

SAFETY RULES

Governing all Employees

Effective June 1, 2004

**John H. McCabe,
Chief Officer (General Manager)**

SAFETY

IS OF

**FIRST
IMPORTANCE**

BE CAREFUL

THINK - LOOK

AND

LIVE

TABLE OF CONTENTS

1 – GENERAL NOTICE	7
2 – GENERAL RULES	9
3 – FITNESS FOR DUTY	15
4 – PERSONAL PROTECTIVE EQUIPMENT	18
5 – ON OR ABOUT TRACKS	21
6 – GETTING ON OR OFF EQUIPMENT	26
7 – TRACK CARS AND WORK EQUIPMENT	28
8 – OPERATING LOCOMOTIVES	31
9 – SERVICING OR MAINTAINING LOCOMOTIVES OR CARS	38
11- OPERATION OF MAIN AND AUXILIARY BUGS	46
10 –TOOLS, APPLIANCES AND MACHINES	48
11 – LOCK-OUT/TAG-OUT	53
12– WELDING AND CUTTING	59
13– ELECTRICAL AND LINE WORK	64
14 – HANDLING REFRIGERANTS	68
15 – BOILER EQUIPMENT/STEAM LINES AND HVAC	70
16 – HANDLING MATERIALS AND EQUIPMENT	72
17 – CRANES AND HOISTS	76
18 – LADDERS, SCAFFOLDS, AERIAL LIFTS AND ELEVATIONS	82
19 – MANHOLES, TANKS AND EXCAVATIONS	88
20 – LP (LIQUEFIED PETROLEUM) GASES	90
21 – OFFICES	93
22 – DRIVING SAFETY	95

SAFETY

IS OF

**FIRST
IMPORTANCE**

BE CAREFUL

THINK - LOOK

AND

LIVE

Eyes and Ears Network - The New Millennium

Webster's Dictionary defines **SAFETY** as: "the condition of being safe from undergoing or causing hurt, injury or loss." Until recent times, the latter portion of the definition was the most applicable to transit operations. Transit safety efforts were directed toward avoiding accidents that were a direct result of our actions as employees. However, recent events, both regionally and globally, have called our attention to the need to avoid/prevent unsafe situations that are the result of the actions of individuals and/or groups that are outside the control of the Authority.

As providers of transportation service within one of the world's largest metropolitan region, we have a special responsibility as first reporters in the region's effort to prevent injury and loss due to the activities of individuals and groups intent on damaging our social, economic, or political way of life.

Constant vigilance is essential in this effort. All employees must be continuously aware of their immediate surroundings - keeping watch for anything that "just doesn't seem right." This could be in the form of a suspicious package, an inappropriately attired or acting customer, an individual or something at a location at the wrong time. It is essential that all employees become the EYES and EARS for the prevention of harm from outside sources.

In the interest of safety, all employees must complete the "Authority's Eyes and Ears Network - The New Millennium - Training Program. "

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P	NRS			
1-1	X	X	X	X	X	X	X	X	X	X
1-2	X	X	X	X	X	X	X	X	X	X
1-3	X	X	X	X	X	X	X	X	X	X
1-4	X	X	X	X	X	X	X	X	X	X
1-5	X	X	X	X	X	X	X	X	X	X
1-6	X	X	X	X	X	X	X	X	X	X
1-7	X	X	X	X	X	X	X	X	X	X

1 – GENERAL NOTICE

1-1. Safety is of the first importance in the performance of duty.

1-2. All employees are required to have a copy of these rules and must understand and obey them. If anyone is in doubt as to the meaning of any rule, they must ask their supervisor for an explanation. Experienced employees should, whenever possible in carrying out duties with inexperienced employees, observe that safety requirements and proper work practices are met.

1-3. General Rules applies equally to all employees and must be observed wherever they relate in any way to the proper performance of the duties of any employee.

Department/Division rules apply equally to all designated Department/Division employees.

1-4. Managers and Supervisors shall constantly make observations and checks. They will take all necessary action to insure compliance with these rules and any safety related special instructions.

1-5. Unsafe past work practices will not be accepted as an excuse for noncompliance. Employees who persist in unsafe practices will be subject to **disciplinary action**.

1-6. The use of alcohol and other intoxicants, narcotics, or dangerous or illegal drugs by employees subject to duty, while on duty, or on Company property is prohibited. Possession of intoxicants, narcotics, or dangerous drugs or participation in any transaction involving these items by employees on duty or on Company property is prohibited.

The use of any medication, including those prescribed or dispensed by person or persons authorized to do so, that will adversely affect the employee's ability to perform their duties safely when subject to duty or on duty is prohibited.

All SIR employees are subject to and ensure their familiarity and understanding of the **MTA Staten Island Railway Alcohol and Drug Policies**.

1-7. It is the duty of every employee to use correct/proper judgment and exercise care to avoid injury to themselves or others. No job is so urgent that sufficient time cannot be allowed to perform all work safely.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P	NRS			
2-1	X	X	X	X	X	X	X	X	X	X
2-2	X	X	X	X	X	X	X	X	X	X
2-3	X	X	X	X	X	X	X	X	X	X
2-4	X	X	X	X	X	X	X	X	X	X
2-5	X	X	X	X	X	X	X	X	X	X
2-6	X	X	X	X	X	X	X	X	X	X
2-7	X	X	X	X	X	X	X	X	X	X
2-8	X	X	X	X	X	X	X	X	X	X
2-9				X	X	X			X	
2-10	X	X	X		X		X	X	X	
2-11	X	X	X						X	
2-12	X	X	X	X	X	X	X		X	
2-13	X	X			X	X	X			
2-14	X			X	X	X	X			
2-15	X				X	X	X			
2-16	X	X	X	X	X	X	X	X	X	X
2-17	X	X	X	X	X	X	X	X	X	X
2-18	X	X	X	X	X	X	X	X	X	X
2-19	X	X	X	X	X	X	X	X	X	X
2-20	X	X	X	X	X	X	X	X	X	
2-21	X	X	X	X	X	X	X		X	
2-22	X	X	X	X	X	X	X	X	X	
2-23	X	X	X	X	X	X	X	X	X	
2-24	X	X	X	X	X	X	X		X	
2-25	X	X	X		X				X	
2-26	X			X	X	X				
2-27			X		X	X				
2-28	X	X	X	X	X	X	X		X	
2-29	X	X	X	X	X	X	X	X	X	X
2-30	X	X	X	X	X	X	X	X	X	
2-31	X	X		X	X	X	X			
2-32			X	X	X	X				

2 – GENERAL RULES

2-1. Employees must provide oral and written reports of all unusual occurrences:

(a) Employees must report all personal injuries, regardless of how slight, to their supervisor, giving full details on a SIR On the Job Injury form before ending tour of duty. Delay in reporting personal injury may result in disciplinary action. All injuries should receive immediate attention. The department head or his/her designee using the following criteria will investigate employee injuries:

- 1) Telephonic notification of all reported injuries must be made within 24-hours of occurrence.
- 2) An On the Job Injury Form is to be completed by both the employee and supervision and submitted to the SIR Personnel Department, the faxed to OSS and the Worker's Compensation Division of the Law Department within 48 Hours.
- 3) A "root cause" determination is to be made.
- 4) A management follow up is to be initiated.

(b) Employees must promptly report all collisions, derailments and "near misses" to the Dispatcher using quickest means available.

(c) Employees must promptly report all injuries incurred, or reported to have been incurred, by passengers while on SIR property.

(d) Employees must report all unusual conditions or incidents that may in any way have a potentially detrimental effect on the safe operation of the system.

2-2. Employees must be suitably dressed to perform all duties safely and must observe the following:

(a) Employees working in and around the tracks or right of way are required to wear a specified safety vest.

Clothing must cover shoulders, back and abdomen.

(b) Excessively oily, greasy, torn, loose or frayed clothing is not permitted. Shoes with loose or thin soles or unlaced shoes shall not be worn.

(c) Working in shorts, or with a shirt not having sleeves, or going bare, or partially bare, from the waist up is prohibited.

(d) Employees whose duties require them to walk or work in yards or on tracks, or in shops, storerooms or in other areas in proximity to heavy movable equipment shall wear approved laced safety shoes. High-top (6 inches or more) safety are recommended.

(e) Employees wearing approved buckle type overshoes must keep buckles of such footwear securely fastened.

(f) Employees working on or about moving equipment or machinery with moving parts, or in the areas where open fires or sparks may be present must keep their hair cut or otherwise protected so as to avoid the possibility of its becoming entangled, enmeshed or burned. Hair must not interfere with employee's vision.

(g) Employees must not wear ear coverings or any other PPE not approved for use by SIR. Employees who need to wear ear protection shall follow the Hearing Conservation Program Policy Instruction - 8.14 before being issued hearing protection.

(h) Employees are responsible for complying with the procedures outlined in the Personal Protective Equipment (PPE) Policy Program Manual, specifically:

- 1) **Wearing** all required PPE during the performance of his/her tasks.
- 2) **Inspecting** the PPE prior to the start of a job and to repair or replace defective equipment.
- 3) **Reporting** defective PPE to his/her supervisor.

2-3. All employees are to be provided with a smoke-free work area as outlined in P/I 4.2.1. **Smoking is expressly prohibited in all Authority work areas** including, but not limited to, the interior space of office buildings, training facilities, maintenance and car shop facilities, dispatch command centers, stations, agent's booths, Rapid Transit cars, automobiles, trucks, vans, tracks and tunnels. Smoking or having an open flame is prohibited:

(a) In engine rooms of locomotives, cranes or any equipment that is equipped with internal combustion engines.

(b) Around diesel oil, gasoline or LP gas fueling stations, compressed gas cylinders, hazardous waste or related storage facilities.

(c) While servicing or inspecting batteries.

(d) While fueling locomotives, vehicles or machines.

(e) While in or near manhole, sewer, tank, or tunnels, etc., where flammable gases may be present.

(f) While inside any SIR owned or controlled building, office or vehicle.

2-4. Scuffling, horseplay, practical jokes, and all conduct of a similar nature, while on duty or on company property, is prohibited.

2-5. The carrying or possession of firearms, or other weapons while on duty or on Company property, except when duly authorized by SIR is prohibited.

2-6. Employees must use normally accepted and designated paths, walkways, or routes in going to, from, and within yards, shops, stations, buildings and other places of employment. "Short cuts" are prohibited.

2-7. Trespassing on the property of the company is prohibited. Reasonable means at the command of employees must be used to prevent it. However, employees are not expected to expose themselves to personal danger in complying with this rule.

2-8. Aisleways, walkways, steps, and driveways must be kept free of debris, tools, equipment and other material. Trash and refuse must be placed in containers and not thrown on the floors of buildings or strewn about the premises and/or right-of-way. Boards with protruding nails, rail, ties, couplers, knuckles, scrap, ballast mounds and other underfoot obstructions must be promptly removed from premises where employees walk or work.

2-9. Holes left in and around tracks or buildings must be adequately covered or protected by proper barricades and warning lights. Manholes and pit entrance openings must be protected when open, and they must be closed immediately after the work is finished.

2-10. Jumping across locomotive pits or other open pit areas is prohibited.

2-11. Crossing over between locomotives or cars, except when necessary to do so with STOPPED equipment in the performance of duty, is prohibited. Stepping on cut levers, couplers, or other movable part is prohibited. Employees must not crawl under locomotives or cars except when working on such equipment, and then only when proper protection is provided.

2-12. Fueling vehicles or a machine with engine running is prohibited.

2-13. The use of gasoline or the improper use of other highly flammable liquids for cleaning purposes, or to start or stimulate fires is prohibited.

2-14. Do not use compressed air or gases to clean dust or other debris from the body or from clothing.

2-15. Admitting compressed air or a gas to non-pressure (vacuum) vessel or tank is prohibited.

2-16. The use of equipment, machinery, power tools, or appliances of any kind by unauthorized or unqualified persons is prohibited.

2-17. The operation of valves, controls or switches on machinery when such operation could activate component parts that could cause injury, without first seeing that no one is in position to be injured is prohibited.

2-18. Before using tools, appliances, machines, vehicles, or other equipment, employees must be sure that they are in safe condition. Defective items must be repaired or removed from service promptly. Do not use tools, appliances or equipment unless you are properly trained to

use them. Defective tools shall be red-tagged and removed from service promptly.

2-19. Standing on improvised scaffolds or supports made of boxes, barrels, chairs, etc., is prohibited.

2-20. Standing near cables, ropes, or chains that are under tension, or when heavy pull is being made; or standing in the path of or under load, bucket, or magnet of hoisting equipment is prohibited.

2-21. Do not throw or drop anything from locomotives, cabooses, or passenger cars, trucks, scaffolding, or any higher levels, without first making sure that no one is in a position to be injured. Refuse materials must be placed in proper containers or other designated locations.

2-22. Employees passing cutting or welding operations where goggles or shields are required are prohibited from facing or watching such operations without proper eye protection.

2-23. Operating any type of internal combustion engine in an enclosed space without adequate ventilation is prohibited.

2-24. Before removing valves, caps, plugs, or other parts subject to pressure from boilers, reservoirs, tanks or other pressure vessels, the relief valves must be opened and the pressure completely exhausted.

2-25. Employees are prohibited from passing over or under safety valves or automatic blow-down valves on stationary boilers or steam generators under pressure.

2-26. The use of a metallic tape line of any kind, wire, wet rope, or other conductive materials to measure the height of any wire or the distance between wires or other electrical conductors, is prohibited.

2-27. Persons using portable telephones must exercise caution to insure that connections are made to communications lines and not to power or signal lines, which may be located on the same pole.

2-28. Persons working about electrical equipment must not use metal cased flashlights or lanterns, nor wear rings, wristwatches or other metal apparel that could come in contact with energized equipment as result of accidental hand or arm movements.

2-29. Rings, bracelets or necklaces must not be worn in areas where they could create a snagging hazard to employees working in the vicinity of machinery, getting on and off equipment, or while handling materials.

2-30. When getting off equipment, ladders, etc., examine landing areas before stepping down and retain handhold until foot can be properly placed to avoid sprains, falling, or turning ankles.

2-31. Grounding must be maintained between metal containers while gasoline or other highly flammable liquids are being poured from one to

another to prevent fires or explosions from sparks or static electricity. Where direct contact cannot be maintained, a wire with suitable connectors or clips must be used for this purpose.

2-32. UPON COMPLETION OF ANY REPAIR OR MODIFICATION OF TRACK OR TRACK APPLIANCES, ALL ASSOCIATED TRACK AND/OR APPLIANCES MUST BE TESTED TO INSURE COMPLIANCE WITH STANDARDS CONTAINED IN MW-1. EMPLOYEES PERFORMING THIS WORK MUST REMAIN IN VICINITY OF WORK AND POSITION THEMSELVES TO OBSERVE AS THE FIRST TRAIN PROCEEDS THROUGH THE WORK AREA AT RESTRICTED SPEED. SUPERVISION MUST REMAIN IN THE WORK AREA UNTIL THE FIRST TRAIN OPERATING AT NORMAL SPEED PROCEEDS THROUGH THE AREA.

Rule No.	Operation			Maintenance			Purc	Police	Exec/ Gen'l	
	M	CS	T	Tk	B&B	S&P				NRS
3-1	X	X	X	X	X	X	X	X	X	X
3-2	X	X	X	X	X	X	X	X	X	X

3 – FITNESS FOR DUTY

3-1. Supervisors must check all employees for fitness for duty when they report for work. Supervisors will also check operating employees frequently thereafter during their tour. They must not permit a Conductor or Engineer to operate a train if suspected of being unfit for duty. All employees who appear unfit for duty must be removed from service and ordered to submit to drug and alcohol testing; such unfitness must be immediately reported to the appropriate department head.

3-2. In order to fulfill this obligation properly:

(a) Supervisors must engage all employees in a face to face conversation, in a manner where they can detect an odor of alcoholic beverage or redness of the eyes when they report for duty.

(b) Supervisors must engage in conversation with employees frequently throughout the day.

(c) Transportation Department and Maintenance Division managers must check Block Operators on duty at locations without on site supervision.

(d) Supervisors must observe the employee's behavior and manner as they speak and interact with them and other employees.

(e) Supervisors must be on the lookout for the following observable effects of controlled substance use:

- 1) Staggering;
- 2) Slurred speech;
- 3) Odor of alcoholic beverage (e.g. beer, whiskey, wine);
- 4) Shaky hands;
- 5) Decreased eye/hand coordination;
- 6) Red/bloodshot, glassy or blank staring eyes;
- 7) Rambling, excited speech patterns;
- 8) Euphoria, laughing out of context;
- 9) Talkativeness, restlessness;
- 10) Sniffing, running nose;
- 11) Fast mood swings (e.g. from "down" and irritable to "up" and happy, or visa versa, within a few minutes);
- 12) Any other extraordinary behavior;
- 13) Any change in personality or behavior over a period of time;

(f) If the supervisor is out of the office for any reason, he or she must secure the sign on sheets in a place not readily accessible.

