding employees' fitness for duty.

In 1991, the Medical Services Department, which formerly serviced only NJ TRANSIT Bus Operations employees, became a corporate-wide entity under the Human Resources Department. It currently serves all employees throughout NJ TRANSIT. Medical Services currently uses separate contract physician offices in addition to its own medical staff to provide medical services. Medical Records are maintained at the four in-house facilities. Preferred provider networks have been established in such areas as radiology, physical therapy and nuclear medicine. In addition to the main facility in Maplewood, Medical Services Department also has coordinated care with three in-house facilities located in Hoboken, NJ, Camden, NJ, and Egg Harbor, NJ.

Medical Services ensures that employees in safety-sensitive functions and employees assigned to perform service subject to the Hours of Service Act are physically fit to perform their duties. Periodic physicals are required in many cases to determine physical fitness. The Medical Services Department also provides special testing services necessitated by state and federal mandates such as the Hearing Conservation Program, Worker Lead Protection Program, and other programs associated with potential occupational hazards.

NJ TRANSIT Rail mandatory blood-borne pathogen program includes creating a policy and training program, an immunization plan for hepatitis B and tetanus for all those employees who serve the public and who are considered “at risk” such as Car Appearance Maintainers and Station Attendants. A Respiratory Fit Testing program is designed to help maintain a higher standard of health and safety in the environment for all those employees who must wear respirators as part of their daily job duties. Respiratory medical testing is conducted annually as needed for those employees who must wear respirators. Hearing Conservation Program baseline testing and annual monitoring of employees who are exposed to noise levels above 85 dBA occurs during annual physical examinations.

The medical services provided through NJ TRANSIT’s network of professional medical staff are designed to fulfill the mission of NJT by providing a safer, healthier work force. The wellness and educational programs provided by NJ TRANSIT promote a healthier work force for the company. These programs are offered to employees throughout the year.

10D DRUG AND ALCOHOL POLICY

NJ TRANSIT is committed to preventing the use and presence of alcohol and drugs in the workplace. The company has a comprehensive Drug and Alcohol Policy that prohibits the use of drugs or alcohol while on the property, while on duty or while subject to duty. This policy applies to all NJ TRANSIT employees. The program was developed to detect users and to remove abusers of drugs or alcohol from the workplace.

As part of its role in maintaining a drug and alcohol free workplace, Medical Services ensures the implementation of drug testing programs as required by and according to standards set forth under federal regulations and in accordance with procedures outlined in these regulations and company policy. It covers all employees in safety sensitive functions and those who are required to comply with the requirements of the Federal Transit Administration (FTA), the Federal Motor Carrier Safety Administration (FMCSA) and the Federal Railroad Administration (FRA). It includes all employees assigned to perform service subject to the Hours of Service Act. The Medical Services Department also guarantees the employees of NJ TRANSIT that the services provided

will be done in such a manner as to ensure confidentiality and safety to all those who use these services.

As a condition of employment, employees must abide by the terms of the NJ TRANSIT Drug and Alcohol Policy. Violations of the policy will result in disciplinary action. The Medical Services Department conducts pre-employment physicals, which include drug and alcohol testing for safety-sensitive employees. In addition to testing during pre-employment physicals, testing is done as part of voluntary periodic examination physicals, reasonable suspicion testing, reasonable cause testing, return-to-duty testing, unannounced follow-up testing, post-accident testing and random testing.

An employee may be tested for Reasonable Suspicion when a supervisor suspects that he or she may be under the influence of drugs or alcohol based on specific, articulate observations of the person's appearance, speech, behavior or body odor. The limitations and conditions of this testing are stated in NJ TRANSIT's Drug and Alcohol Policy.

An employee can be tested for Reasonable Cause when the employee has been involved in an accident or incident and a supervisor has determined, based on specific facts that the employee, through his or her acts or omissions contributed to the occurrence or severity of the accident or incident. The limitations and conditions of reasonable cause testing are stated in the company's Drug and Alcohol Policy.

Post-accident Testing will be performed when an employee is involved in an event that involves one or more of the following:

- A major train accident that exceeds the reporting threshold in which there was a fatality, and/or a release of hazardous materials accompanied by an evacuation, an FRA-reportable injury or damage of one million dollars or more to railroad property.
- An impact accident which results in an FRA-reportable injury or damage to the railroad of \$150,000 or more.
- A fatal train incident resulting in the death of an on-duty railroad employee.
- A fatal train incident involving the movement of on track equipment that involves a fatality to any on duty railroad employee within 12 hours.
- A passenger train accident resulting in an FRA-reportable injury to any person in a train accident involving a passenger train.

Exceptions include:

- An accident at a highway-rail grade crossing.
- An accident that is attributable to natural causes, vandalism or trespasser(s).

NJ TRANSIT offers an Employee Assistance Program (EAP) to encourage affected employees to seek help voluntarily and to encourage referral of employees for assistance before their job performance deteriorates. Participation is confidential and

there is no disciplinary action for admission of previous behavior. If an employee tests positive for drugs and/or alcohol on a voluntary or random drug test, he or she must agree to mandatory EAP counseling to maintain their employment with NJ TRANSIT.

10E FATIGUE PROGRAM

NJ TRANSIT Medical Services provides general fatigue awareness information via on-site visuals (brochures and posters) at work locations systemwide.

The NJ TRANSIT Rail Training Department also provides general fatigue awareness training as part of the Continuing Safety Education Program(s) for Engineering and Mechanical employees.

In addition, NJ TRANSIT Rail has been involved in the North American Rail Alertness Partnership (NARAP), a group comprised of rail labor, railroad operators and the FRA, whose mission is to study the effects of fatigue on railroad workers and the development of fatigue countermeasures. NJ TRANSIT Rail also participated in a transit industry fatigue project sponsored by the Transportation Research Board.

