



Republic of the Philippines  
**DEPARTMENT OF TRANSPORTATION**

**DEPARTMENT ORDER NO. 2024-024**

**SUBJECT : PHILIPPINE RAILWAY SAFETY GUIDELINES**

**DATE : DEC 06 2024**

**RULE I**  
**GENERAL PROVISIONS AND RAILWAY SAFETY AND HEALTH**  
**COVERAGE**

**Section 1. Scope and Application**

These guidelines shall apply to all railway operators (ROs), including their employees, contractors, subcontractors, and any other individuals or entities engaged in railway operations and maintenance (O&M), regardless of their employment or engagement status.

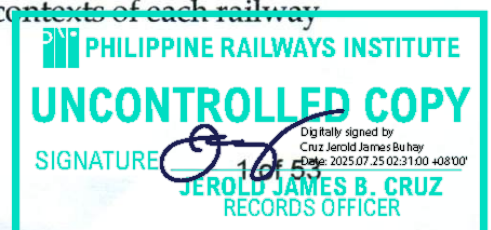
These guidelines are established in response to the observed need for additional regulation, based on the insights gathered from the DOTr-PRI training courses and the experiences of the ROs. It supplement Department Order (DO) No. 198, Series of 2018, issued by the Department of Labor and Employment (DOLE), which serves as the Implementing Rules and Regulations (IRR) of Republic Act No. 11058, also known as the "An Act Strengthening Compliance with Occupational Safety and Health Standards and Providing Penalties for Violations Thereof," and the Joint Memorandum Circular (JMC) No. 1, series of 2020, Occupational Safety & Health for Public Sector, issued by the Civil Service Commission (CSC), Department of Health (DOH), and DOLE.

These guidelines address specific safety requirements for the railway industry. Provisions already covered by RA 11058, DO 198-18, and JMC No. 1 s. 2020 are not repeated herein.

**Section 2. Objective**

The objective of these guidelines is to enhance the implementation of safety, health environmental, and accident prevention measures among railway personnel while they fulfill their duties and responsibilities. Furthermore, these guidelines ensure the welfare of both employees and commuters within a railway system where safety and health measures are specifically tailored to its unique environment.

Recognizing that each railway line possesses distinct characteristics, ROs are responsible for complying with the minimum requirements of this DO, ensuring that these guidelines are consistently met and applied across the different operational contexts of each railway system.





### Section 3. Definition of Terms

This section provides clarity on terms used in these guidelines to ensure that all stakeholders have a common understanding for effective communication and implementation.

- a) **"Approving Authority"** refers to a management-level individual, or any such individual designated by the RO, who approves or disapproves work permit applications, ensuring that all necessary safety measures are in place before work commences;
- b) **"At-grade rail"** refers to the to a railway system that operates on tracks built at ground level, as opposed to elevated or underground tracks;
- c) **"At Sight Driving"** refers to the action of train drivers to proceed with utmost caution to control their speed according to the track visible in advance, whatever the circumstance s is, and to be able to stop the train before any obstacle, train or any anomaly along the track;
- d) **"Civil Service Commission (CSC)"** refers to the government agency responsible for establishing and implementing policies and regulations related to human resource management in the public sector, particularly concerning laws, rules, and regulations on occupational safety and health standards. The CSC also promotes the welfare of government employees by ensuring the adoption of a safe and healthy working environment, aimed at preventing injuries, loss of life, and protecting valuable resources;
- e) **"Competence"** refers to the ability of individuals to perform their tasks safely and effectively, demonstrating the necessary knowledge, skills, and behaviors to prevent accidents and injuries. It encompasses understanding relevant PRSG regulations, identifying and mitigating hazards, using appropriate safety equipment, and following established procedures;
- f) **"Competence Management"** refers to the systematic and integrated control of a cycle of activities within an organization aimed at ensuring and continuously developing competent performance in the workplace;
- g) **"Competence Management System"** refers to a systematic approach or framework for competence management;
- h) **"Confined Space "** refers to an area with limited entry or exit points, inadequate ventilation, or restricted space where workers may need to perform tasks;
- i) **"Continuing Safety and Health Promotion, Training, and Education"** refers to the continuous process of providing safety and health information, skills development, awareness-raising activities, and training to all railway personnel with the primary goal of ensuring that employees are equipped with the



knowledge and competencies necessary to prevent accidents, injuries, illnesses, and loss of human life in the railway workplace;

- j) **"Depot"** refers to the area in the railway system where trains or other railway vehicles are stored, serviced, cleaned, and repaired when not in operation. It typically includes maintenance workshops, storage areas, and administrative offices to support day-to-day and long-term operations.
- k) **"Disability"** refers to a condition that impairs, interferes with, or limits a person's ability to engage in certain tasks or activities or participate in typical daily activities and interactions. It can be a physical, mental, cognitive, or developmental condition that affects a person's ability to perform tasks or interact with the world around them;
- l) **"Disabling Condition"** refers to a physical, mental, or emotional impairment that significantly limits an individual's ability to perform daily activities or participate in various aspects of life, including work;
- m) **"DO 2020-005"** also known as *DOTr DO 2020-005*, refers to the Implementing Rules and Regulations of Executive Order No. 96, series of 2019, which establishes the Philippine Railways Institute under the Department of Transportation. The Philippine Railways Institute serves as the planning, implementing, and regulatory agency responsible for human resources development in the railway sector;
- n) **"DOH"** refers to the Department of Health;
- o) **"DOLE"** refers to the Department of Labor and Employment;
- p) **"DOTr-PRI"** refers to the Philippine Railways Institute established pursuant to Executive Order No. 96, series of 2019;
- q) **"Elevated rail"** refers to a rail system that runs on tracks above the ground, supported by viaducts and other rail structures;
- r) **"Ergonomics"** refers to the scientific discipline concerned with the understanding of the interactions among humans and other elements of a system, and the profession that applies, theory, principles, data, and methods to design and optimize human well-being and overall system performance in a particular setting;
- s) **"First Aid"** refers to the immediate care or treatment provided to an individual suffering from an injury or illness, usually at the scene of an incident, before professional medical help can be administered;

- t) **"First Aid Kit"** refers to a set of medical materials and tools for emergency treatment of a sick or injured person;
- u) **"First Line Response"** refers to the initial response provided by individuals or teams who are the first to arrive at the scene of an emergency or incident. They are typically trained to handle common emergencies and provide immediate assistance until more specialized help arrives;
- v) **"Grade of Automation (GoA)"** refers to a classification system used to define the level of automation in railway operations that outlines the extent to which a train's movement is controlled by human operators versus automated systems;
- w) **"Good practice"** refers to a process or method that has been shown to work well, succeeds in achieving its objective(s), is widely accepted, and therefore, can be recommended as an approach;
- x) **"Hazardous materials or substances"** refer to substances in solid, liquid, or gaseous forms known to pose poison, fire, explosion, or health hazards;
- y) **"Hazardous occurrence"** refers to a work-related event or incident that is known to pose a risk of harm to railway personnel;
- z) **"Heavy Rail"** refers to a type of high-capacity urban or intercity rail transit system designed to transport large numbers of passengers over longer distances, typically with fully grade-separated tracks (elevated or underground) to avoid street-level traffic;
- aa) **"Hot works"** refer to any activity that makes use of open fires, flames, or any work involving the application of heat by means of tools or equipment;
- bb) **"Imminent Danger"** refers to a situation where there is a high probability of harm occurring immediately or within a very short period. It often implies a threat that is serious, immediate, and unavoidable;
- cc) **"Injury"** refers to severe or light harm or damage sustained by someone through an accident or deliberate attack;
- dd) **"Inter-Government Coordination and Cooperation Committee (IGC3)"** refers to the body established by the DOLE to foster collaboration and cooperation among various government agencies involved in labor and employment matters;
- ee) **"Light Rail"** refers to a type of urban public transit system that uses lighter-weight trains compared to heavy rail or metro systems. It typically operates on tracks that may be at-grade, elevated, or underground and is designed to carry passengers over shorter distances within cities or metropolitan areas;



- ff) **"Line Side"** refers to the area directly adjacent to or near the railway tracks, which includes equipment, signals, cables, and other infrastructure essential for the operation of the trains. The specific measurement from the edge of any rail to the line side can vary, but it is typically defined as a certain distance to ensure a safe working distance from moving trains and live electrical equipment.
- gg) **"Maintenance Zones"** refer to designated areas along the railway tracks where maintenance and repair activities are carried out on trains, infrastructure, or equipment. These zones are typically established to ensure safety and efficiency during maintenance operations.
- hh) **"Medical Treatment Injury"** refers to an injury or illness for which first aid, or medical treatment is provided within the railway system, and that does not result in a disabling condition;
- ii) **"Non-line Side"** refers to areas that are farther away from the tracks, usually not directly involved in the operation of the trains, and might include maintenance zones, offices, or other railway-related infrastructure that do not require proximity to the tracks;
- jj) **"Operations Control Center (OCC)"** refers to the central command center responsible for monitoring and controlling the overall operation of the railway system, playing a crucial role in ensuring the safe and efficient movement of trains, managing incidents, and coordinating emergency response;
- kk) **"Occupational Health Personnel"** refers to individuals responsible for promoting and maintaining the health and well-being of railway workers, including the prevention of occupational diseases and injuries related to railway operations;
- ll) **"Occupational Safety and Health (OSH)"** deals with the prevention of work-related injuries and diseases as well as the protection and promotion of the health of workers, aiming at improving the working conditions and environment;
- mm) **"Occupational Safety and Health Standards (OSHS)"** refers to the DOLE's set of rules and regulations designed to protect workers from hazards in the workplace, thus, mandating the adoption and use of appropriate practices, methods, operations, or processes, and working conditions necessary to ensure safe and healthful employment;
- nn) **"Permanent Total Disability"** refers to any injury or resulting sickness other than death, which permanently and totally incapacitates railway personnel from engaging in any gainful occupation;

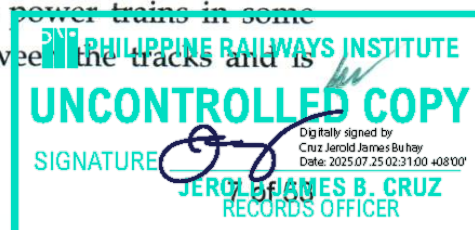




- oo) **"Personal Protective Equipment (PPE)"** refers to any equipment worn or used to minimize exposure to hazards that can cause serious workplace injuries or illnesses, and serves as a last line of defense when engineering and administrative controls are insufficient to eliminate or reduce risks;
- pp) **"Philippine Railway Safety Guidelines (PRSG)"** refers to the comprehensive set of rules and regulations aimed at preventing accidents and injuries among railway workers, thereby ensuring a safe and healthy working environment in the railway industry;
- qq) **"Railway Operators (ROs)"** refers to existing and future private and government railway organizations in the Philippines responsible for the operations and maintenance of railway lines;
- rr) **"Railway Personnel"** refers to any person employed, engaged, or working in any capacity on a railway system;
- ss) **"Railway Vehicle"** refers to a broader term that includes any vehicle designed to run on railway. It encompasses train cars, maintenance vehicles, and other specialized rail equipment;
- tt) **"Railway Safety"** refers to the systems, technologies, procedures, and regulations designed to ensure the safety of passengers, workers, and the public in and around railway networks;
- uu) **"Railway Safety Officer"** refers to railway personnel with safety-critical roles as designated by the RO and possesses relevant qualifications, skills, and training to effectively implement the railway system's safety and policies and programs in their workplace;
- vv) **"Railway System"** refers to an interdependent system that involves infrastructure, rolling stock, electrification, signaling and telecommunications, operations, and maintenance;
- ww) **"Respiratory Protective Equipment (RPE)"** refers to any device designed to protect the wearer's respiratory system from exposure to hazardous substances in the air;
- xx) **"Safety-critical Activities"** refer to activities that directly impact the railway system's operation or infrastructure, which may lead to a serious accident or incident;
- yy) **"Safety-critical Components"** refers to the components or systems that are essential for the safe operations of the railway line and its infrastructure, the failure of which could directly lead to a serious accident or incident.



- zz) **"Safety-critical roles"** refers to tasks that directly impact the operation or infrastructure of the railway (See Annex A), and often refer to positions where an individual's actions or inactions can directly affect the safety of the railway system or its users. Such roles may involve the operation of critical equipment, decision-making in high-risk situations on site, or oversight of safety-related processes;
- aaa) **"Safety Officer"** refers to any employee or officer of the company trained by the DOLE or DOLE-Accredited Safety Training Organization (STO), tasked to implement railway safety program and ensure that it is in accordance with the PRS standards;
- bbb) **"Safety Management System" (SMS)** refers to a structured approach or framework to managing safety risks within an organization, which outlines policies, procedures, and practices designed to identify, assess, and control potential hazards, thus, ensuring a safe and healthy work environment;
- ccc) **"Safety representative"**, whose primary role is to promote a safe and healthy working environment for all employees, refers to a designated individual within a railway organization who acts as a liaison between railway personnel and management on matters related to railway safety;
- ddd) **"Subway railway system"** refers to a type of underground or elevated railway system that operates in urban areas. It consists of a network of tracks, stations, and trains that provide a rapid and efficient mode of transportation;
- eee) **"Safety Training Organization (STO)"** refers to an organization or institution that provides structured programs on workplace accident prevention, health standards, and regulatory compliance, promoting safer work environments through specialized safety practices and emergency response training.
- fff) **"Train Car"** refers to an individual unit of a train;
- ggg) **"Train Driver"** also known as train operator, is the individual responsible for operating and controlling a train;
- hhh) **"Training Needs Assessment (TNA)"** refers to a systematic process of identifying and prioritizing the railway personnel's training requirements to ensure that training efforts are aligned with the specific needs of the railway operations, regulatory requirements, and the organization's railway safety objectives;
- iii) **"Third-party Service Provider (TPSP)"** refers to any independent individual or enterprise that renders services to the ROs;
- jjj) **"Third Rail"** refers to the electrified rail that is used to power trains in some subway and railway systems. It is typically located between the tracks and is





energized with direct current (DC) or alternating current (AC) electricity;

- kkk) **"Threshold limit value"** refers to the airborne concentration of substances that represents conditions under which nearly all railway personnel may be repeatedly exposed to daily without adverse effects;
- lll) **"Underground service tunnels"** refer to passageways constructed beneath the tracks or stations to accommodate various utility lines and infrastructure. These tunnels serve as a centralized hub for essential services, allowing for efficient maintenance, repair, and expansion of the railway system;
- mmm) **"Work environment"** refers to the physical and social setting in which an individual performs his/her job. It encompasses the conditions, atmosphere, and culture that influence an employee's overall experience and productivity;
- nnn) **"WHO"** refers to the World Health Organization; and
- ooo) **"Workplace violence"** refers to any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site.