(g) If there is any doubt about an employee's fitness for duty, the supervisor must spend extra time interviewing that employee and, if necessary, **MUST** remove the employee from his/her assigned duties and notify the appropriate department head.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	C	T	Tk	B&B	S&P	NRS			
4-1	X	X	X	X	X	X	X	X	X	X
4-2	X	X	X	X	X	X	X	X	X	
4-3	X	X	X	X	X	X	X	X	X	
4-4	X	X	X	X	X	X	X	X	X	
4-5	X	X	X	X	X	X	X	X	X	

4 – PERSONAL PROTECTIVE EQUIPMENT

4-1. Employees must wear prescribed eye protection when performing work hazardous to the eyes or when in the vicinity of such work. For the purpose of example, but not limitation, listed below are the principal job functions which require eye protection (*face protection required in addition to eye protection):

- (a)** Chipping, cutting or caulking metal.
- (b)** Breaking or cutting concrete, stone or asphalt.
- (c)** Striking, or striking with, hardened tools and fastenings.
- (d)** Cutting rivets, bolts, or cotter keys, splitting nuts, etc.
- (e)** Driving, bucking, sticking, or heating rivets.
- (f)** Scaling, scraping, or removing welding flux.
- (g)** Using power-activated impact tools.
- (h)** Using tools powered by explosive charges. (NOTE: E-21 Certificate of Certification required.)
- (i)** Machining steel, cast iron, brass, or bronze.
- (j)** Boring, drilling or reaming.
- (k)** Operating woodworking machines.
- (l)** Operating manual woodworking tools.
- (m)*** Operating power rail saws, grinders or drills.
- (n)*** Using or dressing grinding wheels.
- (o)** Hammer testing tanks.
- (p)*** Blowing or cleaning with compressed air or steam.
- (q)** Spraying paint or cleaning agents.
- (r)** Pouring or handling molten metal.
- (s)*** Handling acids or other chemical solutions, and servicing/charging refrigeration equipment.
- (t)*** Handling or servicing storage batteries.
- (u)** Tending open furnaces and boiler fires.
- (v)*** Electric or gas welding, burning or cutting.
- (w)** Using tools to break frozen ground, gravel, cinders, ballast, etc.
- (x)** Working in areas where heavy dust conditions exist.
- (y)** Performing slotting, chipping operations

(z) Performing any other work hazardous to the eyes, as determined by the supervisor in charge.

4-2. When safety equipment such as, but not limited to, hard hats, protective clothing, gloves, guards, masks, respirators, eye, and hearing protection are required in specified areas for certain specified job functions, such safety equipment must be used by all persons affected. Specific PPE required for each task will be determined in accordance with P/I 8.26 "Personal Protective Equipment."

(a) Respiratory protection for any task requiring same shall be determined by the Office of System Safety (OSS) as per P/I 8.11.1 (Respiratory Program)

(b) Hearing protection for any task requiring same shall be determined by the Office of System Safety (OSS) as per P/I 8.14.1 (Hearing Conservation Program)

4-3. Employees are responsible for keeping all protective equipment issued to them in good order, properly fitted, and replaced as may be required to maintain intended protection.

4-4. Employees working in areas specifically designated as "Hard Hat Area" or where there is a possible danger of head injury from impact, or from falling or flying objects, must wear protective helmets ("hard hats"). Helmets for the protection of employees against impact and penetration of falling and flying objects must meet the specifications contained in American National Standards Institute (ANSI) Z9.1-1969. Such helmets must have a label stating "Complies with ANSI Z89.1." The shell and suspension of hard hats work together to reduce the effect of the force of falling objects striking the top of the shell. To ensure the effectiveness of a hard hat, employees must:

(a) Never modify the shell or suspension;

(b) Replace a damaged shell or suspension immediately;

(c) Regularly inspect the shell and suspension and replace at the first sign of wear;

(d) Avoid contact of the cap with energized electrical conductors (LIVE WIRES) or equipment;

(e) Not make holes through the shell;

(f) Not use paints or solvents, gasoline or other chemicals, etc., on the cap; and

(g) Clean only with mild soap and warm water.

4-5. Face shields must not be used alone as substitute for goggles or spectacles for eye protection.

Rule No.	Operations			Maintenance			Purch.	Police	Exec/ Gen'l	
	M	CS	T	Tk	B&B	S&P				NRS
5-1	X	X	X	X	X	X	X	X	X	X
5-2	X	X	X	X	X	X	X		X	
5-3	X	X	X	X	X	X	X		X	
5-4	X	X	X	X	X	X	X			
5-5	X	X	X	X	X	X	X			
5-6	X	X	X	X	X	X	X		X	
5-7	X	X	X	X	X	X	X		X	
5-8	X	X	X	X	X	X	X		X	
5-9	X	X	X	X	X	X	X		X	
5-10	X	X	X	X	X	X	X		X	
5-11	X	X	X	X	X	X	X		X	
5-12	X	X	X	X	X	X	X		X	
5-13	X	X	X	X	X	X	X		X	
5-14	X			X	X	X	X			
5-15	X	X	X	X	X	X	X			
5-16	X	X	X	X	X	X	X			
5-17	X		X			X				

5 – ON OR ABOUT TRACKS

5-1. Employees on or about tracks must always be alert to keep out of danger, exercising care to avoid injury to themselves and others. Employees must learn the orientation of normal traffic on the track and must walk against the flow of traffic when possible. Employees whose duties involve performance of tasks on or about tracks must receive track safety training and attend biannual track safety training. Nothing in these rules is to be construed as relieving any employee from performing his/her full duty in this respect.

5-2. Expect movement of equipment on any track, at any time, in any direction. Always look in both directions before crossing or getting close to any track. Crossing tracks immediately in front of moving trains, locomotives, or cars is prohibited. When crossing tracks near standing equipment, always allow sufficient room to avoid injury in case of sudden or unexpected movement.

5-3. Employees on or about any tracks, whether in the open, in shops, on bridges, or in tunnels, must move to a place of safety upon the approach of rolling equipment on the track where they are working or on an adjacent track. Employees must always position themselves at a safe distance from moving equipment, and be alert for falling or protruding equipment.

5-4. All machines being operated close enough to any track to be struck by rolling equipment must be moved to a place of safety upon the approach of a train or other moving equipment, and must remain in the clear until the moving equipment has passed.

5-5. When not in use, track equipment and machines must be secured to prevent fouling of adjacent tracks, and such equipment must be secured clear of all tracks when it is placed along right-of-way.

5-6. In addition to safety rules herein, supervisors are responsible for providing necessary protection for their employees and equipment in accordance with Operating Rules and Track Car Rules.

5-7. Employees are prohibited from being on rails, ties or any other part of track structure, except when necessary in performance of duty, or as may be necessary in going to or from work, and then only when sufficiently protected to insure their safety.

5-8. Stepping or walking on rail, derail, frog, switch, interlocking equipment, 3rd rail protection boards, or defective equipment is prohibited.

5-9. Keep hands and feet clear of power operated switches. Obtain permission from the person controlling such equipment, and take necessary precautions to prevent undesired movement before performing any work thereon.

5-10. Employees should observe moving trains for dangerous conditions such as overheated journals or shifted lading. If train crew cannot be alerted by radio or stop signals, Train Dispatcher should be notified immediately.

5-11. Sitting on footboards or steps of locomotives or leaning against standing locomotives, cars, or other equipment subject to unexpected movement is prohibited.

5-12. Extreme care must be exercised in opening or closing car doors to avoid having hands caught in door facings or latches or being injured by unexpected movement or displacement of doors.

5-13. Never walk between the running rail and 3rd rail.

5-14. Use 3rd rail mat when working close to the 3rd rail (i.e. emergency repair work).

OPERATING SWITCHES AND DERAILS

5-15. When operating switches and derails, take the following precautions:

(a) Look for moving equipment on adjacent tracks and keep clear of it.

(b) See that no other employees are in position to be injured.

(c) Check to be sure that no obstructions will interfere with proper operation.

(d) Obtain help for switches requiring excessive force to operate.

(e) Take position facing the switch or derail squarely. Avoid a twisted or awkward position.

(f) Be sure switch locks and switch point locks, if any, are removed.

(g) Keep in the clear of any movement of switch parts while releasing latches.

(h) While lifting lever, use leg muscles, and keep back straight to avoid strain.

(i) Keep feet and hands clear of descending lever or ball.

(j) When operating high switch stand, pull lever toward you instead of pushing it away from you.

(k) Never lift, kick or push a switch lever with your feet.

(l) Be sure switch points or derails have moved to proper position and are secured with switch latch or switch lock- before movement is made.

5-16. On-track derails and switch point derails must be kept in the derailing position when not in use.

OPERATING CONTACT RAIL JUMPERS

5-17. Sixty-foot Contact Rail Jumpers are available in those locations listed in Timetable Special Instructions.

When a car or train becomes stalled in a contact rail gap, the Contact Rail Jumper must be used to conduct electrical current from the contact rail to the contact shoe of a car. (Contact Rail Jumpers are the only authorized device permitted to be used for this purpose.) To prevent electrocution or serious injury when using the Contact Rail Jumper, it is imperative that the metal contact ends of the Contact Rail Jumper be kept clear of the running rails, ground, car body, trucks or any other object.

In addition to the operating Locomotive Engineer, two qualified employees must be present, one to handle each end of the jumper. If only one qualified employee is present, another qualified employee must be found before the Contact Rail Jumper may be used. Proceed as follows:

(a) TO APPLY JUMPER:

- 1) Two qualified employees will each hold one end of the jumper.
- 2) One employee will apply the spike of the jumper to the contact shoe of the car in the gap first. This employee will be in charge of the operation. Do not put the spike on the jumper into the hole in the contact shoe. When holding the jumper in the contact shoe, face the direction the train will move.
- 3) The other employee will then apply the other end of the jumper to the contact rail LAST
- 4) Wait for sufficient air pressure to build up, if necessary.
- 5) The Locomotive Engineer in the cab must keep the controller in the "OFF" position until the employee at the contact shoe signals that it is safe to move.
- 6) After receiving instructions from the employee at the contact shoe, the Locomotive Engineer in the cab will then move the controller to the first point of power ("switching") position only,
- 7) When the train begins moving, the Locomotive Engineer in the cab must be constantly alert to ensure the safety of the two employees applying the Contact Rail Jumper.
- 8) The Locomotive Engineer in the cab will stop the car or train as soon as its contact shoe has made contact with the contact rail or the full length of the jumper has been reached. The controller must be placed in the "OFF" position. This will avoid a serious arc and permit safe removal of the jumper.

(b) TO REMOVE JUMPER:

- 1) Remove the jumper end on the contact rail FIRST. Extreme care must be used to keep the jumper end free from any object.
- 2) Remove the jumper end on the contact shoe LAST.
- 3) Upon completion of its use, return the Contact Rail Jumper to the location from which it was taken.

If a train is not gapped and known to have 600-volt trouble, or motor trouble, a Contact Rail Jumper must NOT be used. The car or train must be electrically isolated and coupled to good order cars. The good order cars will then push the car or train clear of the gap.

When using a Contact Rail Jumper, always take power from the contact rail section that is in advance of the cars to be moved, when possible. Remember: If any one contact shoe on a car is touching the contact rail, all contact shoes on that car are energized with 600 volts of electrical power. When choosing the car on which to apply the Contact Rail Jumper, the leading "A" unit is preferred.

Before using a Contact Rail Jumper, check the condition of the jumper for knots and kinks, cracks or bare spots in insulation, cracked or broken handles, damaged or loose metal tips. If any of these conditions exist, do not use the jumper; notify supervision.

Do not use a jumper if the handle has excess steel dust on it.

Do not use a wet jumper.

Never attach the jumper to the contact shoe assembly or insert it in the hole in the shoe; always hold it firmly in place.

Do not look at the shoe in case of an arc.

Be sure the path ahead is clear of tripping hazards.

Do not become entangled with the jumper.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&	NRS			
6-1	X	X	X	X	X	X	X		X	
6-2	X	X	X	X	X	X	X		X	
6-3	X	X	X	X	X	X	X		X	
6-4	X	X	X	X	X	X	X		X	
6-5	X	X	X	X	X	X	X		X	
6-6	X	X	X	X	X	X	X		X	
6-7	X	X	X	X	X	X	X		X	

6 – GETTING ON OR OFF EQUIPMENT

- 6-1.** Employees must NEVER attempt to get on or off moving equipment.
- 6-2.** When getting on or off equipment, employees must face the equipment and have secure handhold and footing. Watch for equipment on adjacent tracks, close clearances, obstructions, irregularities, or openings, on the ground. Get on or off side away from main track or close clearance when conditions permit.
- 6-3.** Getting on or off equipment while carrying anything that will prevent a secure handhold, or otherwise interfere with safe movement is prohibited.
- 6-4.** Employees must get on or off trailing end of rear cars if practicable. If it is necessary to get on or off other than the rear car, when possible, use the leading end of the car to be mounted or dismounted.
- 6-5.** Employees must not stand in front of approaching equipment for any reason.
- 6-6.** When getting on or off equipment grab bars and steps must be used. Jumping off end sills or swinging up or down between two cars or other equipment with a hand on each one is prohibited.
- 6-7.** Before attempting to board equipment to be shopped, employees will ascertain why it is to be shopped and avoid using any defective parts.

Rule No.	Operations			Maintenance			Purch.	Police	Exec/ Gen'l	
	M	CS	T	Tk	B&B	S&P				NRS
7-1				X	X	X	X			
7-2				X	X	X	X			
7-3				X	X	X	X			
7-4				X	X	X	X			
7-5				X	X	X	X			
7-6	X		X	X	X	X	X			
7-7				X	X	X	X			
7-8				X	X	X	X			
7-9				X	X	X	X			
7-10			X	X	X	X	X			

7 – TRACK CARS AND WORK EQUIPMENT

7-1. Employees must not ride on cars being towed unless cars are equipped with hand brakes, handholds, and sill steps. Employees riding on track cars or trailers must be seated while car is in motion and so placed that the operator has an unobstructed view. All occupants must keep a vigilant lookout in both directions.

7-2. Employees must not sit with their feet between cars coupled together, nor use their feet against rails, ties, etc., in stopping cars.

7-3. Track cars, trucks and trailers must not be overloaded. Tools, material, supplies, etc., must be secured so they will not injure employees, fall off, or prevent operation of required warning devices.

7-4. Trailers, track cars, burro cranes or other units of on-track work equipment shall not be coupled together, except by standard equipment couplings. Trailers shall be pulled rather than pushed when practicable.

7-5. Operators and occupants of motor cars must watch for obstructions on rails or in flangeways of frogs, switches, and crossings.

7-6. When necessary to ship a track car or other gasoline-operated machine by train or truck service, the gasoline tank and carburetor must be drained and all torpedoes, fusees and other combustible materials removed before shipment is made.

7-7. Employees must not ride on footboards of cranes.

7-8. When necessary to reverse the movement of maintenance-of-way self-propelled equipment, the operator must know that all employees are in the clear, and blow three short blasts on the horn before doing so. When it is necessary for employees to work closer than 10 feet from the rear of such machine, the operator must be notified.

7-9. No track car shall be placed, or remain in service without a properly functioning horn.

7-10. All track cars and High-Rail Trucks will be operated in accordance with the Track Car Rule section of the Operating Rules, these rules, and any applicable Operating Rules and Special Instructions.

Rule No.	Operations			Maintenance			Purch.	Police	Exec/ Gen'l	
	M	CS	T	Tk	B&B	S&P				NRS
8-1	X	X	X	X	X	X	X	X	X	X
8-2	X	X	X	X	X	X	X		X	
8-3	X		X	X	X	X	X		X	
8-4	X		X	X	X	X	X		X	
8-5			X							
8-6	X	X	X						X	
8-7	X		X							
8-8	X		X	X	X	X	X		X	
8-9	X	X	X							
8-10	X		X							
8-11			X							
8-12	X		X							
8-13	X		X							
8-14	X		X							
8-15	X		X							
8-16	X		X							
8-17	X		X							
8-18	X		X							
8-19	X		X							
8-20	X		X							
8-21	X		X							
8-22	X		X							
8-23	X		X							
8-24	X	X	X							
8-25	X		X							
8-26	X		X							
8-27	X		X							
8-28	X		X							
8-29	X		X							
8-30	X		X	X	X	X	X		X	
8-31	X		X							
8-32	X		X							
8-33	X		X							
8-34	X		X							
8-35	X		X							
8-36	X	X	X							
8-37	X		X							
8-38	X	X	X	X	X	X	X			
8-39	X		X							
8-40	X	X	X	X	X	X	X			
8-41	X		X							
8-42	X	X	X	X	X	X	X		X	
8-43	X	X	X	X	X	X	X		X	

Rule No.	Operations			Maintenance				Purc	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P	NRS			
8-44	X	X	X	X	X	X	X		X	
8-45	X	X	X	X	X	X	X		X	
8-46	X	X	X	X	X	X	X		X	
8-47	X	X	X	X	X	X	X		X	
8-48	X	X	X	X	X	X	X		X	
8-49	X		X							
8-50	X	X	X	X	X	X	X			
8-51	X	X	X	X	X	X	X			
8-52	X	X	X	X	X	X	X			

8 – OPERATING LOCOMOTIVES

8-1. The moving of locomotives by unauthorized personnel is prohibited.

8-2. Employees are prohibited from riding on locomotives, motor, hand and push cars or any work equipment except as is necessary in the performance of their duties.

8-3. The maximum number of occupants within operating diesel locomotive cabs shall not exceed FOUR persons; the maximum number of occupants within a cab of a rapid transit car shall not exceed THREE persons, except by permission of proper authority. Factors that may further influence the number of occupants in a diesel cab are, but not limited to:

(a) The locomotive engineer's view is in no way obstructed. They must have a full view of the right of way.

(b) The locomotive engineer can operate freely and operating space is unencumbered.

8-4. Employees must not pass from one unit of a locomotive to another while locomotives are moving.

8-5. Picking up train orders or other materials from open doors of moving locomotives is prohibited.

8-6. Doors leading from the locomotive cab to the engine room must be kept closed. Keep locomotive side and end doors closed when the locomotive is in service.