10F SAFETY RESPONSIBILITIES OF DEPARTMENTS OTHER THAN SAFETY

As governed by the Policy Statement and Authority of the Rail System Safety Program Plan, all supervision at the appropriate level have the following responsibilities:

- Focus departmental and individual efforts to reach established safety goals.
- Accident prevention and Hazard Identification and Resolution. This includes the enforcement of NJ TRANSIT Rail safety rules. In those instances where corrective actions are not within the resources or authority of the Supervisor involved, timely and efficient communication and documentation shall be made through the Supervisor's organization structure and to the Rail Safety Department.
- Ensure that the ability to safely perform assigned work is included in all job specifications and is considered in the employee selection and promotion process.
- Ensure that new and newly transferred employees immediately receive briefings on the importance of safety, their responsibilities for safety, work place hazards, hazard reporting procedures, required safe working practices, fire evacuation procedures and any other safety related information the employee must have to perform their job safely.
- Ensure that the importance of safety is communicated to each employee as frequently as possible.

- Ensure that all training includes safety requirements appropriate to that function.
- Practice good housekeeping to provide a safe working environment because of its direct relationship to safety hazards.
- Submit written accident/incident/inspection reports as outlined in the NJT Internal Control Plan, and the appropriate follow-up investigation and action.
- Establish appropriate emergency procedures and periodically conduct exercises to ensure their effectiveness.
- Administer disciplinary action for safety noncompliance when warranted.
- Provide for proper marking and storage of hazardous materials.

In addition to the above individual responsibilities, the departmental staffs identified below have specific additional safety-related responsibilities:

Communication and Customer Service:

- Receive customer safety related concerns and document them.
- Forward customer safety related concerns to appropriate departments for follow-up and resolution.
- Provide customer service support at main terminal locations to mitigate customer safety concerns.
- Educate the public on how to ride the system safely.
- Promote public awareness through the established safety program.

Finance (Operations Control):

- Ensure that adequate funding is budgeted and available to support approved safety program efforts.

Human Resources:

- Screen prospective employees so as to maximize the hiring of those who have good safety records and habits, and who will practice good safety habits.
- Hire employees who meet established position safety standards.
- Ensure Performance Appraisals for appropriate personnel that include safety and security performance as a key criterion.

Infrastructure Engineering:

- Design, build and maintain the infrastructure to current codes, standards, and regulations.
- Work with other departments to assure acceptable levels of safety in project design, engineering and construction, especially on property work sites.
- Adopt appropriate safe work practices and provide a safe work environment.

Labor Relations and Administration:

- Ensure that safety standards and practices are not compromised during negotiations or grievance hearings.

Mechanical:

- Coordinate with affected departments to ensure acceptable levels of safety in all equipment specifications, design, construction and modifications.
- Adhere to maintenance schedules designed to maintain a level of safety consistent with the Rail System Safety Program Plan

Procurement/Materials Management:

- Maintain a list of approved products to ensure that purchases do not include prohibited items.
- Provide for proper marking and storage of hazardous materials in the storerooms under their jurisdiction
- Assure the ability of prospective bidders to meet construction or procurement performance specifications required for the safety of employees, passengers and the general public.

Rail Training:

- Include a safety component in all lesson plans.
- Emphasize appropriate safety rules and work practices.
- Ensure safety rules and work practices are adhered to during all training.

Risk Management:

- Identify and provide documentation of accidents and/or claims costs that indicate the need for immediate action on the part of other departments.

Transportation:

- Ensure that the daily operation of service maintains a level of safety consistent with the Rail System Safety Program Plan.
- Encourage the reporting of safety concerns and operational hazards by operating personnel.

10G

REFERENCE DOCUMENTS

- NJT Rail Employee Injury Policy
- NJT Rail Drug and Alcohol Free Workplace Policy
- NJT Rail Respiratory Protection Program
- NJT Rail Hearing Conservation Program
- NJT Rail Confined Space Entry Program
- NJT Rail Worker Lead Protection Program
- NJT Rail Bloodborne Pathogens Program
- NJT Rail Corporate-wide Medical Policy
- NJT Rail Annual Rail Safety Program
- NJT Rail Internal Control Plan
- NJT Rail Lockout/Tagout Program
- NJT Rail Fall Protection Program

SECTION 11

PASSENGER AND PUBLIC SAFETY PROGRAMS

NJ TRANSIT Rail passenger trains operate 539.4 miles of track throughout New Jersey, through major cities, small towns, industrial areas as well as remote locations. These trains generally operate at speeds between 60 and 80 miles per hour. While some of the tracks are elevated, most are at grade level requiring approximately 330 highway-rail grade crossings.

Focusing on “Education – Engineering- Enforcement”, NJ TRANSIT Rail has various on-going programs with emphasis on reducing accidents and incidents involving trespassers and the effects of these incidents on our co-workers.

11A

SAFETY EDUCATION PROGRAMS

NJ TRANSIT is concerned with the safety of residents in communities where trains operate and in order to reduce rail-related incidents along commuter lines. NJ TRANSIT provides two Safety Education Programs to impress the dangers of being on or near railroad tracks:

- NJ TRANSIT’s Safety Rules
- NJ TRANSIT’s Driver Education Safety Program (DESP)

These complementary programs are offered to all public, private and charter schools, recreational programs, community and organizational groups throughout New Jersey. The cooperative effort of NJ TRANSIT’s Safety Education Programs increases public awareness of our rail, light rail and bus system and help keep communities safe.

Safety Rules

Each year, the “Safety Rules” program reaches tens of thousands of students in approximately 150 schools and participates at numerous community events reaching additional audiences.

Twice annually, letters/postcards are sent to schools to acquaint superintendents and principals with NJ TRANSIT Safety Education Programs. NJ TRANSIT works with individual school principals to customize the program based on the needs of their community.

