The Kansas City Southern Railway Company

System Special Instructions

and

Instructions for Handling Hazardous Materials

All Subdivisions

In effect Monday, November 1, 2010
0001 Hours

Updated through General Order #113 – Effective June 22, 2012

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A. General Instructions

Train dispatcher console identifications and radio frequencies:

Console #	Territory	Frequency	DTMF
~~**Consoles 1, 2 and 8 between 07:00 to 22:59 Monday through Friday**~~			
~~Console 1~~	~~Kansas City to South McElhany (Including switch South McElhany)~~	~~16 – 10~~	~~1~~
~~Console 8~~	~~South McElhany to North Shady Point~~	~~16 – 10~~	~~1~~
~~Console 8~~	~~North Shady Point to South Rich Mountain (Including switch South Rich Mountain))~~	~~55 – 80~~	~~1~~
~~Console 2~~	~~South Rich Mountain to North Shreveport~~	~~55 – 80~~	~~1~~
~~**Consoles 1 and 2 between 23:00 to 06:59 Monday through Friday**~~			
Console 1	Kansas City to North Shady Point	16 – 10	1
Console 2	North Shady Point to North Shreveport	55 – 80	1
~~Explanation:~~ ~~Between the hours of 07:00 and 22:59 Monday through Friday, Dispatcher Consoles will be adjusted with the addition of Console 8, see territory limits listed in the above table.~~ ~~Between 23:00 and 06:59, Consoles 1 and 2 will return to dispatching their normal territory limits listed in the above table.~~			
Console 3	Shreveport to New Orleans	16 – 10	1
	West Leg Texas Wye to Dallas/Alliance	16 – 10	1
Console 4	North DeQuincy Wye to Station 11	52 – 13	1
	Victoria to Rosenberg	97 – 67	1
	Corpus Christi to Laredo	74 – 74	1
Console 5	North Frierson (including Switch North Frierson) to North DeQuincy Wye (Including switch North DeQuincy Wye)	52 – 13	1
	N. DeQuincy Wye to Gulf States Utilities	52 – 13	1
	East Bossier to East Bovay (Including switch East Bovay)	86 – 60	1
Console 6	Meridian to East Bovay	97 – 29	1
	Gulfport to Palmer	29 – 29	1
	Artesia to MP 17 (Tuscaloosa Sub)	65 – 65	1
	Meridian to West Point	65 – 65	1
	Newton to Aberdeen	65 – 65	1
	West Point to Corinth	53 – 53	1
Console 7	Shreveport Terminal CTC	76 – 76	1
	Shreveport Term. CTC to East Bossier (including switch East Bossier)	76 – 76	1
	Shreveport Term. CTC to N. Frierson	76 – 76	1
	East St. Louis Terminal Subdivision	90 – 90	1
	Gateway Eastern Branch	90 – 90	1
	Godfrey Subdivision	90 – 90	1
	Mexico Subdivision	78 – 78	1
	Mexico to Louisiana (Roodhouse Sub)	78 – 78	1
	Louisiana to Roodhouse (Roodhouse)	90 – 90	1
	Springfield Subdivision	90 – 90	1
	Jacksonville Branch	90 – 90	1

Console Contact Number Information:

Console 1: 318-676-6641	Console 5: 318-676-6645
Console 2: 318-676-6642	Console 6: 318-676-6646
Console 3: 318-676-6643	Console 7: 318-676-6647
Console 4: 318-676-6644	~~Console 8: 318-676-6648~~

All EOT/HTD, Locomotive and Car defects are to be reported to the Mechanical Assistance Coordinator.

The phone number is: 816-983-1818.

Trains operating Line of Road will continue to report locomotive and car defects to the dispatcher for handling. The dispatcher will notify the Mechanical Assistance Coordinator.

B. Maximum Gross Weight Limitations and Speed Restrictions

WEIGHT LIMITATIONS: The following will govern gross weights (combined weights of cars and lading) allowed on the KCS Railway:

1. Cars with 4 axles must not exceed **144 tons**.
2. Cars with 6 axles must not exceed **198 tons**.
3. Cars with 8 axles must not exceed **263 tons**.
4. Eight axle cars having a gross weight of **263 tons** may be coupled together in any number, but it must not be coupled to any other four axle car with a gross weight in excess of **132 tons**.
5. Cars with a gross weight in excess of **132 tons** must not be handled over the following subdivisions or branch lines: Ft. Smith Branch, Gulfport Branch, Louisville Subdivision (North Union to West West Point) and (Pearl Industrial lead to Sebastopol), Counce Branch, Artesia Subdivision (North West Point to Corinth only) and Tuscaloosa Subdivision.
6. Union Pacific Railroad Trackage between Beaumont and Corpus Christi, TX, cars must not exceed 134 tons.
7. Fort Smith Railroad: Cars delivering in interchange to the Fort Smith Railroad must not exceed **131 tons**. Cars consigned to Planters Corporation are exempt from these restrictions.

SPEED RESTRICTIONS:

1. Speed restrictions for 4 axle cars and gross weight of **132 tons to 144 tons**:

SHREVEPORT SUBDIVISION:
Over Bridge MP 477.9 ..... 20 MPH
NEW ORLEANS SUBDIVISION:
Over Bridge MP 704.5 ..... 25 MPH
Over Bridge MP 767.7 ..... 20 MPH
Over Bridge MP 783.2 ..... 10 MPH
Over Bridge MP 801.8 ..... 25 MPH

2. Speed restrictions for 6 axle cars and gross weight of **132 tons to 198 tons**:

NEW ORLEANS SUBDIVISION:
Over Bridge MP 704.5 ..... 20 MPH
Over Bridge MP 767.7 ..... 10 MPH
Over Bridge MP 783.2 ..... 10 MPH
Over Bridge MP 801.8 ..... 25 MPH

GREENVILLE SUBDIVISION:
Over Bridge MP 92.6 ..... 10 MPH
Over Bridge MP 93.0 ..... 10 MPH

3. Speed restrictions for 8 axle cars and gross weight of **132 tons to 263 tons**:

PITTSBURG SUBDIVISION:
Over Bridge MP 73.2 ..... 25 MPH

SHREVEPORT SUBDIVISION:
Over Bridge MP 477.9 ..... 20 MPH
Over Bridge MP 497.5 ..... 25 MPH

GREENVILLE SUBDIVISION:
Over Bridge MP 92.6 ..... 25 MPH
Over Bridge MP 93.0 ..... 25 MPH

C. Speed Restrictions

All speeds are subject to modification by speed restrictions indicated under Individual Subdivision Special Instructions.

Business Car and Passenger trains will be governed by Intermodal Train Speed.

MAXIMUM SPEEDS PERMITTED:

Empty coal trains ..... 55 MPH
Key trains (including RSSM trains with one or more PIH/TIH cars) ..... 50 MPH
Key trains on sidings ..... 10 MPH
Loaded bulk commodity trains ..... 45 MPH
Empty Continuous Welded Rail Trains..... 45 MPH
Loaded Continuous Welded Rail Trains..... 40 MPH
All other Loaded Rail Trains ..... 30 MPH
Through turnouts and sidings (unless otherwise specified) ..... 10 MPH
On tracks other than main tracks (unless otherwise specified) ..... 10 MPH
Wye tracks except those portions used as a MT or SDG ..... 5 MPH
On car or locomotive repair tracks ..... 5 MPH
Movements on or off turntables ..... 1 MPH
Engines running lite ..... IMTspeed
Lite engines or train consists less than 12 axles ..... 30 MPH
Engines running lite – when operative dynamic brake is not sufficient to control speed..... 45 MPH
Engines running lite – when operative dynamic brake is not sufficient to control speed on descending grade over one percent (1%) ..... 25 MPH

When maximum subdivision speed is over 45 MPH, the maximum speed permitted will be determined by the tons per operative brake.

Tons per Operative Brake.	**Maximum Speed**
100 or less	No Restriction
101 to 110	55 MPH
111 to 120	50 MPH
Over 120	45 MPH

EQUIPMENT:

1. When the controlling locomotive of the train is a car body type or has desk top controls and the Long Hood is in forward position, maximum speed is 45 MPH.

2. Scale test car, KCS 12, must be handled on head end and must not exceed 50 MPH.

3. Trains handling bulkhead flats loaded with slab steel are restricted to 45 mph.

4. Empty bulkhead flats and woodracks are restricted to 45 mph, except center beam bulkhead (lumber cars) cars.

5. All loaded rail trains must be handled in special train service unless otherwise directed by the Director of Train Management and the Chief Engineer. Empty continuous welded rail trains, when handled in manifest service, must be handled on rear of train. Single car shipments or multiple single car shipments loaded with rail moving in other than special train service are not subjected to rail train speed restriction unless otherwise instructed.

WORK EQUIPMENT:

1. Unless the Timetable or a Track Bulletin specifies a lower speed, the maximum authorized speed for KCS Wreckers is 25 MPH.

   Except:

   Over bridges:

Greenville Subdivision	T-92.6	10 MPH
Greenville Subdivision	T-93.0	10 MPH
Shreveport Subdivision	477.9	10 MPH
Alexandria Subdivision	680.3	10 MPH
New Orleans Subdivision	704.5	10 MPH
New Orleans Subdivision	767.7	10 MPH
New Orleans Subdivision	783.2	10 MPH
New Orleans Subdivision	785.1	10 MPH
New Orleans Subdivision	801.8	10 MPH
New Orleans Subdivision	824.4	10 MPH
New Orleans Subdivision	845.6	10 MPH

   Wrecking operations with this equipment may be performed on a bridge only when the trucks on the boom end are off such bridge, regardless of the use of outriggers. This equipment must not be handled unless authorized by the Director of Network Operation Center (NOC)

2. KCS Slot Equipment and Jordan Ditcher must not exceed 30 mph. This equipment will move under own power or in special train service only, unless otherwise authorized by the Senior Vice President of Transportation. Jordan Ditcher wings must be properly secured and in the trailing position when not in use.

3. Rail Grinders and Sperry Cars operating on CTC signal indication or TWC authority will not exceed 45 MPH and will operate with a locomotive engineer pilot.

4. Ore cars with a truck centers of 20 feet or less: ..... 30 MPH

5. Locomotive truck transfer cars: ..... 45 MPH

D. Other Equipment Restrictions

1. Empty air-dump cars will be handled on rear-end of train only.

2. Cabooses must be handled on the rear of trains, unless otherwise authorized by the General Manager.

3. Derrick cars with booms disconnected, or heavy machinery riding on its own wheels or loaded on coal or flat cars, must be entrained with the heavy end in the direction of movement.

4. Foreign line wreckers, pile drivers, engines, derrick cars, and other heavy machinery on its own wheels, or such equipment moving on revenue billing, will be handled only on the authority of the Senior Vice-President of Transportation and instruction from the Director of Network Operation Center (NOC)

5. Open top cars, bulkhead flats, or any type car with lading extending above the top of the car, liable to shift, will not be handled in trains next to an engine, occupied caboose, placarded tank car (subject to the Instructions for Handling Hazardous Material), or rocket motor car.

Exception: This rule does not apply to locals, dodgers and road switchers when handling bulk head flat cars loaded with tree length wood when they do not have other equipment to use as cover (subject to the Instructions for Handling Hazardous Material).

6. Part loaded cars must be moved only on authority of the General Manager.

7. Bad order cars will not be handled behind a caboose, except cars with drawbars that can be coupled to the caboose.

8. While engaged in the unloading of company ballast, cars will be pulled, unless conditions make it impossible. Doors of empty hopper cars must be closed and securely fastened before moving.

9. Do not pull loads of pulpwood from any wood yard, unless they meet the following requirements:

   a. Loads must be level over the entire length of the car and must not extend above the end bulkheads. Loads of hardwood must not be loaded above the yellow line on the end of bulkheads.

   b. Loads must be properly bumped up, with no voids or open spaces within the load that will allow the load to shift.

   c. Loads must not protrude over the sides of a car more than one (1) foot.

   d. Pulpwood must be tilted toward the center of the car, and tilt maintained throughout the entire height of the load.

   Any cars loaded contrary to these requirements must not be pulled and the appropriate personnel notified.

   The conductor will advise the dispatcher of the car number, location, and reason for leaving the car, who will in turn notify the Car Department, who will inspect the load and advise if and when the car can move.

   Make couplings with no more force than is necessary when picking up pulpwood and when placing in a train. In addition, if holding onto other cars, make a 150 foot safety stop before the coupling is made, when picking up pulpwood and when placing in a train.

10. The Train Dispatcher must be immediately notified anytime a unit coal train gondola car, with a rotary coupler in each end of the car (double stripe) is set out of the train for any reason.

11. Cars equipped with rotary couplers, moving in unit trains, must not have stationary couplers together when spotted for unloading at a rotary dump facility.

12. Schnabel and other special cars equipped with span bolsters will not be accepted in interchange except on specific instructions from the Senior Vice-President of Transportation. If permission is granted for movement on our line, both loads and empties will be handled only in a special train kept on the main track.

    Listed below are Schnabel (these cars generally carry large transformers) type cars currently in service:

    BBCX 1000, CEBX 100, 101, 800, GEX 40010, 40013, 40017, 40018, 50000, 80002, 80003, HEPX 200, MEPX 300, WECX 101, 102, 200-203, 301

13. When handling the below listed cars:

    MSRC 2502 – 2511
    MSRC 2513 – 2514

    Follow these restrictions:
    a. These cars can only move on the KCS Railroad and are prohibited in interchange.
    b. No speed restrictions.
    c. Cars can only move on rear end of trains.
    d. Cars cannot be cut off in motion, nor allow any car moving under its own momentum to strike these cars.
    e. These cars have no cushioning devices.

14. Continuous Welded Rail (CWR) train consists of specially designed rail cars to facilitate the loading/unloading and handling continuous-welded rail, or continuous lengths of bolted rail. The rail cars are permanently coupled together with the couplers blocked against slack and are highly susceptible to damage from rough handling.

    When equipment is loaded with rail, a buffer car must be used at each end. The buffer car must not be a car containing hazardous materials or an occupied caboose or camp car. The ends of the buffer car must be at least as tall as the top row of rail to restrain the rail. The “B” end of the buffer car must not be next to the equipment loaded with rail.

15. When trains are reduced on line, do not set out perishable products, liquor or beer.

16. **Dimensional Load**

A "High Wide/Dimensional Load" is any load wider than 10’6” and/or higher than 17’2” and/or longer than length of car and will be shown on the train consist as “high wide”. Excludes double stack intermodal and multi level auto equipment.

Special Handling Guidelines for Dimensional Loads

When handling dimensional loads, the following will govern:

- Dimensional loads must be inspected by Mechanical personnel at time of interchange or release from an industry to ensure loads are properly braced and secured for safe transportation.
- If a crew member has a dimensional load in the train, then a job briefing with all crew members and the train dispatcher must be performed before moving the train.
- Dimensional loads must not remain in the consist during switching operations.
- Dimensional loads must not be cut off in motion or struck by any equipment moving under its own momentum.
- The air brake system must be fully charged and the automatic brake used when spotting/pulling dimensional loads.
- Dimensional shipments that have clearance to any structure less than 12” will be noted on clearance wire approval notification to the field and NOC with notation of speed restrictions, and any other special handling instructions required through specific structure(s) along the route of movement. Trains are permitted to resume normal speed once the “dimensional load” has cleared the structure.

E. Train Make Up Restrictions

1. **Long car / short car:**
Do not couple freight cars 80 feet or longer to any car 40 feet or shorter. However, this does not apply:

   To a locomotive crane 45 feet or shorter when coupled to a boom idler car 80 feet or longer.

   Note: for the purposes of this restriction, each unit of an articulated car is to be considered one car.

   Empty tank cars less than 35 feet must not be entrained with more than 4,000 trailing tons.

2. Two axle intermodal cars (Car Code QA) must be entrained with not more than 1,500 trailing tons.

3. When moving a single trailer on TOFC flat cars equipped with two (2) hitches, it must not be loaded on the center hitch.

4. Cars tagged, stenciled, billed or shown as "Rear End Only" must be entrained in the rear five cars of the train.

5. Train make-up requirements:

   - Consideration must be given to the overall distribution of weight within the train, with the heavier cars placed toward the head end of the train and lighter cars placed toward the rear of the train. Train should not have more than 30% of total weight of train in the rear 25% of the train.

   - Loaded platform double stack cars should be entrained on head end of train. These cars are to be considered loaded when the consist or wheel report indicates a load of 100 tons or more.

   - A block of 10 or more cars having an average weight over 100 tons should be placed near the head end of train.

6. **Blocks of empty / loaded cars** - When a train's total trailing tonnage exceeds 4,500 tons, do not place blocks of 20 or more continuous empty platforms and/or cars anywhere ahead of 20 or more continuous loaded platforms and/or cars.

7. Shreveport/Heavener/Pittsburg Subdivisions:
   - Trains containing a car 85 feet or longer coupled to a shorter car will not exceed 6,000 trailing tons behind this combination.
   - Northbound trains between MP 431.0 and MP 128.0 with head end locomotive consist only, are limited to 8,700 tons.
   - Southbound trains between MP 128.0 and MP 404.0 with head end locomotive consist only, are limited to 7,800 tons.

8. Mixed freight trains consisting of 25 or more empty flats, TOFC, COFC, or loaded military movements must handle such cars on the rear of the train.

9. Passenger type cars must not couple with any car equipped with shelf type coupler.

10. All equipment classified "Heavy Weight" or "Light Weight" style passenger equipment (includes business cars, support cars and railway service cars) may be handled at the head end of a freight train, next behind road power, provided the train does not exceed 3,500 trailing tons or 45 cars, whichever is less. If head end placement criteria cannot be met, the equipment must be placed on the rear of the train. Cars are to be considered occupied at all times whether being handled in a train or in a yard.

    When Business Car(s) are moved on a Business Train or in regular train service on the Kansas City Southern, a Road Foreman of Engines will occupy the lead locomotive during all movements

    At locations where tracks other than the main or siding will be occupied, an operating officer will be on the ground accompanying the conductor.

11. Trains moving to and from the KCS Laredo, Rosenberg and Beaumont subdivisions via UP trackage rights must be governed by the following UPRR train make up restrictions:

Intermodal equipment:
Two-axle front runner cars (TTOX), three platform solid drawbar cars (in series FEC 60000 FEC 60199), four platform four runner cars (TTFX), and five platform solid drawbar cars (in series CN 677000-677139) must be entrained as follows:

In a solid intermodal train, they must be entrained within the rear 2,500 tons of train.

In other than solid intermodal trains, they must be entrained as the rear cars in the train.

When a train's total trailing tonnage exceeds 4,500 tons, place cars listed below no closer than the eleventh car/platform behind the road engine.

Empty conventional type intermodal car or empty non-intermodal flat car that is 85 feet or longer, and articulated multi-platform cars having one or more empty platform/wells.

When moving single trailers on TOFC flat cars equipped with only two hitches, they must not be loaded on the center hitch.

Rear end only cars:
Entrain equipment tagged, stenciled, billed, or shown on the train consist as rear end only or rear rider in the rear five cars of the train. Solid blocks of this equipment may extend up to 20 cars from the rear of the train if the trailing car of the block is in the rear five cars.

Solid-drawbar connected gondola cars in series AMGX 4052, 4162-4165, 4174-4175, 4179, 5001-5005, 5033, 5103-5104, 5218, 5220, 7071-7076, 808300-809500 must be placed as a rear rider explained above, behind helper locomotives.

Passenger cars with initials MTDX must be placed in a train beginning immediately ahead of rear car of the train.

Length:
All trains are restricted to 7,200 feet, including locomotives.

F. Handling Restricted Equipment

NOTIFICATION IS REQUIRED WHEN HANDLING RESTRICTED EQUIPMENT

Conductors or engineers handling excessive dimensional loads must be provided with restricting information concerning movement and notified that movement has been authorized by Director of Network Operation Center (NOC).

The conductor must inform the engineer of any restricted equipment in his train, specifying the maximum authorized speed at which the equipment may be handled. In addition, he must notify the train dispatcher where clearance of structures or equipment on adjacent tracks may be close. Other movements or on-track equipment required to meet or pass such excessive dimensional loads must be notified.

When trains are consolidated, the crew handling the consolidated train must see that cars restricted to movement on the head of the train are brought forward to their proper position in the consolidated train. Unless otherwise advised, cars subject to restricted movement in any of the individual trains will continue the restricted movement in the consolidated train.

Unless otherwise directed by the Director of Network Operation Center (NOC), shipments of excessive height, width, weight, value, or other unusual shipments requiring close attention, must be positioned in trains as close to the engine as practical, but in no case further than five cars behind the engine.

G. Air Dump Cars

Only employees who are knowledgeable in the operation of air dump cars may operate such cars in unloading operations. When air dump cars are being operated, the conductor must personally supervise the handling to see that all people are in the clear before charging actuating air line and before they are operated.