8-7. All safety appliances, guards, equipment covers and ceiling hatch covers must be in place and securely fastened while locomotive is in service.

8-8. Employees must not step out side door of locomotive to platform, or other side elevation while locomotive is in motion.

8-9. Employees must not allow their hands or other parts of their bodies or clothing to come in contact with fans, radiator shutters or other equipment that operates automatically.

8-10. Placing face or hands near main generator or any high voltage equipment while under load is prohibited.

8-11. Do not permit locomotives to stand over burning fusees, switch heaters, or other open flame.

8-12. In case of fire, fuel oil supply to diesel engine must be shut off by operating the "Emergency Fuel Cut-Off" device, and opening main battery switch.

8-13. Employees are prohibited from restricting or interfering with normal intended function of any device or equipment on locomotives, cars or

other railroad property except in case of emergency, in which case an oral and written report must be made to the proper authority.

8-14. Nothing but standard equipment may be used on locomotives. Employees are prohibited from adding temporary equipment for personal convenience or comfort.

8-15. Employees must isolate or remove the diesel engine from main line before opening doors of high voltage electrical cabinets.

8-16. Employees must isolate or remove the diesel engine from main line before testing or replacing fuses. If circuit breakers, other than those for lighting, are found tripped while locomotive is in operation, the unit must be isolated or removed from main line before tripped breakers are reset.

8-17. Caution must be used in moving locomotives about shop premises to avoid striking employees. The bell must be ringing before moving and while passing locations where employees may be working.

8-18. Employees are prohibited from using the anglecock to control the movement of locomotives and cars except where it is absolutely necessary. Back-up hoses, hand signals, radios or speakers should be used in controlling moves to be made.

8-19. Employees moving locomotives or cars into a shop must STOP at STOP SIGNS outside shop doors. After making the required stops outside the shop and observing that the door is open high enough to pass through safely, employee operating equipment, before entering, will wait for a proceed signal from designated employee at the entrance of the shop. Employee moving equipment will then sound the horn twice before moving and proceed into the shop no faster than five (5) miles per hour, looking closely at the track, prepared to stop at any time.

If the move into the shop is being made with a single car, employee operating car will stop inside the shop door and wait for a Mechanical Department employee to apply 600 volt trolley to the car before attempting to move the car any further.

8-20. All employees moving locomotives or cars into the shop, regardless of train length, must stop at least two (2) car lengths, the fifty(50) feet, then ten(10) feet and then two (2) feet from the standing cars, or end of track. When space limitations within the shop itself do not permit the specified safety stops due to other cars being already on the track, employees moving equipment will make any remaining safety stop(s) in accordance with available space.

8-21. Whenever contact rail power is lost and it necessary for an employee to apply a 600 volt trolley to a train in order to move it to its required position inside the shop, the train must be operated "point on - point off" only, and the controller must not be advanced beyond SWITCH position. To avoid the possibility of arcing, direct communication must be established between employee operating equipment and employee handling the trolley to ensure the controller is in OFF when the trolley is removed

8-22. Before a locomotive is coupled to or moved, it must be known that no employees are in a position to be injured. Always check to see that anything such as hoses, pipes, cables, etc. which may be connected to or leaning against locomotives are removed to a place of safety before any moves are made.

8-23. When placing a locomotive in shop, or before leaving it unattended for any reason, employees must see that the throttle is in idle position, the reverser in neutral position, the control switch open and the locomotive secured sufficiently to prevent movement. Where instructions require removal of reverser and brake valve handles, they must be properly stored in brackets or containers provided, unless otherwise instructed.

8-24. A blue signal or "tag" attached to the throttle, or at other locations where it is readily visible to the operator at the controls of a locomotive indicates that employees are working on, under, or between that locomotive, or other locomotives or cars coupled to that locomotive. A locomotive having such blue signal so displayed will not be moved until this protection has been removed by the same person, or craft that displayed it.

8-25. When coupling or uncoupling any equipment, continuous direct communication must be maintained between the employee operating the locomotive or revenue cars and the employee performing the coupling or uncoupling.

8-26. Going between or in front of moving engines or cars to couple and uncouple, adjust couplers, knuckles, or lock pins; or to manipulate angle cocks is prohibited.

8-27. Kicking, or other use of feet to adjust couplers, knuckles, or lock pins is prohibited. Always get help when required.

8-28. Before going between standing engines or cars to couple, uncouple, or make adjustments, observe the following:

(a) Have a clear understanding with all persons involved to protect against any movement of the equipment.

(b) Wait until slack has adjusted on non-revenue work equipment.

(c) If cars are on a grade, be sure the brakes are in EMERGENCY they are secured by a sufficient number of hand brakes.

8-29. While equipment is standing, see that coupling appliances, including knuckle pins, are in place and in good order, and make any necessary adjustments to insure proper coupling. Always wear leather gloves. Always stand to the side rather than directly in front when adjusting knuckles or couplers. If equipment is found to be defective, it must be reported to responsible supervisor.

8-30. Giving any signal other than a STOP signal while an employee is between cars, locomotives, or between locomotives and cars is prohibited.

8-31. On non-revenue equipment, before opening an angle cock on an uncoupled air hose, either hold the air hose or take other precautions to prevent injury from hose movement.

8-32. Separating air hose by hand before angle cocks are closed is prohibited.

8-33. Air hose couplings must not be struck or adjusted in any manner to stop air leaks until the angle cocks are closed on both sides of the coupling.

8-34. To uncouple, use uncoupling lever. If lever is inoperative, stop the movement, crossover, and use uncoupling lever on other car. Do not go between cars to crossover.

8-35. When cutting off cars with air hose coupled, keep clear of hoses and flying debris.

8-36. When coupling or uncoupling revenue equipment, engineer must operate from the operating cab that is closest to the intended coupling or uncoupling.

Employees must remove and secure safety chains and inter-car safety barriers before separating passenger cars.

8-37. When coupling equipment, arrangements should be made to couple uphill.

8-38. When on cabooses, cars, or locomotives, employees must exercise care to avoid injury from slack action or from sudden start or stop. In cabooses or locomotives, they must remain seated when duties permit, and wear seat belts when provided. Employees who are not seated must maintain a firm hand hold grip.

8-39. Train and engine service employees must not occupy the roof of a caboose or engine under any circumstances. Other employees whose duties require them to occupy the roof of a car, caboose or engine may do so only when equipment is standing and the train crew has been notified that such work or inspection is required.

8-40. Employees must not position any part of the body between sides or ends of cars and loaded rail, lumber, pipe, or other lading which is likely to shift. Standing on or placing any part of the body on top of such material is prohibited, except when absolutely necessary by employees engaged in loading or unloading operations.

8-41. Sitting on running boards of equipment, platforms or steps of cabooses and locomotives, sides of cars, or in doorways is prohibited.

8-42. Riding on cars and platforms of locomotives or cabooses without a secure hold is prohibited. Riding on locomotive steps is prohibited. Standing on top of any car near the end or sides, except when necessary while the car is undergoing repairs is prohibited.

8-43. Do not ride between cars, locomotives, or between locomotives and cars unless it is positively necessary in the performance of duty.

8-44. Walking, standing or sitting on the sides or ends of open-top cars is prohibited. Walking over open-top loaded equipment is prohibited.

8-45. Do not sit, stand, lean against or step on hand rails, uncoupling rods or levers, couplers, brake wheels, trucks, or the movable portion of center sills.

8-46. When opening or closing, or moving through locomotive or caboose doors, employees must maintain a firm hold on knob or handle and keep hands off door edges and facings.

8-47. Ascending or descending end ladders between or on leading end of moving equipment is prohibited.

8-48. Jumping from one piece of equipment to another is prohibited.

8-49. While on moving equipment, employees must maintain a lookout in the direction of movement for obstructions or close clearances along side of track, and must not lean out or be on side of equipment.

8-50. When unloading ballast or other material from hopper cars, or when cleaning or doing other work which makes it necessary for the car doors to be opened, be certain that all concerned have a clear understanding of what is to be done, before latches are released and doors are opened. When entering such cars located over pits or on trestles or fills, employees must use a safety harness to prevent falling through hoppers.

8-51. When unloading material of any kind where it is necessary to bump or jar the cars to dislodge the material, all employees must be off the cars and in the clear before the cars are bumped. Occupation of ballast or hopper cars while such cars are being moved is prohibited.

8-52. Engine rooms, cabs, walkways, steps, grab bars and other safety appliances must not be obstructed by material, supplies or tools and must be kept free from oil, grease, dirt, rags, etc.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&	S&	NR			
9-1	X	X	X	X	X	X	X	X	X	X
9-2	X		X							
9-3	X		X							
9-4	X		X							
9-5	X		X							
9-6	X		X							
9-7	X		X							
9-8	X		X							
9-9	X		X							
9-10	X		X							
9-11	X		X							
9-12	X		X							
9-13	X	X	X							
9-14	X		X							
9-15	X		X							
9-16	X		X							
9-17	X		X							
9-18	X		X							
9-19	X		X							
9-20	X		X							
9-21	X		X							
9-22	X		X							
9-23	X		X							
9-24	X		X							
9-25	X		X							

– SERVICING OR MAINTAINING LOCOMOTIVES OR CARS

9-1. BLUE SIGNAL (BLUE FLAG) PROTECTION

PURPOSE

This Rule prescribes the requirements that must be followed for the protection of railroad workers engaged in the inspection, testing, repair and servicing of rolling equipment whose activities require them to work on, under, or between such equipment and subjects them to the danger of personal injury posed by movement of this equipment.

DEFINITIONS:

BLUE SIGNAL - A clearly distinguishable blue flag or blue light by day and a blue light at night. When attached to the operating controls of a locomotive, it need not be lighted if the inside of the cab area of the locomotive is sufficiently lighted so as to make the blue signal clearly distinguishable.

WORKERS - Railroad employees assigned to inspect, test, repair, or service railroad rolling equipment, or their components including brake systems. Trains are excluded except when assigned to perform such work on railroad rolling equipment that is not part of the train or yard movement they have been called to operate.

NOTE-: Testing does not include visual observations made by an employee positioned inside or alongside a caboose, locomotive, or rapid transit car.

GROUP OF WORKERS - Two or more workers of the same or different crafts assigned to work together as a unit under a common authority and who are in communication with each other while the work is being done.

MAIN TRACK - A track, other than an auxiliary track, extending through yards or between stations, upon which trains are operated by timetable or train order or both, or the use of which is governed by a signal system.

LOCOMOTIVE SERVICING TRACK AREA - One or more tracks within an area in which the testing, servicing, repair, inspection, or re-building of locomotives is under the exclusive control of mechanical department personnel.

CAR SHOP REPAIR TRACK AREA - One or more tracks within an area in which the testing, servicing, repair, inspection, or rebuilding of railroad rolling equipment is under the exclusive control of mechanical department personnel.

ROLLING EQUIPMENT - Locomotives, railroad cars, and one or more locomotives coupled to one or more cars.

LOCOMOTIVE - A self-propelled unit of equipment designed for moving other equipment in revenue service including a self-propelled unit designed to carry passengers, and may consist of one or more units operated from a single control.

SWITCH PROVIDING ACCESS - A switch, which if traversed by rolling equipment, could permit that rolling equipment to couple to the equipment being protected.

EFFECTIVE LOCKING DEVICE - When used in relation to manually operated switch or a derail means one which is:

- Vandal resistant;
- Tamper resistant; and
- Capable of being locked and unlocked only by the class, craft or group of employees for whom the protection is being provided.

When used in relation to remotely controlled switch means a blocking device that will effectively prevent the lever or button controlling the switch from being operated.

BLUE SIGNAL DISPLAY

Blue Signals displayed in accordance with paragraphs A, B and C signify that workers are on, under, or between rolling equipment. When so displayed:

- The equipment must not be coupled to;
- The equipment must not be moved, except as provided for in paragraph C;
- Other rolling equipment must not be placed on the same track so as to reduce or block the view of a blue signal, except as provided for in Paragraphs (c) 1)-3); and
- Rolling equipment must not pass a blue signal.

Blue Signals must be displayed in accordance with paragraphs (a), (b) and (c) by each craft or group of workers prior to their going on, under, or between rolling equipment and must only be removed by the same craft or group that displayed them.

(a) WORKERS ON A MAIN TRACK

When workers are on, under, or between rolling equipment on a main track:

- 1) A blue signal must be displayed at each end of the rolling equipment;
- 2) If the rolling equipment to be protected includes one or more locomotives, a blue signal must be attached to the controlling locomotive at a location where it is readily visible to the Engineer or Operator at the controls of that locomotive; and

- 3) When emergency repair work is to be done on, under, or between a locomotive or one or more cars coupled to a locomotive, and blue signals are not available, the Engineer or Operator must be notified and effective measures must be taken to protect the making the repairs.

(b) WORKERS ON TRACK OTHER THAN MAIN TRACK

When workers are on, under, or between rolling equipment on a track other than a main track:

- 1) A blue signal must be displayed at or near each manually operated switch providing access to that track;
- 2) Each manually operated switch providing access to the track on which the equipment is located must be lined against movement to that track and locked with an effective locking device;
- 3) The supervisor must have notified the Operator of any remotely controlled switch that work is to be performed, and have been informed by the Operator that each remotely controlled switch providing access to the track on which the equipment is located has been lined against movement to that track and locked as prescribed in paragraph (d);
- 4) If rolling equipment requiring blue signal protection as provided for in this rule is on a track equipped with one or more crossovers, both switches of each crossover must be lined against movement through the crossover toward that rolling equipment, and the switch of each crossover that provides coupling access to the rolling equipment must be protected in accordance with subparagraphs 1), 2) and 3); and
- 5) If the rolling equipment to be protected includes one or more locomotives, a blue signal must also be attached to the controlling locomotive at a location where it is readily visible to the Engineer or Operator at the controls of that locomotive.

(c) ALTERNATE METHODS OF PROTECTION

Instead of providing blue signal protection for workers in accordance with paragraph (b) (WORKERS ON TRACK OTHER THAN MAIN TRACK), the following methods for blue signal protection may be used:

- 1) **LOCOMOTIVE SERVICING TRACK AREAS** - When workers are on, under, or between rolling equipment in a locomotive servicing track area:
 - a) A blue signal must be displayed at or near each switch providing entrance to or departure from the area;
 - b) Each switch providing entrance to or departure from the area must be lined against the movement to the area and locked with an effective locking device;

- c) A blue signal must be attached to each controlling locomotive at a location where it is readily visible to the Engineer or Operator at the controls of that locomotive;
 - d) If the speed within this area is restricted to not more than 5 miles per hour, a derail capable of restricting access to that portion of a track within the area on which the rolling equipment is located will fulfill the requirements of a manually operated switch in compliance, with subparagraph b) of this paragraph when positioned at least 50 feet from the end of the equipment to be protected by the blue signal, when locked in a derailing position with an effective locking device, and when a blue signal is displayed at the derail;
 - e) A locomotive may be moved onto a locomotive servicing area track after the blue signal has been removed from the entrance switch to the area. However, the locomotive must be stopped short of coupling to another locomotive;
 - f) A locomotive may be moved off of a locomotive servicing area track after the blue signal has been removed from the controlling locomotive to be moved and from the area departure switch;
 - g) If operated by an authorized employee under the direction of the person in charge of the workers, a locomotive protected by blue signals may be repositioned within this area only after the blue signal has been removed from the locomotive to be repositioned and the workers on the affected track have been notified of the movement; and
 - h) Blue signal protection removed for the movement of locomotives as provided in subparagraphs e) and f) of this paragraph must be restored immediately after the locomotive has cleared the switch.
- 2) **CAR SHOP REPAIR TRACK AREAS** - When workers are on, under, or between rolling equipment in a car shop repair track area:
- a) A blue signal must be displayed at or near each switch providing entrance to or departure from the area;
 - b) Each switch providing entrance to or departure from the area must be lined against movement to the area and locked with an effective locking device;
 - c) If the speed within this area is restricted to not more than 5 miles per hour, a derail capable of restricting access to that portion of a track within the area on which the rolling equipment is located will fulfill the requirements of a manually operated switch in compliance with subparagraph b) of this paragraph when positioned at least 50 feet from the end of the equipment

to be protected by the blue signal, when locked in a derailing position with an effective locking device and when a blue signal is displayed at the derail; and

- d) If operated by an authorized employee under the direction of the person in charge of the workers, a car mover may be used to reposition rolling equipment within this area after workers on the affected track have been notified of the movement.
- 3) **TRACKS OTHER THAN MAIN TRACKS** - Except as provided in paragraphs (c) 1) and 2) when workers are on, under, or between rolling equipment on any track, other than a main track:
- a) A derail capable of restricting access to that portion of the track on which such equipment is located, will fulfill the requirements of a manually operated switch when positioned no less than 150 feet from the end of such equipment; and
 - b) Each derail must be locked in a derailing position with an effective locking device and a blue signal must be displayed at each derail.
- 4) **EMERGENCY REPAIR WORK** - When emergency repair work is to be done on, under, or between a locomotive or one or more cars coupled to a locomotive, and blue signals are not available, the Engineer or operator at the controls of that locomotive must be notified and effective measures must be taken to protect the railroad employees making the repairs.

(d) REMOTELY CONTROLLED SWITCHES

- 1) After the Operator of the remotely controlled switches has received the notification required by paragraph (b) 3), the Operator must line each remotely controlled switch against movement to that track and apply an effective locking device to the lever, button, or other device controlling the switch before he may inform the employee in charge of the workers that protection has been provided. The Operator may not remove the locking device unless the supervisor informs him that it is safe to do so.
- 2) The Operator must maintain for 30 days a written record of each notification and contain the following information:
 - a) The date and time the Operator received notification of the work to be performed;
 - b) The name and craft of the supervisor who provided the notification;
 - c) The number or other designation of the track involved;
 - d) The date and time the Operator notified the supervisor that protection had been provided in accordance with the first paragraph of this section D; and

e) The date and time the Operator was informed that the work had been completed, and the name and craft of the supervisor who provided this information.