The 45-minute presentation increases awareness about rail safety, caution around tracks and focuses on: staying alert and being aware of rail and light rail vehicles; looking both ways before crossing tracks; crossing at designated areas; staying off tracks; staying away from catenary wires, and standing behind the safety line on station

platforms. Grades PreK to 12 receive an informative introduction covering safety tips and procedures, an age appropriate video (some of which are provided through Operation Lifesaver) and audience participation is encouraged through a question and answer session.

The discussion with students in grades PreK to 3 emphasizes the need to stay off the tracks, and is stressed repeatedly with the aid of NJ TRANSIT's "Metro Kids" and Operation Lifesaver's "Sly Fox and Birdie" cartoon animated videos.

For student grades 4 to 8, NJ TRANSIT provides its own video, "Chicken on the Tracks", which depicts children throwing rocks at trains, walking on tracks and playing the game of "chicken" with trains. As a result of their dangerous behavior, the film ends abruptly as two children are struck and killed by a train. Students are pre-warned about the ending, assured the children in the film are actors, that no one was hurt during filming of the video and emphasizes that anyone, at any age, can be seriously hurt if safety warnings are ignored.

Presentations to grades 9 to 12 are direct and to the point, students are spoken to as adults, and graphic illustrations of previous accidents are used. Other NJ TRANSIT videos, "Look, Listen Up, Stay Alive" and "Dead in Their Tracks", are utilized to meet the main objective of preventing accidents by discouraging students from being on train tracks. The presentation includes a review of trespass laws, reasons for staying off tracks, high voltage/catenary wires, electric vs. diesel trains, stopping distances of trains, vandalism, and safe driving tips at highway-rail grade crossings.

Accompanying proprietary NJ TRANSIT materials, including specifically designed brochures, bookmarks, activity books, pencils, and rulers highlighted with key safety messages and are distributed (based on audience age) by teachers after the presentations. These materials, some with corporate sponsorship, are also complementary.

To supplement safety outreach, NJ TRANSIT also conducts Safety Rules presentations for community groups and at public events. This outreach focuses on specific safety issues concerning that particular town (especially when new service is introduced in that area).

In addition, NJ TRANSIT Safety Education Programs participate at the annual conventions: NJAHPERD, NJSBA, NJEA, and NJPTA.

The NJ TRANSIT Safety Education Program has been in place for approximately 20 years and NJ TRANSIT Safety Education Program Specialists are Operation Lifesaver Certified Presenters.

Driver Education Safety Program (DESP)

In 2009, NJ TRANSIT introduced the DESP, a new, innovative program to educate young drivers, grades 10 – 12, on potential hazards while driving near railroad and light

rail tracks, through grade crossings and along roadways used by buses. The DESP is designed as an engaging classroom tool to raise teen awareness of these dangers and prevent injuries, collisions and fatalities.

Information contained in the DESP fills a critical void in railroad and bus safety education. Current high school driver education curriculums in New Jersey often include less than a fifteen minute segment on rail safety. A stronger emphasis is needed to educate young motorists about potential dangers that exist at railroad crossings. With the introduction of the DESP, NJTRANSIT became one of the first statewide transit agencies to offer a complimentary, comprehensive rail and bus safety education program targeted to teen drivers.

The DESP is specifically designed to provide driver education to health and physical education teachers with a user-friendly driver education program that augments the current driver education curriculum. Instructional materials include hard copies and compact discs. The DESP includes several DVDs and handouts.

- Designed as a two-classroom period lesson, part one of the DESP consists of the PowerPoint and video presentations. The instructor lesson plan explains how to use the video, and contains a complete outline and explanation of the PowerPoint. The instructor provides the students with a student reference guide so students can take notes on appropriate slides during the presentation.

Operation Lifesaver sponsored the launch of the NJ TRANSIT DESP and the Distracted Driving Campaign and NJ TRANSIT continue to work collaboratively on growing concerns about driving safely near tracks.

The New Jersey Department of Education, Division of Standards and Programs recognizes the DESP as a quality standards-based program in alignment with the New Jersey Core Curriculum Content Standards (NJCCCS).

11B OPERATION LIFESAVER PROGRAM

NJ TRANSIT has established a longtime partnership with Operation Lifesaver and actively participates in the program at the state and national level. Operation Lifesaver is a national, non-profit organization dedicated to preventing collisions, injuries and fatalities on and around railroad tracks and highway-rail grade crossings by raising public awareness of railroad safety issues. The program is sponsored cooperatively by federal, state and local government agencies, highway safety organizations and the nation's railroads. Operation Lifesaver promotes the three E's: education, engineering and enforcement.

The success of the program is based on educating people of all ages and walks of life about safety around railroad tracks and highway-rail grade crossings. NJ TRANSIT accomplishes this through safety education programs at schools throughout the state to students in grades PreK-12, driver education students, school bus drivers, first

responders, and community organizations. The purpose is to increase awareness of the hazards of railroad tracks and to stress the importance of safe practices around highway–rail grade crossings. As noted in Section 11A, NJ TRANSIT partnered with Operation Lifesaver to launch the NJ TRANSIT DESP for teen drivers in 2009 and the supplemental Distracted Driving Campaign in 2010.

Each year, NJ TRANSIT sponsors at least one Railroad Safety Expo for first responders. The Expo includes an Operation Lifesaver presentation and written materials which covers information regarding grade crossings and warning devices, where and when accidents can occur and safety information regarding trains.

In previous years, NJ TRANSIT sponsored a special Operation Lifesaver train. Students from a municipality with schools close to railroad tracks were given a train ride and educated about safe behavior around trains and railroad tracks. Each year students attending schools near a different passenger rail line were chosen to participate.