- Dump cars must not be unattended while charged.
- Dumping Reservoirs must not be charged until dumping is to begin.
- Dumping Reservoir must be bled off after dumping is complete.
- Employees are prohibited from riding inside air dump cars.
- Cars must not be moved with doors open, except as necessary to clear material just dumped.

Protection of Adjacent Tracks: Before charging the actuating air line or before attempting to dump air dump cars, it must be known that protection against movement on adjacent tracks, which could be fouled by material to be dumped, has been provided as follows:

1. If the adjacent track is an auxiliary track, except where CTC is in effect, movement must not be permitted to pass air dump cars that are being charged or being unloaded.
2. If the adjacent track has CTC in effect, protection must be provided by securing track and time
3. If the adjacent track has TWC in effect, protection must be provided by securing work between

Air Connections between locomotive and air dump car are made as follows:

1. **Locomotive Main Reservoir Hose To Air Dump Actuating Hose:** This connection provides the air supply from the locomotive main reservoir to the dumping reservoirs on the air dump car. The brake pipe hoses remain coupled and angle cocks cut in between locomotive(s) and the air dump car(s) to allow use of train air brakes while dumping. Use extreme caution when uncoupling the locomotive main reservoir hose from the air dump actuating hose.

2. **Locomotive Brake Pipe to Air Dump Actuating Hose:** This connection provides the air supply from the locomotive brake pipe to the dumping reservoirs on the air dump car. This method is to be used only when a connection cannot be made from the locomotive main reservoir hose and the air dump cars actuating hose. The following will apply when using this method:

   a. Secure the car(s) by setting hand-brakes on all air dump cars, and set a sufficient amount of hand-brakes on the remaining cars.
   b. Separate brake pipe connection between the air dump car and the locomotive.
   c. Connect locomotive brake pipe hose to the actuating hose on the air dump car.
   d. Raise brake pipe pressure on the locomotive to 120 PSI by use of the regulating valve.

   NOTE: The air dump car actuating line is against the pipe when cut-in, with the pipe when cut-out.

H. TOFC/COFC Shipments

SHIPMENTS IN POSSESSION OF THE KCS WITH MECHANICAL REFRIGERATION SERVICE

1. If the unit is inoperative or varying 15 degrees from the optimum temperature specified by the shipper, contact the Corridor Manager.
2. At no time shall a mechanical refrigeration TOFC/COFC shipment be set out due to the unit being inoperative or due to temperature varying beyond limits specified.

I. Train Tonnage Profile

A Train Tonnage Profile (TTP) is issued at the time of printing of a Conductor's Wheel Report from the data processing system and provides to the crew members a visual graph of the location in their train of empty, loaded, overloaded, and high or wide cars.
It is the conductor's responsibility to provide the engineer with a copy of the TTP when available.

The category of each car is displayed on the base line of the TTP as follows:

C – Caboose
D – Loaded or empty hazardous commodity car
E – Empty non-hazardous car
L – Loaded non-hazardous car
U – Engine

The weight in tons of each car in the train is indicated by columns consisting of vertical bars or the letters "O" or "H" with the upper bar or letter for each car designating the tonnage category in which the car falls.

O – Overload
H – High or wide load

Running totals of tonnage and cars in increments of five cars are also shown as well as the tons per operative brake.

J. Rotary Dump Coal Unloading Plants

INSTRUCTIONS FOR OPERATING IN ROTARY DUMP COAL UNLOADING PLANTS

Speed must not exceed:

1. Loop Tracks .....5 MPH
2. Approaching and through dumper building .....2 MPH

Unloading instructions:

1. Before entering the dumper building, all engines must have all the windows closed, awnings down, and side vents closed.
2. Before spotting the first car for unloading, it must be known that all the rotary couplers are lined through the entire train. If the rotary couplers are not properly lined, the dumper operator must be notified of the car(s) initials, number, and the location in the train of such car(s) before the train is released to the power plant.
3. Train crews must remain inside the engine cab. Riding on the sides of engines or cars while entering or moving through the dumper facility is prohibited.
4. The engineer will spot cars using radio contact with the dumper operator.

5. When the dumper operator advises that he is ready to take charge of the train, the engineer will:

   a. Place reverser lever in the center (neutral) position.
   b. Proceed to nullify the alerter (if equipped).
   c. Release the air brakes.
   d. Place the generator field switch in the "OFF" position.

6. The train crew will advise the dumper that the train is in "freewheel" and must detrain, using caution to watch for close clearance, sudden movement, and footing.

7. The train crew must not remain in the vicinity of the dumper building during the unloading.

8. The train crew, before departing the plant, must observe the cars being unloaded in order to determine that the alerter is deactivated (if equipped).

When unloading is completed:

1. The train crew will board the engine(s) but will not move the train until radio or verbal contact is made with the dumper operator and permission is granted to proceed.

2. The engineer will not make a reverse move.

3. If it is necessary to spot any cars to complete the unloading, the train crew will do so by pulling the train through the dumper building while maintaining radio contact with the dumper operator.

4. To prevent damage to equipment, the engineer will take actions to dispose the air brake system of an overcharge.

5. After train is released to train crew, an air test must be made to determine that the brakes on the rear car will set and release, either by using the end of train device or by a crew members observation at the rear of the train.

K. FRAT-217 Test Car Operating Instructions

Federal Railroad Administration (FRA), Office of Safety, manages a rail-bound high-speed inspection vehicle (identified as FRA T-217) to measure track geometry for compliance with the *Federal Track Safety Standards* nationwide.

1. Each Train Dispatcher and Locomotive Engineer/Pilot will be furnished with a copy of this enclosure.

2. Prior to each day's survey, the contractor will conduct a face-to-face safety briefing to all occupants of the FRA T-217 and review applicable operational and safety conditions or on-track protection procedures. Proper equipment is onboard for signaling.

3. FRA inspectors, prior to the survey operation, will communicate directly with the train dispatcher and Locomotive Engineer/Pilot, to insure that all operating rules, in effect on the route to be traveled, are understood and confirm that the FRA T-217 will be dispatched as a train. Reference to applicable operating documents (Timetable, Special Instructions, General Order, Track Bulletin or similar documents) will confirm dispatching and operational information. FRA inspectors will be stationed in the immediate vicinity where the method of operation, procedures, and movement allows monitoring.

4. Whenever the FRAT-217 is operated, the railroad will assign and provide a Locomotive Engineer/Pilot, Traveling Engineer, or Road Foreman. The FRAT-217 Operator solely relies on the Locomotive Engineer/Pilot to identify a sufficient distance in advance, relevant railroad physical characteristics, movement authority limits, and authorized speeds. FRAT-217 is governed by applicable operating rules when moving on either signal or non-signal system territories (except that auto routing and automatic clearing features will not be used and all dual control switches will be blocked). Absolute block protection or alternate protection methods, controls or authority (except within "yard" or "restricted" limit territory require all trains operate at Restricted Speed), will be applied to protect FRAT-217 against opposing and following trains or on-track equipment.

5. The FRA T-217 operates as a train, and will not be operated by lineup, movement of track cars' or similar on-track equipment authorities. Authorization will not be issued within the same or overlapping limits of another train or on-track equipment, except to facilitate a disabled movement or emergency. Restricted Speed will govern movement within these limits according to the railroad's operating rules.

6. All mandatory directives will be transmitted and received in compliance with railroad rules and instructions. For purposes of this instruction, all references to assigned crew members apply only to the Locomotive Engineer/Pilot.

7. Interlocking machines will be operated manually for the FRA T-217 movement (automatic clearing and routing features will not be used). The control machine operator will be kept informed of the progress of the FRA T-217 from one control point to another. Interlocking control operators will not change the position of any switch or indication of any signal, until they are informed that the FRA T-217 is clear of the interlocking or a section thereof. Where provided, electrical or mechanical blocking devices will be used on switch and signal controls to protect against opposing and following movements. If the FRA T-217 is stopped within the limits of any interlocking, the control operator or dispatcher will be notified of the stop and the precise location. The FRA T-217 will not stop within the limits of an automatic interlocking or a non-interlocked, at grade railroad crossing.

8. In automatic block signal system or traffic control system territory, FRA T-217 should not be stopped on sand or other similar rail surface conditions affecting the shunting of the track circuit. If such a stop cannot be avoided, FRAT-217 will immediately move a sufficient distance to clear that affected portion of the rail. Track conditions may cause non-shunting. However, in all other conditions FRA T-217 has proven reliable and activates track circuits. Where provided, electrical or mechanical blocking devices will be used on switch and signal controls to protect against opposing and following movements.

9. FRA T-217 will approach all highway-rail grade crossings equipped with automatic warning devices prepared to stop, until it is determined the warning devices activate and the FRA T-217 occupies the crossing. On-ground protection against highway vehicles will be provided when automatic warning devices fail to fully activate, the FRA T-217 interferes with the normal function, or when prescribed by railroad rules or instructions.

10. FRA T-217 must not exceed the maximum passenger speed and are not restricted by special track work. In addition, the maximum operating speed of the FRA T-217 is 90 mph when self-propelled, and 110 mph when towed by a locomotive. FRA T-217 are not equipped with automatic cab signal, automatic train stop, or automatic train control systems and cannot negotiate curves greater than 20-degrees. Additionally, due to truck center length, the center of vehicle swing-out clearance is limited on curves greater than 13-degrees, and may restrict safe movement.

11. The FRA T-217 is equipped with operating controls at either end. When appropriate, instructions will be given to the operator to change and operate from the opposite end. Any reverse movement will be conducted, in accordance with the railroad's operating rules. FRA T-217 is not required to be stopped while being passed by a train on an adjacent track.

12. In the event the FRA T-217 Operator is to be relieved for any reason, the Locomotive Engineer/Pilot maybe utilized (if agreeable) to continue operations to the day's final tie-up point. If the Locomotive Engineer/Pilot is not willing or prohibited from operating the FRA T-217, the survey should be stopped at a suitable point short of the scheduled tie-up or a locomotive will be requisitioned for tow-in. This contingency is one that will be addressed at the beginning of the survey to allow for ample planning.

13. Neither FRA nor contractor employees will operate a railroad switch or derail and will rely upon a railroad employee to perform that function. After receiving authority for placement from the appropriate railroad representative, protective devices (i.e., signs, derails, and locking devices, owned by FRA) will be applied by contractor employees. A "blue signal" will be displayed on or near the FRA T-217, control stand at a readily visible location and the 'key' removed when on ground instrument verification (i-v's) checks are made. Similarly, positive protection (brakes placed in emergency position and surrendering of the locomotive reverser) will be imposed by FRA when a locomotive tows the FRA T-217.

14. Except within a locomotive servicing area or car shop area, FRA may reposition the FRA T-217 at anytime on a track or portion of a track that is exclusively occupied by the FRA T-217 and protected by FRA owned devices. Within a locomotive servicing area or car shop area, a railroad's blue signal rules will be in place and complied with to protect anyone on, under or at the ends of the FRA T-217. The FRA T-217 may be repositioned only after the movement is authorized by the railroad employee-in-charge of workers and approved by the FRA.

15. When unoccupied and at the request of FRA, FRA T-217 protection (guards) will be provided by the railroad. Additionally, the FRA T-217 will not be relocated or coupled to other rolling equipment without permission by the FRA. To prevent undesirable access, a remotely controlled or manually operated switch providing entrance to the track occupied by the FRA T-217, will be aligned against movement to that track. Where provided, electrical or mechanical blocking devices will be used on the switch and signal controls. Additionally, the switch will be secured with an effective locking device, exclusive to FRA. The switch stand's operating mechanism will be equipped with a visible all-weather display tag warning any users, "Out of Service-Do Not Operate." At the request of the railroad, additional protective measures may be utilized.

    If a switch cannot be aligned and locked, as described, derails capable of restricting access will be used instead of an effective locking device. The placement of front and rear "portable train control" signs will be displayed in the center of the track, marking the presence of the FRA T-217. The warning sign will consist; of a 16x24-inch red (flag) placard affixed to a derail signifying rolling equipment cannot couple or pass. An FRA T-217 wheel will be securely chocked to prohibit movement on its own.

    Note: Protective devices, owned by FRA, will not be placed fewer than 150-feet from each end of the FRA T-217, except where appropriate.

L. Trackside Warning Detectors

1. All detector systems are equipped with a VSU (Voice Synthesizer Unit) which transmits alert tones and messages via radio. Each system will identify by location or milepost. All Hot Journal detector systems are equipped with dragging equipment detection. In addition the VSU will transmit an axle count. The axle count reported by the first system encountered after departing the initial terminal or after changing the consist en route will be used as the base axle count for the train. If a subsequent axle count varies by more than two (2), and the train has no caboose or EOT device with telemetry capability, a roll-by ground inspection must be made to insure that the train is intact.

2. At all systems, other than those designed specifically to inspect for oversize load, dragging equipment, or high water **only**, if no alarm is received, the message "**Proceed**" or "**No Defects"** must be received when departing the system. If the detector message is not heard or understood, the radio command #88 (pound sign followed by eight, eight) will initiate a rebroadcast of the detector message.

3. **DETECTOR FAILURE**: If a detector failure message is received and a proper detector inspection was received at the last system encountered, a train may proceed to the next system not exceeding 30 MPH, unless the detector is ahead of a critical structure, see note below. If two consecutive systems fail, a roll-by ground inspection of both sides of the train must be made at that location at a speed not exceeding 10 MPH.

    A detector system will be considered as failed when any of the following messages are received:

    a. The message "**System test failure**" is received.

    b. The message "**System failure, a ground inspection is required**" is received.

    c. The message "**Integrity Failure**" is received.

    d. No message is received or understood from the detector when the trains head end is two miles past the detector and attempts to initiate a rebroadcast have failed.

    NOTE: The letter (C) following the detector type in the TRACKSIDE WARNING DETECTOR table indicates a detector that is in advance of a critical structure.

    If a detector in advance of a critical structure fails, a roll-by ground inspection of both sides of the train must be made at that location at a speed not exceeding 10 MPH.

    The letter (N), (S), (E) or (W) designates the direction a train must be traveling to encounter a critical structure after exiting the designated detector.

    Trackside inspections account of a detector failure message may be performed by another train crew, mechanical employee, or maintenance of way employee as long as both sides of the train are inspected. All inspections must take place no more than 4 miles from the failed detector.

4. The Train Dispatcher must be notified immediately of any Trackside Warning Detector failure.

5. **LOCATING DEFECTS**: A crew member must count axles from the head end beginning with the lead axle of the lead locomotive, (Lead axle of lead car when shoving equipment). If a defect is found which cannot be corrected by the crew, and if it is safe to move equipment, set out car at a location accessible to repair personnel. If assistance is required contact the train dispatcher.

6. **HOT JOURNAL**: This alarm may result from abnormal heat from wheels (sticking brakes), journals, traction motors, or suspension bearings. A defect is indicated by an immediate five (5) second interrupted alert tone or a five (5) second interrupted alert tone and the message "**Defect Detected**". Approximately six (6) seconds after the train clears the system, the VSU will transmit an End of Train message which will include "**Hot Journal, (North/South/East/West) side, _____ axles**" or "**First Hot Box, (North/South/East/West) side, _____ axles from head of train**"

    When a Hot Journal alarm is received, train speed must be reduced to 10 MPH, without an automatic brake application, if possible, consistent with good train handling. If necessary to use the automatic brake, use only the minimum amount that will provide the retardation of the train. The entire train must be pulled through the system. The equipment indicated defective may be pulled to a crew member stationed on the ground where a stop will be made.

    When inspecting for a Hot Journal, give particular attention to heat of journals and hub of wheels, observing for smoke, sloughing or melting of bearing surface, or metallic cuttings in journal box of friction type bearings. **Caution and good judgment must be exercised, since defective components can become extremely hot and could cause personal injury.** If no defects are found on equipment indicated, inspect both sides of train twelve (12) axles each side of indicated defect.

When an alarm is received on the same car at two (2) consecutive systems, the equipment must be set out at the first available auxiliary track regardless of whether or not a defect can be found. While moving car to the auxiliary track train must maintain a speed that will ensure safe handling of the car, but not exceeding ten (10) mph.

When a Hot Journal alarm is received and no defect is found the inbound crew must notify the connecting crew of any defects providing the defective equipment initial and number, axle count(s), side of car(s) and defect(s). If the last system encountered failed the inbound crew must notify the connecting crew of such failure. If connecting crew is not available this information must be recorded on KCS Job Briefing Card and left on the console of the lead locomotive. When a Hot Journal alarm is received on an axle that has been previously marked with a "W" the car must be set out.

7. **TESTING JOURNAL TEMPERATURE**: Use a heat indicating crayon to test bearing temperature. Test the bearing temperature by stroking the heat indicating crayon on the bearing cup. A liquid smear will remain on an overheated bearing.

   When ambient temperatures is 32 degrees Fahrenheit or above, use a 200-degree Fahrenheit (RED) heat indicating crayon to test bearing temperature.

   When ambient temperature is below 32 degrees Fahrenheit, use a 163-degree Fahrenheit (Blue) heat indicating crayon to test bearing temperature.

   Use a marker to write the date and the letter "X" above each journal found to be overheated and set-out. Write the date and the letter "W" above each wheel indicated if the car remains in the train.

8. **OVERSIZE LOAD (HIGH OR WIDE) & DRAGGING EQUIPMENT:** These defects are indicated by a five (5) second continuous tone or a five (5) second continuous tone and the message **"Defect Detected"**.

   If a high load is detected, the VSU will transmit the message "**Stop train, High load, near axle** _____".

   If a wide load is detected, the VSU will transmit the message "**Stop train, Wide load (North/South/East/West) side, near axle** _____".

   If dragging equipment is detected, the VSU will transmit the message "**Stop train, Dragging equipment near axle** _____" or "**First Dragging equipment near axle** _____ **from head of train**".

   When any of these alarms are received, the train must be stopped as quickly as possible, consistent with good train handling, without making an emergency brake application. A crew member must make a walking inspection to the indicated location. When defect is found and repaired or it is safe to move the equipment, a roll-by inspection of the remainder of the train must be made with speed not exceeding 10 MPH.

9. **REPORTING DEFECTS:** The Train Dispatcher must be promptly notified of reports of defective equipment. Provide the Train Dispatcher with the defective equipment initial and number, axle count(s), side of car(s) and defect(s).

M. ATK Launch Solid Rocket Motors

The following "Operating Procedures" and general information are intended to serve as guidelines concerning the safe handling and movement of the Redesigned Solid Rocket Motor (RSRM) shipments that are received from the Union Pacific Railroad at Kansas City, Missouri, and delivered to the NS at Meridian, MS or CSXT Railway at New Orleans, LA. These procedures will be furnished to all employees that handle this equipment in performance of their duties.

The purpose of these guidelines is to assure that these shipments are moved with the greatest care possible while providing both KCS and ATK Launch employees as well as the general public with the utmost degree of safety. Each of us needs to use good judgment in handling these shipments. The safe movement and handling, both on the main track and in terminals, is a top priority. KCS must make all responsible operating and transportation personnel aware of all procedures necessary for the safe transit of the RSRM segments.

We are aware of the sensitive nature of these NASA movements. KCS must strive to do its part in assuring our space program receives only the best that America has to offer and provide quality and efficient service to the ATK Launch.

The RSRM segments are classified as class 1.3 explosives and travel in specially designed heavy duty rail cars. These cars are totally dedicated, 8-axle, oversized, covered flat cars.

They measure:

ATR	WIDE
17' 3"	0' 0"
11' 1"	12' 11"
6' 6"	12' 11"
4' 0"	10' 6"

Loaded RSRM segment cars (southward movement) have a gross weight on rail of approximately 457,000 lbs. The inert (spent) motor segments (northward movement) have a gross weight on rail of approximately 165,000 lbs. The doors to these cars are locked for security during shipment.

Additionally, traveling together with many of these movements are nozzle exit cones that move in similar type rail cars. These nozzle exit cones are class 1.1 explosives that are detonated after the solid rocket booster has detached from the shuttle during the launch. The detonation of the class 1.1 explosive causes a portion of the nozzle assembly to detach from the nozzle exit cone. This function provides a reduced impact at splashdown. These nozzle exit cone shipments should be handled in the same manner as the RSRM segments except where specifically designated.

All operating employees that handle this equipment (both loaded and spent rocket segments) in the performance of their duties must be familiar with these guidelines and the clearance messages for these shipments.

1. **Notification Procedures:** Notification of a pending solid rocket motor movement on KCS will come from the Union Pacific Railroad to the KCS Director of Network Operations Center (NOC). Based upon this advance notice, the KCS Director of NOC will develop a firm estimated time of arrival and notify the Joint Agency General Superintendent.

   Once the ETA is established, alert/expedite notices will be sent to the Kansas City Joint Agency, Director of NOC, and Kansas City personnel. The Kansas City operations office will send clearance notices to all operating points between Kansas City and New Orleans or Meridian as well as to the responsible train dispatchers.