9-2. Cars or other equipment must not be placed or moved on repair tracks by repair track forces until it is known that all employees are clear of the tracks on which the movement is to be made.

9-3. Cars must be secured by means of sufficient hand brakes, and air brakes in emergency to prevent movement while undergoing repairs. Particular attention must be given to cars equipped with roller bearings.

9-4. Before jacking up one end of a locomotive or car, employees must block the wheels with wheel stops or approved chains on the other end of such equipment to prevent rolling or other undesirable movement.

9-5. When a car or other equipment is jacked up, even if trucks are not removed, employees are prohibited from working on or going under such equipment until it is properly supported by trestles, horses, stands, or other adequate blocking with wheel stops or approved chains.

9-6. Guiding center pin with hands when lowering car body onto trucks is prohibited. If center pin should foul, the car must be raised and center pin properly positioned.

9-7. Employees are prohibited from placing their hands in journal boxes while boxes are jacked up. Tools are provided for applying and removing parts and feeling journals, and they must be used.

9-8. Employees are prohibited from placing their hands between truck bolsters and springs or spring planks on cars, except when blocks have been inserted to prevent bolsters from falling in case the supporting jack slips.

9-9. Employees must not attempt to apply brake shoes, renew journal brasses, or do other work on cars where application of brakes may result in injury until brakes have been cut out and reservoirs bled. Similar work must not be performed on locomotives until brakes have been cut out. Employees must ensure that pits are clear of employees before dumping or releasing air from any car or reservoir.

9-10. In the process of repairs, employees who burn off bolts or rivets or remove nuts from grab irons, ladders, hand rails, running boards, etc., must remove such insecure parts immediately. Leaving materials or parts of equipment in position and not properly secured when applying or removing them is prohibited.

9-11. When dismantling cars or locomotives, the work must be properly planned and extreme care used to prevent employees being struck by falling parts when supports are burned or cut off, or otherwise removed. Rope off the area and use hazard warning signs where necessary.

9-12. Employees are prohibited from doing work on locomotives or cars that may result in undesired movement of the equipment without first taking necessary precaution to prevent undesired movement and possible personal injury. Before working on cushioning underframe cars or standing in front of couplers of such cars, be sure cushioning devices are fully extended so there will be no unexpected movement.

9-13. The use of unapproved cleansing agents for cleaning equipment or parts is prohibited. Use only agents which are approved for cleaning purposes, and then only according to instructions and with personal protective equipment, as required.

9-14. Electrical load and high potential testing shall be performed by qualified personnel only. When making high potential and electrical load tests, suitable warning signs must be displayed to keep persons not engaged in making tests safely away from equipment and circuits being tested. Immediately after completion of these tests, and before test equipment has been disconnected, circuits which have been under test shall be effectively grounded for a sufficient length of time to completely eliminate static charges.

9-15. The isolation switch must be in "Start" position and control switch in "Off" position while working on or inspecting main generator, traction motors or power circuits, except when the nature of the work requires that these circuits be energized, and then person closing switches must know that all workers have been notified and are in a safe position before switches are closed.

9-16. When in engine room or radiator compartment with engine running, employees must keep safe distance from fans, shafts, belt drives, or other moving parts.

- 9-17.** When working on the diesel engine, the electrical equipment, or any of the rotating equipment, the starting fuse must be removed, the main battery switch opened, and the engine start switch tagged with a blue flag.
- 9-18.** Do not stand in front of open cylinder test valve while engine is being rotated.
- 9-19.** Keep in the clear when taking off the first air box or crankcase cover
- 9-20.** Air box and crankcase covers should not be removed or tightened while the engine is running. All air box and crankcase covers must be in position and tight before the engine is started.
- 9-21.** Before starting engine, an inspection is to be made to ensure that all tools and equipment have been removed and in the clear, and ample warning shall be given to other employees.
- 9-22.** When sanding cars or locomotives, employees must take a position where there is no danger of being struck by flying particles in case of unexpected movement of locomotives. Proper PPE must be worn while performing this task.
- 9-23.** Employees are prohibited from tightening pipe connections on locomotives, cars or other equipment while the part to be tightened is under pressure.

OPERATION OF MAIN AND AUXILIARY BUGS

9-24. Operation of Main Bug:

ONLY EMPLOYEES SPECIFICALLY TRAINED TO OPERATE A MAIN BUG MAY DO SO.

- (a) Before placing main bug on car, place protective shoe pad covers on all shoe pad of the car except for the shoe pad which is being bugged.
- (b) Alert all workers around the car that the car is about to be bugged.
- (c) Remove main bug from hanger. Make sure main bug TIP is inside the outer sleeve.
- (d) Put main bug over she pad, keeping main bug tip inside the outer sleeve.
- (e) Place main bug firmly on she pad, with one hand on the inner sleeve and one hand on the outer sleeve, push inner sleeve to advance main bug tip on to shoe pad and then twist and lock.
- (f) Never remove main bug with the tip out of the sleeve.
- (g) Never touch the side of a car when handling the main bug.
- (h) Always untwist and retrieve main bug tip before removing main bug from shoe pad.
- (i) Always re-hang main bug in the hanger.

9-25. Operation of Auxiliary Bug:

ONLY EMPLOYEES SPECIFICALLY TRAINED TO OPERATE AN AUXILIARY BUG MAY DO SO.

- (a) Make sure all circuit breakers in cabs are off.
- (b) Unlock knife switch cover.
- (c) Raise cover and open knife switch to center position.
- (d) Turn auxiliary bug circuit breaker to "off" position.
- (e) With knife switch in center position, insert bug on pin and throw knife switch to the right.
- (f) Let cover rest on knife switch.
- (g) Turn auxiliary bug circuit breaker to "on" position.

Rule No.	Operations			Maintenance			Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P			
10-1	X	X	X	X	X	X	X	X	X
10-2	X	X		X	X	X	X		
10-3				X	X	X			
10-4	X			X					
10-5				X					
10-6				X					
10-7				X	X	X			
10-8	X	X		X	X	X	X		
10-9	X			X	X	X	X		
10-10	X			X	X	X			
10-11	X			X	X	X	X		
10-12	X			X	X	X	X		
10-13	X			X	X	X	X		
10-14	X			X	X	X	X		
10-15	X			X	X	X	X		
10-16	X			X	X	X	X		
10-17	X			X	X	X			
10-18	X			X	X	X	X		
10-19	X			X	X	X	X		
10-20	X			X	X	X			
10-21	X	X	X	X	X	X	X		
10-22	X	X		X	X	X	X		
10-23	X	X	X	X	X	X	X		
10-24	X	X		X	X	X	X		
10-25	X				X				
10-26	X				X				
10-27	X				X	X	X		
10-28	X				X	X	X		
10-29	X				X	X	X		
10-30	X			X	X	X	X		
10-31	X			X	X	X	X		
10-32	X			X	X	X	X		
10-33	X			X	X	X	X		
10-34	X			X	X	X	X		
10-35	X			X	X	X	X		
10-36	X			X	X	X	X		
10-37	X			X	X	X	X		
10-38	X			X	X	X	X		
10-39				X	X	X			
10-40	X	X		X	X	X	X		
10-41				X	X	X			

10 – TOOLS, APPLIANCES AND MACHINES

10-1. Machines or tools must not be used for purposes other than those for which they are designed. All tools must be inspected and in good working order before use.

10-2. Employees are prohibited from striking hardened bolts, pins, bushings, tempered tools or any other hardened objects with hard hammers or other hardened materials.

10-3. Spike mauls must not be used to strike chisels, rock drills, backing out tools, lining pins, other spike mauls, etc. Approved hammers must be used for such purposes.

10-4. Two employees must not drive the same spike at the same time. Spiking over a rail is prohibited, except when track structure makes it necessary.

10-5. Claw bars must not be driven under spike heads with spike mauls. Sledgehammers must be used for this purpose.

10-6. The use of lining bars or claw bars for turning rail is prohibited. Rail forks, or other approved tools must be used for this purpose.

10-7. Leaving shovels, forks, rakes, hoes, or other pointed or sharp-edged tools lying with points or edges up is prohibited.

10-8. Tools or material must not be left standing or leaning against walls, locomotives, cars, etc..

10-9. Employees must not use fingers for aligning holes for the insertion of rivets, bolts, knuckle pins, etc.

10-10. Employees must use tie tongs when handling ties manually. If conditions prohibit the use of tongs, specific permission must be obtained from proper authority before proceeding.

10-11. Where possible when assisting in the use of chisel bars, punches, rods, or other such equipment, the employee holding the tools should stand on the opposite side from the employee using the hammer. Employee holding tool must not place hands in position where hands may be struck by missed hit.

10-12. Using a file as a wedge or pry bar, striking a file with or against metal, or the use of a file without handle is prohibited.

10-13. When using a wrench, be sure it fits properly. When possible apply force by pulling. If you must push, do so with open palm.

10-14. Brooms, bagging, or similar protection must be used when cutting off bolts, nuts, rivets, etc., and when backing out bolts or rivets. Canvas or other screens along with proper PPE, must be used when chipping or cutting to prevent injury from flying fragments.

- 10-15.** Never press a screwdriver into a small object held in the hand. Use a vise or other means to hold such materials.
- 10-16.** Sitting on, standing on, or straddling a bar or lever while in use is prohibited.
- 10-17.** When moving a car by hand, have handle of car mover slightly out of line with rail to avoid catching fingers.
- 10-18.** Employees must see that jacks have secure and adequate footing. Except when using jacks in track repair operations, a block of wood or other approved cushioning material must be inserted between the head of the jack and metal parts being jacked. Proper jack handles must be used, and handles must be removed when jacks are not being operated.
- 10-19.** Before tripping or otherwise lowering a jack under load, make certain that all employees, tools and materials are in the clear.
- 10-20.** Track jacks must be placed on outside of rail when practicable.
- 10-21.** Operating or working near a machine or appliance without safety guards in proper position is prohibited.
- 10-22.** Repairing, cleaning, oiling or adjusting machinery while it is running is prohibited when employee is subject to being struck or caught by moving parts. Before performing such work, machinery must be stopped and controls properly locked out and tagged in accordance with Lock Out - Tag Out P/I 8.24.1.
- 10-23.** Before starting motors, pumps or other machinery, inspect for potential flying objects and potential catching of material or clothing warn other employees and see that they are in the clear.
- 10-24.** Reaching between, going between, or touching moving belts and cables, or shifting them by hand, is prohibited.
- 10-25.** Employees operating woodworking machines must not pass hands between rip saw and guide when ripping small material, a pusher must be used, and hands must not be passed over jointer blades while dressing materials less than 1" in thickness or 4" in width.
- 10-26.** Loose or scrap material must be removed from power saw table immediately after cut has been made.

10-27. Before any material is drilled on a drill press, it must be properly fastened by means of a vise, clamp or chuck to prevent it from turning. Hands, tongs, wrenches or other tools must not be used to hold such material.

10-28. Removing chips, cuttings or scale by hand from machine tables or moving tools is prohibited. Machine must be off and brushes or other devices must be used.

10-29. All set screws or keys in revolving spindles or shafts must be flush or countersunk.

10-30. The operation of grinding wheels at speeds in excess of those recommended by the manufacturer is prohibited. All grinding wheels must be of a type and size approved for the machine on which they are to be used and must be applied in accordance with instructions of the manufacturer.

The use of makeshift parts or attachments is prohibited. Grinding wheels not bearing manufacturer's label showing speed for which designed shall not be used.

Removal of guards or any protective device is prohibited.

10-31. Grinding on sides of abrasive wheels not designed for that purpose is prohibited.

10-32. Tool rest shall be not more than 1/8 inch from the wheel. Never attempt to adjust tool rest while the wheel is in motion.

10-33. Keep grinding wheels clean and true by frequent dressing. If a wheel vibrates after dressing, stop the machine and check for other defects.

10-34. Apply the work gradually to a cold grinding wheel, in order for it to warm up. Always apply the work smoothly and avoid forcing the work to the extent that glazing or breakage may occur.

10-35. The use of air-operated grinding tools not equipped with speed governors in good order is prohibited. Repairs or adjustments to speed governors must be made only by authorized personnel.

10-36. Pointing pneumatic or other power actuated tools at a person is prohibited. Before connecting or disconnecting pneumatic tools, close valves at supply lines and relieve all pressure from hoses. Introduce air pressure to supply lines gradually, being prepared to shut off pressure in event of leak.

10-37. Laying down a pneumatic, electric or other tool while motor is running is prohibited. Place such tools where they will not be accidentally started.

10-38. When a reaming or drilling tool which is operated by a portable pneumatic motor becomes fouled in the hole to the extent that it is necessary to strike the tool with an object to free it, the motor must be removed from the tool before it is struck.

10-39. Employees working on the opposite side of the rail from a power track wrench must not place themselves in direct line with the bolt being tightened.

10-40. Unless equipment is double insulated, electrical tools, both portable and stationary, must be equipped with a functioning ground wire before using.

10-41. Chain saws must be equipped with tip guards.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P	NRS			
11-1	X	X	X	X	X	X	X	X	X	X
11-2	X	X	X	X	X	X	X	X	X	X
11-3	X			X	X	X	X			
11-4	X			X	X	x	X			
11-5	X			X	X	X	X			
11-6	X			X	X	X	X			
11-7	X			X	X	X	X			
11-8	X	X	X	X	X	X	X	X	X	X
11-9	X			X	X	X	X			
11-	X			X	X	X	X			
11-	X			X	X	X	X			
11-	X			X	X	X	X			
11-	X			X	X	X	X			
11-	X			X	X	X	X			
11-	X			X	X	X	X			
11-	X			X	X	X	X			
11-	X			X	X	X	X			
11-	X	X		X	X	X	X			
11-	X			X	X	X	X			

11 - LOCK-OUT/TAG-OUT

11-1. Managers, supervisors and employees must follow all Lockout/Tagout guidelines which will enable SIR and MTA NYC Transit employees and outside contractors to protect themselves from energy sources that could cause personnel injury or equipment/facility damage during the conduct of repair, maintenance and operation of equipment or processes.

11-2. Each Department must survey their operations to identify energy sources (primary and secondary) that require Lockout/Tagout.

11-3. Each Department must identify the sequence of Lockout/Tagout procedures required for each piece of equipment or process outlined in the Lock-Out/Tagout manual. The term "EMPLOYEE" shall refer to SIR, NYC Transit and Contractor personnel.

11-4. An affected employee is an employee who performs work in the area in which energy control procedures have been implemented. An affected employee becomes an authorized employee when that employee's duties include performing servicing and/or maintenance. An authorized employee is a knowledgeable employee who performs work on or near energy devices and uses Lockout/Tagout for his/her own protection. Qualified contractor employees may be authorized to perform assignments only after becoming familiar with the safety procedures.

11-5. Each affected employee is responsible for becoming familiar with, and following, the procedures contained in the Lock Out/Tagout Manual and P/I 8.24.1.

11-6. All authorized and affected are responsible for following all Lockout/Tagout procedures and **never** attempting to bypass or defeat installed Lockout/Tagout protection.

11-7. Each Tag must have the following information written on it:

- (a)** The name of the authorized employee who applied the Tag.
- (b)** The name and telephone number of the person who authorized the tag.
- (c)** A brief description of why the Tag was applied.
- (d)** The date and time the tag was applied.
- (e)** The date and time the Tag is expected to be removed.

11-8. Tags must have "DANGER DO NOT OPERATE" inscribed on them. The tag must be obeyed. Substitutions are strictly forbidden.

11-9. The following Lock Out/Tagout procedures must be followed by all affected employees:

- (a)** Whenever Lockout is possible, Tagout only is prohibited.

- (b) Operation of equipment protected by Tags is strictly prohibited.
- (c) Unauthorized alteration or removal of Tags and/or Locks is strictly prohibited.
- (d) Violation Lockout/Tagout procedures can lead to injury or death.
- (e) Individual(s) responsible for normal production operations must be notified, prior to changing any Lockout/Tagout procedures, that their equipment/process will be released to other Authorized personnel.
- (f) All required energy isolating devices must be positioned, to isolate the equipment/process from its energy source(s).
- (g) Authorized Employees will apply Lockout devices to keep energy isolating devices in place and in a safe position.
- (h) Each Authorized Employee will keep assigned keys to a Lockout device on his/her person, while work is being performed.
- (i) Isolation of the energy source(s) must be verified after the lockout devices are in place. Verification is achieved by operating switches, circuit breakers or other controlling devices for the piece of equipment. Visual inspection and appropriate testing equipment must be used to determine that energy isolation is effective. Any residual energy must be drained, relieved or disconnected.
- (j) Tagout shall be used as a protective measure only if the equipment is not capable of being locked out. The equipment will only be used after authorization from the Supervisor of the equipment/process has been acquired.
- (k) Each Authorized Employee will verify that Tagout devices have been applied to prevent unauthorized operation of the equipment and removal of the energy isolating device(s).

11-10. The following procedures must be followed at a change of shift:

(a) End of First Shift: Special provisions must be made to ensure the continuity of Lockout/Tagout protection during multiple shift operations. If a job cannot be completed within the same shift, the supervisor in charge is responsible for ensuring that the integrity of the existing Lockout/Tagout procedure is maintained and transferred to the relieving Authorized Employee. The maintenance and transfer of a Lockout/Tagout procedure from one shift to another must be documented along with appropriate information changes on the Tags.