NJ TRANSIT actively supports and participates in the State of New Jersey Chapter of Operation Lifesaver. The office of State President, also a Member of the Board of Directors, is represented by NJ TRANSIT. Operation Lifesaver Certified Presenters must obtain and maintain their credentials through mandatory training provided by the New Jersey Chapter. NJ TRANSIT personnel such as police officers and safety professionals have been credentialed through New Jersey Operation Lifesaver and are active at the state and national level. NJ TRANSIT was invited to showcase its Safety Education Programs at several Operation Lifesaver national symposiums and regional workshops across the country.

11C PASSENGER SAFETY

NJ TRANSIT has a comprehensive passenger safety campaign that aggressively promotes safety to customers. Safety messages are included in various communication materials to passengers, specifically through the FYI customer newsletter, posters, customer notices, and messages in timetables, “seat drops” and customer notices. Safety messages also are displayed on television monitors at various stations and on message boards system wide.

In addition, on-board train announcements, signage, and instructions warn passengers of the potential hazards of getting on and off moving trains, leaning against center doors, riding in vestibules while the train is in motion, and watching for the gap between the train and station platform. Photo luminescent emergency evacuation signs communicate where emergency exits are located and newly- acquired rail equipment has electronic message displays, which continuously display safety messages. An all-inclusive bi-lingual rail safety brochure that includes information on emergency exits and evacuations, safety features on trains, and safety tips is available.

Situations have been evaluated to include how to get pedestrians to cross at designated locations such as overpasses, underpasses and railroad grade crossings and how to reduce trespassing incidents at stations, on bridges and elsewhere along the right of way.

During station rehabilitations customers are informed of work that is being done. In addition to directional signs, temporary fences and warning signs are installed to prevent injuries during construction projects. The Construction Manager or Project Manager who is responsible for the new construction or passenger station rehabilitation, schedules intermediate and a final walk-through site inspections. This is coordinated with other affected departments to identify and resolve any safety-related issue prior to opening the facility for public use.

The passenger and community safety campaign consists not only of education and engineering initiatives but also equipment and operational initiatives as well. In response to open side-door injuries, NJ TRANSIT procedures require closing doors on all trains at all times. Since 2003, all push-pull equipment is equipped with doors that will close with the traps up or down, eliminating the need for train crews to manually close each trap before closing the doors.

11D PLATFORM/TRAIN GAP MANAGEMENT PROGRAM

Of the total number of injuries which occur to our passengers, approximately 75% of those injuries occur while boarding or detraining. Of that number almost 30% involve the “gap” between the platform and car. In order to address these circumstances, NJ TRANSIT Rail has implemented or is pursuing the following initiatives as an overall program to reduce gap-related injuries:

- On-board announcements by traincrew through enhanced language in the TRO-12.
- On-board automated PA system for gap message.
- Automated gap message on station platforms.
- Internal and external car signage with gap message.
- Develop platform / gap awareness training for new hire Transportation employees (2008) and for annual retraining (2009).
- Platform stencil with gap message.
- On-board posters and brochures containing the gap message.

- Utilize platform PA system for gap message.
- Measure vertical/horizontal high-level platform clearances to ensure the gap between train and platform is maintained to NJT standard.

Since February 2007, NJ TRANSIT Rail has been a member of the Federal Railroad Administration RSAC “General Passenger Safety Task Force (GPSTF)”, which was formed to address passenger train safety issues nationwide. The first initiative of the GPSTF Working Group was the development of the “FRA Approach to Managing Gap Safety” document, which was implemented in March 2008.

Also as part of the three major commuter railroads (including Metro-North and Long Island), NJ TRANSIT Rail works directly with these agencies to benchmark various gap safety initiatives.

Through an initiative sponsored by the New Jersey Department of Transportation, NJ TRANSIT Rail contracted with the New Jersey Institute of Technology to review gap-related injury statistics, actions already taken by NJ TRANSIT Rail to reduce gap-related injuries, observation of passenger behavior while boarding and detraining, and to recommend additional actions by NJ TRANSIT Rail.

11E PASSENGER TRAIN SIDE DOOR CONTROL PROCEDURES

NJ TRANSIT Rail has comprehensive door operating procedures for on-board train service employees in a single document source since 1992; specifically, Section 2 “Door Procedures” of the “Regulations Governing Conductors and Assistant Conductors (TRO-12)”.

Since 2008, NJ TRANSIT Rail also has specific procedures in effect to ensure the safety of customers on all trains whereby all side doors are required to be closed at all times.

Unlike the Long Island Railroad and Metro North Railroad, NJ TRANSIT Rail utilizes both high and low-level platforms. Except for the Northeast Corridor which has all high level platforms, station stops on any rail line can vary between high and low-level platforms. As a result, crew members must open and close trap doors at the ends of the cars to accommodate each platform type.

The combination of close station spacing (1-2 minutes between stations), peak period ridership and staffing levels on-board trains traditionally have made it difficult for crew members to open and close the traps at all doors, especially on trains making local stops, and maintain the schedule

Beginning with Comet III and the overhaul of the Comet II cars, NJ TRANSIT Rail equipment purchases have included an end door design that allows the traps to be opened and closed without having the side-door open. However, there remain 230 cars in the Arrow III fleet that do not have this feature.

In 2008, NJ TRANSIT Rail instituted a comprehensive Door Failure Protocol, whereby if there is a report by a crewmember of an uninitiated (uncommanded) side door opening, the entire consist is removed from service until an inspection is performed by Mechanical, QA/QC and a Transportation crew labor representative to determine the root cause of the event.

11F CUSTOMER SAFETY FENCING INITIATIVE

On February 1, 2006, a customer at Ramsey Station initially got off a westbound train. He walked in front of the stopped train and was struck by a westbound train operating “express” through Ramsey on the center track. It was determined that when getting off a train passengers may already be in front of the crossing gates, leaving them a clear path to cross the tracks without an effective warning.