#### Section 4. Duties of The Railway Operator

The ROs, along with their TPSPs, have a duty to implement this DO to ensure the safety and well-being of all personnel, facilities, and passengers within their area of operation. This obligation includes, but is not limited to, complying with PRS standards, providing appropriate safety equipment, disseminating job safety instructions, and adhering to DOTr-PRI's training and competence management requirements. Additionally, ROs must actively reduce risks, prepare for emergencies, and cultivate a safe and compliant work environment. Each RO, including its TPSPs, shall:

- a) Provide all personnel, workplaces, and passengers with tools, equipment, and/or facilities designed to protect them from hazardous environments and workplaces that may cause temporary or permanent injury, illness, physical harm, or death.
- b) Provide comprehensive job safety instructions and proper orientation to all existing and newly hired personnel, including, but not limited to, instructions related to familiarization with their work environment.
- c) Ensure that O&M personnel undergo the relevant DOTr-PRI's safety-related training courses, which include mandatory attendance and the attainment of certificates of competency.
- d) Ensure that all train drivers possess train drivers' IDs issued by the DOTr-PRI, as mandated in the DOTr DO 2020-005 Article IV Section 18, along with any other





relevant compliance documents.

- e) Ensure that individuals in safety-critical roles possess the necessary certifications, qualifications, and training to effectively perform their duties. This includes verifying that they possess the requisite skills and knowledge to minimize the risk of errors and prevent incidents.
- f) Ensure that all psychological and physical hazards within the employer's control are mitigated to the lowest practicable level. This encompasses the provision of stress debriefing and psychological counseling for O&M personnel following critical incidents.
- g) Ensure that O&M activities comply with the minimum requirements on correct and approved RO systems, devices, tools, and equipment.
- h) Ensure strict adherence to PRS standards throughout the training, operations, and maintenance. This shall include the provision of comprehensive training on health and safety promotion, identification and mitigation of potential hazards, implementation of preventive measures to minimize risks, establishment of emergency procedures, and availability of necessary PPE and machine guards. Additionally, regular medical surveillance shall be conducted to monitor employees' health and well-being, thereby fostering a safe and healthy work environment that promotes compliance with railway safety regulations.
- i) Ensure that the personnel or their representatives are afforded the time and resources necessary to actively participate in the processes of organizing, planning, implementing, monitoring, evaluating, and improving the OSH management system.
- j) Provide measures, as deemed necessary, to identify training courses and address hazards, including drills and simulations, evacuation plans, and other pertinent actions to manage O&M emergencies, including first aid protocols.
- k) Submit data and reports as required by the DOTr and other relevant government agencies, in compliance with applicable laws, rules, and regulations.
- l) Ensure that contracts with the TPSPs explicitly delineate the responsibilities of the contracting parties concerning compliance with relevant DOs, laws, rules and regulations, including internal regulations regarding regular monitoring and reporting, accountabilities for breaches of contract, and submission to alternative dispute resolution, if applicable.
- m) Periodic refresher courses, as determined by the RO and its TPSP every two years as mandatory or earlier if there are extraordinary changes in procedures, identification of competency gaps, technological advancements, system upgrades, or modifications to job roles. *W*



## Section 5. Duties of The Railway Personnel

This section delineates the specific duties of railway personnel at various levels within the organization with regard to the implementation of PRSG. Its purpose is to ensure that all employees, including the top management, are aware of their responsibilities in maintaining a safe and healthy working environment.

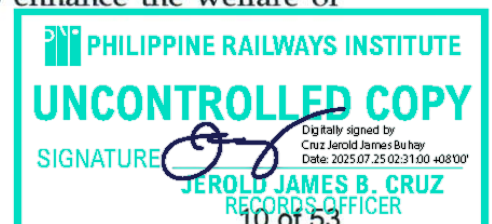
By explicitly defining the employee's duties, the guidelines foster a culture of safety and accountability. This, in turn, enhances the overall well-being of the railway personnel and aids in the prevention of accidents and injuries. Accordingly, all railway personnel shall:

- a) Adhere to and implement the PRS guidelines and practices established by the RO, ensuring full compliance with these guidelines.
- b) Implement the minimum railway safety programs for prevention of accident or illness for personnel such as, but not limited to the following:
  - i) Occupational Accident and Illness Prevention Program;
  - ii) Medical Services Assistance and Rehabilitation Program;
  - iii) Occupational Accident and Illness Surveillance Program, and
  - iv) Information and Education Campaign Program
- c) Report any identified hazards or unsafe practices to the immediate supervisor, the Safety Officer, or the Health and Safety Committee. Where feasible, mitigate the hazard safely and inform the supervisor of any action/s taken.
- d) Remain informed and updated regarding the action/s taken in response to safety reports to prevent recurrence and enhance safety awareness.
- e) Follow the established process for reporting unsafe conditions as part of a positive safety culture and respect the personnel's right to refuse the commencement of work if there are health and safety concerns.
- f) Attend mandatory OSH training provided by the Occupational Safety and Health Center (OSHC) every two (2) years, including training from its accredited STO, as well as Railway Safety (RS) training by the DOTr-PRI, to remain updated on OSH practices and regulations.

Personnel who fail to comply with RS standards or report unsafe conditions may be subject to disciplinary action in accordance with company policies and applicable laws. Individuals who report unsafe conditions in good faith shall be protected by the RO from retaliation or discrimination.

## Section 6. Railway Safety Policy and Program

The RO shall adopt, implement, and promote railway safety policies and programs that are consistent with these guidelines and its amendment/s, if any. These policies and programs shall be tailored to the RO's operational context to enhance the welfare of railway personnel. *W*





## 6.1 Occupational Safety

Railway transportation is classified as a high-risk workplace due to its potential for harm, accident, disability, illness, or even death, thereby rendering passenger safety of paramount importance. To ensure the railway system's safety, the ROs and railway personnel must effectively manage and mitigate hazards within the workplace by implementing effective occupational safety practices.

### 6.1.1 Confined Space

In railway operations, a confined space is defined as a space that possesses the following characteristics:

- a) **Enclosed:** The space has limited or restricted means of entry or exit, exemplified by structures such as tunnels, maintenance pits, or compartments within rolling stock.
- b) **Restricted:** The space's configuration renders it challenging for the personnel to maneuver or for emergency responders to access it effectively.
- c) **Potentially Hazardous:** Space may harbor hazardous atmospheres, which include oxygen-deficient environments, toxic (poisonous) gases, or explosive atmospheres. Additionally, it may present physical hazards, including unguarded machinery and electrical risks, which may lead to entrapment.
- d) **Non-Occupancy:** The space includes areas that are not intended for continuous human occupancy, such as signal control rooms, equipment vaults, or tunnels. It often lacks adequate ventilation or lighting systems necessary for prolonged human presence.

The ROs are responsible for ensuring the safety of the Railway Personnel as mandated in the provisions of Rule 1120 of the OSHS on Hazardous Work Processes. Additionally, for railway system the following shall be considered:

- a) implement a medical surveillance program for personnel who regularly work in confined spaces, including periodic medical examinations and health assessments.
- b) ensure monitoring equipment is regularly maintained and calibrated for accurate results.
- c) develop and implement emergency response procedures for confined space activities, including rescue plans and the availability of rescue equipment.
- d) provide appropriate Respiratory Protective Equipment (RPE), including Self-Contained Breathing Apparatus (SCBA), for personnel involved in confined space emergencies.
- e) clearly delineate the minimum qualifications required for rescuers, including certification in basic first aid and specialized training in confined space rescue techniques.

On the other hand, the railway personnel are expected to:

- a) undergo training on confined space entry procedures before entering





- such spaces.
- b) obtain a work permit prior to entry into confined spaces.
  - c) ensure adequate ventilation is provided when working in confined spaces where hazardous chemicals may be present.
  - d) wear approved RPE or breathing apparatus when entering confined spaces.
  - e) adhere to the RO's prescribed safe working procedures.
  - f) monitor the atmosphere for hazardous gases and oxygen levels before and during work in confined spaces.
  - g) receive specialized training on hazard identification and emergency response related to confined spaces.

### 6.1.2 Ventilation

In accordance with Rule 1076 of the OSHS on General Ventilation and relevant legislation, including the National Building Code, the Philippine Mechanical Engineering Code, and DOLE Department Order 224-21 (Guidelines on Ventilation for Workplaces and Public Transport to Prevent and Control the Spread of COVID-19), ROs are mandated to ensure suitable atmospheric conditions in railway areas including the following, but not limited to:

- a) train cars
- b) train loading and unloading area
- c) underground service tunnels
- d) depots and workshops
- e) accommodation rooms
- f) subway

To prevent insufficient air supply and the accumulation of contaminated air, appropriate ventilation systems must be implemented. These systems, whether natural or artificial, should be in accordance with the specific requirements of each facility and the nature of the work being performed.

In areas not directly involved with industrial processes, such as offices, stations, and trains, adherence to other international standards or references for Indoor Air Quality (IAQ) shall be required.

Regular inspections and maintenance of ventilation systems are essential to guarantee their continued effectiveness. Furthermore, the RO shall consider the implementation of air quality monitoring programs to assess indoor air quality levels and identify any potential issues.

To safeguard railway personnel from the adverse effects of extreme temperatures, sudden temperature changes, excessive humidity or dryness, and unpleasant odors, appropriate environmental and administrative controls must be enforced. Temperature and humidity levels must be monitored during operations.<sup>1</sup>

<sup>1</sup> OSH Standards Rule 1076.01 Atmospheric Conditions





### 6.1.3 Lighting

ROs shall ensure that all areas where railway personnel work, pass through, or may need to access in emergencies are provided with adequate natural or artificial illumination, as mandated by Rule 1075 of the OSHS on Illumination. Additionally, ROs shall comply with minimum light intensity standards to maintain an optimal working environment and shall provide an emergency lighting system in the event of power failure or interruption.

When planning lighting installations, the following areas should be considered, but not limited to:

- a) passenger platforms
- b) waiting areas
- c) trackside maintenance zones
- d) train stations and terminals
- e) underground service tunnels
- f) maintenance depots
- g) service tunnel
- h) parking lots and drop-off zones
- i) signal and control rooms
- i) emergency exits and stairways
- j) escalators and elevators
- k) first aid and rescue stations

### 6.1.4 Noise

The RO shall ensure that workplace noise levels stay within the Permissible Noise Exposure Limits (PNEL) specified in Rule 1074 of the OSHS on Physical Agents, especially in areas involving industrial processes. Regular monitoring of noise levels, including external sources, shall be conducted.

The RO must implement noise control measures, such as engineering and administrative controls, and provide hearing protection when necessary. If noise cannot be reduced below 85 decibels, hearing protection devices shall be provided to meet PNEL standards for railway personnel.<sup>2</sup>

Some railway works where noise should be controlled within PNEL include, but not limited to:

- a) track maintenance and repair (rail grinding, ballast tamping etc.)
- b) train operations and services (train engine startup and idling etc.)
- c) upgrading works
- d) maintenance depot activities (machinery and equipment operations, ventilation system maintenance etc.)
- e) electrical signal works
- f) rail welding and cutting operations
- g) rail ballast tamping works
- h) emergency and repair work

During maintenance activities particularly within proximity to residential areas, the RO shall consider installing noise barriers as a preventive measure. These

<sup>2</sup> OSH Standards Rule 1074.01 Threshold Limit Values for Noise





barriers mitigate the impact of maintenance noise on nearby communities in accordance with [RA 8749](#) (An act providing for a comprehensive air pollution control policy and for other purposes). When selecting and installing noise barriers, factors such as the type of noise source, distance between the source and the barrier, as well as the barrier's height and length shall be evaluated.

#### 6.1.5 Vibration

The RO shall ensure that workplace vibration levels remain within the permissible exposure limits. Regular monitoring and measurement of vibration levels shall be carried out in work areas and on trains, taking into account factors such as machinery, equipment, and track conditions.

Some activities where vibration should be controlled within permissible exposure limits includes the following, but not limited to:

- a) tamping, grinding, and welding
- b) tunnel boring and excavation
- c) ballast replacement and compaction
- d) rail grinding and polishing
- e) piling and foundation work
- f) heavy equipment operation (excavators, bulldozers etc.)
- g) bridge and structure demolition
- h) welding and cutting operations
- i) track and vehicle testing
- j) rail ballast tamping works
- k) inspection and testing of mechanical equipment

The RO shall implement appropriate vibration control measures, including, but not limited to, the use of anti-vibration mounts, provision of vibration-dampening tools, and implementation of work rotation schedules.

#### 6.1.6 Dust

The RO shall ensure that dust levels generated from various sources including, but not limited to raw materials, machinery operations, and processes within the workplace do not exceed the Threshold Limit Values (TLVs) established in the OSHS.