(b) Start of New Shift: Each incoming Authorized Employee will check each Lockout/Tagout location in his/her area of responsibility to assure themselves that it is safe to begin work.

11-11. If, for any reason, interruption of Lockout/Tagout protection is required, authorization must first be obtained from the Supervisor of the

area/equipment/process. To interrupt Lockout/Tagout, the following sequence of events must be followed:

- (a) Clear equipment/process of tools and materials.
- (b) Clear personnel.
- (c) Remove Locks/Tags from the equipment controls according to established procedures.
- (d) Energize the equipment/process.
- (e) Proceed with test, etc.
- (f) After test etc., de-energize all systems and relock/re-tag the controls to continue the work.

11-12. At times when work must be performed on a piece of equipment or a process that cannot be de-energized. In these instances, it must be established that continuity of service is essential and that the shutdown of the system is impractical. Work in this type of environment must be authorized by a Supervisor. The Authorized Personnel performing the work must have proper control circuits, control equipment, personal protective equipment and documented operating procedures which provide proven, effective, protection.

11-13. On occasion it may be necessary to provide temporary power to equipment that has been isolated from its primary and secondary energy sources. In these cases, the following precautions must be followed:

- (a) Equipment must be completely isolated prior to making the temporary power connections.
- (b) The temporary connection must be properly identified and insulated. A warning Tag, prominently positioned, must describe the specific hazard.
- (c) All personnel affected in the normal power lockout must be advised of, and approve, the temporary connection.

11-14. In a situation where the Authorized Employee, who applied the Lockout/Tagout protection is not available, and every effort made to locate the employee has been unsuccessful, the locks and tags may be removed under strict observation of a Supervisor, from the same department as the Authorized Employee and who is knowledgeable of the job. The Locks/Tags may be removed only after the following conditions have been met:

- (a) The Authorized Employee's direct Supervisor must be consulted.
- (b) All appropriate checks and inspections have been made to ensure that it is safe to remove the Locks/Tags.

NOTE: The Supervisor who removes the Locks/Tags must notify the Authorized Employee who originally signed for the Lockout device tag, and that employee's direct Supervisor, at the earliest opportunity.

11-15. At times it may be necessary to service or repair equipment that requires one or more groups to accomplish. Under these conditions, the primary responsibility for Lockout/Tagout procedures is vested in the Authorized Employee for the group, or groups, working under group Lockout/Tagout protection.

11-16. The following procedures must be followed for release of Lockout/Tagout:

(a) A Visual Inspection: After working on equipment/process, but before energy has been restored, Authorized Personnel must conduct a visual inspection of the work area to ensure there are no unnecessary items present in the work area and that all machine components are operationally intact.

(b) Only those Authorized Personnel who applied the device may remove Lockout/Tagout devices. Removal of the device(s) may occur only after Authorized Personnel have ensured that the job site is being left in a safe condition.

(c) A Personnel Check: All Personnel, Affected and Authorized, who were involved in a work procedure while Lockout/Tagout was removed, must be accounted for and out of danger before energy is restored to the equipment/process.

11-17. An Authorized Employees will sign for, and use, a properly identified lock and key, which will only be used for a specific job assignment. After the job has been completed, the lock and key will be returned to their proper location. The log must be signed when the lock and key have been returned. Loans or exchanges of locks and keys among Authorized Employees are not permitted.

11-18. Supervisors of specific work units e.g., a subdivision, control office, or gang, are solely accountable for the tracking of locks and keys.

11-19. The procedures for Lock Out/Tagout do not apply to work on cord and plug-connected electric equipment for which exposure to the hazards of unexpected energizing or startup of the equipment can be controlled by unplugging the equipment from the energy source, with the plug being under the exclusive control of the employee who is performing the service or maintenance.

11-20. Those operations involving transmission and distribution systems for substances such as gas, steam, water or petroleum products when they are performed on pressurized pipelines; components such as circuit breakers, field cables, hand switches, contact rail etc., provided that the respective Departments/Divisions demonstrate that:

(a) Continuity of service is essential.

(b) Shutdown of the system is impractical.

(c) Documented procedures will be followed.

(d) Special equipment is being used which will provide proven, effective, protection for employees. These exceptions must receive prior approval from the OSS as part of the departmental submittal of Lockout/Tagout procedures for approval.

No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P	NRS			
12-1	X	X	X	X	X	X	X	X	X	X
12-2	X			X	X	X	X			
12-3	X			X	X	X	X			
12-4	X			X	X	x	X			
12-5	X			X	X	X	X			
12-6	X			X	X	X	X			
12-7	X			X	X	X	X			
12-8	X			X	X	X	X			
12-9	X			X	X	X	X			
12-10	X			X	X	X	X			
12-11	X			X	X	X	X			
12-12	X			X	X	X	X			
12-13	X			X	X	X	X			
12-14	X			X	X	X	X			
12-15	X			X	X	X	X			
12-16	X			X	X	X	X			
12-17	X			X	X	X	X			
12-18	X			X	X	X	X			
12-19	X			X	X	X	X			
12-20	X			X	X	X	X			
12-21	X			X	X	X	X			
12-22	X			X	X	X	X			
12-23	X			X	X	X	X			
12-24	X			X	X	X	X			
12-25	X			X	X	X	X			
12-26	X			X	X	X	X			
12-27	X			X	X	X	X			
12-28	X			X	X	x	X			
12-29	X			X	X	X	X			
12-30	X			X	X	X	X			
12-31	X			X	X	X	X			
12-32	X			X	X	X	X			
12-33	X			X	X	X	X			
12-34	X			X	X	X	X			
12-35	X			X	X	X	X			
12-36	X			X	X	X	X			
12-37	X			X	X	X	X			
12-38	X			X	X	X	X			
12-39	X			X	X	X	X			
12-40	X			X	X	X	X			
12-41	X			X	X	X	X			
12-42	X			X	X	X	X			
12-43	X			X	X	X	X			
12-44	X			X	X	X	X			
12-45	X			X	X	X	X			
12-46	X			X	X	X	X			
12-47	X			X	X	X	X			

12 – WELDING AND CUTTING

12-1. Only qualified employees will be permitted to perform welding operations.

12-2. Employees performing welding or cutting work must use prescribed eye protection and wear clothing and shoes that will afford protection against sparks and molten metal. Ear screens or other ear protection must be used to protect against burns when welding or cutting overhead. Suitable screening devices must be used to protect the eyes of other employees working in the vicinity of welding operations. The shade number for welding/cutting/burning varies with the type of operation being performed. Contact SIR Safety for guidance.

12-3. Careful inspection of cutting and welding equipment must be made before beginning each job. Be sure that all parts of the equipment are in good condition, that there are no leaks in gas welding equipment, and that all electric welding equipment is properly insulated.

12-4. Welding material must be kept in an orderly condition. Flammable material and debris must be removed from the vicinity before welding or cutting is begun.

12-5. Properly rated fire extinguisher(s) shall be in area during welding/burning/cutting operation.

12-6. Be sure that all oxygen and flammable gas equipment and connections are clean. NEVER ALLOW OIL OR GREASE TO COME IN CONTACT WITH OXYGEN IN ANY WAY.

12-7. Before connecting oxygen or flammable gas regulators, the cylinder or station valves must be opened slightly for an instant to remove any dirt present.

12-8. Always use approved wrenches provided for connecting and disconnecting regulators, hoses and torches.

12-9. See that pressure adjusting screws of oxygen and flammable gas regulators are in release position before opening cylinder valves. Always stand to one side and away from front of regulator gauge faces when opening cylinder valves.

12-10. Do not open acetylene cylinder valve more than 1-1/2 turns. Always use approved wrench and leave in place on the cylinder valve while in use. Open oxygen cylinder valve slowly until cylinder pressure builds up on the regulator gauge, then open valve fully.

12-11. Pressure of acetylene in hose or pipe line must not exceed 15 pounds per square inch.

- 12-12.** Always close cylinder valves and release pressure adjusting screws when moving equipment from one place to another, or when leaving equipment unattended.
- 12-13.** Do not tamper with or attempt to repair cylinder valves, regulators or torches. If they do not work properly, turn them in for repairs or replacement.
- 12-14.** Do not tighten a regulator to cylinder connection without first closing the cylinder valve.
- 12-15.** Never place tools, clothes or material on top of cylinders or regulators.
- 12-16.** Never use fire for the purpose of finding leaks. Leaks should be located by applying soap and water.
- 12-17.** A leaking gas cylinder must be placed in the open air, the valve opened, and all fire and open lights kept away until the gas has escaped from the cylinder or station valves.
- 12-18.** In case of fire in or around gas welding or cutting equipment, immediately close cylinder or station valves.
- 12-19.** In case of flash-back, first close the oxygen valve at once - a delay is dangerous - then close the flammable gas valve, if necessary.
- 12-20.** Spark lighter must be used to light torches. Using matches or other open flames is prohibited.
- 12-21.** Always see that torch valves are closed before torch is laid down for any purpose. Place the torch where it will not be damaged, contaminated with dirt or grease, or the valves accidentally struck and opened. Do not leave torch in such position that gas could escape into a confined space.
- 12-22.** Always maintain proper gas mixture adjustments.
- 12-23.** Do not allow torches to become overheated.
- 12-24.** When repairs are being made to oxygen or flammable gas pipe line, and it is necessary to close the supply valve, a protective tag must be attached to the valve by an authorized employee. When the work is finished the tag must be removed only by the same authorized employee.
- 12-25.** Oil-based pipe joint compounds must not be used on gas line connections.
- 12-26.** Before burning through sheet, plate, or other material, employees must be certain that no persons are in a position to be burned or struck by falling material.
- 12-27.** Using oxygen as a substitute for compressed air or as a source of pressure is prohibited.

12-28. Before leaving equipment unattended or when work is finished, close oxygen and flammable gas cylinder or station valves tightly. Open torch valves to relieve pressure in the hoses. Release pressure adjusting screws on regulators where used. If hoses are removed from station, apply caps to station connections.

12-29. All compressed gas cylinders must be:

(a) Stored in a well ventilated location

(b) Stored at least 20 feet away from highly combustible materials, including grease and oil, stoves or other sources of heat.

(c) Kept away from open lights and fires at all times.

12-30. Oxygen cylinders must be separated from flammable gas cylinders by a distance of at least 20 feet or by a noncombustible partition at least five feet high, having a fire resistance rating of at least 1/2 hour.

12-31. Acetylene, LP gas and liquid oxygen cylinders should be stored, transported and used in the vertical position.

12-32. All compressed gas cylinders, either loaded or empty, must be handled carefully. Do not drop or permit them to strike other cylinders, subject them to any great shock or concussion. All cylinders must be secured so as to prevent falling or being knocked over.

12-33. Valve protection caps must be kept in place and tight at all times when cylinders are not in active use.

12-34. Always protect hoses from being run over, or trampled, and avoid tangles and kinks.

12-35. Ventilation must be provided when flammable gas hose is removed from equipment and stored.

12-36. To protect against fire or explosion, never enter a confined space with a lighted torch, or attempt to light a torch in any area where the odors of acetylene or other gaseous vapors are detected. Hoses of sufficient length must be used to prevent taking flammable gas cylinders into confined spaces.

12-37. Before entering a closed place to do any flammable gas welding or cutting, make sure there are no leaks in any part of the equipment.

12-38. Do not operate a torch with hose thrown over shoulder. Keep hose as far away from body as possible.

12-39. Tanks, drums, other closed containers, and hollow or cored castings must be adequately vented before heated.

12-40. Before cutting, welding, brazing, soldering, or applying heat in any way on a tank or container previously used for any flammable or poisonous material, it must be thoroughly drained, washed, and steamed out.

12-41. Arrange for good ventilation when welding or cutting brass, bronze, galvanized iron or painted metal. All painted surfaces must be cleaned prior to being welded/burned. Additionally, paint shall be checked for lead content before disturbing.

12-42. The use of cadmium-based silver solder is prohibited.

12-43. When necessary for a welder to leave electrical welding equipment unattended, electrode holder and leads must be properly placed to prevent short circuits or electrical burns, and welder power supply must be in OFF position.

12-44. Before starting an electrical weld, ground wire must be firmly secured as closely as is practicable to the material to be welded. Do not connect ground wire to water, steam, air, gas or other pipe lines for electrical continuity purposes, except when performing specific welding work on such equipment. When welding on locomotives, cars or machines, ground wire must be attached to frame or body so as to avoid passing current through bearings or gears.

12-45. Molten metal used in foundry or rail welding operations will explode upon contact with cold, damp or wet materials. Therefore, molds and skimming tools must be warm and dry before being used. Pouring molten metal upon the ground is prohibited.

12-46. Leggings, approved goggles with proper lens, leather gauntlet/gloves, sleeves and adequate foot protection must be worn when welding with or otherwise handling molten metal.

12-47. Use of Halide detector torches to locate refrigerant leaks is prohibited. As an alternative, consider using soapsuds.

Rule No.	Operations			Maintenance			Purch.	Police	Exec/ Gen'l	
	M	CS	T	Tk	B&B	S&P				NRS
13-1	X	X	X	X	X	X	X	X	X	X
13-2	X	X		X	X	X	X			
13-3					X	X				
13-4					X	X				
13-5					X	X				
13-6	X				X	X	X			
13-7					X	X				
13-8					X	X				
13-9	X			X	X	X	X			
13-10	X				X	X				
13-11	X			X	X	X	X			
13-12					X	X				
13-13					X	X				
13-14	X	X	X	X	X	X	X	X	X	X
13-15	X				X	X	X			
13-16	X				X	X	X			
13-17	X				X	X	X			
13-18	X				X	X	X			
13-19	X				X	X	X			
13-20	X	X	X	X	X	X	X	X	X	X
13-21	X	X	X	X	X	X	X	X	X	X
13-22	X				X	X	X			
13-23	X				X	X	X			
13-24	X	X	X	X	X	X	X			

13 – ELECTRICAL AND LINE WORK

13-1. Only qualified persons charged with that duty shall install, or make repairs, or adjustments to electrical systems or tools, machinery and apparatus.

13-2. Working on an energized circuit or equipment without first disconnecting the power source when possible is prohibited. Care must be taken to avoid coming in contact with water, steel bridges, ground wires, guy wires, and all other circuits when working on any power circuit regardless of voltage. Ensure that the procedures outlined in the LO/TO Policy Instruction (P/I) 8.24.1 are in place prior to attempting to work in energized equipment.

13-3. Climbing power line poles, radio towers, floodlight towers, or other such structures, or entering substations or power plants without authorization is prohibited.

13-4. Every pole, tower, ladder or other structure, including bases, must be examined before attempting to climb it to insure its being sound enough to support the weight to be placed upon or against it. All equipment thereon must also be examined before sitting, leaning, standing or otherwise placing strain upon it.

13-5. Two or more persons must not climb up or down a pole or ladder at the same time. The succeeding person must wait until the one preceding is either in position at the top or in the clear at the bottom.

13-6. Prescribed protective equipment and tools must be used when working on electrical wires or apparatus. Such equipment must be regularly inspected and tested to insure that it is in safe condition.

13-7. Use both hands when ascending or descending ladders, poles or structures.

13-8. Body belts, shoulder straps or pockets must be used to carry small tools or material. Hand lines must be used for heavier items.

13-9. Extreme care must be used to prevent injury as a result of materials being thrown or dropped.

13-10. When working on or handling wire, rope, or cables on curves or corners, employees must not stand in the inside angle unless they are properly protected.

13-11. Particular care shall be taken when cutting copper, bronze or galvanized guy wire to prevent injury due to flying ends.

13-12. In replacing a defective pole with a new one, the old pole must be inspected and shall be positively secured before climbing or transferring of any wires is begun.

13-13. Before removing any wire from any pole or structure, positive supports such as, but not limited to, guying, piking, or roping must be used to assure that removal of such wires will not permit the pole or structure to fall.

13-14. All wires and circuits are to be considered energized at all times unless employee has positive knowledge to the contrary. The insulation on tools or wires alone must not be relied upon for protection. Prescribed protective gloves and other equipment must be used.

13-15. When electrical circuits are opened for work, the power source shall be isolated in full compliance with Section 11 of these rules and the current Lock-Out/Tagout P/I.

13-16. Before beginning work on high voltage lines or equipment when decision has been made to de-energize them, workers shall positively know that the current source has been disconnected. The de-energized lines or equipment shall then be grounded on both sides of the employees who will perform the work. Such grounds shall be applied in accordance with standards of the National Electrical Code.

13-17. Before working on a high voltage capacitor, the terminals shall be grounded, using an approved grounding lead insulated sufficiently equal to the capacitor voltage rating.

13-18. Before making repairs to a transformer, disconnecting switches on both sides must be opened and the transformer grounded. If the transformer is not equipped with disconnecting switches, the primary and secondary connection shall be disconnected.

13-19. Current or series transformers with primary windings energized shall have their secondary windings short circuited when not in use.

13-20. Any act which will raise or destroy the protective action of fuses or circuit breakers is prohibited, except when done in emergencies by qualified personnel. Any such action must be promptly reported to proper authority, and remedial action commenced immediately. When practicable, de-energize circuits before replacing fuses.

13-21. Care should be used at all times to prevent water from hose stream or other sources from coming in contact with electrical wires and equipment. This also applies to liquids contained in fire extinguishers, except when directions on the extinguisher specify that it may be used on electrical fires.

13-22. Employees must not work on live conductors from above, when such work can be done from below.