   After the shipment comes on line, the KCS Corridor Manager will monitor progress and extend telephone notification to the NS or the CSXT Railway.

2. **Origin Terminal Procedures:** Arrival Inspection (Kansas City) - Upon arrival of shipment in interchange, employees will inspect each car in the shipment. This will include wheels, draft system, suspension system, side bearing, brake systems and safety appliances. Any defects will be repaired before departure from Kansas City. Exterior of car canopies will be inspected for damage or vandalism.

   Smoking or in any way producing fire on, under or about any car in these shipments is not allowed. This includes repairs to the cars or lading. If welding/cutting on or near these cars is required, it must be done under the direct supervision of a car foreman and then only after notifying ATK Launch.

Waiting for Departure - While waiting for departure, these cars should be placed in a high visibility location. These cars must be inspected periodically. The doors to these cars are locked for security during shipment.

Train Service - These movements will operate in regular or special train service at ATK Launch's request. These shipments should not be delayed more than 10 hours waiting for a higher preference outbound train.

Should ATK Launch request special train service, all normal operating guidelines will apply. Should special train service become standard, then KCS will seek run-through power agreements with the other roads involved. This will reduce delay and handling of the rocket motor cars.

Locomotives - Locomotives must be properly inspected before departure. A working radio must be provided on the lead locomotive and caboose. If the train is cabooseless, then two working radios within the locomotive consist must be provided.

Outbound Train Makeup - After acceptance of shipment and prior to departing Kansas City, an initial terminal air brake test will be performed as per current regulations and an air brake certificate furnished to the outbound engineer.

Rail cars in these shipments are not allowed to roll free or be switched detached from the locomotive. No other equipment is to be switched with these cars, nor are cars to be kicked into the RSRM cars.

Handle carefully avoiding tracks with close fixed obstructions, close track centers, and excessive curvature. Use caution when going through and/or near crossovers and turnouts. Air hoses will be tie-wrapped to reduce the possibility of air hose separation.

3. On Line Road Procedures

Train Handling - At the discretion of the Division General Manager, a Transportation Supervisor shall accompany the shipments between Kansas City and New Orleans or Meridian.

Safety stops will be made before coupling into any RSRM or business car, occupied or unoccupied.

Trains handling RSRM loaded cars are to remain on the main track at meeting points. Spent RSRM are to remain on the main track when possible.

Maximum speed whether loaded or empty is 50 MPH. Trains are restricted to 20 MPH as they pass each other at meeting points.

Train crew inspections of RSRM cars at meeting points are required as per Kansas City Southern Operating Rules.

Adjacent tracks to this equipment in Yards are to remain clear whenever possible. Car department employees shall make inspections when possible.

Roll by inspections shall be made checking journal bearings, air hoses, wheels (flat spots, etc.), stuck brakes, hand brakes, and dragging equipment at Pittsburg, Kansas; Heavener, Oklahoma; Shreveport, Louisiana; (Latanier, Louisiana; and Baton Rouge, Louisiana - Destination New Orleans, Louisiana) or (Monroe, Louisiana; Vicksburg, Mississippi; and Jackson, Mississippi - Destination Meridian, Mississippi).

4. Destination Terminal Procedures:

Arrival at Meridian - These cars will be interchanged to the Norfolk Southern Railroad. (See NS special handling instructions for ATK Launch Solid Rocket Motors.)

Arrival at Shrewesbury (New Orleans) - These cars will be handed over to the Norfolk Southern Railroad for interchange and delivery to the CSXT Railway. (See CSXT special handling instructions for ATK Launch Solid Rocket Motors.)

Waiting to Depart - These cars should be placed in a high visibility location. No smoking or any fire is allowed on or near these shipments.

5. **Destination Terminal Procedures:** Empty (spent rocket segments) return procedures shall be the same as loaded movements. The route will be from receipt of spent segments at either Shrewesbury (New Orleans) from the CSXT Railway (via Norfolk Southern Railway), or Meridian from the NS Railroad to Kansas City and delivery to the Union Pacific Railroad. ATK Launch may request special train service for the spent rocket segments. The shipments should not be delayed more than 10 hours waiting on a higher preference outbound train.

6. **Emergency Procedures:** An emergency is defined as any situation in which personnel, cargo, equipment, or any property (public or private) would be endangered.

   Derailment or Other Non-Ignition Emergency: In the event the solid rocket motor car is derailed or survives an accident without igniting:
   a. Extinguish incidental fires within a 450 foot radius of the car.
   b. If cover is detached or broken open and a fire is in the immediate vicinity of the exposed solid rocket motor, use extreme caution in fighting the fire and approach the car from the side. The propellant does not emit flammable vapors under ambient (normal) conditions and is therefore not subject to flash back such as gasoline, etc.
   c. Keep out all non-essential persons. Keep general public beyond 2,500 feet from car.
   d. Allow no flame or spark producing devices or equipment into the area until damages can be assessed.
   e. Contact Information:

KCS Critical Incident Desk
(24 hours)
(816) 983-1892
and
ATK Launch Emergency Office (24 hours)
(435) 863-8545

ATK Launch's Emergency Office will request the following:
   i. Location and rail line
   ii. Name and number of caller
   iii. Description and seriousness of emergency
   iv. Whether ATK Launch's assistance is required

ATK Launch will have an emergency team in transit if needed within four hours of notification via the most expeditious means available.

7. **Ignition of the Solid Rocket Motor:** In case of a derailment or accident the solid rocket motor could ignite. In the event the solid rocket motor is ignited:

   a. Evacuate all personnel immediately as far as possible, but no less than 2,500 feet, and wait for fire to subside.
   b. Do not attempt to fight the fire, it cannot be extinguished. It will burn out in 12 to 16 minutes.

Caution: Do not breathe the fumes, it could be hazardous.

   c. Contact Information:

KCS Critical Incident Desk
(24 hours)
(816) 983-1892
and
ATK Launch Emergency Office (24 hours)
(435) 863-8545

ATK Launch's Emergency Office will request the following:
   i. Location and rail line
   ii. Name and number of caller
   iii. Description and seriousness of emergency
   iv. Whether ATK Launch's assistance is required

ATK Launch will have an emergency team in transit if needed within four hours of notification via the most expeditious means available.

8. **Hot Journal on Solid Rocket Motor Car**: In the event the solid rocket motor car develops a hot journal en route:

    a. Train crew should contact Train Dispatcher and/or Corridor Manager immediately.
    b. Set out solid rocket motor car at nearest location.
    c. Corridor Manager contact:
        i. Nearest law enforcement agency and arrange security protection until KCS Special Services Department can arrive at location.
        ii. KCS Car Department forces to repair car as soon as possible.
        iii. ATK Launch Emergency Office (435) 863-8545 (24 hours).

    d. ATK Launch's Emergency Office will request the following:
        i. Location and rail line.
        ii. Name and number of caller
        iii. Description and seriousness of emergency
        iv. Whether ATK Launch's assistance is required

    In the event of a hot journal ATK Launch's assistance will not be required.

9. **Hot Journal on Spacer Car:** In the event the spacer car develops a hot journal en route:

    a. Train crew should contact Train Dispatcher and/or Corridor Manager immediately.
    b. Set out spacer car at nearest location.
    c. Corridor Manager should assist in finding a suitable replacement spacer car as soon as possible from nearby location or from within the train if in regular train service.

10. **Vandalism to Solid Rocket Motor Car:** In the event the solid rocket motor car is vandalized in any way:

    a. Extinguish incidental fires within a 450 foot radius of the car.
    b. If cover is detached or broken open and a fire is in the immediate vicinity of the exposed solid rocket motor, use extreme caution in fighting the fire and approach the car from the side. The propellant does not emit flammable vapors under ambient (normal) conditions and is therefore not subject to flash back such as gasoline, etc.
    c. Keep out all non-essential persons. Keep general public beyond 2,500 feet from car.
    d. Allow no flame or spark producing devices or equipment into the area until damages can be assessed.
    e. Contact Information:

    KCS Critical Incident Desk
    (24 hours)
    (816) 983-1892
    and
    ATK Launch Emergency Office (24 hours)
    (435) 863-8545

    ATK Launch's Emergency Office will request the following:
        i. Location and rail line
        ii. Name and number of caller
        iii. Description and seriousness of emergency
        iv. Whether ATK Launch's assistance is required

    ATK Launch will have an emergency team in transit if needed within four hours of notification via the most expeditious means available.

N. Grade Conditions

Due to grade conditions, the train dispatcher must ascertain the exact location of the preceding train and determine that the preceding train has passed the milepost location listed below before issuing authority to the following train per GCOR 9.12.1.

Following trains		Preceding trains
Rich Mountain	South	MP 377
Rich Mountain	North	MP 355 (South Page)
Page	North	MP 345
Stilwell	North	MP 250
Westville	South	MP 250
Siloam Springs	South	MP 235 (North Watts)
McElhany	South	MP 192
McElhany	North	MP 174

The train dispatcher will not issue provisions of General Code of Operating Rule 9.12.1 to a train or engine for movement between South Joplin and North Dalby, South Rich Mountain and North Potter, or South Vandervoort and North Wickes, if a track light is indicated on his console and there is evidence of heavy rain in the area.

The train dispatcher may authorize a train to move the minimum distance required in order to clear public crossings at grade at the above locations prior to issuing authority to pass a stop indication as per GCOR Rule 9.12.1.

O. Weather Conditions

When weather bulletins forecasting hazardous weather are received in the Network Operation Center (NOC), the train dispatcher will notify all trains in the area.

The train dispatcher must ascertain from forces on duty facts concerning excessive rain and/or wind, fog, the sudden rise of streams, or any other adverse condition that may restrict visibility, affect the condition of the track, or otherwise endanger trains and engines. The dispatcher must notify the appropriate section foreman promptly and require him to inspect the track and make a subsequent report of conditions.

When hazardous weather is reported, the train dispatcher will advise train crews affected.

When doubt exists concerning safety of movements, train dispatchers and control operators must hold trains or place them in sidings, maintain absolute blocks between trains and engines, and take other action as may be required until the track has been patrolled and found to be safe.

P. KCS Safety (STAR), General Code of Operating Rules (G.C.O.R.) and Air Brake Systems & Train Handling (A.B.T.H.) Changes

KCS Safety Through Awareness and Responsibility (STAR), effective November 5, 2000, is changed as follows:

Transportation, T-9 Entering the RED ZONE; Is changed to read:

If there will be more than one employee in the RED ZONE, a job briefing must be performed prior to entering the RED ZONE or clearing the RED ZONE. All employees involved must ascertain that proper protection has been provided before entering the RED ZONE and all persons are clear before releasing the RED ZONE.

Do not go between uncoupled locomotives or cars when clearance between them is less than 50 feet.

When handbrakes are being released, protect against slack adjustment.

Follow these rules regarding RED ZONE:

- Before entering the RED ZONE, employees must signal the engineer using the radio or hand signals. Acceptable hand signals to enter the RED ZONE are:
    1. Daytime - One arm straight up and one arm pointed toward the cars the employee plans to go between.
    2. Nighttime – Lantern swung over and back across the body.

- Before the engineer gives the employee acknowledgment, he/she must:
  1. Fully apply the independent brake.
  2. Center the reverser.
  3. Place the generator field switch in the down or open position.

- The employee may enter the RED ZONE only after:
  1. The movement has stopped and slack has adjusted.
  2. Proper acknowledgement is received from the engineer. Proper acknowledgement will be:
     a. If radio signal is used, the engineer must acknowledge using the radio
     b. If a hand signal is used, the engineer must acknowledge with one long blast of the whistle.

- The equipment must not be moved until the employee reports clear or signals that he/she is clear of the equipment.
  1. If the employee used the radio to enter the RED ZONE, the employee must report clear of the RED ZONE using the radio.
  2. If the employee used a hand signal to enter the RED ZONE, another hand signal to move would signal to the engineer the employee is clear of the RED ZONE. However, if the employee is not visible the radio may be used to clear the RED ZONE as described above.

Transportation, T-14, Motor Vehicles; Is changed to read:

When operating motor vehicles while on duty, employees must use caution to prevent injury or damage to equipment. Employees must comply with all KCSR operating rules and policies, and be governed accordingly:

a. Operate vehicles applicable to operating instructions.
b. Perform pre-inspection for safe operation.
c. When using vehicle to assist with protecting a shove move, employee must exit the vehicle while protection is being provided.
d. Headlights must be illuminated at all times while operating vehicle.
e. Hazard lights must be used when crossing tracks, riding between tracks and/or structures.
f. Vehicle must not foul tracks, equipment and/or structures.
g. Parking brake must be set with transmission in park or neutral when leaving vehicle.
h. When operating yard/utility vehicles employees must drive at speeds that allow you to maintain control at all times.
i. Utility type vehicles must not be operated on public roads.
j. Secure tools, equipment and materials in designated areas.
k. Use of hand-held cell phone while driving is prohibited.

Transportation, T-17 Personal Protective Equipment and Clothing, under heading of Footwear, second bullet reading:

- Six inches high (minimum)

Is changed to read:

- Eight inches high (minimum) for men, and six inches high (minimum) for women.

Engineering, page 33, under heading of Footwear, second bullet reading:

- Six inches high (minimum)

Is changed to read:

- Eight inches high (minimum) for men, and six inches high (minimum) for women.

Mechanical, page 38, under heading of Footwear, second bullet reading:

- Six inches high (minimum)

Is changed to read:

- Eight inches high (minimum) for men, and six inches high (minimum) for women.

Clerical, page 21, under heading of Footwear, second bullet reading:

- Six inches high (minimum)

Is changed to read:

- Eight inches high (minimum) for men, and six inches high (minimum) for women.

Red Zone definition is changed in its entirety to read:

Red Zone
The area occupied when an employee goes behind, on, under or between cars and/or locomotives for the purpose of:

- Coupling air connections.
- Opening and closing angle cocks. *
- Applying or releasing handbrakes.
- Inspecting or repairing equipment.
- Installing or removing markers.
- Adjusting mismatched couplers.
- Opening knuckles. **
- Performing other duties as required.

* When cutting off cars, it is permitted to place body in Red Zone to close angle cock if both feet remain outside rail.

** Red Zone protection is not required to open a knuckle if equipment is stopped, both feet remain outside rail, no equipment is approaching the knuckle and employee opening knuckle is in control of equipment while in a continuous switching operation.

General Code of Operating Rules (G.C.O.R.), effective April 7, 2010 (Adopted by KCS on May 1, 2010), is changed as follows:

Rule 1.5 Drugs and Alcohol - is changed to read:

The use or possession of alcoholic beverages, while on duty, on company property or while occupying facilities paid for or furnished by the company (including any required or instructed medical procedures and examinations) is prohibited. Employees must not have any measurable alcohol in their breath or in their bodily fluids when reporting for duty, while on duty, while on company property, or while occupying facilities paid for or furnished by the company (including any required or instructed medical procedures and examinations).

The use or possession of intoxicants, over-the-counter or prescription drugs, narcotics, controlled substances, or medication that may adversely affect safe performance is prohibited while on duty, while on company property, or while occupying facilities paid for or furnished by the company (including any required or instructed medical procedures and examinations). Employees must not possess, sell, use, or have in their bodily fluids any illegal drug or controlled substance while on or off duty except medication that is permitted by a medical practitioner and used as prescribed.

Rule 1.6 Conduct - add the following paragraph:

Desertion from duty, making false reports or statements, concealing facts concerning matters under investigation, and serious violations of the law are prohibited.

Rule 1.6.4 Notifications of Criminal Charges – New Rule:
Any employee charged with a crime involving any of the following is required to report the situation within 48 hours to the Operation Support Administrator (318-676-6403). The report of the situation shall include the employee's name, identification number, job title and work location. In regard to the criminal charges, the employee must report the crime(s) that s/he has been charged with committing, the date of the criminal charge(s), the circumstances leading to the charge(s) and the jurisdiction(s) where the criminal charge(s) are pending.

- Operating a motor vehicle while under the influence of, or impaired by, alcohol or a controlled substance or refusal to undergo testing to determine whether s/he was operating a vehicle under the influence of alcohol or a controlled substance.
- Possession, use or distribution or use of any illegal drug, controlled substance or related paraphernalia.
- Any crime involving violence, theft or fraud
- Any felony

Rule 1.6.5 Criminal Convictions – New Rule:
Any conviction for a crime that is determined by the Carrier to make employee unsuitable for railroad employment is considered grounds for dismissal.

Rule 1.10 Games, Reading, or other Media - is changed to read:

Employees on duty must not:

- Play games
  or
- Read magazines, newspapers, or other literature not related to their duties when:
  - On a train or engine,
  - Performing safety related activities,
    or
  - It would delay or interfere with performance of required duties.

This does not prohibit employees from having such material enclosed in their personal luggage.

Rule 1.17 Hours of Service Law - add paragraph reading:

When it is apparent that employees will be unable to complete their trip or tour of duty within the lawful period or after being on duty nine (9) hours, train and engine crews will notify the train dispatcher of the time they will have been on duty twelve (12) hours.

Rule 1.47 All Crew Members' Responsibilities – part C item 2 - is changed to read:

Crew members in the engine control compartment must be alert for signals. Crew members must:

- Communicate clearly to each other the name of signals affecting their train as soon as signals become visible and/or audible.
- Following the intercrew communication, a crew member riding on the controlling locomotive will communicate via radio the indication and location of all signals. This communication will include the engine number, direction, signal name and location of each signal affecting their movement. (Example: KCS 745 South, approach signal, North Potter, out)
- Continue to observe signals and announce any change of aspect until the train passes the signals.
- If the signal is not complied with promptly, crew members must remind the engineer and/or conductor of the rule requirement.
- When train is operated with helper crew, helper crew members will repeat via radio all signal information reported by controlling crew members. (Example: Helper crew KCS 745 South, approach signal, North Potter out)

Rule 1.49 Trainees – Add New Rule:

Conductor Trainees must work an assignment with a Qualified Trainer that has a minimum of 2 years of active service as a Conductor. Engineer Trainees must work an assignment with a Qualified Trainer with a minimum of 2 years of active service as a Locomotive Engineer. The minimum active service for Conductors and Engineers must be consistent with the Railroad Coach Program. In the event these specific requirements cannot be accomplished, the Trainee or the Trainer must contact their immediate supervisor, crew manager, or Assistant Director of the Training Center.

Rule 1.50 Job Briefing – Add New Rule:

Perform Job Briefings at the beginning of the job, during the job as conditions change or new tasks are started, and at the completion of the job to ascertain all requirements of the task have been completed.

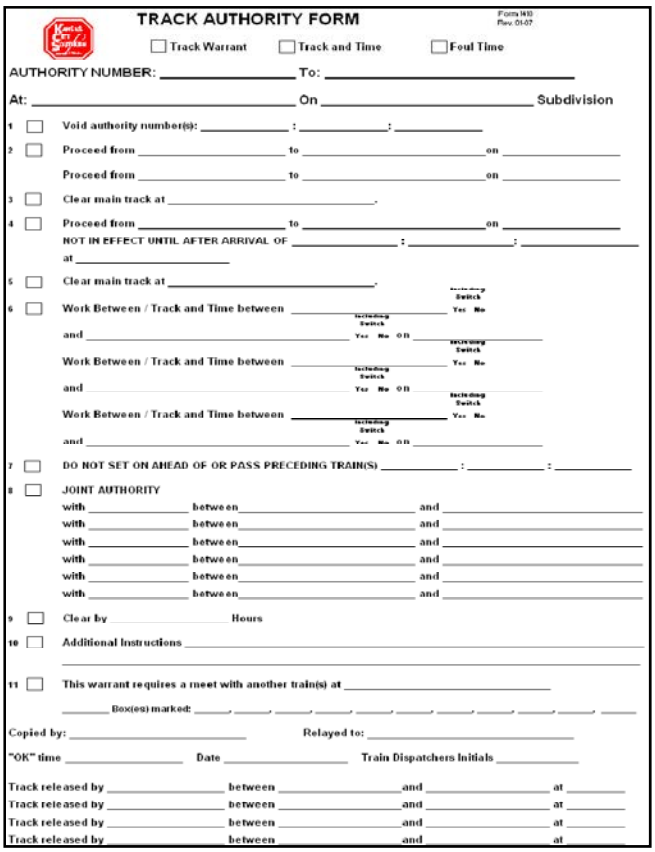
All members of the work group, including contractors, are to be included, and are responsible to participate in the Job Briefing. During the initial Job Briefing, the crew or work group will designate an employee in charge of Job Briefings

Designated employee in charge of Job Briefings must be in the Safe Zone prior to receiving instructions that will require a Job Briefing, and ensure that all affected employees are in the Safe Zone prior to conducting a Job Briefing.

To comply with Safe Zone, employees must not engage in any other activity, or be in a location that could result in being struck by vehicles, equipment, or tools, until the Job Briefing is complete. When required, the locomotive engineer or remote control operator must be stopped, with independent brake fully applied, and reverser centered, until the Job Briefing is complete.