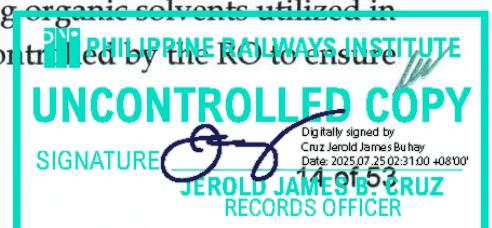
In indoor workplaces that lack industrial processes or operations, such as offices, stations, and trains, established standards or references for IAQ shall be applied

Regular monitoring and measurement of dust levels shall be conducted in work areas where hazardous processes or operations are performed, including trains and stations.

The RO shall implement appropriate dust control measures, which may include, but are not limited to, regular cleaning and housekeeping practices, the use of air filters and the provision of appropriate PPE, such as dust masks, as deemed necessary.

#### 6.1.7 Organic Solvents

Containment areas for hazardous materials, including organic solvents utilized in cleaning and maintenance, shall be monitored and controlled by the RO to ensure





compliance with established exposure limits. These limits must adhere to the TLVs specified in Table 8 of the OSHS for airborne contaminants.

For substances not enumerated in the OSHS, the guidelines provided by the [American Conference of Governmental Industrial Hygienists \(ACGIH\)](#) or other relevant occupational exposure limits shall be employed.

In instances where the use of organic solvents is unavoidable, the RO must ensure the provision of adequate ventilation, PPE, and comprehensive training for personnel on the safe handling and disposal of these substances.

Furthermore, the RO shall develop and implement a Chemical Safety Program in accordance with DOLE DO No. 136-14, which outlines the Guidelines for the Implementation of the Globally Harmonized System (GHS) in Chemical Safety Programs within the Workplace.

#### 6.1.8 Fall Prevention and Protection System

In accordance with DOLE DO No. 128-13, which amends Rule 1414 on Scaffolding of the OSHS, ROs are required to provide fall prevention or protection systems to all personnel working in unguarded areas where there exists a potential fall hazard.

These areas include, but are not limited to, the following:

- a) **Areas exceeding two (2) meters above the nearest permanent safe level:** This category encompasses elevated rail, elevated platforms, catwalks, inspection of bridges viaducts, catenary, and other elevated workspaces.
- b) **Areas situated above moving parts of machinery or other surfaces that may cause injury:** This includes zones adjacent to rotating machinery, conveyor belts, or other dynamic components.
- c) **Areas located above open holes:** This encompasses open pits, trenches, or other openings that present a fall hazard.

#### 6.1.9 Hot Work Operations

Hot work shall be conducted in an environment free from combustible materials, including, but not limited to, flammable gases, vapors, and dust. Only personnel who are trained and deemed competent shall be authorized to perform hot work activities.

Adequate and appropriate fire prevention, protection, and suppression measures must be implemented in both the working and adjoining areas. Such measures may include, but are not limited to, the use of fire extinguishers, fire alarms, sprinkler systems, or other fire protection equipment, depending on the specific circumstances and the nature of the hot work being performed. Gas cylinders must also be properly positioned and securely stored in an upright manner.<sup>3</sup>

<sup>3</sup> MOSH Standards Rule II Section 2 Hot Work



### 6.1.10 Use of Mechanical Equipment

Personnel engaged in the operation of mechanical equipment must possess the requisite qualifications, certifications, and training to ensure both safe and efficient operation. When mechanical handling equipment is utilized, sufficient safe clearance shall be maintained in aisles, at loading docks, through doorways, and in areas requiring turns or passage. Aisles and passageways shall remain unobstructed, ensuring that no impediments are present that could create a hazard. Permanent aisles and passageways shall be clearly and appropriately marked.<sup>4</sup>

Mechanical equipment in the railway system includes, but is not limited to, the following:

- a) **Cranes:** Utilized for lifting and positioning railway tracks and other infrastructure.
- b) **Forklifts:** Employed for the movement of materials, parts, and freight at stations and depots.
- c) **Conveyors:** Designed for the transport of materials within maintenance and assembly areas.
- d) **Railway Track Maintenance Machines and Vehicles:** Comprising tamping machines, rail grinders, and track inspection vehicles used in maintenance.
- e) **Hydraulic Jacks:** Utilized for lifting train cars or sections of track during maintenance and repair activities.
- f) **Work Trains:** Specialized railway vehicles employed for the transportation of materials and personnel along railway lines.
- g) **Loading/Unloading Equipment:** Used for the efficient handling of cargo at loading and unloading points.

### 6.1.11 Housekeeping

Proper storage of materials shall be strictly observed. Controls for perishable items must be implemented in accordance with existing regulations. To the extent practicable, working surfaces utilized by railway personnel shall be maintained free of grease, oil, or any other oily substances causing slippery flooring, as well as any materials or objects that may pose a hazard or cause accident to railway personnel.

Additionally, 5S standards (sort, set in order, shine, standardize, sustain) or any related standards must be practiced to maintain a safe and healthy work environment.

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<sup>4</sup> MOSH Standards Rule 2.5 Materials Handling and Storage





### 6.1.12 Manual Handling

All railway personnel required to manually handle loads shall receive proper training in safe lifting techniques, which shall include instruction on appropriate posture, body mechanics, and the identification and avoidance of lifting hazards. Prior to lifting and carrying any weights, the railway personnel concerned shall inspect the load's weight, size, and shape.

The use of lifting aids, such as trolleys, dollies, hoists, slings, chain blocks, and similar equipment, shall be prioritized whenever feasible to mitigate physical strain on the railway personnel and minimize the risk of injuries. When employing such lifting aids, railway personnel must verify the Safe Working Load (SWL) of the equipment to ensure it is capable of accommodating the intended load. Additionally, aisles and passageways shall be kept clear and in good repair, with no obstruction across or in aisles that could create a hazard. Permanent aisles and passageways shall be appropriately marked as stated in Rule 1150 item a (Use of Mechanical Equipment) of the OSHS.

### 6.1.13 Secured Storage

It is a proper management and safe storage of materials, particularly hazardous substances, to prevent accidents, exposure, and environmental harm, as mandated under Rule 1150.01 item b (Secured Storage) of the OSHS. Thus, bagged containers, bundles, and similar items stored in tiers shall be stacked, blocked, interlocked, and limited in height to ensure stability and prevent sliding or collapse. Additionally, stored materials must remain within the safe lifting capacity of the storage containers.

For materials classified as hazardous<sup>7</sup>, including<sup>4</sup>, but not limited to<sup>4</sup>, chemicals or flammable substances, appropriate segregation, labeling, and ventilation shall be implemented to prevent accidents. All stored items must be clearly labeled to inform personnel of any potential hazards. Furthermore, storage areas shall be evaluated for environmental conditions, such as temperature and humidity, to ensure that sensitive materials are protected from degradation, rust, or other damage resulting from improper storage conditions.

### 6.1.14 Other Hazards

The ROs shall assess and manage additional work environment parameters that may pose risks to the railway personnel's health and safety. These parameters may include, but are not limited to, electrical & mechanical hazards, ergonomic considerations, radiation exposure, thermal stress, and biological hazards

The ROs shall also establish appropriate exposure limits and implement control measures to ensure that these parameters are maintained within safe and acceptable levels, referencing applicable international or national standards as necessary.

## 6.2 Occupational Health

Each RO shall establish its own health policy, duly signed and endorsed by its management, which shall be regularly reviewed and updated in accordance with the Management's prerogative but not more than two (2) years from the last policy revision,





to reflect changes in operations, technology, and regulatory requirements, ensuring its continued relevance and effectiveness. The said policy shall be prominently, strategically and openly displayed for easy viewing and access of the personnel within the workplace. Moreover, the policy statement shall explicitly articulate the RO's commitment to achieving safety and shall include the following provisions:

- a) Confirmation that the RO's primary objective is to prioritize the safety of its personnel and passengers as its commitment to safety is paramount within the railway transportation industry. Adherence to established rules and regulations is fundamental to maintaining a safe and healthy environment. The meticulous performance of duties by all staff is a key requirement for ensuring the highest safety standards.
- b) An open acknowledgment of the management's responsibility and accountability for ensuring safety.
- c) A commitment to the continuous improvement of the RO's safety culture.
- d) Recognition that ensuring safety is a collective responsibility shared by all personnel.

#### 6.2.1 Medical Fitness Standard

All railway personnel engaged in safety-critical tasks shall comply with the medical fitness criteria established by the ROs.

- a) **Vision Requirements:** This may include distance, near, and intermediate visual clarity, well as color vision, depending on the specific job requirements.
- b) **Hearing Requirements:** Pre-determined standards shall be established to assess an individual's hearing capabilities.
- c) **General Health Requirements:** This may encompass the detection of conditions that could impair essential functions necessary for the safe performance of duties, including, but not limited to, sight, hearing, awareness, mobility, balance and coordination, as well as neurological and psychological functions.

#### 6.2.2 Annual Physical Examination

All railway personnel shall undergo regular periodic physical and medical examinations, particularly for safety-critical positions, in accordance with the PRS. The RO may also implement random drug testing and breathalyzer tests for personnel occupying safety-critical positions.

Furthermore, the RO may conduct health status inquiries. By integrating these methods, the RO can effectively assess the personnel's health and ensure their





capacity to safely perform their duties.

Surveillance in occupational health shall encompass periodic, systematic, and continuous assessment of health hazards and medical examinations. Accurate and complete medical records for each employee shall be maintained by the Occupational Health (OH) physicians of the RO and the TPSP pursuant to the Data Privacy Act of 2012.

Furthermore, in the event of any temporary or ongoing health condition, or any change in health status that is likely to affect an employee's ability to perform work safely, the railway personnel shall promptly inform the relevant OH physicians. Additionally, employees are required to provide complete and accurate information regarding their medical history to the OH Physicians and to comply with any health assessment requirements.

All health disclosures shall be treated with strict confidentiality. Where necessary, support mechanisms, such as counseling or alternative work arrangements, shall be made available to personnel who may be affected by health conditions.

### **6.2.3 First Aid Kit and Medical Equipment**

The RO shall ensure that all trains, stations, depots, and work offices are equipped with a well-stocked first aid kit and necessary medical equipment. These items shall be properly maintained and inspected at regular intervals by the OH Personnel and the Safety Officer.

The first aid kit shall be readily accessible to railway personnel onboard trains, at stations, and in depots, and shall be clearly identified by a conspicuous sign. The RO shall provide and maintain medicines, medical supplies, and equipment in accordance with the OSHS, or, at a minimum, in quantities sufficient to meet the needs of all railway personnel.

### **6.2.4 Medical Care**

The RO shall ensure the provision of adequate medical services onboard trains, at stations, and within depots or on the main line. Such services shall include, but not be limited to:

- a) personnel trained in first aid procedures;
- b) basic first aid;
- c) out-patient treatment for sickness or injury; and
- d) dental treatment.

The RO shall ensure that effective means of communication for medical advice including, but not limited to, radio or satellite communication are readily available.

The RO shall establish written procedures for the prompt rendering of first aid for any injury, disability, or illness. In turn, the OH Personnel responsible for medical care or first aid shall use these procedures as guides in their medical responses. First aid training shall be obtained from organization recognized or accredited by the DOLE in accordance with [DOLE DO No. 235](#) (Rules on the Certification of First





Aiders and the Accreditation of First Aid Training Providers), series of 2022, and JMC 1 S. 2020 of CSC-DOH-DOLE.

Information regarding the nature of substances, associated risks, required PPE, relevant medical procedures, and specific antidotes shall be made readily available to the railway personnel.

The railway personnel shall immediately report to a certified first aider if they sustain an injury or become aware of any disability or illness. In the absence of a certified first-aider, they shall contact the Safety Officer, other OH Personnel, or the nearest available medical support.

#### 6.2.5 Medical Records

The RO shall keep and maintain records, reports, or other documents in a manner that ensures their readiness for inspection by the Safety Officer, contingent upon the authorization of RO management and in compliance with the Data Privacy Act of 2012.

The railway personnel's medical records are confidential and shall be treated as such by the RO. Only the railway personnel concerned and authorized RO representative/s shall have access to these records. Moreover, the RO may provide a copy of the said records to a third party only upon the railway personnel's written consent.

Medical records may be requested by the train drivers in accordance with the requirements set forth in DOTr DO No. 2020-005 and its amendment/s, if any.

#### 6.2.6 Health and Wellness Program

Each RO shall provide and support health and wellness programs, which shall include, but are not limited to, the following:

- a) **Access to Medical Services:** Provision of medical services, health screenings, and wellness programs designed to monitor and promote the personnel's health.
- b) **Mental Health Support:** Resources and support for addressing mental health issues, facilitating work-life balance, and intervention in cases of post-traumatic stress disorder.
- c) **Drug-Free and Alcohol-Free Workplace Policy:** The ROs shall establish and enforce a Drug-Free and Alcohol-Free Workplace Policy with zero-tolerance approach toward the use of alcohol and drugs, in accordance with [RA 9165](#) (Comprehensive Dangerous Drugs Act of 2002), and [DOLE DO No. 53, Series of 2003](#), and Civil Service Commission (CSC) Memorandum Circulars No. 04, Series of 2011, and No. 13, Series of 2017.