13-23. All electrical wiring, other than of temporary emergency nature, shall be installed according to local or national codes.

13-24. Do not work around wires or electrical apparatus during electrical storms, unless absolutely necessary.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P	NRS			
14-1	X	X	X	X	X	X	X	X	X	X
14-2	X				X		X			
14-3	X				X		X			
14-4	X				X		X			
14-5	X						X			
14-6	X				X		X			

14 – HANDLING REFRIGERANTS

14-1. ONLY CERTIFIED EMPLOYEES ARE TO HANDLE FREON AND REFRIGERATION EQUIPMENT.

14-2. NO REPAIRS MAY BE MADE TO ANY EQUIPMENT CONTAINING REFRIGERANTS THAT MAY IN ANY WAY AFFECT SUCH EQUIPMENT'S ABILITY TO SAFELY RETAIN ALL REFRIGERANT, UNTIL ALL REFRIGERANT IS EVACUATED IN ACCORDANCE WITH NYCT CAR EQUIPMENT MAINTENANCE PROCEDURES MP#-01-01.

14-3. NO FREON IS TO BE ADDED TO THE AC SYSTEM UNTIL ALL LEAKS ARE FOUND AND REPAIRS COMPLETED.

14-4. If the location of a leak cannot be detected, the employee performing the work must obtain assistance in finding the source of the leak. A determination of "no defect found" must not be recorded unless there is no indication of any leakage. No car is to be released for passenger service until all defects are repaired and verified in writing by supervision.

14-5. A description of all repairs made and the amount of freon added must be recorded prior to release of a car for service.

14-6. The certified self-contained refrigerant recovery system must be tested for the required evacuation level each month. If any defects are observed the system must be repaired and re-certified. A record of all tests must be retained in the shop where the system is located.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	C	T	Tk	B&B	S&P	NR			
15-1	X	X	X	X	X	X	X	X	X	X
15-2	X				X					
15-3	X				X					
15-4	X				X					

15 - BOILER EQUIPMENT/STEAM LINES AND HVAC

15-1. ONLY EMPLOYEES PROPERLY TRAINED AND POSSESSING ALL NECESSARY CERTIFICATE OF CERTIFICATION(S) MAY REPAIR OR IN ANY WAY MODIFY BOILER EQUIPMENT AND/OR STEAM LINES.

15-2. NO REPAIRS MAY BE MADE TO ANY BOILER AND/OR STEAM EQUIPMENT MAY IN ANY WAY AFFECT SUCH EQUIPMENT'S ABILITY TO SAFELY RETAIN ALL WATER AND STEAM UNTIL WATER TEMPERATURE IS REDUCED AND ALL STEAM PRESSURE HAS BEEN RELIEVED.

15-3. NO TEMPORARY REPAIRS THAT WOULD INVOLVE BYPASSING OR DISABLING ANY PRESSURE RELIEF VALVE OR TEMPERATURE SHUT OFF MAY BE MADE TO ANY BOILER AND/OR STEAM EQUIPMENT.

15-4. No boiler may be returned to service, nor any steam introduced to any line, until ALL known leak points have been repaired. No such equipment may be restored to full temperature/pressure operation until a reduced temperature/pressure inspection has been performed.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	C	T	Tk	B&B	S&P	NRS			
16-1				X	X	X				
16-2				X	X	X				
16-3	X	X	X	X	X	X	X	X	X	X
16-4	X	X		X	X	X	X			
16-5	X	X		X	X	X	X			
16-6	X	X		X	X	X	X			
16-7	X	X		X	X	X	X			
16-8	X	X	X	X	X	X	X			
16-9	X	X		X	X	X	X			
16-10	X		X	X	X	X				
16-11	X	X		X	X	X	X			
16-12	X	X		X	X	X	X			
16-13	X			X	X	X	X			
16-14	X	X	X	X	X	X	X	X	X	X
16-15				X	X	X				
16-16	X	X		X	X	X	X			
16-17	X	X		X	X	X	X			
16-18	X	X		X	X	X	X			
16-19	X	X		X	X	X	X			
16-20	X	X		X	X	X	X			
16-21	X	X		X	X	X	X			

16 – HANDLING MATERIALS AND EQUIPMENT

16-1. Wear gloves in good condition when handling ties, lumber, or materials to protect against splinters, sharp or jagged edges.

16-2. Remove all nails, staples, wire, etc., protruding from kegs, packing boxes or other containers, immediately after they have been opened.

16-3. Do not attempt to lift beyond your normal physical strength. Avoid sudden movements or twisted positions and obtain help to move heavy or cumbersome objects. When lifting, have secure footing, keep feet apart, tuck in chin, bend knees, keep back erect and maintain a firm grip with entire hand on the object. When two or more people are lifting, designate one person to give signals.

16-4. Transfer plates, gang planks, and skids must be in good condition and securely placed for use. When removing transfer plates, etc., remove nails, cleats or other fastening devices promptly.

16-5. When placing or removing transfer plates, keep hands and feet in the clear.

16-6. Placing gang planks or transfer plates in door-ways of cars coupled to a locomotive is prohibited, unless arrangements have been made for protection against movement.

16-7. Care must be exercised in the handling of materials shipped in metal drums, such as, but not limited to, metal preservatives, carbolicum, creosote, cold patch asphalt, etc.. Material Safety Data Sheets (MSDS) must be reviewed for proper handling. When necessary to remove the bungs from metal drums containing these or other gaseous products, keep all parts of the body away. The bungs must be screwed out slowly, to allow pressure to escape before the bung is removed. The drum must be so positioned while the bung is being removed that the opening is not blocked by material in the drum.

The heating of any of these materials is prohibited, except when authorized by special instructions, and then it must be done under direct supervision, in an open container, or in a drum from which the entire head has been removed, being careful to see that there is no accumulation of gas or fumes.

16-8. Tools and other equipment must be kept a safe distance from tracks, walkways, trucking spaces, and edges of platforms, and must be handled or stowed so as not to fall or be knocked down.

16-9. Before being used, platforms, transfer plates, skids and aisles which are slippery should be cleaned or covered with salt, sand or approved absorbents.

16-10. When working around or unloading poles or similar lading, use caution to prevent lading from becoming dislodged unexpectedly.

- 16-11.** Do not walk in front of heavy objects being rolled or moved on rollers. Keep feet clear of such objects.
- 16-12.** Material being moved on trucks or rollers should be kept under control. Be prepared to stop short of obstructions or persons. When heavy or unwieldy objects get out of control, make no effort to catch them, keeping in the clear until they come to rest.
- 16-13.** Throwing, dropping, or otherwise roughly handling loaded or empty oxygen, acetylene, or other gas cylinders is prohibited. Proper cradles must always be used if cylinders are handled with hoisting equipment.
- 16-14.** Before handling or working in the vicinity of chemicals or other substances, the Material Safety Data Sheet (MSDS) of such chemicals must be reviewed. Instructions for handling the materials and the use of the proper Personal Protective Equipment (PPE) must be followed.
- 16-15.** Tongs must be used for handling creosoted ties and timbers, when absolutely not possible. If not possible, required PPE must be worn and clear instructions given to avoid injury.
- 16-16.** Employees must not operate forklifts or motorized hand trucks unless properly trained and qualified.
- 16-17.** In order for a forklift to be stable (not tip over or to the side) the Center of Gravity must stay within the area of the lift truck represented by a triangle drawn between the drive wheels and the pivot of the steering axle
- 16-18.** When performing forklift load placement:
- (a)** Square the fork truck with the load resting location.
 - (b)** Stop the fork truck 18" to 24" away from the load resting location.
 - (c)** Raise the load to proper entry height.
 - (d)** Drive forward with the load and position the load over its resting location.
 - (e)** Lower the load to a height of 4" if possible
 - (f)** Tilt the load forward to a level position.
 - (g)** Lower the load to its resting platform.
- 16-19.** When retrieving a load with a forklift:
- (a)** Square the fork truck with the load resting location.
 - (b)** Stop the fork truck 18" to 24" away from the load resting location.
 - (c)** Raise the forks to eye level, and now level the forks to a horizontal position.
 - (d)** Raise the forks to the proper entry height.

- (e)** Enter the load and maintain the clearance around the forks to avoid load disturbance.
- (f)** Raise the load so it is completely suspended from its resting platform.
- (g)** Tilt the load back.
- (h)** Visually inspect to ensure no pedestrians are behind or around the unit.
- (i)** Back up the unit using proper back up procedures and sequence.
- (j)** Back up the fork truck 18" to 24" and stop.
- (k)** Lower the load to the proper travel height.

16-20. When performing forklift back up:

- (a)** Pivot at the waist to inspect the area of operation in the rear of the fork truck.
- (b)** Blow the horn to alert any pedestrians that may or may not be visible.
- (c)** Engage the directional lever to the reverse position.
- (d)** Concentrate on the removal of the forks from the load to avoid any load disturbance.
- (e)** Stop the fork truck 18" to 24" away from the load's resting location.
- (f)** Lower the forks to the proper travel height and angle.

16-21. When traveling with and without a load:

(a) Loaded traveling height and angle should be:

- 1) Tilt the load back.
- 2) Position the load to obtain a minimum height of 4" and a maximum height of 8" at the lowest point of the load.

(b) Travel height and angle with bare forks should be:

- 1) Position the fork so the tips are tilted below the horizontal position, and are a minimum of 4" and a maximum of 8" at the fork tips.

Rule No.	Operations			Maintenance			Purch.	Police	Exec/ Gen'l	
	M	CS	T	Tk	B&B	S&P				NRS
17-1	X	X	X	X	X	X	X	X	X	X
17-2	X			X	X	X	X			
17-3	X			X	X	X	X			
17-4	X			X	X	X	X			
17-5	X			X	X	X	X			
17-6	X			X	X	X	X			
17-7	X			X	X	X	X			
17-8	X			X	X	X	X			
17-9	X			X	X	X	X			
17-10	X			X	X	X	X			
17-11	X			X	X	X	X			
17-12	X			X	X	X	X			
17-13	X			X	X	X	X			
17-14	X			X	X	X	X			
17-15	X			X	X	X	X			
17-16	X			X	X	X	X			
17-17	X			X	X	X	X			
17-18	X			X	X	X	X			
17-19	X			X	X	X	X			
17-20	X			X	X	X	X			

17 – CRANES AND HOISTS

17-1. Only trained, qualified and authorized employees may operate cranes and hoists. Personnel who supervise crane operators and employees who operate pendant cranes should attend the NYC Transit Crane Safety Awareness Course.

17-2. Before using cranes, hoists, or similar equipment, the operator must perform an inspection to determine that the equipment, including pulleys, cables and drums, are in safe condition and that all safety guards are in place. Brakes and limit switches must be tested periodically to insure that they are in proper condition and operating as intended.

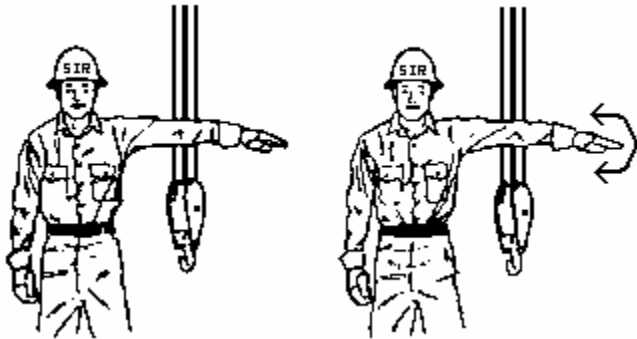
17-3. Cranes must not be operated when wind conditions are in excess of 25 MPH, or in the judgment of the operator, gust conditions will have a detrimental affect on their ability to control the move.

17-4. Never stand under or in the path of a load being moved by a crane.

17-5. Hand signals or verbal instructions for the operation of hoisting equipment must be given only by the person designated. Operators of hoisting equipment must not act upon signals or instructions, except STOP signals, unless the designated person gives them. Where two cranes are lifting the same load, one person shall be designated to direct the movement of both.

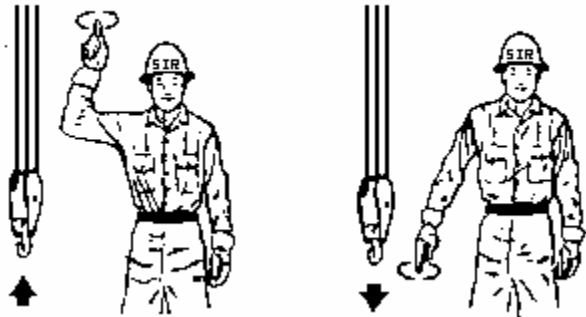
17-6. Hoisting equipment operator must not move the equipment without clearly understood signals or instructions. When hand signals are being used, the person giving the signals must remain in sight of the operator at all times while movements are being made.

17-7. Hand signals to the operator of hoisting equipment shall be in accordance with the standard code, shown as follows:



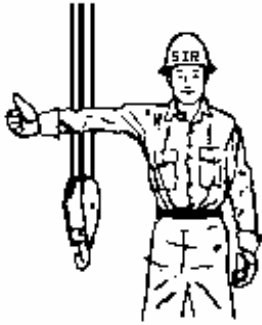
STOP. Arm extended, palm down, hold position rigidly.

EMERGENCY STOP. Arm extended, palm down, move hand rapidly right and left.

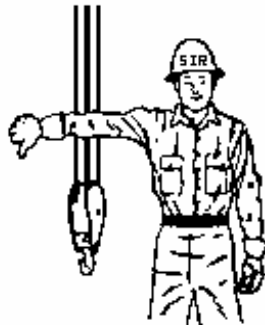


HOIST. With forearm vertical, forefinger pointing up, moving hand in small horizontal circles.

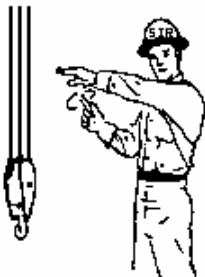
LOWER. With arm extended downward, moving hand in small horizontal circles.



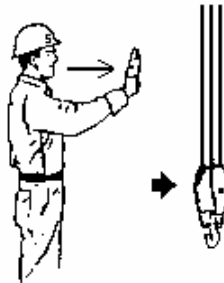
RAISE BOOM. Arm extended, fingers closed, thumb pointing upward.



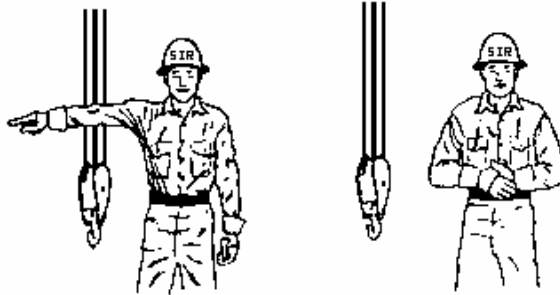
LOWER BOOM. Arm extended, fingers closed thumb pointing downward.



MOVE SLOWLY. Use one hand to give any motion signal and place other hand motionless in front of hand giving the motion signal. (Hoist slowly as example.)



TRAVEL. Arm extended forward, hand open and raised, make pushing motion in direction of travel.



SWING. Arm extended, point with finger in direction of swing of boom.

DOG EVERYTHING. Clasp hands in front of body.

17-8. Place the block or hook directly over the load, if possible, to prevent the load from dragging or swinging when lift is made. If material being handled gets out of control, employees must not attempt to catch or rebalance it, until swinging material comes to rest.

17-9. Crane Operator must see that capacity of crane is not exceeded, that rail clamps and outriggers are properly used when provided, and that hooks, chains, cables, ropes, slings, etc., used for hoisting purposes are of proper size and in condition to safely handle the load. Capacity of cranes or hoists must be posted in operating cab, or at other location readily visible to the operator.

17-10. Attaching hook of crane or hoist block directly to object being moved is prohibited. Chains, slings, or other lifting accessories must be used. Employees must see that attachment to the load is secure and properly made to prevent slipping, and crane operators must, when possible, observe that this is done.

17-11. Carrying a load over workers is prohibited. Proper warning must be given to alert persons in or near the path of a moving load or load-handling equipment.

17-12. Moving crane or hoist with load swaying or turning excessively is prohibited.

17-13. The operator of hoisting equipment must never lift a load with a sudden jerk or lower it so fast as to necessitate a sudden stop.

17-14. Before moving a crane from which an empty sling is hanging, both ends of the sling must be hooked to the block. The hooks and attachments must be high enough to clear obstacles.

17-15. Employees must place themselves in a position so they cannot be caught between an obstruction and the load being handled or the load-handling equipment. Be alert for unexpected swing or shifting of loads.

17-16. Do not leave hoisting equipment unattended with load, bucket, magnet, or other heavy attachments suspended.

17-17. Crane boom must be lowered to car or ground for lubrication, inspection or repair. Boom must be secured to prevent movement when not in use.

17-18. When guiding suspended loads, push rather than pull when practicable. Keep hands and feet from under load. Use tag lines on bulky or awkward loads.

17-19. Before unhooking a sling, be sure the load has settled and take a position to avoid being struck by the sling or any part of the load.