Employees involved with train movements must not engage in any other activity not related to the Job Briefing, other than the operation of the train.

At a minimum a Job Briefing must: define the work to be done; how the work will be done; identify the potential hazards; and name the employees responsible for each task.



TRACK AUTHORITY FORM

Track Warrant ☐ Track and Time ☐ Foul Time

AUTHORITY NUMBER: _____ To: _____

At: _____ On _____ Subdivision

1 ☐ Void authority number(s): _____ : _____ : _____

2 ☐ Proceed from _____ to _____ on _____

Proceed from _____ to _____ on _____

3 ☐ Clear main track at _____.

4 ☐ Proceed from _____ to _____ on _____

NOT IN EFFECT UNTIL AFTER ARRIVAL OF _____ : _____ : _____

at _____

5 ☐ Clear main track at _____.

6 ☐ Work Between / Track and Time between _____ Including Switch Yes No

and _____ Including Switch Yes No On _____

Work Between / Track and Time between _____ Including Switch Yes No

and _____ Including Switch Yes No On _____

Work Between / Track and Time between _____ Including Switch Yes No

and _____ Including Switch Yes No On _____

7 ☐ DO NOT SET ON AHEAD OF OR PASS PRECEDING TRAIN(S) _____ : _____ : _____

8 ☐ JOINT AUTHORITY

with _____ between _____ and _____

with _____ between _____ and _____

with _____ between _____ and _____

with _____ between _____ and _____

with _____ between _____ and _____

with _____ between _____ and _____

9 ☐ Clear by _____ Hours

10 ☐ Additional Instructions _____

11 ☐ This warrant requires a meet with another train(s) at _____

_____ Box(es) marked: _____, _____, _____, _____, _____, _____, _____, _____, _____, _____, _____

Copied by: _____ Relayed to: _____

"OK" time _____ Date _____ Train Dispatchers Initials _____

Track released by _____ between _____ and _____ at _____

Track released by _____ between _____ and _____ at _____

Track released by _____ between _____ and _____ at _____

Track released by _____ between _____ and _____ at _____

Rule 2.14.1 Verbal Transmitting and Repeating Mandatory Directives – is changed to read :

When transmitting and repeating mandatory directives (which include Track Warrants, Track and Time limits, BLT authorities, Work and Time, Track Bulletins and Radio Speed Restrictions):

- State and spell single digit numbers.
- State multiple digit numbers by number and digit.
- Identify decimal point as, point, dot or decimal.
- State and spell directions.

Exceptions:
Multiple numbers that do not need to be stated and spelled or single digit numbers not needed to be spelled are:

- Date
- Box or line numbers
- Total line numbers issued
- The "OK" time

Rule 2.21 Required Radio Communication (Shoving, Backing or Pushing Movements) – Add New Rule:

When radio communication is used to make movements, other than during continuous switching operations*, crew members must respond to specific instructions given for each movement.

Additionally, when the radio is used instead of hand signals for backing, shoving or pushing movements, the following information must be communicated to and confirmed by the individual controlling the locomotive (engineer, hostler, or controlling remote control operator) prior to beginning the movement.

Communication must include:

- Direction and distance to be traveled and must be acknowledged when distance specified is more than four cars. Movement must stop within half the distance specified unless additional instructions are received.
- All access gates are open and secure to allow unrestricted entrance to the track (where applicable).
- All switches are properly lined to allow access to the track.
- All derails are in proper position to complete the desired move.
- There are no track flags restricting the desired move.
- There is no on-track or off-track equipment fouling the movement.

* The term “continuous switching operations” only applies to free rolling equipment that is kicked, humped or dropped on a yard switching lead.

Rule 2.22 Electronic Devices – Add New Rule:

This rule outlines the requirements for use of electronic devices. As used in this rule, the following definitions apply:

Electronic Device means an electronic or electrical device used to conduct oral, written, or visual communication; place or receive a telephone call; send or read an electronic mail message or text message; look at pictures; read a book or other written material; play a game; navigate the Internet; navigate the physical world; play, view, or listen to a video; play, view or listen to a television broadcast; play or listen to music; execute a computational function; or, perform any other function that is not necessary for the health or safety of the person and that entails the risk of distracting the employee or another employee from a safety related task. The list above is meant to provide representative examples, but should not be considered as all inclusive. This definition does not include:

- electronic control systems and information displays within the locomotive cab (whether the displays or systems be fixed or portable) or on a remote control transmitter necessary to operate a train or conduct switching operations
  or
- railroad supplied radio

Railroad operating employee means an individual who is:

- engaged in or connected with the movement of a train including a hostler,
- a train employee providing commuter or intercity rail passenger transportation,
  or
- subject to hours of service governing train service employees.

The use of any electronic device is prohibited if that use would interfere with a railroad operating employee’s performance of safety-related duties.

A. Personal or Railroad Supplied Electronic Devices

Personal or railroad supplied electronic devices may be used as necessary by railroad operating employees as follows:

- To respond to an emergency situation involving the operation of the railroad,
- To respond to an emergency encountered while on-duty,
- As a communication device in the event of a railroad supplied radio malfunction.

B. Personal Electronic Devices

Except when deadheading in other than a controlling locomotive, railroad operating employees on duty must have each electronic device turned off and stowed out of sight and have earpieces removed from their ear when:

- On moving rolling equipment or on track equipment.
- Any member of the crew is on the ground performing safety related duties.
  or
- Any employee is assisting in preparation of the train, engine(s) or on-track equipment.

A railroad operating employee may use a personal cell phone while on duty only for voice communication when:

- Rolling and on track equipment is stopped,
- A safety briefing is conducted with all crew members to confirm that it will not interfere with any safety related or required duty,
- No member of crew will foul any track.

Cell phones must be turned off when calls have been completed.

A personal stand-alone calculator or digital watch whose only purpose is as a timepiece and medical devices that are consistent with the railroad’s standards may be used as necessary in the performance of duties.

C. Mechanical Department Employees

The use of personal electronic devices by mechanical department employees is prohibited while on duty.

Rule 5.4.1 Temporary Restrictions - is changed by adding:

Temporary speed restrictions due to thermal displacement or track disturbance caused by track maintenance requiring reduced speeds until track stabilizes may be protected by track bulletin Form A (Temporary Speed Restrictions) only without the use of Yellow Flags for a period not exceeding 48 hours. When Yellow Flags are not displayed, the words "NO FLAGS" must be shown in the "FLAGS AT" column of the Track Bulletin Form A (Temporary Speed Restrictions).

Rule 5.5.1 Advanced Warning Signs – add new rule:

An advance warning sign must be placed 2,500 feet before the location where the lower speed is in effect.

Rule 5.8.2 Sounding Whistle, (2) – is changed to read:

(2) ── Acknowledgement that locomotive has been set up for RED ZONE

Rule 5.11 Engine Identifying Number – is changed to read:

Trains will be identified by the initials and engine number displayed on exterior of engine and by adding the direction when required. When an engine consists of more than one unit or when two or more engines are coupled, the number of one unit only will be illuminated as the identifying number. When practical, use the leading unit.

Locomotives with the following initials stenciled on the side of the locomotive will be identified as NS locomotives: AGS, CG, CNOT, CR(Conrail) CRCX, CRN, GN, GSF, INT, NW, PRR, PRRX, SOU, SR, SRTA.

Locomotives with the following initials stenciled on the side of the locomotive will be identified as CSXT locomotives: CSXT, CSX, and CSX Transportation.

For other locomotives bearing conflicting initials, conflicting railroad lettering or having no initials at all, identify these units by using the locomotive initials noted on the FRA form F6180-49A (BLUE CARD) for that locomotive.

Rule 5.13 Blue Signal Protection of Workmen - add new item H:

When Blue Signal protection is required to perform work on a Remote Control Locomotive, prior to establishing Blue Signal protection, ensure the locomotive is not conditioned for remote control operation.

This can be determined by ensuring:

- There is not a Lock-Out device in the reverser slot on the control stand indicating the locomotive is in remote control operation.
- The Remote/Manual change over switch is in the MANUAL position.

If there is a Lock out device in the reverser slot on the control stand or the change over switch is in the REMOTE or BELTPACK position, the Remote Control operator or local supervisor must be contacted to condition the locomotive for manual operation.

A Remote Control Locomotive in the MANUAL mode and without a Remote Control Mode Lock-Out device in the reverser slot on the control stand can be protected using Blue Signals as provided in this rule.

However, when the locomotive must remain in the RCO mode in order to test, repair, or troubleshoot the RCO equipment, the locomotive may remain in the RCO mode if all controlling RCUs for that locomotive are in the direct control of the employee(s) responsible for the blue flag protection.

Rule 6.3 Main Track Authorization - is changed by adding:

- 6.14.1 Branch Line Territory

Rule 6.3.2 Movement of Hy-Rail Inspection Vehicles - add new rule:

Hy-Rail Inspection Vehicles are defined as a Roadmasters' Truck, Signal Supervisors' Truck, Track Supervisors' and other Company Officers' Vehicles that are equipped with rail wheels.

Hy-Rail Inspection Vehicles will be governed by the following:

- They must be prepared to stop when approaching any of the following:

    1. People or animals.
    2. Any road crossing.
    3. Standing or moving trains, cars, or on-track equipment on the same or adjacent tracks.
    4. Frogs or switches.
    5. Derails, tunnels, or station platforms.
    6. Curves or points where the view is obscured.

- When approaching and passing over road crossings:

    1. Move in such a way as to avoid accidents
    2. Remain in complete control of the on-track equipment
    3. Stop, if necessary
    4. Provide protection against vehicular traffic, if necessary

- At an interlocking signal when operating a Hy-Rail Inspection Vehicle that does not shunt the track, the track car operator must stop. If no conflicting movement is seen or heard, the track car may proceed as the way is seen to be clear.

Railroad Radio and Headlights must be on at all times.

Unit must have adequate flagging supplies.

A. Movement of Hy-Rail Inspection Vehicles on Controlled Track

Employees must obtain proper authority from the train dispatcher or control operator, before an employee can operate a Hy-Rail Inspection Vehicle on the following controlled track territories:

- CTC
- TWC
- Signaled Yard Limits

Hy-Rail Inspection Vehicles may operate at a maximum speed of 40 MPH provided the authority is not joint with other trains, track cars, and/or employees. If track limits are joint with other trains, track cars, and/or employees, movements will be made at RESTRICTED SPEED.

Exception: Restricted speed will not apply to Hy-Rail Inspection vehicles 15,000 lbs. GVW or under when moving within or through joint authorities.

When moving through joint authority limits, Hy-Rail Inspection vehicles 15,000 lbs. GVW or under must move at a speed that will allow stopping within half (1/2) the range of vision short of:

- Train
- Engine
- Railroad car
- People or equipment fouling the track
- Stop signal
  or
- Derail, moveable point frog or switch lined improperly

And not exceeding 40 MPH.

When determining the proper speed, take into consideration the following:

- Weather conditions such as rain, snow, or ice
- Track conditions such as grade, curvature, and rail condition
- Load
- Sight distance
- Visibility
- Other conditions that might adversely affect the safe operation of Hy-Rail Inspection Vehicles

All Hy-Rail Inspection vehicles moving within or through working limits must operate at restricted speed, unless a speed is otherwise specified by the Employee in Charge of working limits.

B. Operating Two or More Hy-Rail Inspection Vehicles as a Single Unit on Controlled Track

Hy-Rail Inspection Vehicles may share the same authority number and operate as a single unit under the following conditions:

- They must stay in communication with each other.
- They must be able to stop in 1/2 their range of vision.

C. Movement Hy-Rail Inspection Vehicles on Non-Controlled Track

If there is a person in charge of the non-controlled track, obtain permission before fouling the track. When moving on non-controlled track, be governed by the following:

- All movements will be made at restricted speed.

Rule 6.3.3 Operation of Track Car in CTC or DTC - add new rule:

Clearing for trains
A track car, or group of track cars may occupy a siding on verbal authority of the train dispatcher after existing track and time or work between is voided for the explicit purpose of clearing trains.

The train dispatcher may issue verbal instructions to a track car or group of track cars to enter a siding located within or adjacent to the track limits of existing track and time or work between for the explicit purpose of clearing trains.

Rules 6.7 A, B, and C Remote Control Zone are deleted. (See KCS Remote Control Rules)

Rule 6.9 Meeting or Passing Precautions - is changed by adding a sentence, which will now be the last sentence of the second paragraph:

A train that will be met or passed at a Power Assisted Switch must not line the switch for the opposing or passing train.

Rule 6.11 Mandatory Directive – is changed by adding:

- Add 6th bullet to the first paragraph reading: BLT Authority
- Add last paragraph to rule reading: Use KCS Form 1410 to record track warrant, track and time or foul time written authorities.

Rule 6.11.1 Issuing or Voiding Mandatory Directives - Add New Rule:
When a mandatory directive is issued for the purposes of occupying a controlled track, or voiding authorities or a portion of the authority comply with the following:

A. Requesting Track Authority
The employee requesting track authority must inform the train dispatcher of their name, identification, exact location where the track will be entered or occupied and authority limits desired.

B. Transmitting Track Authority

- An employee will enter all of the information and instructions issued by the train dispatcher on the track authority form.
- The employee will repeat the information, including total number of lines issued and the number of each line issued, to the train dispatcher.
- The train dispatcher will compare the repeat with the authority and if repeated correctly will respond with “OK” time, date and the dispatcher’s initials.
- The employee will enter the “OK” time, date and the train dispatcher’s initials on the track authority form and repeat this information to the train dispatcher.
- If repeated correctly the dispatcher will acknowledge with “That is Correct”.
- The track authority is not in effect until the “OK” time is shown on it and the dispatcher has acknowledged with “That is Correct”.

C. Joint Authority
When a joint authority is issued listing other train(s), track car(s) or employee(s), the employee receiving the authority must notify the listed train(s), track car(s) or employee(s) of the addition to the joint authority. The notification to the other train(s), track cars(s) or employee(s) must be made before entering the joint limits of the authority. In the event that the train, track car or employee is unable to notify the other train(s), track car(s) or employee(s) about the addition, the information may be relayed through the train dispatcher or other employee.

Trains and on track equipment must not enter joint authority limits without first determining from the employee in charge if working limits have been established. Established working limits must not be entered without permission from employee in charge of the working limits. Trains, track cars or employees must understand the conditions and movements that will be made within the joint limits and where established working limits, if any, exist.

D. Altering Track Authority
Employees must not add to or alter their track authority except:

- When joint authority has been issued and additional train(s), track car(s) or employee(s) are added to the limits, the train(s), track car(s) or employee(s) that have been notified must notate the identification of the addition on line 8 of their authority.

- When a train, track car or employee releases a portion of the track authority, the employee must record that portion that has been released in the appropriate location on the track authority form.

E. Track Authority in Effect
A track authority for occupying controlled track is in effect until an employee reports clear of the controlled track between two specific locations or the track authority is made void using the format listed below. A crew member must inform the train dispatcher when the train has cleared the limits of the authority.

1. Employees reporting clear between two specific locations of their authority must state:

- Identification as designated on the track authority.
- Limits being released
- In non-signaled territory employees must add confirmation of the switch lock status and position of all manually operated switches/switch point derails within the limits.

The dispatcher will state "(Identification as designated on the track authority) is releasing that portion of authority number ____ between (location) and (location) (adding switch included and track designation when required) at (time), (date), (dispatcher's initials)." In non-signaled territory the dispatcher must add confirmation of switch lock status and position of switches within the limits.

The employee will repeat this information and if repeated correctly the dispatcher will acknowledge with "That is correct." The track authority will then be considered void between the points released. The employee releasing the limits between the two points will notate the information in the appropriate location on each copy of the track authority form.

2. Except when receiving additional track authority, employees voiding track authority must state:

- Identification as designated on the track authority.
- Track authority number being voided.
- In non-signaled territory employees must add confirmation of the switch lock status and position of all manually operated switches/switch point derails within the limits.

The dispatcher will state "Track authority number ____ to the (identification as designated on the track authority) is void at (time), (date), (dispatcher's initials)." In non-signaled territory the dispatcher must add confirmation of switch lock status and position of switches within the limits.

The employee will repeat this information and if repeated correctly the dispatcher will acknowledge with "That is correct." The track authority will then be void and the employee must write void across each copy of the track authority being made void.

F. Reporting Clear of Limits of Authority
A train without a crew member on the rear and operating in non-signaled or double track territory may report clear of the limits, report having passed a specific location, or release the track between two specific locations only when it is known the train is complete. This must be determined by one of the following ways:

- The rear of the train has a rear-end telemetry device, and air pressure on the head-end device indicates brake pipe continuity.
- An employee verifies the marker is on the rear of the train.
- A crew member can observe the rear car of the train on which the marker is placed.
- The train is stopped, and an inspection verifies that the marker is on the rear car of the train.
- A trackside warning detector transmits an axle count for the train, and the axle count duplicates the axle count transmitted by the previous trackside warning detector.

In addition, a train or other on track equipment must comply with requirements outlined in Rule 8.3 (Main Track Switches) before releasing the limits. Note: Main track switches/switch point derails must be left lined and locked in normal position unless otherwise instructed by the Train Dispatcher.

Limits of authorities in non-signaled territories must not be released by trains, track cars or employees with main track authority until a job briefing has been conducted (between all crew members or between other on-track equipment operators) CONFIRMING that all manually operated main track switches/switch point derails are restored and locked in the normal position and that the train or other on-track equipment is clear of limits.
NOTE: Only report and log use of Power Assisted switches and Spring Switches when these switches are operated by hand.

G. Time Limit
If the track authority shows a time limit, the train, track car or employee must be clear of the limits by the time specified, unless another track authority is obtained. If the crew members cannot contact the train dispatcher and time limits expire, authority is extended until the train dispatcher can be contacted.

H. Copies of Track Authority
Before a mandatory directive is acted upon, the conductor and engineer must each have a copy of the track authority issued to their train, and each crew member must read and understand it. The Employee in Charge must have a copy of the track authority issued to their track car and/or employees. The copy must show the authority number, identification, track limits, date, location, and name of the employee who copied it.

Employees may relay track authority.

The train dispatcher must maintain a record of authority granted including the time the track authority was released.

Rule 6.14.1 Branch Line Territory - add new rule:

The train dispatcher may verbally authorize trains and MofW to occupy the main track within branch line territory. Branch line territory limits are specified on timetable subdivision pages within method of operation. Trains or MofW must receive and enter the following information on the prescribed form.

(A) BRANCH LINE TERRITORY

Eng. Init & # or Equip #	Date Auth. Issued	Time Auth. Released	Time	Joint With	Track Bulletin #
(B)	(D)	(E)	(F)	(G)	(H)

A. Branch Name
B. Engine Initial & Number or Equipment Number
C. (Deleted)
D. Date Authority issued
E. Time Authority issued
F. Time Authority released
G. Only used when limits are jointly occupied all movements to be at Restricted Speed.
H. Only used when Track Bulletin Form B is issued.

The Train Dispatcher will keep written records of authorities issued.

A track bulletin Form B, in conjunction with flags, may be used to protect track cars and/or employees on the main track or siding within these limits.

A. Sole Authority

- Movement may be made in either direction.
- Authority will be granted to one train or one track car at a time.
  and
- Authority will be void when the crew reports clear of limits to the train dispatcher.

B. Joint Limits

The train dispatcher may verbally authorize joint limits. This authority will allow trains, men, and equipment to occupy the track jointly.

The train dispatcher must inform all movements of each and make a written record of such authority.

When operating under joint limits:
- All movements will be made at restricted speed.
- Before entering these limits, trains, track cars, and employees must communicate with trains, track cars and employees within these limits.
- Trains, track cars, and employees must not enter Working Limits without authority from Employee in Charge of Working Limits.

Rule 6.23 Inspection of Cars and Units - add the following:

Train must not proceed until all conditions have been met:

1. Brake pipe pressure has been restored by:
   - Observing air pressure gauge on rear of train.
     or
   - Communication between the Front HTD and Rear EOT device indicates that air pressure has been restored to the train.
2. Brake pipe leakage test performed as follows:
   - After air brakes have released, make a 20 PSI brake pipe reduction.
     and
   - After brake pipe exhaust ceases, place automatic brake valve cutout valve to "OUT" position. If brake pipe pressure rapidly reduces to zero, entire train must be inspected. If brake pipe pressure stabilizes, train may proceed.
3. When air hoses part while moving on line causing an undesired emergency application of the air brakes, employees must check to see if hoses are properly coupled and secure them with air hose supports, if necessary. When it is necessary to install or adjust an air hose support, hoses should be 5 inches for empty cars or 6 inches for loaded cars above the top of the rail.

EXCEPTIONS:
WALKING INSPECTION of train is required after an emergency application when ANY of the following conditions exist:

- KEY TRAIN as defined in hazardous material instructions.
- SEVERE SLACK ACTION occurred during stop.
- EXCESSIVE POWER is required to start train.
- Train WILL NOT pass a brake pipe LEAKAGE TEST as explained above.