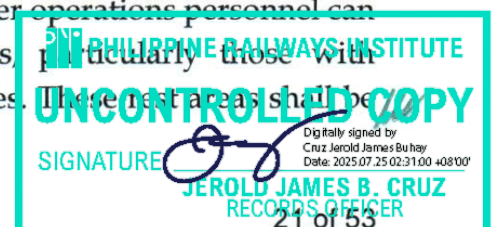
- d) **Fatigue Management System:** The RO shall implement a fatigue management system to mitigate the risks, accidents, and injury associated with fatigue among railway personnel. This system shall encompass the following considerations:
- i) The design of work schedules that minimize the risk of fatigue, including the provision of adequate rest and the establishment of limits on consecutive working hours.
  - ii) Training of staff on signs and symptoms of fatigue, its impact on performance, and the strategies for effectively managing fatigue.
  - iii) A comprehensive monitoring by the immediate supervisors to ensure that the personnel are deemed "fit for duty" and are free from the influence of drugs and/or alcohol.
- e) The RO shall establish ergonomics programs to design and adapt work environments and tasks to minimize the risk of musculoskeletal injuries, including advanced ergonomic risk management in accordance with Rules 1961.01.3 item e (Occupational Health Services) and 1966.01 under Occupational Health Program of the OSHS. Additionally, the RO shall take into consideration the nature of the worker's duties and comply with the provisions of [DOLE DO No. 184-17](#) (Safety and Health Measures for Workers Who, By the Nature of Their Work, Are Required to Spend Extended Periods Sitting). These programs shall include:
- i) Regular assessments of workstations and tasks to identify potential ergonomic hazards and implement corrective measures.<sup>1</sup>
  - ii) Educating employees on proper posture, lifting techniques, and other ergonomic principles.<sup>2</sup>
  - iii) Providing ergonomically designed equipment and workstations that support safe and comfortable working postures.<sup>3</sup>

#### 6.2.7 Accommodation

The RO shall ensure that all accommodation areas provide sufficient headroom, ventilation, lighting, free from noise and vibration, and particulates with a minimum vertical clearance that allows full and unrestricted movement.

##### 6.2.7.1 Resting Quarters

The RO shall establish designated rest areas equipped with comfortable seating or recliners where train drivers and other operations personnel can take short breaks or rest during their shifts, particularly those with extended duty hours or traveling long distances. These rest areas shall be





strategically located within the RO premises to ensure easy access and to promote effective fatigue management among railway personnel.

The resting quarters shall be designed to facilitate rest and relaxation and must be vacated at the conclusion prior to the start of each work shift. The following provisions shall apply:

- a) Sleeping quarters must not open directly into areas designated for machinery, maintenance, storage, or other activities that may generate noise, fumes, or odors, including but not limited to storerooms, drying rooms, or communal sanitary areas.
- b) For each occupant, the furniture shall include a sufficiently sized clothes locker and a drawer that can be locked to ensure privacy.
- c) Each accommodation room must be adequately ventilated to provide sufficient air supply for railway personnel who may utilize the room concurrently.
- d) Separate sleeping rooms shall be provided for male and female occupant.

#### 6.2.8 Sanitation

ROs are responsible for ensuring a safe and sanitary environment by implementing daily cleaning protocols for accommodation rooms and pantries, utilizing covered and easily cleanable waste containers, and restricting equipment storage to designated closets to maintain organization.


##### 6.2.8.1 Cleanliness and Sanitations

Every RO shall ensure that accommodation rooms and pantries used by railway personnel are maintained in a clean and sanitary condition. These areas must be cleaned at least once a day after each use.

##### 6.2.8.2 Waste Containers

Containers utilized for the disposal of solid or liquid waste within the workplace shall be equipped with tight-fitting covers. Furthermore, these containers must be designed to facilitate easy cleaning and maintenance to ensure sanitary conditions.

##### 6.2.8.3 Equipment Storage

The railway personnel concerned shall not store equipment or supplies in accommodation rooms unless a designated closet has been provided for this purpose. 



### 6.3 Health and Safety Organization

Each RO is required to establish a Health & Safety Organization to ensure comprehensive safety management across their operations. This organization must comprise an HS Committee, Safety Officer, Railway Safety Officer, and Occupational Health (OH) personnel, each designated to fulfill critical functions in promoting a safe, compliant, and risk-free environment.

#### 6.3.1 Health and Safety Committee

Each RO shall establish a Health and Safety Committee that includes representatives from every department, as well as from contractors and subcontractors. This Committee shall serve as the planning and policymaking body for all health and safety matters. It will coordinate with other safety-related entities and departments within the RO to ensure comprehensive and cohesive governance of safety and health issues.

Clear lines of communication and responsibility shall be established to prevent overlaps and gaps in safety and health management. When creating this Committee, the following elements must be specified, among others: purpose, powers and functions, membership, meeting protocols, approval systems, authorization procedures, and records management.

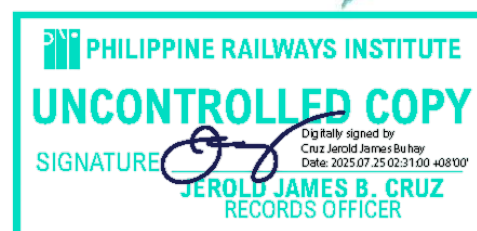
The Committee shall adhere to these guidelines and the PRS Standards. In implementing these guidelines, safety officers shall be employed or designated by the RO, in compliance with Section 14 of the [DOLE DO No. 198-18](#), and Guidelines VII-I of [CSC-DOH-DOLE JMC No. 1, series of 2020](#). These safety officers must possess the requisite training and experience commensurate with the classification of the railway industry as a high-risk establishment, and their numbers shall be proportionate to the associated high-risk level.

#### 6.3.2 Safety Officer

The RO's safety officer/s shall adhere to the duties and responsibilities outlined in Chapter III, Section 14 of DO No. 198-18. The said safety officer/representative shall also serve as the secretariat of the Health and Safety Committee, as designated by the ROs, and shall be responsible for implementing and ensuring compliance with the railway safety policies and programs of the railway system.

The safety officer/representative must possess the following certifications:

- a) Completion of the mandatory Basic Occupational Safety and Health (BOSH) training course;
- b) Approved training in first aid as required by [DOLE DO No. 235](#), series of 2022, and Guideline for Provision for Reasonable Working Conditions V-2-d of [CSC-DOH-DOLE JMC No. 1, series of 2020](#).





### 6.3.3 Railway Safety Officer

The Railway Safety Officer (RSO) that works under safety-critical role in the O&M of the railway systems must obtain:

- a) BOSH Certification
- b) The DOTr-PRI RS Training Certificate of Completion.

### 6.3.4 Occupational Health Personnel

The Occupational Health personnel must possess the necessary certifications required for employment within a railway setting. These certifications include:

- a) Completion of the mandatory training course as stated in Rule 1964 of OSHS (Training and Qualifications of OH Personnel).
- b) PRI RS Training that is specifically designed for individuals performing safety-critical roles within the railway system.

On the other hand, non-safety officers that works under safety-critical role must also obtain either a BOSH certification or a MESH certification<sup>7</sup> or a HSO certification with minimum of eight (8) training hours.

## Section 7. Safety and Health Promotion, Training, and Competence Management

The RO shall provide comprehensive information regarding safety and health hazards to its personnel, including appropriate measures, controls, and protections against such hazards. Additionally, the RO shall foster a robust safety culture within the organization through initiatives that reinforce the importance of compliance with railway safety and health standards.

Continuous Safety and Health Promotion, Training, and Education (CSHPTE) is essential for ensuring that personnel are equipped with the requisite knowledge and skills to maintain a safe working environment. Unlike traditional training programs, CSHPTE is an ongoing process that encompasses a variety of activities designed to enhance safety awareness and employee capabilities. The training types included in CSHPTE are diverse, addressing both technical and non-technical aspects of railway safety.

The technical training shall encompass hazard identification, risk assessment, emergency response procedures, and the safety and maintenance of railway equipment. Industry-specific training may focus on regulations, best practices, and safety standards. Advanced or specialized training, such as that pertaining to occupational health or safety management systems, shall be conducted regularly, at a minimum of every three (3) years, or more frequently when significant changes occur in workplace procedures or equipment.

To support these initiatives, the RO shall ensure that all personnel engaged in railway O&M activities possess the requisite knowledge and skills.

By implementing a CSHPTE program, the RO can cultivate a culture of safety.





accidents, and safeguard the well-being of employees, thereby ensuring long-term compliance with safety standards and operational efficiency.

### **7.1 Competency Management System for Railway Operations and Maintenance Personnel**

The Competence Management System (CMS) shall apply to all O&M personnel with safety-critical roles and whose work activities may impact health and safety. This includes individuals or teams embarking on new tasks (e.g., new employees) and those performing O&M activities at a foundational level that require supervision until they can perform to an acceptable level of competence with less direct oversight.

The RO shall implement an established process for the CMS, which shall outline the following minimum requirements:

- a) assessment plan;
- b) assessment criteria;
- c) assessment tool;
- d) feedback;
- e) monitoring and review; and
- f) action plan.

The approach to ensuring effective and consistent competence management shall be applied as a continuous process for railway O&M personnel across various stages, ranging from novice to expert and proficient levels. Personnel competence must be systematically managed, as performance levels of competence directly impact the safety of both the workforce and the public.

### **7.2 Railway Safety Training**

Railway workers, particularly those engaged in O&M, operate in high-risk environments. These conditions present a significant probability of incident occurrence that could result in fatalities and adversely affect the industry. As such, there is a need to address these risks and implement effective safety guidelines to ensure a safe working environment. One of the initiatives is the RS training, which encompasses regulations and practices designed to protect the railway personnel's health and safety within the railway network.

To facilitate the training of railway personnel, the ROs shall identify and nominate their respective personnel based on their responsibilities, qualifications, and certifications. Upon successful completion of the training, each trainee will be awarded a certificate of completion by the DOTr-PRI.

### **7.3 Training Needs Assessment**

A Training Needs Assessment (TNA) shall be conducted by the ROs to identify specific training needs and the appropriate training courses to be provided for its railway personnel.



**Section 8. Hazard Identification, Risk Assessment, and Control**

Each RO, through its Health and Safety Committee, shall establish a Hazard Identification, Risk Assessment, and Control (HIRAC) process to identify safety and health hazards within the railway system, including civil structures and tracks, rolling stock, signaling and communication systems, power supply, train operations, and station operations.

The HIRAC process shall serve as the foundation for the RO's railway safety programs. It shall be documented and made available upon request from an authorized individual. Additionally, the HIRAC process shall be reviewed regularly, at least annually, or whenever new activities occur, methods, materials, or equipment are changed, incidents or accidents take place, or when the RO's Health and Safety Committee deems it necessary.

The HIRAC process shall be communicated by the RO through various means, including RS bulletins, RS meetings, e-mail bulletins, briefings, and toolbox meetings.

**8.1 Hazard Identification**

One of the fundamental causes of workplace injuries, illnesses, and incidents is the failure to identify or recognize hazards within the workplace. Thus, it is imperative that ROs acknowledge and evaluate potential sources of harm in the work environment. The ROs shall, therefore, conduct inspections of workplaces and processes with the objective of identifying potential risks to personnel health and safety.

**8.2 Risk Assessment**

Risks associated with the identified hazards shall be assessed and evaluated by the RO's in accordance with their respective risk levels or ratings, which are determined by considering both the likelihood and severity of potential incidents. The assessment procedure shall be based on existing process of RO's and incorporate a comprehensive evaluation of potential injuries, illnesses, and property damage.

**8.3 Risk Control and Measure**

Appropriate control measures shall be implemented to mitigate or, where feasible, prevent the impacts of identified hazards and risks. These measures must directly correspond to the specific risk based on the level or rating determined during the risk assessment. Controls shall be prioritized according to the risks' severity and likelihood, thereby ensuring that the most significant hazards are managed effectively. The following are some of the risk controls and measures:

**8.3.1 Relocate or Isolate**

The optimal control practice to implement is the relocation or isolation of the hazardous object, unsafe practices, or high-risk subject from its original location (e.g., the relocation of power lines away from maintenance areas).





### 8.3.2 Substitute

Replace hazardous materials or processes with safer alternatives. For example, implement automated systems for switching in lieu of manual methods. In this way, the operation will not be affected from the absence of a process, machine, or personnel.

### 8.3.3 Engineering or Administrative Control

The installation of barriers, shields, or safety guards including, but not limited to, platform screen doors, shall be implemented to mitigate the risk of accidents. Furthermore, the development of safety procedures and the training of personnel shall be regarded as integral control measures. Optimal scheduling of preventive maintenance shall also be established to ensure the continued effectiveness of these safety interventions.

### 8.3.4 Personal Protective Equipment

All PPE, which serve as the final line of defense in controlling hazardous or high-risk situations, shall be of an approved design and construction that is appropriate for the specific work task and exposure. The RO shall bear the obligation to ensure the adequacy and proper maintenance of all PPE in the workplace. No individual shall be subjected to or exposed to hazardous environmental conditions without the provision of appropriate protection.

All PPE shall also be of the suitable type, having been tested and approved by the DOLE in accordance with its established standards or other recognized verification methods. The RO shall provide PPE to workers at no cost, in accordance with Sections 8 and 21 of DO No. 198-18.

## 8.4 Safety-Critical Communications

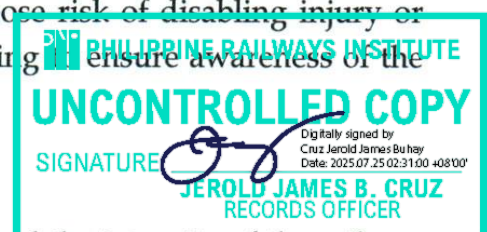
A comprehensive Safety-Critical Communications Protocol must be strictly adhered to by the ROs to map out the procedures for transmitting safety-critical information and the specific protocols to be employed, thereby mitigating risks and preventing miscommunications. Safety-critical communications shall be implemented in normal, degraded, and emergency operational and maintenance situations.

## 8.5 Permit to Work

All personnel accessing railway critical areas shall be subject to the implementation of a comprehensive work permit system by the RO. This system shall encompass provisions for track safety, work permit processes, confined space entry, visitor access, both lineside and non-lineside access, and other activities that may pose risk of disabling injury or fatality. All personnel shall receive orientation and training to ensure awareness of the RO's work permit system.

### 8.5.1 Track Possession

Track possession ensures the safety of personnel and the integrity of the railway infrastructure. Such possessions must be scheduled in advance and necessitate





meticulous planning and coordination to minimize disruptions to train operations while facilitating critical maintenance work. This process mandates the implementation of an approved work permit in advance, except in the case of emergency works.