17-20. When working around electric wires, use extreme care in handling hoisting equipment, as there is danger of current traveling from wires to boom. No part of equipment or load must be permitted to come within 10 feet of high-tension wires unless they have been de-energized.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P	NRS			
18-1	X	X	X	X	X	X	X	X	X	X
18-2	X	X		X	X	X	X	X	X	
18-3	X	X		X	X	X	X	X	X	
18-4	X	X		X	X	X	X	X	X	
18-5	X	X		X	X	X	X	X	X	X
18-6	X	X		X	X	X	X	X	X	
18-7	X	X		X	X	X	X	X	X	
18-8	X	X		X	X	X	X	X	X	
18-9	X	X		X	X	X	X	X	X	X
18-10	X	X		X	X	X	X	X	X	X
18-11	X	X		X	X	X	X	X	X	
18-12	X	X		X	X	X	X	X		
18-13	X	X		X	X	X	X	X		
18-14	X	X		X	X	X	X	X		
18-15	X	X		X	X	X	X	X		
18-16	X	X		X	X	X	X	X		
18-17	X	X		X	X	X	X	X	X	X
18-18	X	X		X	X	X	X	X		
18-19	X	X		X	X	X	X	X	X	X
18-20	X	X		X	X	X	X		X	
18-21	X			X	X	X	X		X	
18-22	X				X				X	
18-23	X	X		X	X	X	X	X		X
18-24	X	X		X	X	X	X	X	X	X
18-25	X	X		X	X	X	X	X	X	
18-26	X	X		X	X	X	X			
18-27	X	X		X	X	X	X			
18-28	X	X		X	X	X	X			
18-29	X	X		X	X	X	X			
18-30	X	X		X	X	X	X			
18-31	X	X		X	X	X	X			
18-32	X			X	X	X	X			
18-33	X			X	X	X	X			
18-34	X	X		X	X	X	X			
18-35	X	X		X	X	X	X			
18-36	X	X		X	X	X	X			
18-37	X	X		X	X	X	X			
18-38	X	X		X	X	X	X			
18-39	X	X		X	X	X	X			
18-40	X	X		X	X	X	X			

18 – LADDERS, SCAFFOLDS, AERIAL LIFTS AND ELEVATIONS

18-1. Use of improvised ladders is prohibited. Employees must see that ladders are of adequate length. Placing ladder on a box, barrel, block, or other object to increase the reach is prohibited.

18-2. Straight ladders must be placed on solid footing, secured against slipping by the use of spikes, safety feet, or other means, and supported at the upper end so as to prevent twisting.

18-3. Straight ladders should be placed so that the horizontal distance from the base to the support against which the ladder is leaning is about one-fourth the length of the ladder.

18-4. Extension ladders must be properly assembled and carefully raised to insure that sufficient overlap is maintained and that guides and hooks are engaged.

18-5. Stepladders must be fully opened, with spreaders set, and placed on a solid level surface.

18-6. Use of stepladders as straight ladders is prohibited.

18-7. Employees must face ladders and hold on with both hands when ascending or descending.

18-8. Tool belts, shoulder straps or pockets must be used to carry small tools or materials. Hand lines must be used for heavier items.

18-9. Extreme care must be used to prevent injury as a result of materials being thrown or dropped.

18-10. Do not climb higher than the third rung from the top of straight ladders or the second step from the top of step ladders.

18-11. Ladders must not be used in a horizontal position as a scaffold or scaffold member.

18-12. Employees must see that scaffolds are properly constructed or assembled, are of sufficient strength for the load required of them, and are approved by proper authority before being used.

18-13. Scaffold boards used on sectional metal scaffolds must be equipped with cleats on the under side. Where such scaffolding is equipped with wheels, they must be locked before climbing or working from the scaffold.

18-14. Special care must be taken in the placing of hooks for suspended scaffolding to insure that they will safely support the intended loads, and are not in a position where they may be disturbed or dislodged.

18-15. All scaffolding must be provided with hand railings and toe boards.

18-16. Moving scaffolds or ladders from point to point while employees are on them is prohibited.

18-17. Moving scaffolds or ladders without taking necessary precautions to assure that tools and materials will not fall is also prohibited.

18-18. Scaffolds and ladders in use at locations where persons or vehicles could collide with them should be properly protected.

18-19. Reaching or leaning out more than arm's length from edge of ladder, scaffold, or elevated platform is prohibited.

18-20. Only fiberglass ladders are allowed to be used near energized 3rd rails. Using metal ladders or scaffolds where they may come in contact with electrical wires or contact rail or equipment, or performing electrical work while standing on portable metal ladders is prohibited. Employees performing work from metal scaffolding must take necessary precautions to prevent electrical shock.

18-21. Except when a scaffold or other protection is provided, a safety belt, safety net or guard rope must be used during work:

- (a) Outside a window above ground level;
- (b) On a steep pitched roof;
- (c) On a steep hillside, cliff or embankment;
- (d) In dangerous positions on bridges or other structures.

18-22. Before walking or working on a roof, be sure it has sufficient strength to support the weight to be placed on it. Be on the lookout for skylight or other insecure areas that may be concealed.

18-23. Wooden ladders shall not be painted.

18-24. Never place a ladder in front/behind an unlocked door.

18-25. All fall protection equipment shall be carefully inspected before each use and periodically throughout the day. Safety equipment showing any sign of mildew, torn or frayed fiber or fabric, burns, excessive wear, or other damage or deterioration which could cause failure shall be permanently removed from use. Safety belts/full body harnesses, lanyards, safety lines, and all other fall protection equipment shall be properly maintained and stored---kept dry and out of sunlight, and away from caustics, corrosives or other materials which could cause defect..

18-26. Hard hats and safety belts or full body harnesses shall be worn by employees in the bucket or on the platform of any aerial lift device while in operation. Loose-fitting clothing shall not be worn while working in any aerial lift device. High-visibility apparel is not required for employees 'in the air', but shall be worn before entering and after leaving the bucket or platform in accordance with Department policy.

18-27. Aerial lift devices shall only be used for the purpose(s) intended by the manufacturer. All manufacturer warnings regarding operation, capacity, and safety precautions shall be strictly followed. Permanent labeling must be conspicuously posted to indicate lifting capacity and travel height.

18-28. Only devices approved for lifting personnel shall be used as aerial lifts. Loaders, forklifts, or other material lift devices shall not be used to transport employees to elevated locations nor as work platforms.

18-29 Lift equipment shall be inspected and controls tested daily before use. On boom devices, one crew member qualified in the operation of the ground controls shall remain readily available on the ground at all times while the lift is operating. Only properly trained employees shall operate the lift. Ground controls shall not be operated without the permission of the employee(s) 'in the air', except in emergencies.

Before extending the boom or raising the platform, outriggers (if the vehicle is so equipped) shall be positioned properly and the truck level. Outriggers shall be placed on pads, blocking, or other solid surface, and shall not be used to level the vehicle. The parking brake (and micro brake if so equipped) shall be set and wheel chocks in place. Sufficient overhead clearance shall be checked before raising any aerial lift. For under-bridge units, adequate clearance beneath the boom shall be assured.

Employees shall keep both feet on the bucket floor while the bucket is moving, or work is being performed. Employees shall not attach themselves to an adjacent pole, structure or tree while working from the bucket, but shall remain connected by safety belt or full body harness and lanyard to the boom, boom eyelet, or boom strap and 'D' ring. Employees required to leave the bucket to gain access to a work location shall maintain 100% fall protection by connection of a lanyard to a safety line, structure or tree capable of supporting the employee(s). **Employees exiting buckets in locations requiring 100% fall protection shall wear a full body harness.** Tree spikes shall not be worn in the bucket. Buckets shall have an inside and outside step (portable 'E-Z step' or step through features are examples).

18-30. Platform lifts shall have a top and mid rail and kick plate, and a means for each person to attach a safety belt or full body harness and lanyard to the platform. Each employee on the platform shall use a safety belt or full body harness and lanyard. Employees shall keep both feet on the floor of the platform; shall not sit or climb on the railing; or use planks,

ladders, or other devices to raise the working height. The gate shall be closed before raising the work platform.

The carrier portion of an aerial lift unit shall not be moved (travel) while the lift is out of its cradle, unless the unit is designed to do so (under-bridge unit). When a unit is moved with employees in the air, they shall be aware of the move and be in communication with those moving the vehicle. For transport the boom shall be properly cradled and the outriggers properly stowed. Bucket covers shall be in place during transport to prevent loss of the bucket liner.

18-31. Tools, parts or any materials shall not be dropped or thrown from the bucket. When using welding or heating equipment from the bucket or platform, the vehicle shall be protected from sparks or slag and special care taken to protect or remove flammables.

18-32. For the underbridge unit, radio communication between employee(s) in the bucket and the vehicle operator shall be tested prior to using the unit. If the communication system is not working properly, work in the bucket shall not be started or cease. Bullhorns are to be used in the event radio communications are disrupted during operations.

18-33. Positioning of any vehicle on the highway pavement or shoulder requires maintenance and protection of traffic procedures in accordance with the N.Y.S. Manual of Uniform Traffic Control Devices and Department Highway Work Zone Safety Policies and Procedures.

18-34. The footing or anchorage for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrels, boxes, loose brick, or concrete blocks shall not be used to support scaffolds or planks. Scaffolds and their components shall be capable of supporting without failure at least four times the maximum intended load.

18-35. Scaffolds and other devices mentioned or described in this section shall be maintained in safe condition. Scaffolds shall not be altered or moved horizontally while they are in use or occupied. Any scaffold damaged or weakened from any cause shall be immediately repaired and shall not be used until repairs have been completed.

18-36. Scaffolds shall not be loaded in excess of the working load for which they are intended.

18-37...An access ladder or equivalent safe access shall be provided.

18-38. Materials being hoisted onto a scaffold shall have a tag line.

18-39. Employees shall not work on scaffolds during storms or high winds. Employees shall not work on scaffolds, which are covered with ice or snow, unless all ice or snow is removed, and planking sanded to prevent slipping. Tools, materials, and debris shall not be allowed to accumulate in quantities to cause a hazard.

18-40. Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest system.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P	NRS			
19-1	X	X	X	X	X	X	X	X	X	X
19-2	X			X	X	X	X			
19-3				X	X	X				
19-4	X			X	X	X				
19-5	X			X	X	X				

19 – MANHOLES, TANKS AND EXCAVATIONS

19-1. Only employees who have successfully completed and comply with **NYCT P/I 8.22.1 Confined Space** may enter or engage in any duties associated with entry or working in a confined space.

19-2. Before entering enclosed areas where toxic gases may be present, or an oxygen deficiency could exist, adequate ventilation must be provided. Employees must comply with P/I 8.11.1 **Respiratory Protection**.

19-3. Working in, or entering an excavation four feet or more in depth, where there may be a possibility of a cave-in or slide, without proper shoring or sloping, is prohibited. Ladders or other suitable means must be used for entering or exiting such excavations.

19-4. When in manhole or excavation, employees must always stand back in the clear while material is being lowered or lifted. Excavated materials, tools and equipment must be kept a sufficient distance away from excavations to prevent injuries as a result of such materials falling.

19-5. When entering a manhole, well, tank or deep excavation, use a tag line and have another employee at the opening capable of rendering rescue assistance in the event of an emergency.

Rule No.	Operation			Maintenance			Purch.	Police	Exec/ Gen'l	
	M	CS	T	Tk	B&B	S&P				NRS
20-1	X	X	X	X	X	X	X	X	X	X
20-2	X			X	X	X	X			
20-3	X	X		X	X	X	X	X	X	X
20-4	X			X	X	X	X			
20-5	X			X	X	X	X			
20-6	X			X	X	X	X			
20-7	X			X	X	X	X			
20-8	X			X	X	X	X			
20-9	X			X	X	X	X			
20-	X			X	X	X	X			
20-	X			X	X	X	X			
20-	X			X	X	X	X			
20-	X			X	X	X	X			
20-	X	X	X	X	X	X	X	X	X	X
20-	X			X	X	X	X			
20-	X			X	X	X	X			
20-	X			X	X	X	X			
20-	X			X	X	X	X			
20-	X			X	X	X	X			
20-	X			X	X	X	X			
20-	X			X	X	X	X			
20-	X			X	X	X	X			

20 – LP (LIQUEFIED PETROLEUM) GASES

- 20-1.** Persons using gas appliances must follow manufacturers instructions covering the appliances being used.
- 20-2.** Ceiling or wall vents in rooms or rolling equipment with gas appliances must be kept open at all times to evacuate gas fumes.
- 20-3.** Persons entering, using or working in buildings and gas equipped rolling equipment must be alert for evidence of leaking gas, reporting same promptly when found.
- 20-4.** The obvious indication of leaking gas is the odor. If detected inside buildings or rolling equipment, close main control valve and open doors and windows promptly. No repairs are to be attempted until the area is completely aired out. LP gas is heavier than air and will accumulate at floor level and could be pocketed in lockers, toilets and cabinets under sinks.
- 20-5.** All reported leaks must be checked out promptly and repaired by qualified personnel only.
- 20-6.** Leaks must be located with soap and water solution, never with an open flame. Close main cut-off valve at fuel supply before breaking any pipe connections or making repairs.
- 20-7.** When replacing portable cylinders, follow instructions posted near the cylinders. Be sure cylinder is positioned so that relief valve will discharge from gas space.
- 20-8.** Portable cylinders should be stored in upright position in cool, ventilated locations. They must not be stored in the same compartment with other compressed gases, nor in areas occupied or used by personnel where any escaping unburned vapor may collect.
- 20-9.** The dispensing of LP gas into the fuel container of a vehicle or car shall be performed only by qualified personnel.
- 20-10.** Before dispensing gas, be sure all connections are tight so there will be no leakage.
- 20-11.** During the transfer of gas, at least one attendant shall remain close to the transfer connection, from the time the connections are first made until they are finally disconnected.
- 20-12.** Fuel containers must be charged or exchanged outdoors. Do not charge or use containers that appear to be damaged.
- 20-13.** Hose used for dispensing gas shall be marked "LP-Gas" or "LPG" and must be equipped with a spring lever operated valve.
- 20-14.** Smoking, open flames or operating any type of spark producing equipment within 50 feet of dispensing areas is prohibited.

20-15. Dry grass, weeds or other readily ignitable material must be removed from the area within ten feet of any LP gas storage container.

20-16. Persons handling LP gas must know at all times where the approved fire extinguisher is located in case of an emergency.

20-17. Persons working with LP gas handling equipment should wear plastic or rubber coated gloves.

20-18. After filling fuel tanks and closing hose valve, loosen hose fitting slowly to relieve pressure.

20-19. If fuel tank check valve does not close after filling is completed, as indicated by gas or liquid continuing to leak from hose fitting or bleeder device, retighten hose fitting and open and close hose valve a few times to wash out any dirt or scale that may be holding the check valve open. If this is not effective, leave the hose attached and the hose valve closed, and get help from qualified personnel.

20-20. In the event of fire from escaping LP gas, in most cases the fire should not be extinguished but should be controlled until the gas can be shut off at the source. If the gas cannot be shut off at the source, it is frequently better to let the fire burn under control until all the liquid is gone from the tank, meanwhile protecting the tank and exposed piping as well as nearby combustible structures or material by water spray if available. When it is advisable to extinguish the fire, it can be done with water spray, dry powder. or carbon dioxide extinguishers.

20-21. In the event rolling equipment equipped with LP gas is involved in a derailment or collision, close the main valve at the tank before starting wrecking operations.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P	NRS			
21-1	X	X	X	X	X	X	X	X	X	X
21-2	X	X	X	X	X	X	X	X	X	X
21-3	X	X	X	X	X	X	X	X	X	X
21-4	X	X	X	X	X	X	X	X	X	X
21-5	X	X	X	X	X	X	X	X	X	X
21-6					X			X		X
21-7	X	X	X	X	X	X	X	X	X	X
21-8	X	X	X	X	X	X	X	X	X	X
21-9	X	X	X	X	X	X	X	X	X	X
21-10								X		X
21-11								X		X
21-12								X		X

21 – OFFICES

21-1. Walk carefully, don't run, up or down stairs. Take one step at a time, using handrails and keep hands out of pockets. Do nothing, which distracts your attention, such as reading, examining handbags, etc. Do not carry anything that will obscure your vision. Do not congregate on stairs or in halls.

21-2. Stairways, hallways, aisles and walkways between desks must be kept clear of spilled liquids, telephone and office machine cords, trashcans or other objects which could create slipping or tripping hazards.

21-3. Keep to the right at corners and go around them slowly to avoid collisions. Do not run or slide across floors or through doorways.

21-4. Stand or walk clear of doors which may swing open unexpectedly. Open doors slowly to avoid striking someone. Do not push on glass panes of doors. Where door handles are provided, they must be used.

21-5. When carrying a portable electric machine or appliance, coil the cord so as to avoid tripping. Lift and carry only loads you can handle safely.

21-6. When moving portable stands or tables supporting office machines or other objects, be careful that such objects do not fall.

21-7. Use care when handling or carrying pointed objects, such as pens, pencils, scissors, letter openers, etc.

21-8. Sit squarely in the middle of chairs, keeping all chair legs or casters on the floor.

21-9. Do not put matches, cigars, cigarettes, or ashes in trash can unless they are thoroughly extinguished. Broken glass, sharp metal, or pointed objects should not be placed in trash cans without adequate warning to those involved in handling the trash for disposal.

21-10. Keep desk, file and cabinet drawers and locker doors closed when not in use. Have only one drawer in same cabinet open at a time.

21-11. Never use straight pins to fasten papers. Use care to avoid cuts from envelopes or other paper.

21-12. Do not leave the blade of a paper cutter in a raised position. Keep hands clear of cutting edge.