NOTE: If a bridge not equipped with a walkway or another physical characteristic prevents a walking inspection of the entire train, a roll-by inspection of the remainder of train will be made before proceeding, not to exceed 5 MPH.

ROLL-BY INSPECTION not to exceed 10 MPH is required after an emergency application when ANY of the following conditions exist:

- NO communication between the HTD device and the EOT device and Train WILL pass a brake pipe LEAKAGE TEST as explained above.

- Train exceeds 5,000 tons, and the emergency application occurred at a speed below 25 MPH.

TRAIN IN EMERGENCY AND/OR SEVERE SLACK ACTION WHILE STOPPING SITUATION:	WALK	ROLL BY	NONE
Brake pipe pressure is not restored	X		
KEY Train	X		
Excessive power required to start train	X		
Excessive slack action when stopping	X		
Train will not pass brake pipe leakage test	X		
No communication between EOT and LCU and Train will pass brake pipe leakage test		X	
Over 5,000 tons: speed below 25 MPH and train will pass brake pipe leakage test		X	
Less than 5,000 tons: pressure restored and train will pass brake pipe leakage test			X
Speed above 25 MPH, pressure restored and train will pass brake pipe leakage test			X

Rule 6.29.1 Trackside Warning Detectors and Inspections second bullet - is changed to read:
- A trackside warning device indicates a train defect except for hot journal, which may be pulled to crew member stationed on the ground where a stop will be made. The journal must then be inspected.

Rule 6.32.2 Part A, Automatic Warning Devices Malfunction - is changed by adding the following table.

Movement When Notified That Automatic Warning Devices Have An Activation Failure, Are Disabled, or Malfunctioning

If ...	Then ...
The crew is notified that the crossing warning system has an activation failure or that the crossing warning system has been disabled, and an equipped flagger is not at the crossing to provide warning	Stop before occupying the crossing. After a crew member is on the ground at the crossing to warn highway traffic, proceed over the crossing as directed by that crew member. Then proceed at normal speed.
The crew is notified that the crossing warning system is malfunctioning and an equipped flagger is not at the crossing to provide warning	Stop before occupying the crossing. After a crew member is on the ground at the crossing to warn highway traffic, proceed over the crossing as directed by that crew member. Then proceed at normal speed.
The crew is notified that the crossing has one equipped flagger who is unable to provide warning in all directions of approaching traffic	Proceed over the crossing at 15 MPH without stopping until the head end of the train completely occupies the crossing. Then proceed at normal speed.
The crew is notified that the crossing has one or more equipped flaggers who are able to provide warning in all directions of approaching traffic	Proceed over the crossing at normal speed without stopping.

NOTE: An equipped flagger is a person other than a crew member who is equipped with a vest, shirt or jacket of the color appropriate for daytime flagging, such as orange, yellow, strong yellow-green or florescent versions of these colors or other generally accepted versions of these colors. The flagger must have a red flag or stop paddle by day and a light at night.

Add new Item C. reading:

C. Train Dispatcher, Yardmaster, and person in charge of yard responsibilities

When notified that automatic warning devices are malfunctioning, the train dispatcher must:

- Notify all trains.
- Contact the Critical Incident Desk to ensure that local law enforcement agents are contacted.

Add new Item D. reading:

D. Power-Off Indicator

When the Power-Off Indicators on the side of the signal housing at highway crossings are not illuminated or a white strobe light is flashing, immediately notify the train dispatcher.

Add new Item E. reading:

E. Automatic Warning Devices Used Infrequently

The location of Automatic Warning Devices Used Infrequently will be identified in the Timetable. Trains approaching crossings identified as "Automatic Warning Devices Used Infrequently" must not occupy the crossing unless the Automatic Warning Devices have been operating for at least 20 seconds, and the gates, if equipped are fully lowered, or until receiving a signal from an employee on the ground at the crossing.

Rule 6.32.4 Clear of Crossings and Signal Circuits - is changed to read:

Leave cars, engines or equipment clear of road crossings and crossing signal circuits.

Avoid spotting cars, engines or equipment less than 300 feet (500 feet within the state of Illinois) from a road crossing when there are one or more adjacent tracks. If compliance with the rule is not possible, immediately report condition to the train dispatcher. The train dispatcher must notify all trains approaching the crossing of the condition.

Use the following table to govern train movement over the crossing:

Movement over the crossing with cars spotted on an adjacent track less than 300 feet (Illinois - less than 500 feet) from the crossing.

If ...	Then ...
The crossing is equipped with functional automatic warning devices or an equipped flagger to provide warning.	Proceed over the crossing at 15 MPH until the head end of the train completely occupies the crossing, then resume normal speed.
The crossing is not equipped with functional automatic warning devices or an equipped flagger to provide warning.	Stop before occupying the crossing. After a crew member is on the ground at the crossing to warn traffic, proceed over the crossing as directed by that crew member.

Rule 7.6 Securing Cars or Engines - is changed by adding the following paragraph:

Securing cars in a Hump or Bowl yard is only required for tracks that have grade conditions that allows or cause cars to rollout.

The designation of Hump or Bowl yard will only apply to a specific group of yard tracks where car classification (switching) is regularly performed without the use of air. The locations of Hump or Bowl yards will be designated in the Timetable Subdivision/Branch Special Instructions.

If a track(s) within a Hump or Bowl yard requires securing, the instructions for securing these tracks will be published in the Timetable Subdivision/Branch special instructions.

Rule 7.7 Kicking or Dropping Cars - is changed to read:

Kicking or dropping cars is permitted only when it will not endanger employees, equipment or contents of cars. When kicking cars, limit the number of cars cut off in motion to no more than five (5).

Before dropping cars, crew members must fully understand the intended movement. They must verify that the track is sufficiently clear and that switches and hand brakes are in working order. If possible, the locomotive must run on straight track. Cars must not be dropped over spring switches, dual control switches or power assisted switches.

Rule 7.11 Charging Necessary Air Brakes - is changed to read:

Do not handle cuts of cars without charging the air brake system, unless the cars can be handled safely and stopped within the required stopping distance.

Do not handle cuts of cars exceeding 3,000 tons without charging the necessary car air brake systems as follows;

- On cuts of cars from 3,001 to 5,000 tons there must be at least five cars with the air brakes cut in.

- On cuts of cars from 5,001 tons or more there must be at least ten cars with the air brakes cut in.

At locations where Yardmasters are on duty the Yardmaster will be responsible to inform the train crew of the tonnage they are handling. If Yardmaster does not supply tonnage information, crew must request or determine tonnage prior to handling cars without air brakes cut in.

Rule 8.2 Position of Switches – - is changed to read:

The employee handling the switch or derail is responsible for the position of the switch or derail in use. The employee must not allow movement to foul a track until all hand-operated switches connected with the movement are properly lined. In the case of hand-operated switches designed and permitted to be trailed through, do not allow movement to foul a track until route is seen to be clear or the train has been granted movement authority.

Do not operate switch that is tagged. If the switch is spiked, do not remove the spike unless authorized by the same craft or group that placed it.

Employee handling switches and derails must make sure:

- The switches and derails are properly lined for the intended route and that no equipment is fouling the switches.
- The points fit properly and the target, if so equipped, corresponds with the switch's position.
- That the switch is not operated while equipment is fouling, standing on, or moving over the switch.
- When the operating lever is equipped with a latch, they do not step on the latch to release the lever except when throwing the switch.
- After locking a switch or derail, they test the lock to ensure it is secured.
- When equipment has entered a track, the switch to that track will not be lined away until the equipment has passed the clearance point of the track.
- When possible, crew members on the engine must see that the switches and derails are properly lined. When this is not possible, employee lining switch must notify the engineer of the position of the switch or derail each time the switch or derail is lined or thrown.
  NOTE: Not for use during yard switching operations on a ladder switching lead.

Rule 8.3 Main Track Switches - is changed to read:

The normal position of a main track switch is for main track movement, and it must be lined and locked in that position. At points where double track begins, the normal position of a spring switch is for movement with the current of traffic. However, the main track switch may be left open:

- In CTC territory within track and time limits.
- When attended by a crew member or switch tender.
- During switching operations when it is certain that no other train or engine will pass over the switch.
- For another train or engine when the switch is attended by a member of that crew.
- Within ABS limits when instructed by the train dispatcher at:
  a) The entering switch of a siding in Rule 9.14 (Movement with the Current of Traffic) territory.
  b) Either switch of a siding in Rule 16.1 (Authority to Enter DTC Limits) territory.
- Within TWC territory when authorized by track warrant. Track warrant protection must be provided for this condition. The switch must not be considered restored to normal position until the train dispatcher is notified by an employee at that location. The train dispatcher must apply blocking or marking devices to the dispatcher system that will prevent movement beyond the switch in either direction. No authorities will be issued beyond the switch until an employee, at the switch, has reported the switch restored to the normal position.

Before a train or a train crew leaves the location where any hand-operated main track switch was operated, all crew members shall have verbal communication to confirm the position of the switch.

On main track switches (if equipped), the target will be red if the switch is lined in other than its normal position.

In KCS Non-signaled territory, crew members relieving train occupying the main track, between siding switches, must determine that both siding switches are restored to normal position prior to movement, unless relieved by train dispatcher.

At all locations with a Power Assisted Switch, the crew must enter the proper DTMF sequence (as outlined in Rule 8.21.1) after passing the "Switch Control" sign to verify the position of the main track switch. Before the crew can act upon the request, they must receive communication of proper alignment via radio or by visual indication of the switch point indicator.

Rule 8.21 Power Assisted Switches - add new rule:

The location of Power Assisted Switches (PAS) will be designated in the timetable.

POWER ASSISTED SWITCH
At power assisted switch locations there will be "Begin OS" and "End OS" signs marking the limits of the on switch. In order for the PAS to operate by DTMF or by push button located at the switch, the limits of the OS must not be occupied.

Rule 8.21.1 Operating a Power Assisted Switch (PAS) - add new rule:

To operate a Power Assisted Switch (PAS), a crew member must perform the following:

Upon passing the wayside sign reading "switch control" (That will be placed approximately 2 miles from a power assisted switch), a crew member must enter the proper DTMF sequence for the desired switch position.
NOTE: Switch Control signs installed less than two miles from a power assisted switch location will be noted in the Power Assisted Switch table.

To enter the proper DTMF sequence:

Switch Normal Command
To line the switch to the normal position, enter # (pound sign) and the 4 digit mile post location specified in the timetable Control Points Table followed by the numbers one (1) one (1).

If milepost is less than 4 digits add zeros (0) between the # (pound sign) and milepost to equal 4 digits followed by the numbers one (1) one (1).

Examples:
East Sibley is shown as milepost 141.0. The proper DTMF sequence for the switch to line in the normal position is #141011.

East Shannon is shown as milepost 38.4. The proper DTMF sequence for the switch to line in the normal position is #038411.

Switch Reverse Command
To line the switch to the reverse position, enter # (pound sign) and the 4 digit mile post location specified in the timetable Control Points Table followed by the numbers two (2) two (2).
If milepost is less than 4 digits add zeros (0) between the # (pound sign) and milepost to equal 4 digits followed by the numbers two (2) two (2).

Examples:
East Sibley is shown as Milepost 141.0. The proper DTMF sequence for the switch to line in the reverse position is #141022.

East Shannon is shown as milepost 38.4. The proper DTMF sequence for the switch to line in the reverse position is #038422.

After entering the proper DTMF sequence, you must receive radio confirmation that the switch is properly lined for requested movement.

Confirmation Message Examples:
"KCS East Sibley, Mile Post 141.0, Switch is normal, East Sibley out."

or

"KCS East Sibley, Mile Post 141.0, Switch is reverse, East Sibley out."

A train must approach a Power Assisted Switch prepared to stop short of the OS until:

1. A DTMF command has been issued to request the switch for the desired position and radio confirmation message has been received that the switch is properly lined for desired movement.
   or
2. The switch point indicator displays the switch is properly lined, as per GCOR 8.10, for the requested movement.

NOTE: If the train has not passed the Switch Point Indicator within 10 minutes after a confirmation message is received that the switch is properly lined for movement, the train must approach the Power Assisted Switch prepared to stop.

Rule 8.21.2 Power Assisted Switch Failures - add new rule:

The crew must approach the Power Assisted Switch prepared to stop if they receive:

1. Message **"Switch Not Lined"**
   or
2. **NO MESSAGE** following a request and the switch point indicator indicates the switch is not properly lined.

The crew must:

- Stop train short of the OS
- Notify train dispatcher
- Test Switch using the hand pump mechanism (refer to rule 8.21.3) to fully line the switch in the opposite direction
- Line switch for desired route

If radio confirmation is received that the switch is properly lined for movement and the Switch Point Indicator displays a RED or DARK, the crew must:

- Stop the train before entering the OS if consistent with good train handling
- Inspect the switch
  and
- Report it to the train dispatcher

Rule 8.21.3 Hand Operation of a Power Assisted Switch - add new rule:

To operate the hand throw mechanism of a PAS:

1. Unlock the pump handle and the hand throw cover.

2. Select the direction of switch point travel by moving the directional valve lever, sticking through the end of the machine, in the direction the switch points are to move.

3. Insert the pump handle into the pump and move the handle back and forth.

4. A visual inspection of a good point closure should be made after completing the hand throw operation.

5. After completing the hand throw operation, the pump handle and the hand throw cover must be locked.

   GCOR Rule 8.3 will apply if PAS has to be operated by hand pump.

   When power assisted switches are operated by hand, all rules governing hand-operated switches apply except cars must not be dropped over the switch.

Rule 8.21.4 Change of Original Requested Route - add new rule:

If a change is needed from the original requested route, the train crew must stop the train outside the limits of the OS at the Power Assisted Switch and:

1. Wait 15 minutes and then enter the proper DTMF sequence to line the switch for the desired route.
   or
2. Wait 15 minutes and operate the push button located on the signal case to line the switch for the desired position.
   or
3. Operate the hand pump mechanism to the desired position. Examine the switch to ensure points fit properly and then proceed.

Rule 9.9.1 Passing Approach to Automatic Interlocking is change to read:

A train must proceed prepared to stop at the interlocking signal when:

- Speed is at or reduced below 25 MPH after passing a milepost location designated as the beginning of the Interlocking Approach (IA) circuit. IA milepost locations will be listed in the Timetable Subdivision Special Instructions, and may be identified in the field by "Begin Interlocking Approach" signs.

The train must continue to move prepared to stop at the interlocking signal until the train reaches a point approximately 1,000 feet from that signal. If the interlocking signal then indicates proceed, the train may resume speed.

Rule 9.18 Electrically Locked Switches and Derails - is changed to read:

To enter a track within manual interlocking or CTC limits, employees must not open the case door or unlock an electrically locked switch or derail without track and time or authority from the control operator.

The following instructions will govern the operation of switches and derails equipped with electric locks.

To Open the Switch while Occupying the Main Track:

- A pair of wheels of a locomotive or railroad car must occupy the circuit located 25 -75 feet ahead of the switch.
- Unlock and open the door of the electric lock case.
- Move the operating lever counter-clockwise until it stops in the 2 o'clock position and wait for the indication displayed to change from "LOCKED" to "UNLOCKED". The device should unlock within 30 seconds.
- Move the operating lever counter-clockwise until it stops in a horizontal position. The switch is now ready for use.

To Open the Switch while Occupying Other Than Main Track:

- Unlock and open the door of the electric lock case.
- Move the operating lever counter-clockwise until it stops in the 2 o'clock position and wait for the indication displayed to change from "LOCKED" to "UNLOCKED". The device should unlock on the expiration of eight (8) to ten (10) minutes.

  NOTE: If the operating lever is moved during the waiting period, the timer will reset and an additional eight (8) to ten (10) minute wait will be required.

- Move the operating lever counter-clockwise until it stops in a horizontal position. The switch is now ready for use.

To Restore the Switch to the Normal Position:

- Line the switch to the normal position.
- Move the operating lever clockwise until it stops in a horizontal position.
- Close and lock the door of the electric lock case.

Emergency Release

If the electric lock includes an emergency release, do not break the seal on the release or operate the release without permission from the control operator or train dispatcher. However, when communication has failed, the seal may be broken and/or the release operated:

- To permit a train to leave the main track.
  or
- To permit a train that has authority to enter the main track. Train must not enter the main track until 5 minutes after the seal is broken and/or release operated.

Rule 10.3 Track and Time - is changed as follows:

1. 1st paragraph is changed to read:

The control operator may authorize a train to occupy main track and sidings within specified limits for a certain time period. Authority must include track limits, and time limit. The train may use the track in either direction within the specified limits until the limits are verbally released. If other trains, track cars, and/or employees do not occupy track limits, a train may operate on signal indication at track speed.

2. Add new paragraph to Item D. Releasing a Portion of Track and Time reading:

A train or track car may release a portion of the track limits between control points not occupied by the train or track car without giving up the remainder of the track limits.

3. Add new Item E. Operating Dual Control Switches within Track and Time Reading:

When operating within the limits of track and time, employees can operate all dual control switches by hand without permission from the dispatcher.

Exception: Before handling dual control switches that are also crossover switches, the train or track car must have track and time authority on the adjacent track.

Rule 10.3.1 Protection of Limits, Item 4 - is changed to read:

After all trains moving within the limits that do not have track and time have passed the location where the track will be occupied, and the employee has been notified that authority is granted behind such trains. When issuing track and time under these circumstances, instructions must include **"DO NOT SET ON AHEAD OF OR PASS PRECEDING TRAIN," SPECIFYING INITIALS, ENGINE NUMBER, AND DIRECTION. THE TRACK LIMITS MUST BE CONSIDERED OCCUPIED. CREW MEMBER OF PRECEDING TRAIN MUST BE NOTIFIED.**

Rule 14.3 - Operating with Track Warrants - is changed to read:

(Diagram in G.C.O.R. Rule book remains the same)

A track warrant authorizes a train or engine to occupy the main track within designated limits. However, the train or engine must not foul a switch at either end of limits where an opposing train may use the same switch to clear the main track.

The train or engine must move as follows:

1. Proceed from one point to another in the direction the track warrant specifies. When a crew member informs the train dispatcher that the entire train has passed a specific point, track warrant authority is considered void up to that point. If a condition of the authority is the requirement to be met or passed by trains(s),, the following must be complied with:
   - The authority must not be issued to a train within Yard Limits (Rule 6.27) or Restricted Limits (Rule 6.14)
   - The authority must include the words “Not in effect until after the arrival of engine(s) (direction) at (location)”.
   - The assigned engineer will be present and alert the entire time the crew member copies and activates the authority.
   - Following the copying and issuance of the authority the assigned engineer will conduct a job briefing with the train dispatcher to confirm he or she has knowledge that the authority they received contains a “Not in effect until after the arrival of” condition requiring their train to be met or passed by another train(s).
   - Crew members are to comply with all requirements of GCOR rule 6.2.1 (Train Location) before proceeding on this authority.

2. If authorized to work between two specific points, the train or engine may move in either direction between those points. When a crew member informs the train dispatcher that the authority is released between two specific points, the authority is considered void between those two points. This track release must begin at the outer limit of the authority.

3. In non-signaled track warrant territory when a train is at least 2 miles prior to a station, authority limits or a meeting point, crews must transmit via radio the following information:
   - Identification as designated by track warrant
   - Milepost location
   - Name of station or MP location of authority limits they are approaching
   - Speed of train

Example: “KCS 675 East is at milepost 314, approaching “Laddonia” at 40 MPH.

Rule 14.4 Occupying Same Track Warrant Limits, add new Item 6 reading:

A train is issued a work between with a box 8 joint authority. Trains must move at restricted speed within joint work between limits.

Rule 14.5 Protecting Men or Equipment is changed to read:

Men or equipment may receive a track warrant in the same manner as trains to occupy or perform maintenance on the main track without other protection.

Hy-rail vehicles operated under box 2 track warrant authority may make reverse movements within the limits of authority.

A track warrant must not be issued to protect men or equipment within the same or overlapping limits with a train unless:

- All trains are authorized to proceed in one direction only, and the track warrant specifies that men or equipment do not foul limits ahead of these trains. Crew members of preceding train must be notified.
- Joint work between authority has been issued.