The RO must establish a Track Possession Procedure designed to prohibit or prevent the entry of any train or railway vehicle into a specified section of the mainline during designated maintenance hours or when the need arises. This procedure shall guarantee the temporary closure or blockage of the relevant track section to enable effective maintenance, repair, or construction activities.

## **RULE II**

### **RAILWAY OPERATIONS SAFETY**

#### **Section 1. Railway Operations**

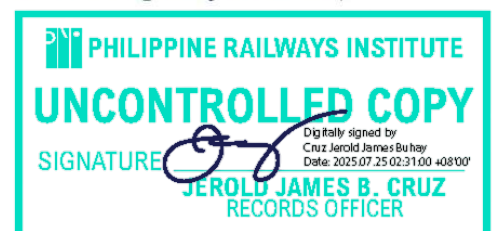
The railway operations plays a critical role in ensuring the safe and efficient delivery of passenger services. Operations personnel are tasked with creating and maintaining a secure environment through activities such as traffic management, train operations and control, and station operations. These activities are conducted across various operating modes, including normal, degraded, and emergency conditions.

The purpose of this Rule is to establish comprehensive operational procedures and safety protocols aimed at preventing incidents and accidents while ensuring safe railway operations in the Philippines. These guidelines encompass both electrified and non-electrified railway systems as well as at-grade, elevated rail, and subway, and are designed to safeguard railway personnel, passengers, and assets by minimizing risks associated with railway operations.

#### **Section 2. Traffic Management**

Establishing effective traffic management is critical in preventing accidents, minimizing risks, and ensuring the seamless movement of trains. As such, the ROs shall implement the established safety standards, protocols, procedures, rules, and regulations on traffic management for normal, degraded, and emergency situations. It shall include real-time monitoring, scheduling, and regulating train movements to balance both passenger and freight services. The components must include standards on the following but not limited to:

- a) Centralized Traffic Control
- b) Automatic Train Control
- c) Accident Prevention (Collision Prevention and Track Occupancy Control)
- d) Dispatching and Scheduling
- e) Radio Communication Systems





## 2.1 Electrical Power Supply System

A safe system process shall be established by the RO for the energizing and de-energizing of traction power within the railway system. Furthermore, there shall be outlined arrangements to be considered for said activities during both normal, degraded and emergency conditions to ensure that adequate procedures are implemented.

No work is permitted on or near any live electrical equipment unless it has been properly de-energized. A work permit must be submitted to the OCC/TCO, and approval must be obtained from the latter.

All electrical equipment should be treated as live at all times until it has been properly de-energized, isolated, locked out, tested with an approved voltage tester, and secured, as necessary, with short circuit devices.

## 2.2 Signaling System

The RO, in addition to maintaining a centralized operation for signaling, shall provide a backup control room or local control panel to ensure the continuity of train traffic command and monitoring along the line. In case of total failure, including local control panels, a procedure (e.g. station to station) to continue or stop the train operations shall apply.

In the event of any of the following situations concerning the signaling system, such situations shall be addressed through a safe system procedure, as necessary.

## 2.3 Safety on the Signal Aspect Display

Railway signaling and control systems are vital for the safe operation of railway traffic as these systems ensure the safe movement of the train. However, the signaling system's complex technical framework cannot be designed to be free of error. Therefore, a risk-oriented approach should be implemented by the RO, and this includes a procedure that clearly defines how the train driver and controller should respond to safety concerns in relation to the following signaling aspects:

- a) Abnormal indication;
- b) Signal at Danger - refers to a signal that is displaying a red aspect, indicating to train operators that they must stop. This signal warns of potential hazards ahead, such as a train on the same track, track work, or other obstructions. Train crews must halt their train at the signal and await further instructions before proceeding. This safety measure is crucial for preventing collisions and ensuring the safe movement of trains on the network.
- c) Signal Conflict;
- d) Different signal indications in the same area; and
- e) Hand signal, audible signal, visual signal.

## 2.4 Mainline Tracks and Guideways

The ROs shall have established procedures for the insertion and removal of trains to or from the mainline. This includes the necessary number of trains according to the





timetable requirements, and minimum operations requirement.

The authority to engage in the mainline operations shall be governed by the Operations Control Center (OCC), having absolute authority and responsibility for movement of all vehicles, train operations, activities on the mainline and remotely controlled or monitored systems within its jurisdiction. Absolute authority and responsibility will not be transferred or relinquished, and is not to be compromised under revenue, maintenance or emergency conditions or situations.

## **2.5 Use of provided walkways**

Personnel shall use established roads, pedestrian crossings, overpasses, underpasses or safety walkways whenever possible. It is strictly prohibited to cross the tracks near switches. Personnel must practice extreme caution when passing between stationary trains. It is strictly prohibited for all personnel or passengers to transfer from one platform to another by crossing the tracks except during emergencies.

## **2.6 Train Insertion and Removal Access Protocol**

The ROs is directed to have necessary procedure regarding train movement activities mentioned below. No trains shall be launched on the mainline without pre-inspection activity prior to its insertion.

- a) train insertion access to the mainline from depot/yard;
- b) train insertion and removal outside the train timetable; and
- c) train removal access to the depot/yard from the mainline.
- d) train insertion outside the revenue service e.g. for maintenance activity

The OCC shall authorize the access of revenue trains or special trains (schooling/ training, test) from the depot to the mainline. These trains must be equipped with a full operational braking system, Automatic Train Protection if applicable and a full operational radio system. When inserted, the train drivers must be informed of the departure times according to the timetable. In case of disruptions, the OCC shall advise the TD of a new departure time.

The OCC shall control the removal of trains from the mainline up to the depot access track. The Maintenance Provider Yardmaster shall control all train movements on non-revenue tracks.

## **2.7 Depot Movement**

Depot movements must ensure a visible orientation of the trains to prevent collision. Speed must be strictly controlled due to concerns for the safety of employees and equipment.

Controlled speed will facilitate appropriate responses to emergencies and mitigate the likelihood of accidents. The ROs shall establish a safety culture within the depots through





the implementation of proper signage and comprehensive staff training on relevant protocols and manuals.

The authority to operate in the Depot area shall be governed by the Maintenance Provider Yardmaster. He shall have absolute authority and responsibility for movement of all vehicles, train operations and activities within the depot limits for non-signaling areas.

## **2.8 Provisional or Partial Service**

If part of the mainline is impassable to revenue trains, the operation of provisional services will allow operating a part or several parts of the line. The OC shall be responsible for the implementation of this service by arranging trains by using crossovers, turn-backs and pocket tracks on the mainline. The OCC shall determine the correct number of trains to remain in revenue service within the operating sections of the mainline. The OCC shall keep the Station Personnel and Train Drivers informed of any traffic disruption. Train Drivers and Station Personnel shall relay accurate information to passengers through the public address system.

## **2.9 Special Movements**

### **2.9.1 Backward Driving**

A train is driven backward when the Train Driver is driving the train in a driving cab other than the leading cab. Driving a train backward without the presence of any Qualified Employee in the leading cab is totally prohibited in every circumstance.

In certain circumstances when it's impossible to drive a train from the leading cab, a train can be operated from the rear driving cab or from another driving cab. This backward movement shall require the Trail Driver to be located in the driving cab to control traction and braking and the Qualified Employee located in the leading cab. The Qualified Employee shall be responsible for the train movement and safety in every circumstance. The Qualified Employee shall monitor the track and the wayside signals and, in case of emergency, shall immediately stop the train. This backward movement is normally prevented by the Automatic Train Protection (ATP) system. The backward movement shall be executed using "At Sight Driving". Both the Train Driver and the Qualified Employee shall be in constant communication with each other by using the train intercom or handheld radio with their own channel. They shall stop the train if the communication is lost. Passengers shall have to be unloaded at the next station platform. The OCC shall clear the line before authorizing any train movement. The train shall be removed from the revenue service at the next opportunity.

### **2.9.2 Reverse Movement/Driving**

A train running in the opposite direction than the normal direction is in reverse movement. In certain circumstances, it may be necessary to operate a train in a





reverse direction. Train Drivers shall not drive a train in reverse movement without authorization from the OCC. When the need to drive a train in reverse arises, the train driver shall change the driver's cab in order to be in the leading cab.

The OCC shall make all necessary arrangements to protect the destination of the reverse movement by closing the shunting signal and ensuring that all concerned trains are stopped. The reverse movement is only possible after the OCC's authorization. Before executing the reverse movement, the train driver shall have a clear understanding of the train destination. The reverse movement shall be done using the "at sight driving".

## 2.10 Speed Restriction

The ROs shall effectively manage speed limits to ensure safety while minimizing disruption to services, thus, the imposition of speed restrictions is paramount.

Under certain circumstances (e.g. broken rail), it will be necessary to reduce the train speed along a portion of the track to ensure the safety of the train running. As soon as an incident is observed by any RO personnel, he/she shall immediately inform the OCC and give details on the area/zone to which the problem extends (e.g. kilometer point, equipment such as signal, point or station)

In addition to the considerations discussed above, a number of safety protocols shall be adopted in traffic management. These protocols shall include train rescue operations; the implementation of an out-of-course driving mode or special train movements, which shall be accompanied by clear guidelines for safe navigation in the event of an unexpected situation. The management of overrun and short stops at platforms is critical in preventing accidents and ensuring the safety of passengers. Furthermore, manual driving procedures must be established to facilitate staff training in the event of system failures.

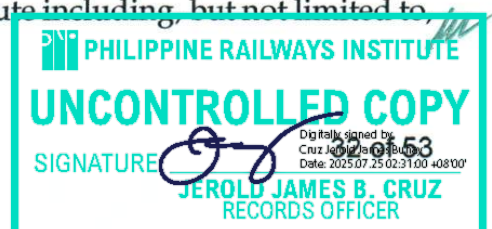
## Section 3. Train Operations

The ROs shall implement already established safety operational rules, regulations, and protocols during normal, degraded, and emergency operations. The following minimum requirements shall be implemented:

### 3.1 Movement of Trains

Protocols governing train movement on the mainline and within the depot shall be the responsibility of the Operations Control Centre (OCC) or Traffic Control Office (TCO). Designated personnel from the OCC or TCO, herein referred to as the train controller, shall maintain standardized safety communication protocols adopted by the RO in all exchanges of information. These protocols are the following:

- a) Communication shall be unequivocal regarding the instructions given and received, particularly concerning the permitted route including, but not limited to,





limits of movement authority, restricted speed, driving mode, and other pertinent parameters.

- b) No train movement shall be executed or authorized if the received information is unclear or incomplete.
- c) movement shall not proceed if there is an outstanding alarm or activation onboard the train or within the system, and the OCC/TCO or train controller must comply with the minimum operating requirements for train operations.
- d) The on-duty train driver, only authorized personnel shall be permitted to travel in the driving cab provided that such travel is in connection with the personnel's official duties.
- e) The OCC/TCO or train controller shall coordinate access with the train driver, and the concerned individual/s must present proper authorization to the driver.
- f) A limited number of individual to access the driver's cab shall be established by the Railway Operator to ensure that the train driver shall be still focused on his/her driving duty.
- g) The OCC/TCO shall ensure safe speed regulations on the railway, including speed regulation, signaling, speed limits, and restrictions.
- h) The OCC/TCO shall verify safe route conditions prior to regular operations on the mainline, including activities such as train mopping, train sweeping, or track sweeping.
- i) Normal track sweeping shall be deployed by one (1) or two (2) trains to inspect tracks where engineering work has been conducted, ensuring that they are free from obstructions or hazards prior to the commencement of operations. This inspection may also be conducted on foot under specific conditions, such as following the discovery of defects or during emergency situations.; and
- j) Personnel operating the sweeping or mopping train must navigate the track with caution, strictly adhering to established speed limits and remaining prepared to stop for any signals or obstacles encountered. Additionally, sweeping or mopping trains may be utilized post-incident, accident, or major fault to assess for potential hazards.

### 3.2 Monitoring of Alighting and Embarking Passengers

Train drivers must diligently ensure the safe ingress and egress of passengers and platform staff prior to initiating train movement. As such, the ROs must implement comprehensive safety measures to mitigate the risk of accidents on station platforms. The presence of safety equipment, such as platform screen doors (PSDs) or barriers, along with other protective measures, significantly improves platform safety.

In relation to the movement of trains, the train driver must ensure that all safety requirements are satisfied, including departure indicators such as securely closed doors and platform-train interface (PTI) that is free from any obstacles. Upon detection of a system obstruction, the train driver shall activate the emergency brake and notify the OCC/TCO. The OCC/TCO shall, in turn, apply the necessary procedures applicable to platform emergencies.





If the train driver erroneously opens a train door on the wrong side, a passenger safety announcement shall be executed and the OCC/TCO must be informed. The OCC/TCO shall likewise implement the appropriate procedures for managing platform emergencies.

### 3.3 Train Driving

Sudden acceleration or braking may result in passenger injury. If such instances, the train driver must adhere to the RO's established protocols, which include safely stopping the train, assessing passenger conditions, and notifying the OCC or TCO. Train Drivers must not operate any train without proper authorization; shall not change the position of any safety devices without proper authorization. Train Drivers who leave a train must ensure it is correctly parked. They shall also use proper means of egress and access when boarding or leaving trains or vehicles.

Furthermore, the adoption of international best practices in train operations, such as the "**pointing and calling**" method, serves as a strategy to maintain train drivers' concentration, focus, and attentiveness.

### 3.4 Train Dispatch

The designated dispatcher shall be responsible for relaying appropriate signals to the train driver while positioned on the platform. Upon the train's departure, and once the doors have been closed, the dispatch personnel must perform a safety check to ensure the following conditions are met:

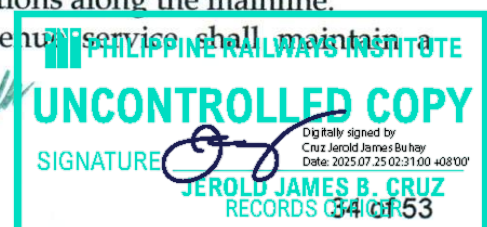
- a) The train doors are securely closed.
- b) No pinning or trapping incidents are occurring with the doors.
- c) No individual outside is in physical contact with the train.
- d) It is safe to commence the train's departure (e.g. Signals are at proceed display, train driver is in position to drive the train); and
- e) The dispatch personnel shall maintain a clear line of sight along the full length of the platform and shall signal readiness to the driver.