Rail Operations staff performed a Hazard Analysis at the accident site, developing a fencing design that would channel customers on a train platform so that they would be behind the activated grade crossing gates. The goal of the design is to provide a low cost, effective solution to this serious safety issue. Thirty-three stations on our system met the criteria where the fencing would be considered: those that have two or more tracks and are adjacent to a road crossing. Rail Operations staff have evaluated each location to prioritize the installation of this fencing. All locations were completed as of December 31, 2007. Since then, one new station facility, Plauderville (Garfield) on the Bergen County Line, met the criteria and was added.

The Customer Safety Fencing process Hazard Analysis was shared with the FRA RSAC General Passenger Safety Task Force as a “benchmark” for other commuter railroads and is included in the 2011 FRA document “Pedestrian Crossing Safety”. In addition, the design has been implemented as an NJT standard for future station construction.

11G NEW SERVICE HAZARD ANALYSIS

NJ TRANSIT Rail policy is to ensure a comprehensive Hazard Analysis for those rail lines that will be experiencing new or expanded service. This Hazard Analysis includes items such as station facilities, grade crossings, right of way fencing and employee facilities.

The first Hazard Analysis performed using the above criteria encompassed the Pascack Valley Line, which on October 28, 2007 initiated a service expansion of 121 new trains per week.

In cooperation with the NJDOT and Bergen County Highway Engineering, specific safety enhancements for a particularly hazardous highway rail grade crossing (Malcolm Ave./ Franklin Ave. MP 10.7) were implemented prior to commencement of the enhanced service.

In addition, the Rail Safety Department, Hoboken Division Operations, Customer Service, Marketing, and Government / Community Affairs coordinated communication efforts with on-line municipalities to ensure awareness of the increased service by public and emergency response agencies. Specifically targeted were public and private schools, an initiative which resulted in 17 additional “first-time” schools which received the “Rail School Safety Program”.

11H GRADE CROSSING SAFETY

NJ TRANSIT works closely with the New Jersey Department of Transportation – Railroad Division. This agency monitors and inspects the conditions and warning devices at highway-rail grade crossings throughout the state. System wide, NJ TRANSIT Rail operates on 330 grade crossings. Diagnostic teams, (which include representatives from NJ TRANSIT Rail Engineering and Rail Safety, NJ DOT and local municipalities) are formed to evaluate the adequacy of the warning devices at crossings system wide and to upgrade them when necessary. Guidance is provided by the USDOT/FHA Manual of Uniform Traffic Control Devices. The diagnostic teams also investigate the possibility of eliminating crossings throughout New Jersey.

Engineering professionals are responsible for keeping highway–rail grade crossings as safe as possible. The Engineering Department Signal and Communications staff inspects all crossings on a periodic basis and works to ensure that all warning devices are working as intended.

By enforcing traffic laws relating to grade crossings, accidents can be reduced. Aggressive enforcement is a major part of the Operation Lifesaver program. NJ TRANSIT Police work closely with local law enforcement agencies to target motorists and pedestrians who ignore warning devices by going around the gates at crossings.

11-I TRESPASSER AND INTRUSION PROGRAMS

The Rail Safety Department works in conjunction with Infrastructure Engineering, line management, Government and Community Affairs and local/NJT Police Departments to determine where to place fences and warning signs. Each situation is evaluated based

on Hazard Identification, and Resolution. NJ TRANSIT Rail implemented an effective “Policy on Right of Way” fencing in October 2002. This document provides guidelines for the allocation of resources based on the Hazard Resolution Process which utilizes historical incident/accident data, employee feedback, geographic location, and frequency of service.

This policy has resulted in a focused Trespasser Fencing Program which is designed to direct the allocation of resources in an effective manner. Since August 2003, 20 locations have been completed systemwide at a cost of approximately \$2.7 million.

11J

REFERENCE DOCUMENTS

- FRA Guide for Managing Gap Safety
- NJT Regulations Governing Conductors and Assistant Conductors – TRO-12
- NJT Passenger Station Guidelines and Standards
- NJT Safety Education Programs Training Manual

SECTION 12

LOSS PREVENTION AND CONTROL

NJ TRANSIT has instituted various programs associated with loss prevention management to prevent and minimize loss resulting from incidents involving people, facilities, rail cars and locomotives, and other rail equipment.

12A

FIRE PREVENTION AND CASUALTY MANAGEMENT

NJ TRANSIT Risk Management has engaged a property loss control consultant (GE GAPS) to review project plans and specifications of various projects and make property risk reduction recommendations as appropriate during the design phase. These recommendations include fire protection systems, alarms, water supply, roof construction, boilers, etc. They also conduct annual loss prevention surveys at selected facilities and generate reports for facility management and Engineering to resolve issues identified in the report. NJ TRANSIT Risk Management follows up on the status of the open items.

Risk Management has engaged another consultant (Hartford Steam Boiler) to conduct statutory inspections of all boilers in NJ TRANSIT facilities.

Rail Safety conducts scheduled inspections of facilities and yards to identify hazards and works with various departments to mitigate the issues. NJ TRANSIT Rail also has an ongoing program for the inspection and maintenance of portable fire extinguishers in its facilities and rolling stock.

Risk Management maintains a Risk Management Information System (STARS), which provides detailed information on employee injuries, passenger injuries, third party injuries, property damage, etc. The information is utilized for claims management, underwriting and financial purposes but can also be utilized to conduct trend analysis to initiate safety programs and training.

During the design phase of new rolling stock, the manufacturers are required to provide fire analysis to NJ TRANSIT of the materials used for the construction of the equipment prior to beginning manufacturing. The Quality Assurance Department investigates any major failure or fire that has occurred to the rail passenger cars and locomotives as well as other rail equipment to determine the cause(s) and to take necessary steps to prevent reoccurrence.