Rule 14.7 Reporting clear of limits - is changed to read:

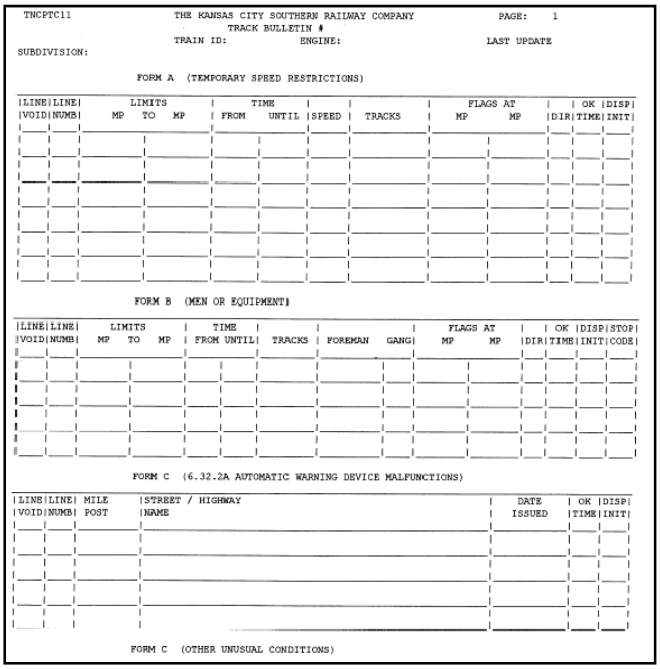
A train or track car reporting clear of the limits of the track warrant must void the authority as outlined in rule 6.11.1 (Issuing or Voiding Mandatory Directives).

Rule 14.11 Changing Track Warrants - is changed to read:

Employees must not add to or alter the track warrant in any manner, except as specified by Rule 15.1.1 (Changing Address of Track Warrants or Track Bulletins) or Rule 6.11.1 (Issuing or Voiding Mandatory Directives).

When the limits or instructions of a track warrant must be changed, a new track warrant must be issued showing, "Track Warrant No. _____ is void" and the number of the track warrant being changed. When a track warrant of a previous date is voided, the date must be included. The previous track warrant will no longer be in effect.

Rule 15.0 Track Bulletin Rules, diagrams A and B are changed to read:



TNCPTC11 THE KANSAS CITY SOUTHERN RAILWAY COMPANY PAGE: 1
TRACK BULLETIN #
TRAIN ID: ENGINE: LAST UPDATE
SUBDIVISION:

FORM A (TEMPORARY SPEED RESTRICTIONS)

LINE VOID	LINE NUMB	LIMITS MP	LIMITS TO MP	TIME FROM	TIME UNTIL	SPEED	TRACKS	FLAGS AT MP	FLAGS AT MP	OK DIR	OK TIME	DISP INIT

FORM B (MEN OR EQUIPMENT)

LINE VOID	LINE NUMB	LIMITS MP	LIMITS TO MP	TIME FROM	TIME UNTIL	TRACKS	FOREMAN	GANG	FLAGS AT MP	FLAGS AT MP	OK DIR	OK TIME	DISP INIT	STOP CODE

FORM C (6.32.2A AUTOMATIC WARNING DEVICE MALFUNCTIONS)

LINE VOID	LINE NUMB	MILE POST	STREET / HIGHWAY NAME	DATE ISSUED	OK TIME	DISP INIT

FORM C (OTHER UNUSUAL CONDITIONS)

The Form A (Temporary Speed Restrictions) portion is used to record temporary speed restrictions.

The Form B (Men or Equipment) portion is used to record the authority of men or equipment to occupy the main track by the use for the Form B track bulletin.

The Form C (6.32.2A Automatic Warning Device Malfunctions) is to record automatic warning devices malfunctioning according to G.C.O.R rule 6.32.2A.

The Form C (Other Unusual Conditions) portion is used to record other information or conditions that affect safe train or engine movement.

15.1 Track Bulletins, is changed to read:

Track bulletins must not be changed unless specified by Rules 15.1.1 (changing Address of Track Warrants or Track Bulletins) or Rule 15.13 (Voiding Track Bulletins). The train dispatcher will issue track bulletins as required. Track bulletins will contain information on all conditions that affect safe train or engine movement. Forms other than track bulletin Forms A and B may be used when necessary.

RECEIPT AND COMPARISON OF TRACK BULLETINS
The conductor and engineer must receive a track bulletin(s) that affect their train's movement at their initial station. Track bulletins **may** be addressed to engine initial and number. The track bulletin(s), number, date, and time of last update and total number of items must be shown on the track bulletin. Each crew member must read and understand the track bulletins before proceeding. If address is correct, it will not be required to contact train dispatcher to verify the track bulletin(s).

When outbound crew members receive track bulletins from inbound crew members at the initial station, or as provided by General Code of Operating Rule 15.12 (Relief of Engineer or Conductor during Trip), the conductor and engineer must compare the track bulletins with each other and with the train dispatcher before proceeding.

When necessary to compare track bulletins, the track bulletin(s) number, date and time of last update, and total number of items must be verified with the dispatcher, and each crew member must read and understand the track bulletins before proceeding.

Rule 15.2 Protection by Track Bulletin Form B Section C (Stop Column) - add the following:

STOP must be shown in the STOP column of all Form B track bulletins issued unless otherwise instructed by Employee in Charge requesting track bulletin Form B protection.

Relief crew taking charge of trains within the limits of track bulletin Form B protection must not make further movement until instructed by employee in charge of track bulletin Form B.

Add the following terms to the GCOR Glossary:

Automated Horn System
A system that provides an audible horn warning to traffic at public crossings at grade. The system is equipped with a visual indicator, such as an orange LED light in the shape of an "X", strobe light, or other indicating device visible to an approaching train. The visual indicator is activated in conjunction with existing automatic warning devices and indicates the Automated Horn System is operating.

"Begin OS" Signs
Sign marking the beginning of OS (On Switch) circuit area for a power assisted switch. Fouling track between the "Begin OS" and "End OS" will cause Power Assisted Switch not to operate on electrical power.

Controlled Track
Track upon which the railroad's operating rules require that all movements of trains must be authorized by a train dispatcher or a control operator.

Control Point Sign
A sign used to define a control point within TWC limits.

Crossing Clearance Sign (CC)
Crossing Clearance Sign represents the clearance point where a train must stop if there is an adjacent track that crosses a road crossing at grade with active warning devices.

End of Train Devices
- **One Way Rear End of Train Devices** - Telemetry equipment that transmits brake pipe pressure via radio communications to the Front of Train device.

- **Two Way End of Train Devices** - Telemetry equipment that has the capability to initiate an emergency application of the train air brake system at the rear of the train (Rear EOT device) using the emergency switch on the head-end device (Front EOT device).

"End OS" Signs
Sign marking the end of OS (On Switch) circuit area for a power assisted switch. Fouling track between the "Begin OS" and "End OS" will cause the Power Assisted Switch not to operate on electrical power.

Fouling (employee or contractor) a track
The placement of an individual in such proximity to a track that the individual could be struck by a moving train or other on-track equipment, or in any case is within four feet of the nearest rail.

Heavy Grade Territory (For application of two-way EOT Rules)
- Train with 4,000 trailing tons or less:
  A section of track with an average grade of two percent (2%) or greater over a distance of two (2) continuous miles. **(NOTE: KCS and GWWR do not operate over this type grade)**
- Train with more than 4,000 trailing tons:
  A section of track with an average grade of one percent (1%) or greater over a distance of three (3) continuous miles.

Intermodal Trains
Trains consisting entirely of intermodal equipment and/or automotive business.

Job Briefing
A communication tool used by professionals to ensure that everyone involved in a task knows what is to be done, how the task is to be accomplished, and how to mentally prepare to accomplish it. If an employee is to perform a task alone, a mental assessment of the task must be conducted.

Job briefings are conducted; at the beginning of the job; during the job as conditions change or new tasks are started; and at the completion of the job to ascertain all requirements of the task have been completed.

At a minimum a Job Briefing must: define the work to be done; how the work will be done; identify the potential hazards; name the employees responsible for each task; and include a follow-up job briefing to ascertain all required tasks of the job are complete.

Loaded Bulk Commodity Train
Loaded Bulk Commodity trains are defined as a train of fifty (50) or more loaded cars in a block, each weighing 125 tons gross weight or more (bulk commodities), such as coal, grain, soda ash, etc.

Non-controlled Track
Track upon which trains are permitted by railroad rule or special instruction to move without receiving authorization from a train dispatcher or control operator.

Off-Track Equipment
Machines that may be operated on the right of way foul of track.

Personal electronic or electrical device
An electronic or electrical device that was not provided to the railroad operating employee by the employing railroad for one or more business purposes.

Power Assisted Switch (PAS)
A switch identified as PAS can be controlled remotely by use of a DTMF keypad located on the engine radio or the Conductor/Brake-man Packset. This switch can also be controlled by a push button and hand pump located at the switch in the event of DTMF failure.

Quiet Zone
A segment of rail line, within which is situated one or a number of consecutive public highway-rail crossings at which locomotive horns are not routinely sounded. Signs may be used to mark the beginning and end of a quiet zone.

Rail Train
Rail Trains consist of flat cars coupled together with or without special mountings for handling lengths of rail extending from car to car for transport.

Railroad-supplied electronic or electrical device
An electronic or electrical device provided to a railroad operating employee by the employing railroad for one or more business purposes.

Switch Control Signs
Signs placed approximately 2 miles from a Power Assisted Switch. These signs mark areas where crew members must begin switch alignment or switch verification procedures.

Track Car
Any equipment which is designed to operate on the rail other than a locomotive or railroad car.

Track is clear
1. The portion of the track to be used for the intended movement is unoccupied by rolling equipment, on-track maintenance-of-way equipment, and conflicting on-track movements;

2. Intervening public highway-rail grade crossings, private highway-rail grade crossings outside the physical confines of a railroad yard and yard access crossings are protected as follows:
   a. Crossing gates are in the fully lowered position, and are not known to be malfunctioning;
      or
   b. A designated and qualified employee is stationed at the crossing and has the ability to communicate with trains;
      or
   c. At crossings equipped only with flashing lights or passive warning devices, when it is clearly seen that no traffic is approaching or stopped at the crossing and the leading end of the movement over the crossing does not exceed 15 miles per hour;

3. Intervening switches and fixed derail are properly lined for the intended movement;
   and
4. The portion of the track to be used for the intended movement has sufficient room to contain the rolling equipment being shoved or pushed. Yard access crossing means a private highway-rail grade crossing that is located within the physical confines of a railroad yard and is either:
   a. Open to unrestricted public access;
      or
   b. Open to persons other than railroad employees going about their normal duties, (e.g. business guests or family members).

Use of an electronic or electrical device
Use of a mobile telephone or another electronic or electrical device to conduct an oral communication; place or receive a telephone call; send or read an electronic mail message or text message; play a game; navigate the Internet; play, view, or listen to a video; play, view, or listen to a television broadcast; play or listen to a radio broadcast other than a radio broadcast by a railroad; play or listen to music; to execute a computational function, or to perform any other function that is not necessary for the health or safety of the person and that entails the risk of distracting the employee from a safety critical task. An electronic or electrical device that enhances the individual's physical ability to perform these tasks, such as a hearing aid, is not covered by this order.

Wireless communication device
An electronic device capable of communicating remotely. Examples include cell phones, personal digital assistants (PDAs) and portable computers (commonly called laptop computers). References to use of a wireless communication device include oral conversations, text messaging, electronic mail, and transmission or receipt of a file and one or more media.

The following Glossary terms are changed to read:

Control Point
The location of absolute signals controlled by a control operator or a railroad identifiable point as defined in the Timetable.

Working Limits
A segment of track within defined boundaries upon which trains, engines, and on track equipment may move only as authorized by the Roadway Worker (Employee in Charge) having control over that defined segment of track.

Air Brake Systems and Train Handling, effective June 1, 2009, is changed as follows:

101.9.2 Ground Air Instructions – add new rule:

The following instructions are to be followed for the Use of ground air systems. Each connection location has been marked with an orange cone. All crews must make sure that any cuts of cars handled in these locations are free of any connections to these air lines before any movement is made to prevent any damage to equipment. These ground air systems are intended to maintain the air charge in the brake pipe. All air brake tests must be performed with a locomotive attached before attaching the ground air lines to maintain the charge.

When cars are set to air after a brake test has been completed the following procedure will govern;

1. Set a sufficient number of hand brakes to prevent any movement.
2. Uncouple the locomotive air from the cars.
3. Route the ground air line through the side of the car using a hand-hold or other location so that it can be plainly seen by others and it will not be run over when cars are coupled up again. Make the air hose connection between the cars and the ground air.
4. Make sure that the BLUE valve is closed. Slowly open the RED air supply valve (just like you would on a locomotive) that is closest to the hose connected to your cars. If you are making the connection in the "middle" of a cut of cars use a "T" connector to connect the air between the cars.
5. Remain at the location until the brakes have released and it is certain that equipment is properly secured.

When picking up cars at these locations the following procedure will govern;

1. Couple to the cars. Do not run over any hoses fouling the rails. Do not release the hand brakes
2. Close the angle cock on the cars that is connected to the air line
3. Close the RED air supply valve closest to the hose that is connected to the cars.
4. Slowly open the BLUE relief valve to release the air in the hose connected to the cars.
5. After the pressure in the hose is exhausted, remove the air hose from the cars and leave it out of the walkway and away from any tracks.
6. Couple the air hoses between your train and the cars, slowly open the angle cock on your train, and then slowly open the angle cock on the cars.
7. Release all hand brakes
8. Make a set and release test (class III test).

Rule 101.14 Securing Equipment, Item H, Number 1) - is changed to read:

Must not be left unattended on a main track unless otherwise authorized.

Rule 102.2 Locomotive Inspection Reports, Item C - is changed to read:

Locomotive Inspection Reports

Complete Locomotive Inspection Reports for each locomotive inspected.

Daily inspections must be documented in accordance with both Federal regulations and KCS rules. In order to provide the required documentation of these inspections KCS uses two forms, KCS Form 1055 (GREEN CARD) and KCS Form 1277 (White Form).

Form 1055 (Green Card) is completed following the inspection and returned in the cardholder provided. The following information must be completed on form 1055:

- Date
- Location
- Time

Write "NC" for Non-complying in the 'time' column if locomotive with a non-complying defect is found during the inspection of that locomotive.
Form 1277 (White form) must be completed and must be faxed and filed according to the following instructions:

Yard/Local/Road Switcher Locomotive Form 1277
Perform daily inspection at beginning of daylight shift when possible.

NO non-complying conditions are discovered:
1. Complete and sign KCS Form 1277.
2. Fax completed KCS Form 1277 to **1-318-676-6087.**
3. File in designated box at each location.

NON-complying conditions ARE discovered:
1. Complete (note repairs needed) and sign KCS Form 1277.
2. Notify local yard Supervisor, Mechanical personnel, or Train Dispatcher *. (*Only notify Train Dispatcher if no local Supervisor or Mechanical personnel are present)
3. Fax completed KCS Form 1277 to **1-318-676-6087** and return to locomotive daily inspection cardholder.
4. Complete and apply Non-complying tags (Form 588) and comply with KCS ABTH rules 102.2.1 or 102.2.2.

NOTE: When inspections are performed on line of road, fax and file Form 1277 as soon as practical upon return to tie-up point.

Locomotives with non-complying conditions must have a Form 1277 left on the locomotive noting the non-complying conditions until all conditions are repaired. When an employee is unable to comply with the faxing instructions due to the hours of service, employee must arrange to fax the inspection at the beginning of his/her next tour of duty.

Road Service Locomotive Form 1277

NO non-complying conditions are discovered:
1. Complete and sign KCS Form 1277.
2. At tie-up location Fax completed KCS Form 1277 to 1-318-676-6087.
3. File in designated box at tie-up location.

NON-complying conditions ARE discovered:
1. Complete (note repairs needed) and sign KCS Form 1277 and place in daily inspection cardholder.
2. Notify local yard Supervisor, Mechanical personnel, or Train Dispatcher *.
   (*Only notify Train Dispatcher if no local Supervisor or Mechanical personnel are available)
3. Complete and apply Non-complying tags (Form 588) and comply with KCS ABTH rule 102.2.1 or 102.2.2.

NOTE: When inspections are performed on line of road, fax and file Form 1277 as soon as practical upon return to tie-up point.

Locomotives with non-complying conditions must have a Form 1277 left on the locomotive noting the non-complying conditions until all conditions are repaired. When an employee is unable to comply with the faxing instructions due to the hours of service, employee must arrange to fax the inspection at the beginning of his/her next tour of duty.

Rule 104.3.2 Dynamic Braking, Part C – Dynamic Brake Limitations, Paragraph 3 - is changed to read:

3. To apply axle limitations for locomotives equipped with high-capacity dynamic brakes, count locomotives in the High AC and AC categories as 10 axles, locomotives in the High DC and SD 60 categories as 8 axles, and locomotives in the GP 60 category as 6 axles.

When approaching and operating through turnouts or temporary speed restrictions with train's air brakes released, limit dynamic brake retarding force to 50 percent of maximum (dynamic brake handle position number 4). Continue to limit the braking effort until at least half the train has passed the restricted area. At speeds of 10 MPH or less, this limitation applies only if 12 axles or more of extended range dynamic brakes are being utilized.

Rule 104.9 Switching Movements, add new Item 5 reading:

Unless otherwise instructed, limit locomotive power to 12 powered axles when switching.

For the purpose of this rule, count locomotives in the High AC, AC and High DC categories as 8 axles.

Rule 106.2 Diesel Engine Shutdown and Starting Procedures - is changed to read:

Unless otherwise directed, to conserve fuel, shut down diesel engines that will be unattended for thirty (30) minutes or longer, however, leave diesel engines running under the following conditions:

- If the outside temperature is expected to drop below 36 degrees Fahrenheit during the duration of the shutdown, do not shut down any diesel engine.
- When diesel engines are attached to a train, do not shut down the lead unit of the locomotive consist.
- When engines are operated in distributed power do not shut down the remote units.

NOTE: Locomotive must not be restarted more than thirty (30) before anticipated departure of locomotive.

Contact the train dispatcher, yardmaster, or other authority for information concerning the expected length of the shutdown or the expected temperature during the shutdown. Locomotive equipped with Automatic Engine Start/Stop (AESS) do not require a manual shutdown of the locomotive account the AESS will monitor systems on the locomotive and determine shutdown and start up times as necessary.

Rule 106.4 Shutdown and Isolation of Light Locomotives and Light Return - is changed to read:

Locomotives in the High AC, AC, and High DC categories, one locomotive is to be online with one operative dynamic brake for every five locomotives in the consist. If the outside temperature is not expected to drop below 36 degrees Fahrenheit, shut down the locomotive(s). If the outside temperature is expected to drop below 36 degrees Fahrenheit, or if the locomotive is equipped with AESS (Auto Shutdown), isolate the locomotive(s). When possible shut down or isolate KCS locomotives. The lead locomotive will not be shut down.

Locomotives in all other categories, one locomotive is to be online with one operative dynamic brake for every three locomotives in the consist. If the outside temperature is not expected to drop below 36 degrees Fahrenheit, shut down locomotive(s). If the outside temperature is expected to drop below 36 degrees Fahrenheit, or if the locomotive is equipped with AESS (Auto Shutdown), isolate the locomotive(s). When possible shut down or isolate KCS locomotives. The lead locomotive will not be shut down.

Rule 107.2 Preparing for Distributed Power Service - is changed by deleting the following paragraph:

Link units after placing them in the train. (Units may be linked on service track to test equipment but must be unlinked before being placed in the train.) Ensure that the brake pipe is connected and open between the consists.

Rule 108.1.5 Handling End of Train (EOT) devices – add new rule:

1. When markers or telemetry devices are used, Conductors are responsible to ensure they have car initial and number of rear car in train when leaving terminals.

2. Report all End of Train Devices that fail en route to the train dispatcher stating EOT number, train number and location. Also, when an EOT fails en route and is exchanged, the train dispatcher must be notified stating the EOT number of the failed device and the number of EOT that is used to replace the failed device. This applies to all trains including unit bulk commodity trains. For accounting and proper handling, EOT's must be reported the same as if a rail car is set out or picked up en route.

3. When train crews remove EOT devices, they must be placed in the storage racks designed for this purpose at locations that are so equipped. When no rack is available for this purpose, crews must store the EOT in a location so as to avoid exposure to moisture. The unit should be stored in the upright position with a battery installed to create a watertight seal. When these devices are left face up with no battery, water leaks into and damages internal electronic components which will cause these devices to fail.

4. TO CHARGE SOUTHERN TECHNOLOGY (NS TYPE) EOT BATTERY: Make sure battery looks okay, case is not broke or damaged and contacts are clean. If battery looks damaged, do not charge - Tag battery as being bad and give to mechanical personnel or Comet.

    - Wear Safety Glasses.
    - Do not stand any closer to the battery than necessary when hooking charger up to battery.
    - Make sure charger is set for 12 volts.
    - Hook Red (+) lead from charger to (+) terminal on battery.
    - Hook Black (-) lead from charger to (-) terminal on battery.
    - Try to charge battery for 12 to 16 hours before using.
    - Remove battery from charger.
    - Hook test meter to battery.
    - Hook test meter to battery - + (pos.) lead from meter to + (pos.) terminal on battery, and - (neg.) lead from meter to - (neg.) on battery.
    - Try to use the battery that has the highest voltage, on the EOT needing the battery.