Rule No.	Operations			Maintenance				Purch.	Police	Exec/ Gen'l
	M	CS	T	Tk	B&B	S&P	NRS			
22-1	X	X	X	X	X	X	X	X	X	X
22-2	X	X	X	X	X	X	X	X	X	X
22-3	X	X	X	X	X	X	X	X	X	X
22-4	X	X	X	X	X	X	X	X	X	X
22-5	X	X	X	X	X	X	X	X	X	X

22 – DRIVING SAFETY

22-1. Driver Responsibility

General: Drivers shall be familiar the SIR Vehicle Safety Policy and shall be responsible for the following:

(a) Administrative Responsibilities:

- 1) Drivers shall maintain a valid driver's license specific to their job activities and to the motor vehicles they operate.
- 2) Drivers shall provide a current copy of their driver's license to their Department Head. Drivers with CDL licenses shall also provide updated copies of drivers' licenses
- 3) Drivers shall notify their Department Head of all permanent or temporary changes in the status of their licenses immediately after the change in status occurs (i.e. restrictions, revocation, suspensions, surrenders. change of class, etc.) Drivers shall provide their Department Head with an updated copy of their license subsequent to each notice of change.
- 4) Drivers shall prepare and file Daily Vehicle Inspection Reports, Crane Inspection Forms, and any daily logs required for equipment inspection.
- 5) Drivers shall make certain that vehicle contains all required documentation (e.g., vehicle inspection report, registration, insurance documentation, gas card).
- 6) Drivers shall notify their supervisor immediately of the receipt of any summons associated with the operation of an Authority owned vehicle.
- 7) Drivers shall be responsible for all summonses and citations (i.e., moving and parking violations).

(b) Operational Responsibilities:

- 1) Drivers shall perform pre-trip and post-trip vehicle inspections to ensure that the vehicle and associated safety features are in good working order. Drivers of 24-Hour Assigned motor vehicles shall not be responsible for filing inspection reports; however, they shall be responsible for maintaining their vehicles in good working order and reporting any defect found during normal operation.
- 2) Drivers shall retain current and prior day's daily vehicle inspection report within the vehicle, and submit them to their Department Head/Supervisor.
- 3) Drivers shall notify their Department Head/ Supervisor and the Non-Revenue Vehicle Shop (NRS) of all defects found during post-trip

inspection. Refer to Maintenance sections on filling out Daily Inspection Reports.

- 4) For serious defects that may preclude the operation of the motor vehicle, drivers shall notify their Supervisor immediately, in addition to filing a daily vehicle report. An evaluation of the operational status of the vehicle and the scheduling of necessary repairs will be performed by the NRS.
- 5) Drivers shall operate SIR vehicles for Company activities only.
- 6) Drivers shall not operate vehicles or equipment with which they are not familiar or in a way that is unsafe (i.e., surpassing load limits during crane operation).
- 7) Drivers shall ensure that only authorized passengers are carried in Company vehicles.
- 8) Drivers and passengers shall utilize appropriate safety equipment when vehicle is in motion (e.g. seat belts, shoulder harnesses, etc.).
- 9) Drivers shall ensure that all equipment and materials are properly secured.
- 10) Employees must not use a hand held cell phone while operating any vehicle; only hands free cell phone usage is allowed, and only when stopping the vehicle is impracticable.

(c) Safety Rules

Be cognizant of and operate all vehicles in compliance with applicable Federal, State and local laws, ordinances, etc., and in accordance with SIR Vehicle Operation Safety Policy and General Safety Rules for motor vehicles. Trucks carrying flammable liquids should be properly marked/labeled as per DOT Rules and Regulations.

22-2. General Driving Rules

(a) The operator or person in charge is responsible for advising occupants of motor vehicles that all occupants must use safety belts. All pertinent regulations and instructions must govern employees who use or operate company equipment and highway motor vehicles.

(b) Getting on or off of moving shop trucks, tractors or highway vehicles is prohibited.

(c) Gasoline or other highly flammable liquids must not be carried or stored in automobiles or in truck cabs. When necessary to carry reserve supply of gasoline on trucks, approved containers must be used, but must not be carried in enclosed spaces, and must be protected from impact.

(d) Employees must not get on or off motor vehicles cars while they are in motion.

(e) Overloading or unsafe loading of trucks or trailers is prohibited.

(f) Motor vehicle drivers must reduce speed and sound alarm when approaching persons and when approaching doorways, passageways, corners and other places where persons are likely to step out.

(g) Speeding, reckless driving, or other careless operation of motor vehicles is prohibited.

(h) Look in both directions before crossing platforms or trucking spaces. Crossing closely in front of moving trucks or tractors is prohibited.

(i) Shop trucks and other hand trucks should be pulled instead of pushed when practicable. Pushing any truck when the load obstructs the view is prohibited.

(j) Place a red flag in daylight or red light at night on end of long pieces of material which extend beyond end of truck. See that such material does not strike or foul anything, especially when rounding corners.

(k) When handling trucks on elevators, employees must see that truck and load have sufficient clearance and are properly secured before elevators are set in motion.

(l) Trucks must be kept a safe distance from track and be secured parallel to track when not in use.

(m) Employees are prohibited from riding up and down on lift truck forks, power end gates, or similar equipment.

(n) Employees are prohibited from standing on or working from a platform on a fork lift truck or other similar device, unless the platform is suitably designed, properly secured, and protected by hand rails.

(o) Riding on trailers or couplings is prohibited.

(p) In coupling or uncoupling trucks or trailers, keep hands clear of coupling devices.

(q) Operators of tractors or fork lifts must see that wheels are properly blocked and that flooring is in safe condition before driving into trucks, trailers or railroad cars.

22-3. Motor Vehicle Accident Reporting, Investigation & Review

All persons involved in on-scene or post-accident activities shall obey the law and SIR policy. This section provides a uniform corporate policy for reporting motor vehicle accidents or crashes, incidents or accident involvement. Also provided are procedures for conveying the reports on SIR Accident forms.

(a) Accident Classification

There are three accident classifications, as follows:

- 1) **Major Accidents or Crashes** – Motor vehicle crashes that involve an injury, fatality, and/or property damage of \$1,000 or more. All major crashes shall be reported to the New York State Department of Motor Vehicles. Cases involving commercial motor vehicles that meet Federal criteria shall be reported to the Federal Highway Administration.
- 2) **Accidents/Incidents** – Events that result in property damage of less than \$1,000.
- 3) **Accident Involvements** – Events that involve property damage to a parked or uninhabited vehicle or during the operation of special equipment, i.e., crane movement, load shifting, etc.

(b) Responsibilities

1) Driver Responsibility:

- a) STOP at the scene of an accident in which you are involved. All employees and contractors are vested with the responsibility to do so. It is against the law and this policy to leave the scene of an accident involving a motor vehicle, until necessary driver/vehicle information has been exchanged and/or policy activities have been concluded.
- b) REPORT immediately, an accident, crash, incident or accident involvement to department supervision, Train Dispatcher, or the appropriate reporting location, as designated by department rule. For major accidents or crashes, call 911 to dispatch local police. Report the vehicle number, exact location, and description of accident. If hazardous material is involved, report the type of material, location and nature of the problem to the 911 operator. All motor vehicle accidents have the potential for serious safety concerns; therefore, whether they occur on highways, roads, parking lots, shops, yards, sidings, right-of-way, or any locations, they must be reported.
- c) REQUEST MEDICAL AID, if required. Request emergency response equipment, if necessary.

- d) Police or SIR supervision at the scene shall direct drivers, or otherwise ensure safe operations and coordinate all activities.
- e) Provide no accident details (i.e., faultfinding) to anyone other than police or authorized SIR representatives, either on-scene or post-accident.
- f) Prepare documentation pertinent to then motor vehicle accident within 24 hours, and provide original to the SIR Claims Department. Utilize the Accident/ Incident Reporting. Prepare and thoroughly complete all forms, as follows:
 - NY State Department of Motor Vehicle Incident Report, MV-104.
 - Copy of Daily Inspection Log for day of accident.
 - Initial Report of Accident/Incident Injury.
 - Witness statements, if any.
- g) Drivers shall cooperate with Supervisors and the Accident Review Committee in the investigation of the accident. Providing statements of fact may be necessary for proper evaluation of the accident.

2) Supervisor/Coordinator Responsibilities:

- a) Departmental supervision shall immediately notify the SIR Police and all other designated personnel.
- b) On-scene supervisors shall coordinate all activities and obtain medical attention, if necessary. Assist emergency response personnel and provide all information relative to the vehicle and materials transported to all accident investigators.
- c) Coordinate vehicle towing with the Non-Revenue Shop (NRS).
- d) The ranking on-scene supervisor shall be in command of all accident scenes with the exception of accidents involving fatalities, fire, crimes or release of hazardous material. In these events, the ranking officer of the fire company or ranking police officer shall be in command for the duration of the investigation. In events involving hazardous materials, the ranking officer of the HazMat Team will be in command.

- e) Supervisors shall ensure accident forms are submitted to the Claims Department. In the event an injury or circumstance preventing the driver from personally reporting the accident, the employee's immediate supervisor shall ensure the following accident forms are completed as soon as practical.
 - ❑ On-scene Accident Report.
 - ❑ NY State Department of Motor Vehicle Incident Report, MV-104.
 - ❑ Copy of Daily Inspection Log for day of accident.
 - ❑ Initial Report of Accident/Incident Injury.
 - ❑ NY State No-fault Insurance Form, NF-2, for all injuries.
 - ❑ Witness statements.
 - ❑ Hazardous Materials Incident Report.
- f) Prepare and submit within three (3) business days all statements of fact and photographs, in person or by mail, to the Claims Department and the department head. The Supervisor follow-up includes a post-accident inspection of the vehicle and the replenishment of the Accident Reporting kit.
- g) Provide post-accident safety counseling for all drivers involved in an avoidable or reportable accident.

3) Accident On-Scene Responsibilities – All Involved

- a) All employees and contractors/consultants at the accident scene shall unite to protect and ensure the safety of passengers, the public, as well as fellow employees, and assist all SIR supervision and outside emergency service personnel when required.
- b) All employees shall be responsible to comply with all SIR Operating and General Rules and Regulations, in addition to all laws involving motor vehicle accidents.
- c) For accidents involving serious injuries or fatalities, the scene shall remain intact and as undisturbed as possible until the arrival of police, fire, EMS and SIR supervision. Should it be necessary to move the vehicle/equipment involved, every effort should be made to do so in a manner that will cause the least amount of scene disturbance.

- d) Supervisors/Safety Personnel who are first to arrive at the scene of the accident shall have the responsibility to identify and obtain statements from all SIR employees and witnesses involved at the accident scene, except from those persons requiring medical aid who have been removed from the scene, until the accident investigators arrive. Drivers shall otherwise be responsible when SIR supervision is not at the scene.
- e) All employees/contractors, witnesses and passengers shall remain at the scene until released by competent authority.

4) Non Revenue Shop Responsibilities:

- a) Non Revenue Shop shall arrange for towing, and provide technical assistance as may be necessary to assist in the investigation process.
- b) Service histories of all vehicles shall be provided by the department responsible for maintenance.

5) Safety Manager Responsibilities

- a) Safety Manager shall coordinate all accident investigation activities.

(c) Post-Accident Testing:

Post Accident Testing shall be required under federal guidelines and SIR policy. Transportation to and from the collection facility shall be provided according to SIR policy, or if necessary, by ambulance.

Post-accident testing shall be required when a driver is involved in a DOT reportable accident and is cited for a moving violation arising from the accident.

All decisions to conduct post accident drug screening shall be discussed with the appropriate Department Head and Chief Officer when any driver meets the criteria for post-accident testing.

(d) Post-Accident Training

Refresher training shall be required after two avoidable accidents.

22-4. DETERMINATION OF AVOIDANCE

Safe performance of a motor vehicle shall be defined in terms of avoidance of vehicular accidents. The careful determination of the avoidability of accidents, incidents and accident involvements shall be performed so appropriate actions can be taken to prevent recurrence. This determination shall be made in the light of all pertinent facts, not to find fault, just to find the facts. Each accident shall be reviewed individually based on the following:

(a) Non-Avoidable Accident, Crash, Incident or Accident Involvement:

- 1) Driver's vehicle was legally and properly parked where permitted.
- 2) Driver was proceeding in own lane of traffic at a safe and lawful speed.
- 3) Driver was stopped due to existing conditions or was stopped in compliance with traffic sign/signal/signage or the directions of police officer or person(s) legitimately controlling traffic.
- 4) Driver was in proper lane waiting to make turn.
- 5) Vehicle was protected by emergency warning devices as required by DOT or state regulations or if driver was in process of setting out or retrieving signals. These provisions shall apply to the use of turn signals as emergency.

(b) Avoidable Accident, Crash, Incident or Accident Involvements:

- 1) Failure to operate at a speed consistent with the existing laws, conditions of road, weather and traffic.
- 2) Failure to control speed to stop within assured clear distance.
- 3) Failure to judge available clearance.
- 4) Failure to yield right-of-way to avoid accident/incident.
- 5) Failure to accurately observe existing condition(s).
- 6) Driver was in violation of SIR operating rules, general rules or special instructions, the regulations of any local, state or federal regulatory agency or any applicable traffic laws or ordinances.

(c) Avoidable for Specific types of accidents:

- 1) At Intersections:
 - a) Failure to control speed and safe driving distances to stop within available sight distance.
 - b) Failure to check cross-traffic and wait for it to clear before entering intersection.
 - c) Driver pulled out from side street in the face of incoming traffic.
 - d) Driver collided with person, vehicle or object while making a right or left turn at intersection.
 - e) Driver collided with vehicle making turn in front of him/her at intersection.
- 2) Striking Other Vehicle in Rear:
 - a) Failure to control speed and safe driving distances to stop within available sight distance.
 - b) Failure to keep track of traffic conditions and note slowdown.
 - c) Failure to ascertain whether vehicle ahead was moving slowly, stopped or slowing down for any reason.

- d) Failure to judge rate of overtaking.
 - e) Driver came too close before pulling out to pass.
 - f) Failure to wait for car ahead to move into the clear before starting up.
 - g) Failure to leave sufficient room for passing vehicle to get safely back in line.
- 3) Sideswipes and Collisions or Crashes:
- a) Failure to be in proper lane of travel.
 - b) Failure to pull to right and slow down and stop for vehicle encroaching lane of travel when such action could have been taken without additional danger.
- 4) Struck in Rear by Other Vehicle:
- a) Driver was passing slower traffic near an intersection and had to make a slower stop.
 - b) Driver made sudden stop to park, load or unload.
 - c) Vehicle was improperly parked.
 - d) Driver rolled back into vehicle behind while starting on grade.
- 5) Squeeze Plays and Shutouts:
- a) Failure to yield right-of-way when necessary to avoid an accident.
- 6) Backing:
- a) Driver backed up when backing could have been avoided by better planning of his/her route.
 - b) Driver backed into traffic stream when such backing could have been avoided.
 - c) Failure to get out of the cab and check proposed path of backward travel.
 - d) Driver depended solely on mirrors when it was practicable to look back.
 - e) Failure to get out of the cab periodically and recheck conditions when backing a long distance.
 - f) Failure to sound horn or warning device while backing.
 - g) Failure to check behind vehicle parked at curb before attempting to leave parking space.
 - h) Driver relied solely on guide to help him back up.
 - i) Driver backed from blind side when driver could have made a sight-side approach.

7) Accidents involving rail-operated vehicles:

- a) Driver attempted to cross tracks directly in front of train.
- b) Driver ran into side of train.
- c) Driver stopped or parked on or too close to track.

8) While Passing:

- a) Driver passed where hill, curve, vegetation, traffic, adverse weather conditions, etc ahead obstructed view of road.
- b) Driver attempted to pass in the face of closely approaching traffic.
- c) Driver failed to warn driver of vehicle being passed.
- d) Failure to signal change of lanes.
- e) Driver pulled out in front of other traffic overtaking from rear.
- f) Driver cut-in short returning to right lane.

9) While Being Passed:

- a) Failure to stay in own lane and hold speed or reduced it to permit safe passing.

10) While Entering Traffic Stream:

- a) Failure to signal when pulling out of curb.
- b) Failure to check traffic before pulling out of curb.
- c) Failure to look back to check traffic when in position where mirrors did not show traffic conditions.
- d) Driver attempted to pull out in a manner which forced other vehicle(s) to change speed or direction.
- e) Failure to make full stop before entering from side street, alley or driveway.
- f) Failure to make full stop before crossing sidewalk.
- g) Failure to yield right-of-way to approaching traffic.

11) Pedestrian Accidents:

- a) Driver was not prepared to stop.
- b) Failure to yield right-of-way.

12) Mechanical Defects:

- a) Defect was of a type that the driver should have detected in making pre-trip inspection or normal operation of vehicle.
- b) Driver's abusive handling of vehicle caused defect.

13) All other avoidable factors, as may be determined.

22-5. Critical Driver Program

(a) General:

The New York State Department of Motor Vehicles has developed a program for employers of drivers. The Department of Motor Vehicles shall provide driver records, in compliance with the Driver's Privacy Protection Act and all other applicable laws and regulations, respecting access and use of motor vehicle records. These records will be sent to the SIR Personnel Department..

Motor vehicle records shall be utilized for pre-employment and qualification of motor vehicle drivers, annual driver reviews, and accident investigations.

SAFETY

IS OF

**FIRST
IMPORTANCE**

BE CAREFUL

THINK - LOOK

AND

LIVE

MTA Staten Island Railway

I _____
(Name) ID#

(Title)

Acknowledge receipt of the Safety Rule Book for employees of the MTA Staten Island Railway dated May 1, 2004.

I acknowledge my responsibility to report the loss of or damage to this document to a department manager, and my responsibility to reimburse the Authority for the cost of the replacement copy.

I further acknowledge my responsibility to have this document available for inspection while on duty.

I also acknowledge my responsibility to ensure that my copy is current through the addition/deletion of such pages as directed through a General Order issued by the Chief Officer (General Manager).

(Signature) (Date)