12B

CONTRACTOR SAFETY REQUIREMENTS

NJ TRANSIT frequently utilizes outside contractors for new projects and also for ongoing maintenance programs. In order to minimize the incidences and losses involving contractors and their employees, all railroad-related construction contracts

handled by the NJ TRANSIT Capital Planning and Programs Department include General Provision clauses which include special requirements pertaining to fire prevention, property damage, maintenance of railroad traffic, etc. General Provision section 4.11.5.A(3) specifically requires contractor employees or their representative to attend Contractor Safety Training prior to working within a specified distance.

Safety training is provided by the Rail Training Department. Records of the training are on file in Rail Safety Department. The training is applicable for a 12 month period and all contractor personnel are provided with photo identification indicating that they have received the appropriate safety training. This identification is randomly checked "on-site" by NJ TRANSIT supervisors to ensure compliance.

SECTION 13

SYSTEM CHANGE MANAGEMENT

NJ TRANSIT Rail continually acquires new equipment, expands and enhances facilities and services, rehabilitates the system with the related procedural revisions that must occur. NJ TRANSIT Rail primarily uses its Quality Assurance / Quality Control staffs for rail mechanical and engineering procurement and procedural revision functions and the NJ TRANSIT Capital Planning and Programs Operating Instructions for the facilities planning, design and review process.

13A

SYSTEM MODIFICATION REVIEW PROCESS

This process specifies quality system requirements for use by NJ TRANSIT Rail. The system outlines the philosophy of quality assurance. It is aimed at achieving internal and external customer satisfaction and preventing nonconformity at all stages, from design through construction and installation. Its objective is to assure the highest quality and reliability of the service NJ TRANSIT provides, to establish a high level of confidence with customers and to maintain a Total Quality Management concept, which emphasizes that quality is everyone's responsibility.

The NJ TRANSIT Rail Quality Assurance Program is established for the purpose of assuring that all Mechanical, Infrastructure Engineering and Capital Procurement functions are performed in a fashion which will assure conformance to specifications, policies, procedures and applicable standards so as to achieve the goals and objectives of NJ TRANSIT Rail.

Quality assurance is an integral part of the Mechanical Department, Infrastructure Engineering Department and Capital Procurement and is designed to develop, modify and recommend controls to ensure the standards of quality are met with regard to safety, reliability, maintainability and human concerns; and to maintain documentation as empirical evidence of quality.

This Quality Assurance Program Plan describes how NJ TRANSIT Rail will facilitate quality requirements during the procurement of goods and services, including design and construction, engineering and maintenance of equipment, infrastructures, and parts and components. It is based on the International Standard ISO-9001 and is in agreement with the Federal Transit Administration's (FTA) Quality Assurance and Quality Control Guidelines (FTA-MA-06-0189-92-1).

The NJ TRANSIT Rail Quality Assurance Program Plan is established by the NJ TRANSIT Rail Quality Assurance Department under the authority and funding from the state of New Jersey and supplemented by the Federal Transportation Administration (FTA) to upgrade railroad systems and equipment to enhance the quality of public transportation in New Jersey.

The Quality Assurance Department is responsible for determining that quality requirements have been adequately considered in design, construction, maintenance, technical specifications and testing; evaluating contractor/vendor quality programs for content, adequacy and capability for compliance with NJ TRANSIT Supplier Quality Assurance requirements; technically reassuring through surveillance and auditing of processes, inspection and testing and other activities performed by consultants/contractors/vendors; and maintaining comprehensive quality records to demonstrate evidence of quality in the procurement and maintenance process including the analysis of quality status and trends.

The Equipment Design and Engineering Department is responsible for administration of projects involving Rail Equipment. The department is responsible for developing the project cost estimates, technical specifications, including design elements such as maintainability, reliability and testing requirements. The department coordinates technical development of specifications using both internal review committees and consulting engineers as appropriate. The department also initiates the project scope involving all appropriate project elements relating to funding, payment and delivery schedules and warranty.

The respective Chief Engineers of the Infrastructure Engineering Department are responsible for administration of capital-funded projects involving track structure, facilities and catenary signal systems. The department is responsible for developing the project cost estimates, technical specifications, including design elements such as maintainability, reliability and testing requirements. The department coordinates technical development of specifications using both internal review committees and consulting engineers as appropriate. The department also initiates the project scope involving all appropriate project scope elements relating to funding, payment and delivery schedules and warranty.

As part of the Capital Planning and Programs Department Quality Assurance/Quality Control Program, and to make project management uniform, a series of Operating Instructions is in effect to cover daily activities. Revisions and improvements are issued as needed. These instructions cover nine basic categories:

1. Information Management
2. Consultation Selection
3. Quality Assurance/Quality Control
4. Design Reviews
5. Construction Procurements
6. Approval Procedures
7. Construction Procedures
8. Warranties and Closeout
9. Project Reporting

These Operating Instructions include the following project review and approved processes that are intended to ensure new facilities and system expansions are

compatible and coordinated with the existing system during construction, testing and break-in phases, as well as when in full operation. These Operating Instructions include specific requirements for the Capital Planning and Programs project manager to:

- Coordinate with the “user group” at Rail during the early stages of design to incorporate all requirements.
- Establish a Technical Advisory Committee, including representatives of the user group.
- Circulate plans and specifications, including provisions for working along the railroad right-of-way.
- Incorporate or address all comments received during the review process.
- Obtain from the VP & GM of Rail Operations, or his designee, a written approval of the plans/specification at the 60 percent design complete stage.

During construction, all work involving operating facilities is coordinated with the user group by the following actions specified in the Construction Management Handbook:

- Establish an emergency notification list.
- Involve the user group in the pre-construction meeting.
- Review and approve the contractor’s QA/QC program.
- Enforce contract terms relative to safety while working along the railroad right-of-way.
- Enforce the contract provisions as to quality of installed material and workmanship.