All platform related safety conditions must be enforced by the ROs, irrespective of whether the personnel assigned to man the platforms are employees of the ROs or TPSPs.

### 3.5 Trackway Monitoring

Concentration and vigilance while operating a train are essential to ensuring safe train driving. Hence, the following guidelines must be observed:

- a) Train driver must maintain their full attention on the trackway, irrespective of the level of the Grade of Automation (GoA) system utilized by the signaling system.
- b) Adherence to speed limits must also be observed under all conditions, including populated areas, varying weather conditions, and potential infrastructure defects, to mitigate the risks associated with incidents and accidents.
- c) In exceptional circumstances, train drivers must remain cognizant of emergency track possessions that may restrict the train operations along the mainline.
- d) Railway personnel accessing tracks during revenue service shall maintain a position of safety until the train has passed clear.





- e) A safety protocol must be established and strictly adhered to, which includes the sounding of a warning horn and ensuring that personnel accessing the tracks raise one arm above their head to acknowledge the approaching train.

### 3.6 Non-Conformance to Safety Standards in Train Operations

An operational safety procedure must be established to ensure that critical tasks required to be performed by the train driver in the event of systems or equipment failure are conducted with adequate safety measures to mitigate the risks of incidents, injury, or damage to assets. The following are examples of train operation activities that may result in safety non-conformance:

- a) train reverse running;
- b) backward operations;
- c) activating train bypass switches/rescue buttons;
- d) Signal Passed at Danger (SPAD);
- e) accessing tracks during revenue hours;
- f) driving a coupled trains during train rescue; and
- g) passenger evacuation between stations.

## Section 4. Station Operations

A strategic procedure to address critical risks associated with station operations shall be established and implemented by the ROs, to wit:

### 4.1 Station Platform

Station platform personnel are responsible for ensuring the safety of both personnel and passengers. Safety at the station platform is defined as follows:

- a) The station platform shall remain clear of unnecessary equipment to prevent obstructions at the platform edge.
- b) If an item or personal belongings fall from the platform onto the tracks, station personnel must immediately notify the OCC or TCO. Should immediate retrieval be required, the platform personnel must be adequately trained in the use of retrieval equipment and are familiar with the RO's established safety communication protocol. Such protocol must include the issuance of an authority number from the OCC/TCO and verification that the tracks are free from all train movement in both directions.
- c) Safety signage shall be prominently displayed on the tracks, ensuring visibility to the public and warning passengers against entering or crossing the tracks. Additionally, public information on how to contact operations personnel in case of incidents or accidents must be disseminated.
- d) Train doors must be securely closed prior to the station platform personnel signaling the train driver to proceed.





#### 4.2 Operation of Station Platform Screen Doors or Barriers

The ROs shall implement and enforce procedures to ensure safety in the vicinity of platform screen doors (PSDs) or barriers. These procedures shall include, but are not limited to, daily inspections to verify proper operation, the establishment of emergency response protocols, and personnel training on evacuation procedures. Technology may be employed for real-time monitoring to promptly detect issues, while both manual and automated control systems shall be in place to facilitate safe operations and ensure swift responses to malfunctions. Effective communication between platform personnel and train driver is essential to ensure the safe boarding and alighting of passengers. Passenger boarding and alighting shall be permitted only when the train is correctly positioned at the platform where PSDs or barriers are installed.

If PSDs are obstructed or fail to close and lock as required, manual intervention may be necessary to ensure the train's safe departure. In such instances, authorized platform personnel, who are duly trained and competent to manually operate or reset the PSDs or barriers, must intervene to allow the train to safely continue its passenger services.

The RO's procedure for authorizing train movement by the designated personnel must, at a minimum, include the following considerations:

- a) initial findings regarding the cause of the obstruction in the PSDs during the door closing process;
- b) intervention by authorized and competent platform personnel in accordance with established protocols;
- c) application of the railway industry-standard safety communication protocol; and
- d) determination by the authorized and competent platform personnel that it is safe for the train to proceed.

The train's initiation of movement shall not be activated until the PSDs or barriers are confirmed to be in a safe status, in accordance with the RO's established PSD/barrier reset or intervention procedures.

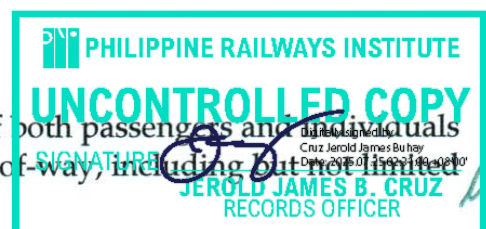
#### 4.3 Management of Hazardous Materials within the Station

The ROs shall establish and implement procedures for the proper screening, receipt, and transportation of hazardous materials and deadly weapons as highlighted from Rule 1090 of the OSHS and [RA 6969](#) (An Act to Control Toxic Substances and Hazardous and Nuclear Wastes, Providing Penalties for Violations thereof, and for other purposes). The screening and acceptance process must verify compliance with the RO's guidelines regarding the packaging, marking, and labeling of containers, as well as the requirement for certificates, documentation, and/or manifests from the supplier, noting that such documents may be provided by third parties.

Furthermore, the ROs shall implement a Hazardous Materials and Deadly Weapons Security Plan, including orientation and awareness training programs to ensure safety within the station premises.

#### Section 5 Passenger and Public Safety

The ROs shall be responsible for ensuring the safety of both passengers and individuals residing or working within the railway system's right-of-way, including but not limited to





to level crossings, overpasses, and underpasses. This responsibility extends to all areas within the defined boundaries of the railway corridor. The ROs shall be accountable for overall public safety and shall ensure that effective communication to the public of the dangers and risks associated with the railway system is consistently provided.

The ROs shall actively promote safety practices among commuters. In addition to utilizing public information systems, such as public announcements and safety signages, the ROs shall collaborate with local communities to enhance safety measures in areas surrounding railway lines and stations. This collaboration shall include partnerships with emergency services, transportation authorities, and health organizations to implement more robust and effective safety protocols.

### 5.1 Level Crossings

The ROs shall install barriers and signaling systems to prevent collisions at level crossings, including gates, lights, and audible warning signals. Railway level crossings must be designed to ensure the safe passage of both pedestrians and vehicles and shall be equipped with safety features that alert pedestrians to approaching trains and obstruct vehicular traffic as necessary. In low-traffic situations, it shall be sufficient for the level crossing safety equipment (flashing alarms, audible alarms, LED warning signs etc.) to notify pedestrians of oncoming trains. Safety systems must also take into account train speed, traffic volume, and vehicle types, and may require the capability to alert trains if a vehicle obstructs the said crossing.

### 5.2 Overpasses and Underpasses

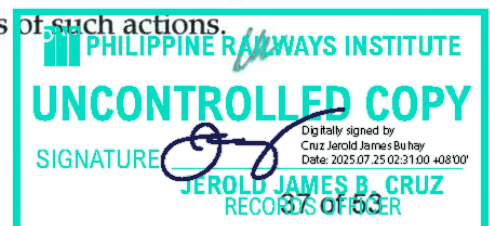
The construction of bridges or tunnels in high-risk areas eliminates level crossings, thereby reducing the likelihood of accidents. Railway bridges spanning busy roads or rivers must incorporate protective measures to prevent falling objects and be engineered to withstand potential impacts from vehicles or vessels. Warning signages shall be installed to indicate any associated hazards.

### 5.3 Pedestrian Safety

Passengers and even trespassers are at risk of encountering moving trains, particularly in stations located within level crossings. Additionally, hazards such as equipment, electrical cables, and dangerous chemicals pose significant threats, further compromising the safety of pedestrians.

The ROs shall establish a comprehensive system designed to mitigate, prevent, or manage trespassing incidents. Such measures shall include, but not be limited to:

- a) posting of conspicuous warning signs at all potential points of access to the track, including level crossings and station crossings;
- b) erecting fences or other physical barriers at station ends and other vulnerable locations to deter unauthorized entry onto the tracks; and
- c) conducting public awareness campaigns to educate the local community about the dangers of trespassing and the potential consequences of such actions.





## Section 6. Detection And Management Of Emergency Situations

Given the intricate nature and complexity of railway operations and their numerous interfaces, a residual risk of incidents or accidents still persists. It is imperative to recognize that no system, regardless of the number of incorporated functions, can anticipate and address every conceivable scenario. The following guidelines shall be observed:

- a) The OCC and TCO, in coordination with the competent response team (Emergency Response Team and First Line Response), must maintain a state of constant readiness to respond to equipment failures, infrastructure malfunctions, and incidents or emergencies that could potentially disrupt train operations. While such disruptions may necessitate temporary restrictions, such as speed restrictions or modified service, the overarching objective is to ensure the uninterrupted continuity of train service.
- b) Deviations from the planned service are likely to impact system capacity, leading to irregular headways or slower travel times.

In the event of an emergency, the ROs shall immediately implement established operating procedures or plans to safeguard the well-being of railway personnel and passengers. . Primarily, the following actions shall be taken but not limited to:

- a) **Immediate Train Stoppage:** For any hazard that may pose a risk to approaching trains, the ROs shall promptly halt train operations.
- b) **Emergency Services Coordination:** The OCC/TCO shall be immediately notified, and the latter must dispatch emergency services as required.
- c) **Train Driver Relief:** In the event of a train driver striking a person, the OCC/TCO shall immediately remove the driver from duty and initiate the appropriate emergency procedures.
- d) **Emergency Protection Measures:** For trains involved in incidents, accidents, or emergencies, necessary precautions shall be taken to indicate the train's hazardous condition. This may include activating hazard lights, hazard warning indications, or employing hand signals.
- e) **Continuous Communication:** The OCC/TCO shall maintain open communication with the personnel on the affected train to monitor the situation and ensure the timely provision of necessary assistance
- f) **Implementation of Temporary Speed Restrictions:** The OCC/TCO shall ensure that all personnel remain informed and can respond promptly to any issues for safe and efficient train operations under the speed restriction.
- g) **Implementation of Provisional Service:** The OCC/TCO shall implement





provisional service to ensure real-time updates on any developments and shall have continuous communication with the personnel involved in operations.

### **RULE III**

## **RAILWAY MAINTENANCE SAFETY**

### **Section 1. Purpose**

This rule establishes comprehensive safety guidelines and protocols to be adhered during the maintenance of railway infrastructure, equipment, and facilities. Its purpose is to prevent accidents, injuries, and health hazards among railway maintenance personnel and TPSPs by implementing effective safety management systems, hazard control measures, and risk mitigation strategies.

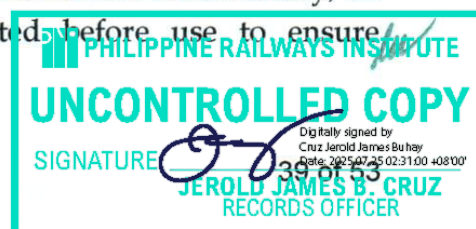
### **Section 2 Civil and Track Works Safety**

All testing or work conducted on civil and track structures must comply with the Philippine National Standards (PNS) or their equivalent international standards. Only personnel certified by the DOTr-PRI through its training courses shall undertake these tasks. Moreover, the maintenance personnel are required to utilize appropriate PPE and tools to safeguard against injury and accidents.

In instances where railway maintenance personnel are operating on or near active tracks or areas under construction, elimination or substitution controls must be implemented whenever feasible. If such controls are not practicable, the work area shall be rendered free from hazards to protect personnel from risks associated with civil and track works.

#### **2.1 Guidelines for Railway Civil and Track Works Safety**

- a) Personnel conducting maintenance activities on depot tracks, mainline tracks, and civil structures shall obtain a permit or clearance from the yardmaster or the OCC/TCO supervisor prior to the commencement of such activities. Proper coordination and communication regarding maintenance activities that involve other engineering subsystems shall also be established. Furthermore, no track work shall be initiated unless the overhead lines or third rail systems have been de-energized. Additionally, personnel must avoid using metal equipment when working on tracks, as this may interfere with signaling equipment.
- b) Personnel engaged in maintenance activities on depot tracks, mainline tracks, and civil structures must use appropriate PPE including, but not limited to, head, eye, ear, hand, and foot protection gears. Moreover, the personnel shall wear clothing that ensures sufficient visibility in low-light conditions, such as during nightshift maintenance or when working in tunnels.
- c) Personnel conducting maintenance activities, mainline tracks, and civil structures must ensure adherence to safety protocols when using tools, equipment, or machinery, this includes manufacturer's and RO's instructions. Additionally, all tools and equipment should be properly calibrated before use to ensure





operational safety.


- d) Given the risk of human-railway vehicle collisions, all personnel working on depot tracks and mainline tracks must remain within the designated safety zones or walkways during maintenance activities. Crossing the tracks shall be permitted only when necessary for maintenance tasks and when the tracks are verified to be free of incoming railway vehicles. Furthermore, the personnel must ensure that they do not walk on the rails or any associated track equipment when crossing the tracks. When walking along the tracks, buddy system shall be strictly observed to ensure visibility and prompt communication in case of hazards.
- e) In areas such as tunnels where side safety walkways are interrupted due to the tunnel's narrow width, signages shall be installed to indicate that the personnel must cross at designated points and proceed to the middle walkway situated between the two tracks for their safety.

When traversing the safety walkways, the maintenance personnel are required to walk in the direction facing the approaching railway vehicle. This practice ensures that the personnel can promptly detect incoming railway vehicles, even when they are at a considerable distance. Furthermore, he/she must maintain vigilance for approaching railway vehicles in areas characterized by poor visibility and on curved tracks.