Rule 108.2 Emergency Application Capability from Rear of Train, add fourth bullet reading:

- Trains that do not operate over heavy grade and do not exceed 30 MPH.

Rule 108.2.1 Loss of Emergency Application Capability from Rear of Train, Item 1, add fourth bullet reading:

- Dead Battery

Rule 109.5 Engineer Certification Records

All engineer certification records will be maintained at the following location.

Contact Information:

Kansas City Southern
Ms. Sheri Davis
Manager of Engineer Certification
PO Box 219335
Kansas City, Missouri 64121
Office 1-816-983-1482; Fax 1-816-218-0143
Office hours 07:00 - 15:00 Monday through Friday

Kansas City Southern
Larry E. Jameson
Engineer Certification Program Administrator
4601 Shreveport Blanchard Hwy.
Shreveport, Louisiana 71107
Office 1-318-676-6627

STUDENT ENGINEER EVALUATIONS

The following are the requirements for engineers and student engineers when completing Student Engineer evaluation forms.

A Certified Engineer performing training of a student engineer will objectively complete the entire evaluation form supplied by the student. The evaluation must include the actual throttle time the student engineer operated the locomotive in order for the student to receive training credit for the trip.

Following completion and signature of the form, the certified engineer will return the form to the student engineer. Student engineers are responsible for having an evaluation form completed for each trip. Students will fax the completed form to the KCS Manager of Engineer Certification at 816-218-0143 AT TIE UP OF EACH TRIP. If a student is unable to comply with the faxing instructions due to the hours of service, employee must arrange to fax the evaluation at the beginning of his/her next tour of duty. Students will retain all evaluation forms for the entire length of the training program and must produce the forms to a Road Foreman of Engines or other company officer upon request.

Q. Remote Control Operations

1. Areas established as Remote Control Operating Areas will be identified in the Timetable Individual Subdivision pages. Locomotives operating within these areas may have unoccupied cabs.

   Remote Control Zone (RCZ)
   A RCZ is a section of track between identifiable points within a Remote Control Area upon which remote control operations may make pull back movements without the presence of an employee on the leading end of the movement. Remote Control Operations are authorized within a Remote Control Area outside of an RCZ as prescribed by applicable operating rules.

   The RCZ may be activated by remote control crews only. The zone will be activated by notifying the yard supervisor who will record this information on the appropriate form. The remote control crew must advise the supervisor when the zone is deactivated. If a Remote Control Operator (RCO) is being relieved by another RCO, a job briefing must be held between the employees. The RCO that is going off duty must deactivate the RCZ and the relieving RCO must reactivate the RCZ.

   Prior to the remote control crew activating the RCZ, the remote control crew will determine by physical examination that the zone is clear and all switches within the zone are in the proper position for the movement(s) that will be made. Once this inspection has been made, the remote control crew will activate the zone by notifying the yard supervisor.

   Before entering this zone all employees who are not part of the remote control crew must determine whether the zone is active. Employees may receive this information from the yard supervisor or RCO. If the zone is not active, movement may enter the zone and will be governed by applicable operating rules. If the zone is active tracks within the zone must not be fouled, occupied or switches operated without permission from the RCO. The RCO will issue permission and instructions for use of the zone. If the RCO of an active zone cannot be contacted, movement must not be made into an active zone. Upon clearing an RCZ employees must notify the RCO.

   When another movement is authorized by the remote control operator to enter the RCZ, the zone must be considered deactivated, yard supervisor notified and all movements protected as prescribed by applicable operating rules. Remote Control Operations are authorized in a deactivated zone as prescribed by applicable operating rules.

2. Kansas City Southern Railway Remote Control Operating Rules & Instructions revised November 8, 2002 is in effect. All employees who are engaged in the actual operation of remote control equipment must have a current copy they may refer to while on duty. All employees assigned must be familiar with and comply with these instructions and regulations.

Continue to Next Page

for Section R:

Internal Reporting Forms

R. Internal Reporting Forms

KCS signal/switch awareness Form 4751 must be completed by the conductor/engineer (on all trains or lite engines) or Employee-in-charge (EIC) Roadway Workers outside Yard Limits. EIC is only required to complete form 4751 for the use of main track switches in non-signaled territory.

A. Conductor/Employee-In-Charge (EIC) will:

1. Write in Subdivision, Train/Job ID, Conductor/EIC, engineer and date.
2. Report all signals more restrictive than clear (abbreviations/rule # may be used).
3. Report all trackside warning detector announcements.
4. Keep in their possession reports of the last 5 (five) trips and present to Managers upon request. EIC will keep in their possession the last 5 (five) days.
5. Report all train delays in 1 (one) minute increments of delay.
6. Place his/her signature on the first blank entry line following the end of the trip.

B. Instructions for completing Form 4751 when operating main track switches in non-signaled territory:

Conductor, Engineer or Employee-in-charge will complete form 4751 as follows:

1. In the column labeled "Location" write the switch name and milepost.
2. In the column labeled "Signal Aspect or TWD Announcement" write the time the main track switch was initially reversed and the initials of the person handling the switch. The engineer/EIC must also initial this entry.
3. In the column labeled "Confirmation of Switch" write the time the main track switch was finally returned to normal position and the initials of the person handling the switch. The engineer/EIC must also initial this entry.
4. In the column labeled "Comments & Delays" the conductor and engineer will both write their initials after the switch is returned to normal position and a job briefing has been exchanged verifying switch position. EIC will write their initials after the switch is returned normal and a job briefing has been exchanged verifying switch position.

All initials must be entered as soon as practicable following the operation of a switch and before leaving the location. All information required by these instructions must be completed before releasing the limits of main track authority.

Exception: Train crew/EIC clearing main track with crew member/employee at switch, may report clear of limits following a job briefing with crew member/employee at switch confirming clear of main track authority and proper switch position. Form 4751 must be properly completed prior to departing the location.

C. Main track switches must be left in normal position unless otherwise instructed by Train Dispatcher. Switch "Reverse" means a switch left in other than normal position. When a dispatcher issues authority to leave switch lined for other than normal position, complete form 4751 as follows:

Train crew/EIC leaving switch reversed will:

1. In the location column write switch name and milepost.
2. In the column labeled "Switch Aspect or TWD Announcement" write the time the main track switch was initially reversed and the initials of the person handling the switch. The engineer/EIC must also initial this entry.
3. In the column labeled "Comments and Delays" write "Reverse" and the dispatcher initials authorizing the switch left reverse. The conductor and engineer will both write their initials following a job briefing discussing the authority to leave the switch reverse. The EIC will write in their initials after the switch is reversed and a job briefing has been exchanged verifying the position.

Train crew/EIC returning switch to normal will:

1. In the location column write switch name and milepost.
2. In the column labeled "Confirmation of Switch" write the time the main track switch was finally returned to normal position and the initials of the person handling the switch. The engineer/EIC must also initial this entry.
3. In the column labeled "Comments & Delays" write the dispatcher initials authorizing the switch to be returned to normal position. The conductor and engineer will both write their initials after the switch is returned to normal position and a job briefing has been exchanged verifying switch position. The EIC will write in their initials after the switch is returned to normal and a job briefing has been exchanged verifying switch position.

NOTE: Only report and log the use of Power Assisted Switches and Spring Switches when switches are operated by hand. When these switches are operated by hand all rules regarding the use of manually operated switches apply.

KCSR CALL Program

The Kansas City Southern Railway Company (KCSR) has developed a program for employees to report unsafe motorist behavior and trespassing on KCSR property. The program has been named the KCSR CALL Program.

The program has two purposes:

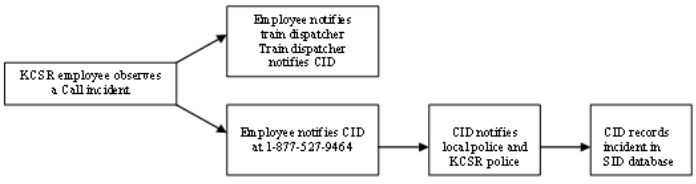
1. To establish a process that will allow employees to report unsafe motorists, unsafe pedestrians, and trespassers.
2. To use the employee report information to follow up with local and state enforcement agencies.

To use the KCSR Call program, employees should notify the KCSR train dispatcher or call the Critical Incident Desk (CID) at 877-527-9464 when any of the following circumstances occur:

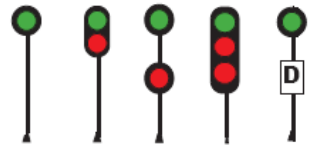
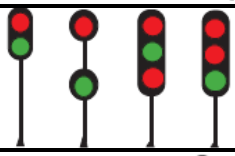
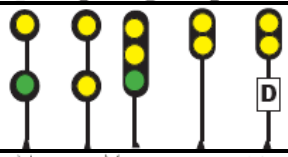
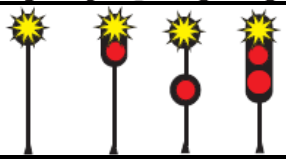
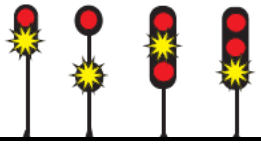
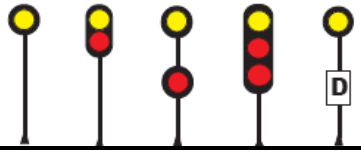
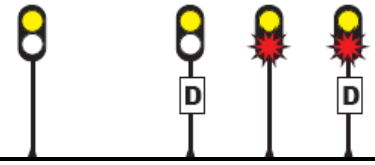
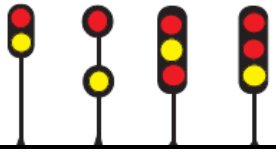
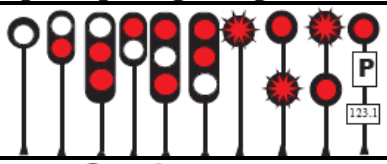
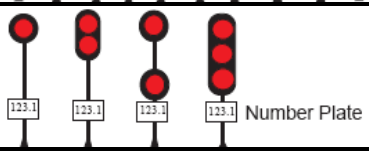
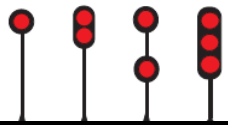
- Vehicle goes around a lowered gate
- Vehicle crosses in front of a close approaching train
- Vehicle stops or traffic "stacking" onto crossing
- School bus does not STOP at a crossing.
- Haz-Mat vehicle fails to STOP at crossing.
- Pedestrians fouling railroad tracks or crossings
- Individual is trespassing on KCSR property

The KCSR would like to thank everyone in advance for participating in this team effort to improve rail safety.

KCSR Call Program Information



Block Signals

Rule	*Block and Interlocking Signal Aspects*	*Name*	*Indication*
9.1.1		Clear	Proceed.
9.1.2		Diverging Clear	Proceed on the diverging route not exceeding prescribed speed through the turnout.
9.1.3		Approaching Diverging	Proceed prepared to advance on diverging route at next signal not exceeding prescribed speed through turnout.
9.1.4		Medium Approach	Proceed reducing speed to 35 MPH before passing next signal.
9.1.5		Diverging Medium Approach	Proceed reducing speed to 35 MPH before passing next signal, not exceeding speed through turnout.
9.1.6		Approach	Proceed immediately reducing speed to 35 MPH, and be prepared to stop at next signal.
9.1.6.1		Approach Restricting	Proceed prepared to pass next signal at restricted speed.
9.1.7		Diverging Approach	Proceed immediately reducing speed to 35 MPH not exceeding prescribed speed through turnout, prepared to stop at next signal.
9.1.8		Restricting	Proceed at restricted speed. Do not exceed prescribed speed through turnout, if applicable.
9.1.9		Stop and Proceed	Stop, then proceed at restricted speed.
9.1.10		Stop	Stop.

Distant Signals

Aspects displayed with a “D” sign/marker on the signal mast identify the signal as a distant signal.

Permissive Signals

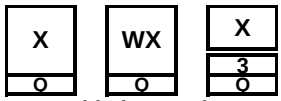
Aspects displayed with a “P” marker on the signal mast identify the signal as a permissive signal.

Note: On signals equipped with number plates, the number plates will be on or near the signal mast and may be displayed horizontally or vertically.

Roadway Signs

Yard Limit Sign

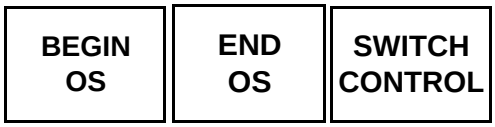
Control Point Sign

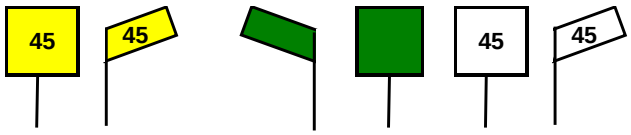


Whistle Board *
Required Whistle Signal
Rule 5.8.2(7)

Crossing Clearance

Begin Interlocking Approach





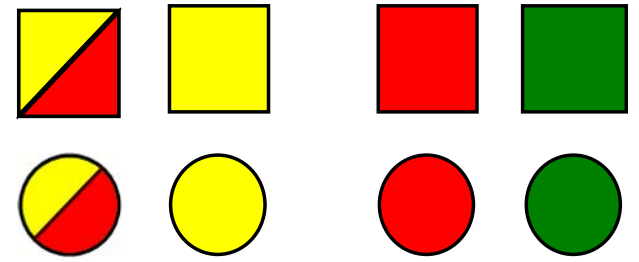
Permanent Speed Sign

Permanent Resume Speed Sign

Advance Sign

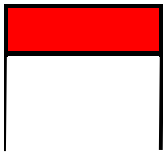
Stop Sign

Stop Sign



Yellow-Red Yellow Flag or Red Flag Green Flag

Flag Protection Men and Equipment



Red Flag

Diagram and color codes are for general information only and not to scale.

AVOID DAMAGE
SWITCH CUSTOMER CARS CAREFULLY

OVERSPEED Couplings are DAMAGING
Here's what happens:

4 MPH	SAFE COUPLING SPEED
5 MPH	Damage begins
6 MPH	2½ times as damaging as 4 MPH
7 MPH	3 times as damaging as 4 MPH
8 MPH	4 times as damaging as 4 MPH
9 MPH	5 times as damaging as 4 MPH
10 MPH	6 times as damaging as 4 MPH

Damage to freight or a car can be avoided by always keeping coupling speed within the safe range – NOT OVER 4 MPH – A BRISK WALK.

HANDLE FREIGHT CAREFULLY AND KEEP OUR CUSTOMERS!

Speed Table

Time Per Mile				Time Per Mile				Time Per Mile			
Min	Sec	MPH	KPH	Min	Sec	MPH	KPH	Min	Sec	MPH	KPH
0	45	80	129	1	07	54	87	1	43	35	56
0	46	78	126	1	09	52	84	1	46	34	55
0	47	76	122	1	11	51	82	1	49	33	53
0	48	75	121	1	12	50	80	1	53	32	51
0	49	73	117	1	15	48	77	1	56	31	50
0	50	72	116	1	17	47	76	2	00	30	48
0	51	70	113	1	18	46	74	2	13	27	43
0	52	69	111	1	20	45	72	2	18	26	42
0	54	67	108	1	24	43	69	2	24	25	40
0	55	65	105	1	26	42	68	2	30	24	39
0	56	64	103	1	28	41	66	2	51	21	34
0	57	63	101	1	30	40	64	3	00	20	32
0	58	62	100	1	32	39	63	3	32	17	27
0	59	61	98	1	35	38	61	4	00	15	24
1	00	60	97	1	37	37	60	5	00	12	19
1	02	58	93	1	40	36	58	6	00	10	16
1	04	56	90								

Distance Conversion Table

Meter	Feet	Tenths of a Mile
161	528	0.1
322	1,056	0.2
483	1,584	0.3
644	2,112	0.4
805	2,640	0.5
966	3,168	0.6
1,127	3,696	0.7
1,287	4,224	0.8
1,448	4,752	0.9
1,609	5,280	1.0

Horn Start Point Table

Speed MPH	Seconds after WB	Railcars before Xing
10	70	6
15	40	9
20	25	12
25	16	15
30	10	18
35	6	21
40	3	24
45	Start Horn At Whistle Board When Operating Over 45 MPH	
50		
55		
60		

Fuel Reading Conversion Table

Gallons	Liters	Gallons	Liters
200	757	2,200	8,330
400	1,514	2,400	9,087
600	2,272	2,600	9,844
800	3,029	2,800	10,601
1,000	3,786	3,000	11,359
1,200	4,543	3,200	12,116
1,400	5,301	3,400	12,873
1,600	6,058	3,600	13,630
1,800	6,815	3,800	14,388
2,000	7,572	4,000	15,145

Continental Time Conversion Chart

AM/PM = 24hr		AM/PM = 24hr	
1:00 AM = 0100		1:00 PM = 1300	
2:00 AM = 0200		2:00 PM = 1400	
3:00 AM = 0300		3:00 PM = 1500	
4:00 AM = 0400		4:00 PM = 1600	
5:00 AM = 0500		5:00 PM = 1700	
6:00 AM = 0600		6:00 PM = 1800	
7:00 AM = 0700		7:00 PM = 1900	
8:00 AM = 0800		8:00 PM = 2000	
9:00 AM = 0900		9:00 PM = 2100	
10:00 AM = 1000		10:00 PM = 2200	
11:00 AM = 1100		11:00 PM = 2300	
11:59 AM = 1159		11:59 PM = 2359	
Noon = 1200		Midnight = 0000	(New Date)
12:01 PM = 1201		12:01 AM = 0001	

Classification of Engines

KANSAS CITY SOUTHERN RAILWAY CO.
LOCOMOTIVE FLEET

CLASS	WEIGHT	AXLES	HP
F9A-3	244,000	4	1,750
F9B	244,000	4	1,750
MP 1500	266,200	4	1,500
SW 900	244,000	4	900
SW 1000	230,000	4	1,000
SW 1001	244,000	4	1,000
SW 1200	248,000	4	1,200
SW 1500	248,000	4	1,500
GP 10	246,500	4	1,850
GP 18	246,500	4	1,850
GP 38	264,000	4	2,000
GP 38-2	266,300	4	2,000
GP 38-3	264,000	4	2,000
GP 40	277,000	4	3,000
GP 40-2	277,000	4	3,000
GP 40-3	276,000	4	3,000
SD 40-2	415.600	6	3,000
SD 40-3	389,500	6	3,000
SD 40-X	385,600	6	3,500
SD 45	396,000	6	3,600
SD 45-3	368,000	6	3,500
SD 50	386,800	6	3,500
SD 60	388,100	6	3,800
AC 4400	420,000	6	4,400
SLUG	260,000	4	----

Kansas City Southern

Hazardous Materials Instructions for Rail

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INTRODUCTION

1. Purpose

This document focuses on the safe transportation of hazardous materials. To handle hazardous material shipments or incidents safely and efficiently, without delay, and in accordance with local, state, and federal regulations, it is imperative that you familiarize yourself with the ***KCS Hazardous Materials Instructions for Rail***, in addition to other operating rules. These instructions provide guidance on how to perform your duties so that both you and the company will comply with Department of Transportation (DOT) regulations.

Transportation employees who inspect or transport hazardous material by rail must have a copy of and comply with the ***KCS Hazardous Materials Instructions for Rail*** readily accessible while on duty.

Employees who transport hazardous materials must also have a copy of the current ***Emergency Response Guidebook*** (ERG) readily accessible while on duty. Emergency Response Guidebooks are available through your supervisor.

The company will provide appropriate training to each employee who directly affects hazardous material transportation safety. Hazardous materials general awareness, safety, function specific and security training is required at least once every three (3) years. Employees should immediately notify their immediate supervisor if training has lapsed.

Always keep in mind that the company requires you to comply fully with the law. Compliance with the letter and spirit of our obligations is good corporate citizenship and is essential to achieving safety and quality in all areas of our operations. Each of us has a duty to see that the railroad's actions are consistent with the highest legal and ethical standards.

2. Questions

For questions about the ***KCS Hazardous Materials Instructions for Rail***, contact your immediate supervisor.

SECTION I - GENERAL INFORMATION

1. Definition of Hazardous Materials

a) Hazardous materials are defined as "a substance or material which the Secretary of Transportation has determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce."

b) Hazardous materials are classified according to their chemical and/or physical properties. There are nine numeric classes, some of which may be divided into divisions and two worded classes. Table 1 lists the hazard classes and divisions.

c) The term "hazardous material" includes hazardous substances, hazardous wastes, elevated temperature materials (HOT or MOLTEN), and marine pollutants.