13B PROCUREMENT

The purpose of the NJ TRANSIT Rail Quality Assurance Program is to ensure that items and services conform to contract requirements, to determine the quality program level applicable to purchased items and services, qualify suppliers/vendors and to verify purchasing documents are effective. This applies to all items and services purchased under capital procurement, subject to FTA quality requirements and all procurement that requires a specific quality level.

The Procurement Department is responsible for purchasing materials and services in accordance with technical specification requirements provided by various NJ TRANSIT Rail departments including quality requirements specified and/or reviewed by the Quality Assurance Department.

When safety-related personal protective equipment items are requested, only those items previously approved by the Rail Safety Department are considered “stock” (standard) items and are ordered through the Procurement Department.

When safety-related personal protective equipment items are requested, those items not previously approved by the Rail Safety Department are considered “non-stock”

(non-standard) items. The request is forwarded to the Rail Safety Department for review, research and approval. Those receiving approval by the Rail Safety Department are forwarded to the Procurement Department. Those disapproved are returned to the originator.

As required by the NJ Worker and Community Right-To-Know Act, the Procurement Department is responsible for obtaining specific product information such as Material Safety Data Sheets at the time of purchase. Special requirements concerning handling, storage and maintenance of supplied products will be included on the Material Safety Data Sheets. Each location is responsible for maintaining in a central file the Material Safety Data Sheets for all products in use at their locations. Purchase orders include language requiring the vendor to submit Material Safety Data sheets with each shipment sent to NJ TRANSIT.

13C CONFIGURATION MANAGEMENT

The configuration management process is designed to ensure that equipment and facility enhancements and improvements are documented accurately and completely. This includes information such as design drawings, maintenance manuals and technical training procedures and the methods to ensure that changes to specifications and procedures are addressed in a timely manner.

To ensure that the configuration management process is effective for engineering and mechanical systems, NJ TRANSIT Rail uses its Quality Assurance Program. The Quality Assurance Department is responsible for reviewing, auditing, documenting, implementing and updating the Quality Plan.

One of the purposes of the Quality Assurance Program is to ensure that a particular product or installation conforms to specified requirements. The system is described in the following manuals and is implemented through the procedures described in the Quality Procedures and Standard Operating Procedures (SOP) and Standard Maintenance Procedures (SMP) Manuals. A Configuration Management Policy has been developed to provide a uniform process for the control of significant changes to NJ TRANSIT Rail Operations owned and operated equipment, facilities, work procedures and purchasing specifications.

The scope of the following manuals describes the activities and responsibilities related to the establishment, maintenance, review and update of the Quality System:

Quality Assurance Manual

This first tier manual is a controlled document that describes the requirements of the reference standard ISO-9001: 1994 as it applies to NJ TRANSIT Rail.

Quality Procedures Manual

This second tier manual is a controlled document and contains the basic procedures necessary to implement the requirements of the Quality Assurance Manual. The arrangement of this manual corresponds to that of the Quality Assurance Manual.

Standard Operating/Maintenance Procedures

This third tier manual is a controlled document and contains the operational/maintenance procedures and work instructions used to further implement the requirements of the first and second tier manuals. The arrangement of this manual is by major operational functions, such as documentation, production processes, test and inspection, etc. This manual is an in-house controlled document and is not intended for distribution outside the company.

These procedures concerning the issuance, distribution, control and revision of the Quality Assurance documents are the responsibility of the Director of Quality Assurance.

As previously indicated, the NJ TRANSIT Capital Planning and Programs Department utilizes Standardized Operating Instructions for project management and system modification. This document also provides procedures to ensure that the configuration process is achieved in an efficient manner.

These procedures concerning the issuance, distribution, control and revision of the Capital Planning and Programs Standardized Operating Instructions and related document control procedures are the responsibility of the Director of Engineering, Construction, and Development.

System expansions and/or modifications carried out by the Capital Planning and Programs Department are done so with complete involvement of Rail staff, including the sign-off on plans and specifications by the VP/GM or his designee. This sign-off is not made without a review and recommendation by the appropriate Rail department.

The Capital Planning and Programs Department, as a routine element of any contracted work, include in the standard contract a requirement for as built drawings, shop manuals and employee training. A copy of the as-built drawings is provided to Rail Operations.

13D SAFETY AND SECURITY CERTIFICATION

System safety and security together play an important role in achieving the NJ TRANSIT mission and goal of providing a safe and efficient service to our customers. NJ TRANSIT Rail Operations is committed to maximizing safety in all aspects of its operations.

To achieve this goal, NJ TRANSIT Rail adopted the Federal Transit Agency (FTA) criteria and developed a "Safety and Security Certification (SSC) Policy for major capital projects to provide a management structure and approach for integrating safety certification activities into major capital development projects, especially rail stations, large employee facilities, maintenance facilities, and yards. The SSC verifies, through documentation, that safety requirements are incorporated into designs, construction, procurement and testing activities, training programs, and operations and maintenance procedures.

The Safety and Security Certification Program is conducted by NJ TRANSIT Rail as a self-certifying agency, coordinated by the Capital Planning and Program Department (CP&P) and the Rail Safety Department. This program is designed to utilize a collaborative process that requires the full support of all affected departments to ensure its success.

The steps outlined in the Safety and Security Certification Program are intended to support the efforts of NJ TRANSIT Rail to achieve continuous improvement in the safety and security of its facilities. Its primary goal is to coordinate the critical tasks that incorporate a given project to enhance operational effectiveness by satisfying safety and security requirements in a timely, cost-effective manner throughout all phases of project development. If implemented properly, this process will minimize the likelihood and/or severity of system hazards caused by poorly specified, designed, or developed systems and facilities in safety critical operations. It supports the on-going implementation of a systematic approach that enables the company to identify conditions that could result in loss, and to resolve these conditions ideally in the design phase, but certainly prior to releasing for revenue service or employee use.