Lastly, the maintenance personnel must always acknowledge the signals of railway vehicle drivers by raising their arm overhead until the driver has recognized this action.

Personnel engaged in maintenance activities on tracks located in at-grade crossings, as well as in the maintenance of civil structures (e.g., beams, girders, columns) above and below road sections, shall implement traffic control measures to prevent road traffic from interfering with maintenance activities and to protect personnel from collisions and interference from pedestrians or motorists. These traffic control measures shall also ensure that the pedestrians and motorists are safeguarded from hazards associated with the maintenance activities.

The traffic control measures shall be subject to the approval and support of the local government units concerned and other relevant agencies responsible for roadworks.

- a) Personnel conducting maintenance activities on tracks and civil structures located on elevated guideways, viaducts, and bridges shall use an appropriate elevated working platform. The working platform must adhere to the provisions outlined in OSH Standard Rule 1414.
- b) Personnel conducting maintenance activities on tracks and civil structures located within tunnels shall implement controls for hazards associated with confined spaces. Safety measures and controls must adhere to the provision of OSH Standard Rule 1120. 



## 2.2 Civil and Track Works Safety Training

The RO shall ensure that all personnel engaged in civil works and track maintenance receive regular training on safety protocols, which shall include, but not be limited to, the following topics:

- a) track-related hazards and accident prevention;
- b) track possession;
- c) proper use of construction tools and track maintenance equipment;
- d) safe procedures for working near or on active railway lines;
- e) fall prevention and protection;
- f) excavation, trenching, tunnel, and confined space safety;
- g) electrical safety near third rails and overhead lines;
- h) manual handling and ergonomics;
- i) noise and vibration hazard awareness;
- j) at-grade road-railway traffic coordination;
- k) lockout/tagout procedures for track equipment and machinery; and
- l) emergency response and evacuation procedures.

## 2.3 Competency Assessment

The RO shall periodically evaluate the competency of personnel engaged in civil and track works maintenance to ensure and maintain that they possess the requisite skills and knowledge to perform tasks safely and efficiently.

## 2.4 Civil and Track Works Safety Audits

Monthly safety audits shall be conducted by the ROs assigned personnel to identify potential hazards associated with civil works and track infrastructure, thereby ensuring compliance with applicable safety standards and regulations.

## Section 3. Electronics and Communications Safety

All testing or work performed on electronic equipment must comply with the Philippine Electronics Code and/or equivalent international standards. Only railway personnel who have attended and completed the required DOTr-PRI's training courses and possess requisite certifications in electronics safety, such as a National Certificate (NC) II in Electronics and Communications Technician (ECT) or an equivalent qualification, shall be authorized to undertake these tasks. Such personnel must utilize appropriate PPE, including insulated tools and anti-static devices, to mitigate the risk of potential injury, illness, or damage to sensitive electronic components.

In instances where railway personnel are engaged in work on or near electrical equipment that is energized or may become energized, the implementation of elimination or substitution controls shall be prioritized whenever feasible. If such controls are impracticable, the electrical equipment must be rendered free from hazards to ensure the protection of personnel from electrical risks.



### 3.1 Guidelines for Railway Electronics Safety

To ensure the safe and reliable operation of railway electronics systems, it is imperative that all personnel involved in the maintenance or operation of these systems strictly adhere to the following guidelines:

- a) **Permit Requirement:** Personnel must obtain a written permit or clearance from the OCC Supervisor before commencing any maintenance work.
- b) **Coordination:** Clear and timely communication must be maintained between relevant engineering subsystems, particularly with the rolling stock and power supply teams, to coordinate maintenance activities and mitigate potential hazards.
- c) **Personal Protective Equipment (PPE):** Appropriate PPE, including but not limited to head, eye, and hand protection, must be worn at all times. Specialized PPEs are required for activities involving high-frequency equipment or electromagnetic fields.

#### Personnel Qualifications and Training:

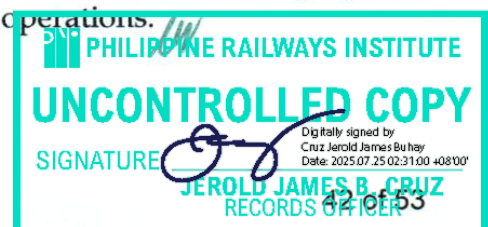
- a) **Authorized Personnel:** Only trained and designated personnel may perform maintenance on specialized electronic equipment.
- b) **Certification:** Personnel must be certified by the RO to handle signaling systems, control panels, and communication devices.

#### Safety Procedures:

- a) **Power Deactivation:** Before commencing any maintenance work, the power supply to the specific system must be deactivated and proper lockout/tagout procedures implemented to prevent accidental re-energization.
- b) **Test Equipment Safety:** All test equipment must be used in accordance with the manufacturer's guidelines and properly grounded to prevent electrical hazards.
- c) **Confined Space Protocols:** Personnel working in confined spaces, such as communication rooms, control centers, or underground cable tunnels, must comply with strict confined space protocols including atmosphere monitoring, proper ventilation, and emergency evacuation procedures.
- d) **Elevated Work Safety:** When working in elevated areas, such as antenna towers or communication masts, appropriate fall protection measures must be in place, including harnesses, guardrails, or other safety systems.
- e) **Trackside Safety:** Personnel working near or adjacent to active railway tracks must coordinate with the OCC and ensure they are situated in designated safety zones to mitigate the risk of human-railway vehicle collisions.

#### Cybersecurity and Training:

- a) **Regular Training:** All personnel must undergo regular safety and cybersecurity training to ensure they are knowledgeable about potential hazards and prepared to address cyber threats that could impact railway operations.





By strictly adhering to these guidelines, ROs can significantly reduce the risk of accidents, ensure the safe and efficient operation of their electronic systems, and maintain the overall reliability of their railway infrastructure.

### 3.2 Electronics and Communications Safety Training

The RO shall ensure that all personnel engaged in activities involving or in proximity to electronic equipment receive regular training on electronics safety, encompassing the following topics:

- a) electronic hazards and accident prevention;
- b) proper handling and use of electronic tools, devices, and equipment;
- c) safety procedures for working on live circuits and mitigating the risk of electrostatic discharge;
- d) lockout/tagout procedures specific to electronics systems; and
- e) emergency response procedures for electronics-related incidents, including shock, fire, and equipment malfunctions.

### 3.3 Competency Assessment

The RO shall conduct periodic assessments of the personnel's competency. Such assessments shall ensure that the personnel possess and maintain the requisite skills, knowledge, and adherence to safety practices essential for the handling of sensitive electronic components and systems.

### 3.4 Electronics Safety Audits

Regular electronics safety audits shall be conducted to identify potential hazards in electronic systems, equipment, and devices, and to ensure compliance with applicable electronics safety standards and regulations. This shall include the inspection of circuits, wiring, electronic control systems, and signal equipment utilized in railway operations.

## Section 4. Electrical Safety

All testing or work performed on electrical equipment must comply with the Philippine Electrical Code or its equivalent international standards. Only railway personnel who have completed the DOTr-PRI's training courses with the necessary training and certifications in electrical safety-such as a National Certificate (NC) II in Electrical Installation and Maintenance, or its equivalent-are authorized to perform these tasks. These personnel must use insulated PPEs and tools specifically designed to prevent injury and illness.

When working on or near electrical equipment, priority must be given to implementing elimination or substitution controls whenever possible. If such controls are impracticable, the electrical equipment must be made hazard-free to protect the personnel from electrical risks.






#### 4.1 Guidelines for Railway Electrical Safety

The RO shall implement stringent Lockout/Tagout/Tryout (LOTOTO) procedures for all electrical maintenance and repair activities. These procedures must include explicit guidelines for isolating power, verifying isolation, and authorizing work. To ensure complete de-energization prior to servicing, maintenance, or repairs, testing or verification of isolation is essential. Adherence to LOTOTO mandates that the integrity of the lockout point be rigorously tested before the commencement of any work.

- a) Regular inspections and maintenance of the catenary system shall be conducted to identify and mitigate potential electrical hazards. Prior to the commencement of any work, a HIRAC process must be completed to identify risks and implement the necessary safety controls. Furthermore, a safety briefing shall be conducted to ensure that all personnel are informed of the potential hazards, safety measures, and emergency procedures pertinent to the work being performed.
- b) Personnel engaged in these activities shall be trained and certified in catenary system safety procedures, as well as in the operation of specialized tools. Strict adherence to LOTOTO protocols is required to ensure that the system is de-energized. Furthermore, appropriate PPE, including insulated gloves, arc flash suits, and dielectric boots, must be worn to mitigate electrical hazards during maintenance activities.
- c) Personnel engaged in working on or near Overhead Line Equipment (OLE) shall receive training on the specific hazards associated with OLE and the requisite safety precautions. This training shall encompass the utilization of insulated tools, proper grounding techniques, and awareness of overhead line voltage. The personnel assigned to areas where a third railway is present must also be provided with specialized training. Such training shall address the risks associated with high-voltage railway systems, procedures for maintaining safe proximity, and the use of insulated footwear and gloves to mitigate the risk of electrocution.
- d) Personnel engaged in operations within electrical substations shall receive specialized training on substation safety, encompassing the risks associated with high-voltage equipment and the proper utilization of protective gear.
- e) The RO shall develop and implement an Emergency Response Plan (ERP) specifically addressing electrical-related incidents and accidents. This plan shall include, but not be limited to, procedures for isolating power, evacuating personnel, and administering first aid.

#### 4.2 Electrical Safety Training

The RO shall ensure that all personnel engaged in work on or near electrical equipment receive regular training on electrical safety. This training shall include, but is not limited to, the following topics: 





- a) electrical hazards and accident prevention;
- b) proper use of electrical tools and equipment;
- c) lockout/tagout procedures; and
- d) emergency response procedures.

#### 4.3 Competency Assessment

The RO shall periodically assess the competency of personnel engaged in electrical-related work to ensure that they possess and maintain the requisite skills and knowledge.

#### 4.4 Electrical Safety Audits

Regular electrical safety audits shall be conducted to identify potential hazards and ensure compliance with electrical safety standards.

### Section 5. Mechanical Safety

The RO shall ensure compliance with established codes that mandate regular inspection, maintenance, required testing, and emergency procedures for mechanical systems including, but not limited to, high-pressure systems, fire protection systems, lifting equipment, and safety devices. All testing or work conducted on mechanical equipment must conform to relevant Philippine safety standards or their equivalent international standards.

Only personnel certified by the DOTr-PRI through its training courses, as well as railway personnel possessing requisite training and certifications in mechanical safety, such as a National Certificate (NC) II in Mechanical Technology or its equivalent, shall be authorized to undertake these tasks. Such personnel must utilize appropriate PPEs and tools designed to safeguard them against injury and illness.

In instances where the railway maintenance personnel are engaged in work on or near mechanical equipment that is classified as hazardous or may become hazardous, the implementation of elimination or substitution controls shall be prioritized whenever feasible. Should such controls not be practicable, the mechanical equipment must be rendered safe to mitigate risks associated with mechanical hazards and ensure personnel safety.

#### 5.1 Guidelines for Railway Mechanical Safety

The personnel performing maintenance activities on railway mechanical systems- such as propulsion systems, braking systems, HVAC systems, and other critical mechanical subsystems, are required to obtain a permit or clearance from the yardmaster or OCC supervisor prior commencing any work. Effective coordination and communication among different engineering subsystems, particularly where electrical or electronic systems are involved, must be clearly established to mitigate potential hazards and ensure seamless execution of maintenance tasks.

All personnel engaged in maintenance on mechanical systems are mandated to wear appropriate PPEs, including head, eye, ear, hand, and foot protection gears. Depending





on the specific mechanical components being handled, specialized PPEs may also be required. For instance, heat-resistant gloves must be worn when working in high-temperature areas, and face shields are necessary when handling pressurized systems.

The personnel concerned must be adequately trained and certified to operate or maintain specialized mechanical equipment and systems, such as hydraulic or pneumatic systems, air compressors, or mechanical lifting devices. Only designated personnel who have successfully completed the required training are permitted to conduct maintenance activities on these systems.

When performing maintenance on mechanical systems that involve moving parts or pose a risk of entrapment, lockout/tagout procedures must be followed to ensure that the system is de-energized, thus, avoiding unexpected start-ups. Special caution is also necessary around high-pressure components or mechanical systems under load, such as springs, belts, or chains.

For tasks conducted in confined spaces, such as equipment compartments or ventilation shafts, the personnel concerned must follow confined space entry protocols. These protocols include using atmosphere monitoring devices, ensuring adequate ventilation, and following emergency procedures specific to confined spaces.

For mechanical systems located in elevated areas, such as on trains, viaducts, or bridges, appropriate fall prevention and protection measures must be in place, including the use of safety harness, guardrails, and other fall protection systems.

When mechanical systems interface with other critical subsystems, such as braking systems interacting with electrical or signaling systems, thorough coordination with relevant teams is essential to avoid cross-system hazards. Maintenance activities shall not commence until all associated systems have been securely isolated.

Finally, personnel working on mechanical systems within tunnels or enclosed environments must ensure adequate illumination and ventilation. All personnel must remain vigilant regarding the risks of working in confined spaces and are encouraged to participate in regular safety drills and training specific to these environments.

## 5.2 Mechanical Safety Training

The RO shall ensure that all personnel engaged in work on or near mechanical equipment receive regular training on mechanical safety. This training shall encompass, but not be limited to, the following topics:

- a) mechanical hazards and accident prevention;
- b) proper use of mechanical tools and equipment;
- c) lockout/tagout procedures; and
- d) emergency response procedures.





### 5.3 Competency Assessment

The RO shall periodically assess the personnel's competency to ensure that they possess and retain the requisite skills and knowledge.

### 5.4 Mechanical Safety Audits

Regular mechanical safety audits shall be conducted to identify potential hazards and ensure compliance with applicable mechanical safety standards and regulations.