13E

REFERENCE DOCUMENTS

- NJT Rail Quality Assurance Manual
- NJT Rail Quality Assurance Procedures
- NJT Rail Standard Maintenance Procedures
- NJT Rail Standard Operating Procedures
- NJT Sign Standards Manual
- NJT Stations Guidelines and Standards Manual
- NJT CP and P Operating Instructions
- NJT CP and P Construction Management Handbook
- NJ Department of Community Affairs “Uniform Construction Code Regulations”
- BOCA - Building Officials and Code Administrations National Building Code
- NJ Bureau of Fire Safety “Uniform Fire Code - State of New Jersey”
- Configuration Management Policy (SAF-011)
- NJ TRANSIT and Rail Safety and Security Certification Policy for major Capital Projects (SAF-010)
- FTA Safety and Security Management Guidance for Major Capital Projects (FTCC 5800.1)
- FTA Handbook for Transit Safety and Security Certification (FTA-MA-90-5006-02-01).

SECTION 14

INTERNAL SAFETY MANAGEMENT ASSESSMENT PROCESS

Internal assessments provide a mechanism for determining the effectiveness of the Rail System Safety Program Plan and an assessment of the implementation level of program elements.

The objectives of NJ TRANSIT Rail internal safety assessment are:

- To verify that the safety programs have been developed and implemented in accordance with the plan's requirements.
- To assess the effectiveness of the Rail System Safety Program.
- To identify program deficiencies.
- To identify potential hazards at NJ TRANSIT Rail and to enhance the current safety programs.
- To verify corrective actions are being tracked.
- To recommend improvements to the Rail System Safety Program.
- To provide management with an assessment of the status and the adequacy of the Rail System Safety Program Plan.

Coordination of the internal safety assessments at NJ TRANSIT Rail is the responsibility of the Director of Safety. This assessment is a process by which NJ TRANSIT Rail objectively examines evidence to determine its own compliance with the Rail System Safety Program Plan. The internal safety assessment process will be conducted on a schedule as determined by the Director of Safety.

The goal of the Internal Assessment Process is to assess all major sections of the NJ TRANSIT Rail SSPP over the life of the SSPP document until the SSPP is revised.

SECTION 15 DEFINITIONS

Accident - an unforeseen event or occurrence, which causes death, injury, contact or damage to property.

Configuration Management - a process to assure that all documentation which describes a system and its various components is current and reflects the actual functional and physical characteristics of the system throughout its life cycle.

Hazard - any real or potential condition that can cause injury or death, or damage to or loss of property.

Hazard Analysis - a systematic analysis of a system operation performed to identify hazards and make recommendations for their elimination or control during all life-cycle phases.

Hazard Management (Loss Control) - an element of the system safety management function that evaluates the safety effects of potential hazards considering acceptance, control or elimination of such hazards with respect to expenditure or resources. (The feasibility of hazard elimination must be considered in light of financial, legal and human considerations.)

Hazard Probability - the probability that a hazard will occur during the planned life of the system.

Hazard Resolution - the analysis and subsequent actions taken to reduce, to the lowest level practical, the risk associated with an identified hazard.

Hazard Severity - a subjective measure of the worst result possible from an event.

Incident - an unforeseen event or occurrence which does not necessarily result in death, injury, contact or property damage.

Risk - an expression of possible loss over a specific period of time or number of operational cycles. It may be indicated in terms of hazard severity and probability.

Safety - freedom from danger; a reasonable degree of freedom from those conditions that can cause injury or death to personnel, damage to or loss of equipment or property.

System - a composite of people, procedures and equipment which are integrated to perform a specific operational task or function within a specific environment.

System Safety - the application of operating, technical and management techniques and principles to the safety aspects of a system throughout its life to reduce hazards to the lowest practical level through the most effective use of available resources.

System Safety Management - the organized planning, controlling and integration of all efforts directed towards System Safety.

System Safety Program - the combined tasks and activities of system safety management and system safety engineering that enhance operational effectiveness by satisfying the system safety requirements in a timely, cost-effective manner throughout all phases of a system life-cycle.

System Safety Program Plan - an organized approach to accomplishing the System Safety Program. Its objectives are to document how safety is addressed, and serve as a planning guide and checklist for day-to-day action.

Unsafe Condition or Act - any condition or act, which does endanger human life or property.

APPENDIX - A

HAZARD ANALYSIS WORKSHEET		
Location / Activity Description:		Date of Analysis:
Division:	Line:	Mile Post or Street Address:
Current Status or Activity:		New Status or Activity:
Other Safety Related Items to Consider:		
Considerations:		

HAZARD ANALYSIS:						
Hazard Severity: Category 1, Catastrophic, death or system loss. Category 2, Critical <u>severe</u> injury, illness or system damage. Category 3, Marginal, <u>minor</u> injury, illness or system damage. Category 4, Negligible, <u>less than minor</u> injury, illness or system damage.					Hazard Severity Rating:	
Hazard Probability:	Individual item	Fleet/Inventory		Hazard Probability Rating:		
Frequent:	A	likely to occur frequently	continuously experienced			
Probable:	B	will occur several times in the life of an item	will occur eventually			
Occasional:	C	likely to occur sometime in the life of an item	will occur occasionally			
Remote:	D	unlikely but possible to occur in the life of an item	unlikely, but may occur			
Improbable:	E	so unlikely it can be assumed the occurrence may not be experienced	unlikely to occur			
HAZARD RESOLUTION MATRIX:						
		1	2	3	4	Hazard Resolution:
A		UN	UN	UN	AC/WR	
B		UN	UN	UD	AC/WR	
C		UN	UD	UD	AC	
D		UD	UD	AC/WR	AC	
E		AC/WR	AC/ER	AC/WR	AC	
UN = UNACCEPTABLE UD = UNDESIRABLE AC = ACCEPTABLE AC/WR = ACCEPTABLE WITH REVIEW BY MANAGEMENT						
RECOMMENDATIONS:						
Analysis and Recommended by:				Date:		