## RULE IV EMERGENCY RESPONSE

The RO shall establish an Emergency Management System to address situations arising from natural disasters, human-induced incidents, passenger-related emergencies, and railway system failures. The following minimum principles of emergency management shall be applied:

### Section 1. Emergency Management Cycle

The objective of the Emergency Management Cycle (EMC) is to prevent or mitigate potential losses from hazards, ensure appropriate assistance to affected properties, and facilitate effective and rapid recovery. The EMC represents a continuous process through which all organizations are expected to plan for and reduce the impact of emergencies, respond during and immediately following an emergency, and implement recovery strategies after the occurrence of an emergency. As a cyclical process, it remains ongoing and is never fully complete.

Railway emergency scenarios necessitating an Emergency Plan, including evacuation protocols, are enumerated below, but are not limited to:

- a) fire (train, tunnel, station, depot);
- b) derailment;
- c) train collision.
- d) tower failure;
- e) extreme weather conditions;
- f) flood;
- g) earthquake;
- h) wrong side opening of train doors;
- i) terrorism;
- j) human factors;
- k) suicide;
- l) medical emergencies;
- m) environmental contamination; and
- n) sudden failure of a sub-system. *JW*





## 1.1 Mitigation

Practices and measures must be adopted to prevent incidents such as fires, system failures, and passenger-related accidents or injuries. These efforts should focus on minimizing hazards and reducing vulnerabilities. A comprehensive risk assessment must be conducted to identify potential risks, and strategies for emergency prevention must be clearly outlined. These preventive measures must be strictly enforced and continuously monitored to ensure the safety of all railway personnel and passengers.

## 1.2 Preparation

To facilitate effective relief efforts, it is crucial to ensure the organized mobilization of funds, equipment, supplies, and personnel within a safe environment. General and specific emergency preparations must outline available resources, procedural actions and responsibilities, as well as communication and coordination protocols, including written agreements with external emergency agencies and authorities, where applicable. These plans shall be made available and accessible to all stakeholders.

Emergency preparations must include Passenger Evacuation Protocols, outlining clear procedures for the passengers' safe evacuation from trains and stations. These should also cover protocols for handling passenger accidents, injuries, illnesses, and staff or passenger assaults

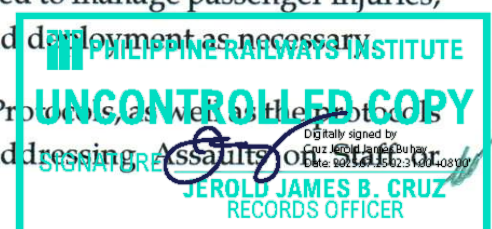
Emergency supplies and equipment—including fire extinguishers, medical first aid kits, fire blankets, emergency lighting, and evacuation plans—must be adequate, readily accessible, and consistently functional. Fire protection equipment and facilities must pass fire safety inspections and comply with the Fire Code of the Philippines and railway safety standards.

An independent evaluator shall periodically assess the effectiveness of emergency management through drills or simulations as necessary, as scheduled by the RO, identifying areas for improvement. Additionally, an annual inter-agency response and rehabilitation drill must be conducted in coordination with external parties, such as the Bureau of Fire Protection (BFP), Philippine National Police (PNP), Philippine Red Cross, Metropolitan Manila Development Authority (MMDA), and the local Disaster Risk Reduction and Management Office (DRRMO). Furthermore, the ROs shall conduct a separate fire drill at least twice a year.

## 1.3 Response

Response shall entail the actions undertaken to address the immediate effects of an emergency, prioritizing the protection of lives and securing critical assets. The ROs shall activate the Emergency Response Team (ERT), which shall include qualified urgent patrol officers, Fire Brigade Team, and medical staff trained to manage passenger injuries, illnesses, or assaults. The ERT must be prepared for rapid deployment as necessary.

In the event of an emergency, the Passenger Evacuation Protocols, as well as the protocols for Handling Passenger Accidents or Sickness and Addressing Assaults on Station





Passengers, shall be promptly activated. Designated officers shall assist passengers and provide first aid, medical care, or security interventions as required.

**1.4 Recovery**

During the recovery phase, the ROs shall implement measures to address the mental, social, physical, and financial impacts resulting from the emergency. Concurrently, actions to restore normal operations and ensure the well-being of affected stakeholders must also be undertaken.

To mitigate future losses, the ROs are required to re-evaluate their emergency plans and make necessary adjustments, which include refining accident and incident reporting procedures.

The ultimate objective of this phase is to restore RO activities to normal operations as swiftly as possible. In instances of uncertainty or unsafe conditions, degraded operations, including provisional service, shall be instituted to maintain business continuity and continuous transportation service.

**Section 2. Emergency Management Cycle (EMC) Standards for Railway Systems**

**2.1 Passenger Evacuation Procedures in Operation**

Coordination through a safety communication protocol must be conducted between the OCC and TCO in the event that passenger evacuation is required. Arrangements for emergency services must also be made. In situations where the train is unable to continue its journey and passengers remain on board, the train driver is responsible for ensuring their safety and overseeing the evacuation process. Passengers must remain in a safe location until appropriate arrangements are in place to escort them to a designated safe evacuation area or location.

Passenger evacuation shall only be undertaken when absolutely necessary. Upon the OCC/TCO's receipt of notification of a planned train evacuation, they must ensure signal protection on all affected lines and deactivate traction power prior to the commencement of the evacuation. In coordination with the OCC/TCO, a determination must be made regarding the safest method of evacuation, taking into account the movement of passengers from the site and any potential need to cross other lines to reach a safe location.

**2.2 Emergency Response Plan (ERP) for Civil and Track Works**

A comprehensive ERP must be established for incidents involving civil and track works. This plan shall cover, but is not limited to, road-rail-personnel collisions, derailments, structural failures (e.g., guideways, viaducts, bridges, tunnels), system failure (e.g., power outage in stations), track failure (e.g., broken rail, missing rail component resulting to misalignment) fires on or near the tracks, spillage of hazardous materials on or near the tracks, electrical hazards (e.g., contact with energized overhead catenary systems (OCS) or third rail systems), flooding of track areas or excavation sites, incidents within tunnels or confined spaces, worker entrapment, and fall-related accidents.





### 2.3 Emergency Response Plan for Electronics and Communications Systems

A comprehensive ERP must be established for incidents involving railway electronics and communications systems. This plan shall encompass, without limitation, failures in signaling systems, communication breakdowns between trains and control centers, malfunctions in train control systems, power surges or outages impacting electronic components, cybersecurity breaches compromising operational control, interference with communication networks, and failures in passenger information systems or automatic fare collection systems. The ERP must also address scenarios wherein electronic system failures contribute to broader emergencies, such as collisions or derailments caused by miscommunication or control system errors.

### 2.4 Emergency Response Plan for Electrical Systems

A comprehensive ERP must be implemented to address incidents involving electrical systems in railway operations. This plan shall encompass, without limitation, power outages or surges affecting traction systems, including OCS or third rail systems, electrical fires, short circuits, electrical faults in transformers or substations, failures of electrical components in trains, risks of electrocution to personnel, and incidents involving contact with high-voltage equipment. The ERP must also consider how electrical system failures may trigger or exacerbate other emergencies, such as train stoppages, derailments, or passenger evacuations.

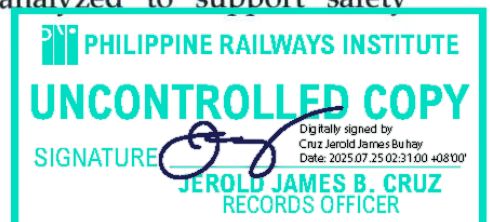
### 2.5 Emergency Response Plan for Mechanical Systems

A comprehensive ERP must be established to address incidents related to mechanical systems in railway operations. This plan shall encompass, without limitation, failures or malfunctions of propulsion systems, braking systems, or air compressors; fires originating from mechanical components (including but not limited to engines or hydraulic systems); overheating of mechanical parts; leakage of fluids such as oils or coolants; malfunctions of Heating, Ventilation, and Air Conditioning (HVAC) systems; and incidents involving pneumatic or hydraulic system failures. The ERP must also account for scenarios in which mechanical system failures exacerbate other emergencies, such as collisions or derailments due to equipment failure.

## RULE V REPORTING AND DATA MANAGEMENT

### Section 1. Reporting Requirements

This rule establishes the reporting requirements for all ROs regarding hazardous occurrences within their respective railway systems. Its purpose is to ensure that comprehensive data on injuries, near misses, incidents, accidents, occupational diseases, and other hazardous occurrences are collected and analyzed to support safety improvement efforts.





## Section 2. Centralized Railway Safety Repository

The DOTr shall establish a centralized repository for collecting and analyzing railway safety data from the RO's reports. To further enhance railway safety, the ROs shall continue to submit regular safety reports to the appropriate agencies and to DOTr for all hazardous occurrences that occur within the railway system. This repository shall serve as a valuable resource for the development and improvement of safety policies and procedures and inputs to the training curriculum for railway workers, especially those in the operation and maintenance of the railway system.

To facilitate data sharing and collaboration, the DOTr shall leverage its membership in the Inter-Government Coordination and Cooperation Committee (IGCCC), established by DOLE pursuant to RA No. 11058 and its Implementing Rules and Regulations. By utilizing this existing mechanism, the DOTr will have a wider perspective in the analysis of the railway safety data, promoting a more coordinated and efficient approach to railway safety.

### 2.1 Data Indicators and Purpose

Safety reports shall be submitted to the DOTr-PRI to identify safety incidents, analyze industry-wide trends, develop best practices, and identify areas for improvement. The objectives of these railway safety data gathering includes:

- a) improving safety performance to reduce accidents and incidents;
- b) ensuring compliance with safety regulations to guarantee the safety of passengers and railway O&M personnel;
- c) identifying and mitigating safety hazards to prevent accidents; and
- d) fostering a strong safety culture within the railway industry to promote a commitment to safety among all employees.

Railway Safety Data Report (Annex B) shall include a variety of data indicators, such as, but not limited to:

- a) Accident and Incident Statistics
  - i) Number of accidents, injuries, and fatalities.
  - ii) Types of accidents (e.g., collisions, derailments, fires).
  - iii) Causes of accidents (e.g., human error, equipment failure, track defects).
- b) Safety Performance Metrics - Measures of safety performance, such as accident rates or incident rates.
- c) Compliance Data - Information on compliance with safety regulations and procedures.
- d) Training Records - Data on employee training programs.

Railway safety data shall be used for a variety of purposes, including:

#### a) Research and Policy Recommendations

Conducting research and formulating policy recommendations to enhance the operation, maintenance, and safety procedures of various ROs.





**b) Railway Personnel Competency Improvement**

Enhancing the DOTr-PRI's training courses for railway O&M personnel to improve their knowledge, skills, and safety awareness. This will contribute to mitigating injuries, near misses, incidents, accidents, occupational diseases, and other hazardous occurrences within the railway system, ultimately providing safe and efficient railway transport services.

**c) Inter-ROs' Data Sharing Protocol**

Facilitating the exchange of data among the ROs to promote sharing of safety-related experiences, knowledge, and best practices. This will enable proactive safety measures through shared safety reports and recommendations.

**RULE VI  
COMPLIANCE AND ENFORCEMENT**

**Section 1. Regulatory Framework**

All ROs shall strictly adhere to the provisions of these guidelines and any other applicable health and safety laws, rules, and regulations pertaining to railway systems.

Moreover, the ROs shall be held responsible for full compliance with these guidelines. Enforcement actions shall be taken in accordance with the relevant provisions of this DO and any other applicable laws, rules, and regulations.

**Section 2. Inter-Agency Collaboration**

The DOTr may collaborate with the DOLE, the BFP, the CSC, and other relevant government agencies to develop a joint memorandum circular addressing specific safety and health concerns, ensuring uniform enforcement of these guidelines across all railway operator in the country both in private and government sector.

In the event of safety violations, investigations shall adopt a collaborative approach involving the inter-agency group and reports from the ROs. The inter-agency group shall not rely solely on the ROs' reports but shall conduct its own independent investigation to ensure a thorough and impartial validation of the facts.

This joint memorandum circular shall establish a framework for coordinated investigations and enforcement, enabling each agency, based on its area of expertise – such as occupational health, fire safety, and civil service compliance – to contribute meaningfully. While ROs may submit initial reports, the inter-agency group shall oversee the investigations, ensuring compliance and upholding the integrity of the process throughout the railway sector.

**RULE VII  
TRANSITORY PROVISION**

**Section 1. Implementation Period and Transitional Arrangements**

All railway personnel, who are currently involved under safety critical role in railway O&M, shall be required to complete the necessary RS training one (1) year from the





effectivity date of this DO. Additionally, ROs including its TPSPs shall ensure that such personnel have access to the requisite support and training programs to comply with these guidelines.

**RULE VIII**  
**MISCELLANEOUS PROVISIONS**

**Section 1. Amendments**

Amendments to these guidelines shall be made to ensure the safety and health of personnel and passengers. The changes may be due to technological advancements, contemporary research findings, and collaborative discussions with ROs, railway personnel, relevant government agencies, and private organizations. This approach guarantees that all updates pertaining to PRS policies, procedures, and programs are seamlessly integrated into the revised guidelines.

Consequently, these guidelines shall be reviewed and amended biennially or more frequently as circumstances warrant, such as modifications to health and safety directives, technological breakthroughs, or revisions to laws, rules, and regulations.

**Section 2. Effectivity**

This DO shall take effect immediately upon its publication in the Official Gazette or a newspaper of general circulation, and the submission of three (3) copies thereof to the University of the Philippines Law Center in compliance with Memorandum Circular 11 dated 09 October 1992 of the Office of the President.

Manila, Philippines, 6 of DECEMBER 20 24

  
**JAIME J. BAUTISTA**  
Secretary

  
DOTr-OSEC SJB 24-004261

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