Table 1. Hazard Classes and Divisions

***Numbered* Classes and Divisions**

1 - *Explosives*
- 1.1 – Explosive with mass explosion hazard
- 1.2 – Explosive with projection hazard
- 1.3 – Explosive with predominantly fire hazard
- 1.4 – Explosive with no significant blast hazard
- 1.5 – Very insensitive explosive; blasting agent
- 1.6 – Extremely insensitive detonating substance

2 - *Gases*
- 2.1 – Flammable gas
- 2.2 – Nonflammable, nonpoisonous, (nontoxic) compressed gas
- 2.3 –Poisonous (toxic) gas (by inhalation)

3 - *Flammable Liquids*

4 - *Flammable Solids and Reactive Solids/Liquids*
- 4.1 – Flammable solid
- 4.2 – Spontaneously combustible material
- 4.3 – Dangerous when wet material

5 - *Oxidizers and Organic Peroxides*
- 5.1 – Oxidizer
- 5.2 – Organic peroxide

6 - *Poisonous (Toxic) Materials and Infectious Substances*
- 6.1 – Poisonous (toxic) material
- 6.2 – Infectious substance

7 - *Radioactive Materials*

8 - *Corrosive Materials*

9 - *Miscellaneous Hazardous Materials*

***Worded* Classes**

Combustible Liquids *(regulated in bulk packaging)*

ORM-D (Other Regulated Materials – D)*-(regulated in air transportation only)*

2. General DOT Requirement

a) No person may offer, accept, or transport a hazardous material in commerce unless that material is properly classed, described, packaged, marked, labeled, and placarded and is in proper condition for transportation according to DOT and International regulations.

b) No person may transport a hazardous material in commerce unless the hazardous material is handled and transported according to DOT regulations.

3. Expediting Hazardous Material Shipments

Loaded hazardous material shipments and both loaded and residue/empty time-sensitive shipments (see Table 2) must be forwarded either:

a) Within 48 hours (excluding Saturdays, Sundays, and holidays) after accepting them at the shipper's facility or receiving them in any yard, intermediate (transfer) station, or interchange point.

or

b) When only bi-weekly or weekly service is performed, on the first available train toward the destination.

Exception: The 48-hour requirement does not apply to shipments that are constructively placed or set out for repairs.

Table 2. Time-Sensitive Shipments

20 days:
- (1) Ethylene, refrigerated liquid - UN 1038
- (2) Hydrogen, refrigerated liquid - UN 1966
- (3) Chloroprene, stabilized - UN 1991
- (4) Flammable liquid, n.o.s. (Methyl Methacrylate Monomer, uninhibited) - UN 1993
- (5) Hydrogen chloride, refrigerated liquid - UN 2186
- (6) Vinyl Fluoride, stabilized - UN 1860

30 days:
- (1) Styrene monomer, stabilized - UN 2055
- (2) Flammable Liquid, n.o.s. (Recycled styrene) - UN 1993

4. Exceptions for U.S. Government Material

a) Department of Energy (DOE) and Department of Defense (DOD) shipments made for the purpose of national security and accompanied by escorts (personnel specifically designated by or under the authority of DOD or DOE) are not subject to DOT regulations or to the instructions in this book.

b) Escorts must travel in a separate transport vehicle from the rail car carrying the hazardous materials.

c) The escorts must have, in their possession, a document certifying that the shipment is for the purpose of national security.

5. International Shipments

International shipments of hazardous materials (including shipments to and from Mexico and Canada), moving with proper International documents and International placards, may be transported in the United States (U.S.):

a) From a U.S. port of entry to their U.S. destination

b) When moving through the U.S. to a foreign destination

c) From a U.S. point of origin to the International port of entry, when the cars are either:

1) Returning residue shipments

or

2) Regulated Internationally but not in the U.S.

6. Documenting the Chain of Custody and Positive Hand-off Of Rail Security-Sensitive Materials (RSSM)

a) Train consist documents are flagged at the top portion of each page with the following message printed in a large asterisk box "TSA Rail Security Sensitive Materials On Board." A Rail Security Sensitive Material is identified on train documents, track-lists, and train consists with the letters "RSSM" contained in the asterisk hazmat box which is located below the equipment initial and number and left of the basic hazmat description. In addition the AAR contents description column will contain the letters "RSSM." A line is provided below the basic hazmat description labeled "Custody Transfer Representative" for writing down the custody transfer name.

b) A documented chain of custody and positive hand-off of a RSSM shipment must be made when:

1) Receiving a RSSM shipment from the shipper at any location.

2) Receiving/delivering an RSSM shipment(s) in interchange. This only applies to an interchange taking place within an HTUA or an interchange that contains at least one RSSM car that is routed - on KCSR or a subsequent connecting carrier - through or will terminate in a High Threat Urban Area (HTUA).

3) Delivering a RSSM shipment within a High Threat Urban Area (HTUA).

c) Chain of custody and positive hand-off requirements.

1) A positive hand-off must be attended by an employee or representative of the railroad and an employee or representative of the shipper/receiver or interchanging railroad.
2) A ground inspection of each RSSM shipment must be performed by the crew or employee accepting the RSSM. Inspection must include looking for signs of tampering or foreign objects such as an improvised explosive device (IED).
3) Chain of custody documented by the railroad employee attending the positive hand-off. Documentation must include:
   (a) car initial and number;
   (b) first and last name of the individual who attended the transfer (provide your full name to exchanging party upon request);
   (c) location of the transfer;
   and
   (d) date and time of the transfer on the work order or other appropriate documents.

NOTE: If entrance to the shipper's or receiver's facility is controlled from a security room inside the plant, then consider person in the security room as being "present" and the rail car being attended once the car is placed inside the shipper's facility. Name of security individual must be received to fulfill the chain of custody requirements.

d) If the representative of the **shipper/receiver** or of an **interchanging railroad to which KCSR is delivering traffic for interchange** is not present or refuses to provide the required information:
1) notify the train dispatcher or your immediate supervisor, as appropriate;
2) do not pull or spot the RSSM shipment from the shipper facility or place it for interchange;
3) retain possession of the non-delivered RSSM shipment until completion of assignment;
and
4) report the non-delivered shipment as "work not done" on the work order.

e) If the representative of the **interchanging railroad from which KCSR is receiving interchange traffic** is not present, perform the required security inspection of the cars containing RSSM and note the lack of required attendance and positive hand-off on the chain of custody documents. Report the information to the train dispatcher or your immediate supervisor as appropriate.

f) If the representative of the **interchanging railroad from which KCSR is receiving interchange traffic** refuses to provide the required information, do not receive the train or pull the equipment and contact the train dispatcher or your immediate supervisor, as appropriate, for instructions.

g) After a railroad complies with the chain of custody and positive hand-off requirements for an RSSM shipment or a train containing an RSSM, the carrier may leave the car or train unattended on its own line in an area that is not located within an HTUA. Prior to the railroad moving that car or train through or to an HTUA or to interchange with another carrier who may move it to or through an HTUA, the RSSM(s) must receive the required security inspection to include checking the equipment for improvised explosive devices . The interchange must be documented and retained on the chain of custody document. Note: A description of the KCS High Threat Urban Areas (HTUA) is found in the glossary section of this instruction.

SECTION II - REQUIRED DOCUMENTATION

1. General Requirements

No person may accept a hazardous material for shipment by rail transportation or transport a hazardous material in a train unless a member of the crew has each of the following documents:

a) Acceptable shipping papers.
b) Acceptable emergency response information.
c) A document showing the current position of the hazardous material shipment in the train.

NOTE: The purpose of this documentation is to provide railroad personnel and emergency response personnel with accurate information about the hazardous materials.

Therefore, keep all current hazardous material documents neat and orderly and ensure that they are available in case of an emergency or for inspection. Properly discard superseded documents to eliminate the possibility of confusing or inconsistent information.

2. Acceptable Shipping Papers

Any one of the following documents is an acceptable shipping paper for hazardous material shipments, as long as it includes the required shipping description entries (see item 6 of this section), is legible, and is printed (manually or mechanically) in English:

a) **Railroad-produced documents** — for example, train consists, train lists, wheel reports, track lists, waybills, industry work orders, or other similar documents.
b) **Customer-produced documents** — for example, bills of lading [including United Parcel Services (UPS) hazardous materials packets], or switch lists.
c) A **connecting carrier's documents**.
d) A **hand-printed document** (printed, not cursive letters) – for example, radio waybills.
e) A **hazardous waste manifest**.

3. Acceptable Emergency Response Information

The ***Emergency Response Guidebook*** (ERG) contains acceptable emergency response information. The ERG may be supplemented by emergency response information printed as part of the train list/consist/wheel-report or provided by the customer – for example, a Material Safety Data Sheet (MSDS).

4. Document Indicating Position in Train

Before moving hazardous material shipments in a train, a member of the crew must have a document that shows the current position in the train of each hazardous material shipment (loaded and residue/empty).

When making pickups or setouts, update the document before proceeding. The train crew must update the document by handwriting on it or by appending or attaching another document to it.

5. Checking for Shipping Papers

Make sure that a member of the crew has a paper copy of acceptable shipping papers, with the required entries, for each hazardous material when:

a) Accepting hazardous material shipments at a customer's facility, interchange point, or other location.
b) Moving hazardous material shipments in a train.
c) Delivering hazardous material shipments to a customer's facility, interchange point, or other setout point.
d) Switching hazardous material shipments outside a yard.

NOTE: Shipping papers are not required in the switch crew's possession when moving hazardous material shipments within a yard or at a customer's facility.

DOT Exception: Some Class 9 empty rail cars (e.g. tank car, hopper, gondola) displaying one of the following identification numbers may remain placarded and/or marked (orange panel or white square on point) without a hazardous material shipping paper and emergency response information associated with the shipment. The identification numbers which may be associated with this DOT exception are: 3077, 3082, 3256, 3257, 3258

6. Reviewing Shipping Paper Entries

Review the shipping description entries for each hazardous material on the shipping papers and make sure that the following entries (a-g under this item) are present. (Figure 1 shows two formats, each having two acceptable variations, for displaying the shipping description entries.)

Figure 1. Shipping Description Entries, Two (2) Formats

Vertical Format (allowed until January 1, 2013)

GATX 12345 (a)
1/TC (b)
SULFURIC ACID (c)
8 (d)
UN1830 (e)
PG II (f)
RQ (SULFURIC ACID) (h3)
EMERGENCY CONTACT: A1 Chemstuff Co (g)
EMERGENCY CONTACT PHONE: 800-424-9300 (g)
HAZMAT STCC = 4930040 (h11)

Vertical Format (optional until January 1, 2013 and mandatory thereafter)

GATX 12345 (a)
1/TC (b)
UN1830 (e)
SULFURIC ACID (c)
8 (d)
PG II (f)
RQ(SULFURIC ACID) (h3)
EMERGENCY CONTACT: A1 CHEMSTUFF CO (g)
EMERGENCY CONTACT PHONE: 800-424-9300 (g)
HAZMAT STCC = 4930040 (h11)

Horizontal Format (allowed until January 1, 2013)

UTLX 12345 (a)
1/TC (b) // CHLORINE (c) // 2.3(5.1, 8) (d) // UN1017 (e) // (CHLORINE) (h3) // POISON-INHALATION HAZARD (h6) // ZONE B (h7) // MARINE POLLUTANT (CHLORINE) (h4) // EMERGENCY CONTACT: A1 CHEMSTUFF CO (g) // EMERGENCY CONTACT PHONE: 800-424-9300(g) // HAZMAT STCC = 4920523 (h11)

Horizontal Format (optional until January 1, 2013 and mandatory thereafter)

UTLX 12345 (a)
1/TC (b) // UN1017 (e) // CHLORINE (c) // 2.3(5.1, 8) (d) // RQ(CHLORINE) (h3) // POISON-INHALATION HAZARD (h6) // ZONE B (h7) // MARINE POLLUTANT(CHLORINE) (h4) // EMERGENCY CONTACT: A1 CHEMSTUFF CO (g) // EMERGENCY CONTACT PHONE: 800-424-9300 (g) //HAZMAT STCC = 4920523 (h11)

Items *(a)* through *(g)* are required entries for the basic hazardous materials description. Item *(h)* refers additional entries that may appear. Typically Items *(b)* through *(f)* are in the sequence shown, however, certain items (technical name and subsidiary hazard class) may appear in parentheses between items *(b)* through *(f)*
NOTE: The identification number *(e)* may be found either before the proper shipping name *(c)* or after hazard class *(d)* until January 1, 2013 when the identification number must appear before the proper shipping name *(c)*.

a) Reporting marks (initials) and number

The shipping paper for a rail car, freight container, transport vehicle, or portable tank must include the reporting mark and number **only** when the reporting mark and number are displayed on the rail car, freight container, transport vehicle, or portable tank.

b) Total Quantity Notation

1) For empty packaging, bulk packaging, or cylinders of Class 2 materials, some indication of the total quantity must be shown (certain abbreviations are acceptable). For example, **"1 T/C"** (1 tank car), **"1C/L"** (1 car load), or **"10 CYL"** (10 cylinders).

2) For non-bulk packaging, the total quantity is given by both:
   a) Weight or volume (including the unit of measure); for example, **"100 lbs."**, **"55 gal."**, **"5 kg"**, or **"208 L"**;
      and
   b) Number and type of packages; for example **"12 drums"**, **"12 UN 1A1"**, **"15 4G"**, or **"2 UN 3H1 JERRICAN"**.
3) For Class 1 materials, the quantity must be the net explosive mass.

c) Proper Shipping Name

1) The proper shipping name of the hazardous material may be one or more words, such as **"Chlorine"** or **"Sulfuric Acid"**. The proper shipping name may include a number that indicates the concentration of the material.
2) When a N.O.S. (Not Otherwise Specified) shipping name appears, the technical name of the product may appear in parentheses immediately after the N.O.S. shipping name, such as **"Corrosive Liquid, N.O.S. (Capryl Chloride)."**
3) Residue/empty shipments in tank cars will begin with **"Residue: Last Contained"**, followed by the proper shipping name.
4) For waste shipments, the word **"Waste"** will precede or be part of the proper shipping name of the material.

d) Hazard Class – numeric or worded

For further information on hazard classes, see the definition in the Glossary and the list of hazard classes and divisions in Table 1 (refer to page 34).

1) For certain hazardous materials, subsidiary hazard class(es), will appear in parenthesis after the primary hazard class. For example, Ethylene Oxide is listed as **"2.3 (2.1)" and Chlorine is listed as "2.3(5.1, 8)".**.
2) The hazard class need not be repeated following proper shipping name: Combustible Liquids, N.O.S.
3) Classes 1.1, 1.2, 1.3, 1.4, 1.5, and 1.6 may show a compatibility group letter after the class (for example, **1.1A**). The letter has no significance in rail transportation.

e) Identification Number

A 4-digit identification number must appear on the shipping papers with the prefix "UN" (United Nations) or "NA" (North America) as appropriate.

NOTE: The identification number (e) may be found either before the proper shipping name (c) or after the hazard class (d) until January 1, 2013 when the identification number must appear before the proper shipping name (c).

Exception: The proper shipping description "gas generator assemblies for aircraft" does not require identification numbers.

f) Packing Group

The packing group must appear on the shipping paper in Roman numerals ("I", "II", or "III"). The packing group may be preceded by the letters "PG" ("PG I", "PG II", or "PG III").

Exceptions: Hazard Classes 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1,2.2, 2.3,4.1 5.2, 6.2, 7, and ORM-D do not require the packing group notation. Identification numbers from Classes 3, 4.2, 4.3, 5.1, 8 and 9 do not require the packing group notation:

NA1365 UN3121 UN3269 UN3343 UN3477
UN2426 UN3127 UN3316 UN3363 UN2990
UN3166 UN3334 UN3473 UN3072 UN3171
UN3335 UN3476

g) Emergency Response Telephone Number

Shipping papers for hazardous materials must show a 24-hour emergency response telephone number. Must include area code or international code and function as dialed. For international shipment to Mexico, both the U.S. and Mexico emergency response telephone number must appear on the shipping document and function as dialed. For international shipments to U.S., only the Mexican emergency response telephone number is required.

Exceptions: Emergency response telephone numbers are not required when the hazardous material is shown as a "Limited Quantity", "LTD QTY", or its shipping name is:

1) Battery powered - equipment or vehicle
2) Carbon dioxide, solid or dry ice
3) Castor - bean, meal, flake, or pumice
4) Consumer commodity
5) Engines, internal combustion
6) Fish - meal or scrap, stabilized
7) Fumigated unit
8) Refrigerating machine
9) Wheelchair, electric
10) Vehicle, flammable gas powered or vehicle, flammable liquid powered

h) Additional Entries

Some hazardous material shipping descriptions may require one or more of these entries:

1) "Residue: Last Contained ..." (for packages emptied to the maximum extent possible).
2) "HOT" notation added before a proper shipping name for elevated temperature materials.
3) "RQ" for Reportable Quantity notation of a hazardous substance.
4) "MARINE POLLUTANT" notation.
5) "POISON" or "TOXIC" notation.
6) "POISON (TOXIC)-INHALATION HAZARD (PIH or TIH)" or "INHALATION HAZARD (IH)" notation.
7) Hazard Zone notation ("ZONE A," "ZONE B," "ZONE C," or "ZONE D").
8) "LIMITED QUANTITY" or "LTD QTY" notation
9) FRA Movement Approval (for example, "FRA 0109123"), DOT Special Permit (for example, "DOT-SP 9271"), Special Approval Number (for example, "SA 920403"), or Competent Authority Number (for example, "CA 9701001").
10) DOT-113 notation ("DOT-113, Do Not Hump or Cut-Off in Motion").
11) Hazardous Materials Response Code (STCC "48xxxxx" or "49xxxxx").
12) Certain shipments described using Canadian regulations may contain both an Emergency Response Plan number and its activation telephone number (e.g., "ERP-2-1008 (800-555-5555)//SPECIAL COMMODITY").
13) Box of asterisks with or without wording (not required by DOT, but may appear on railroad-produced documents).
14) Shipper's Certification.
15) "OIL" notation.
16) Additional radioactive material entries.
17) Name and address of the place of business in Canada of the consignor.
18) Additional hazardous waste shipping description entries (see Section II, item 11, a).
19) EX number (explosive number assigned by DOT) for air bag modules classified as Class 9. Note: Recycled air bag modules do not require the EX number entry, but must have the word recycled after the basic description.
20) For International shipments the notation "Dangerous Goods in Excepted Quantities."

7. Handling Situations when Shipping Papers or Required Entries Are Not Available

When the appropriate shipping paper is not present or when all required entries on the shipping paper provided are not present:

a) Do not move the car until the appropriate shipping paper or the required entries on the shipping paper are present.
b) Take one of these three actions:
   1) Correct the existing document. Contact the customer or your supervisor, request the entries required to complete the shipping description, and legibly print those entries in the appropriate sequence (see Section II, item 6).
      or
   2) Obtain the appropriate shipping paper from the shipper, your supervisor, KCS CSC, or other appropriate person.
      or
   3) Use a radio waybill.
      a) Contact your supervisor or dispatcher and request the appropriate entries for a radio waybill (see Figure 2, Radio Waybill). The supervisor or dispatcher will provide the requested entries via radio or telephone to you.
      b) Complete the radio waybill using the information the supervisor or dispatcher provided.

      NOTE: If a radio waybill form is not available, legibly print the required hazardous material information on a sheet of paper, including the car's initials and number (see Section II, item 6).

      c) Keep the radio waybill with the other shipping documents until either reaching the final destination or receiving another shipping paper with the appropriate entries.
      d) For each radio waybill issued, add the car initial and number and its position on the position-in-train document.

8. Checking for Emergency Response Information

a) When accepting and transporting hazardous material shipments, make sure a copy of the emergency response information for each shipment (see Section II, item 3) is available.
b) If emergency response information is not available, do **not** accept or transport the car.

9. Checking for Position-in-Train Document

a) When transporting hazardous material shipments in a train, make sure a member of the crew has a document indicating the current position in train of each hazardous material shipment.
b) If the document indicating the current position in train of each hazardous material is **not** available:
   1) Update the documents already in your possession.
      or
   2) Create a hand-printed list showing the position in train of each hazardous material shipment and append it to the other hazmat shipping documents.

   NOTE: The list must show the reporting marks and number for each hazardous material shipment in the train and its actual position in the train.

10. Handling Shipping Papers Received from a Customer

When picking up a hazardous material shipment from the customer and regular train documents are not available the customer may provide the original shipping papers:

a) Check for appropriate hazardous material entries.
b) For loaded shipments, make sure that the shipper's certification and signature (signature by hand or mechanical means) are on the shipping papers received from the customer.
c) Forward all customer provided shipping documents to the KCS CSC.

11. Handling Hazardous Waste Shipping Papers and Manifests

a) The shipping paper for a hazardous waste shipment must have the following entries in addition to the entries required for other hazardous material shipments:
   1) shipping description waste codes
   2) Name, address, and telephone number of the hazardous waste generator (aka shipper)
   3) Name, address, and telephone number of the hazardous waste disposal facility (aka consignee)
   4) Name of transporter
   5) Waste manifest number
   6) Special handling instructions (if applicable)

b) Do not accept a hazardous waste shipment without a KCS generated shipping paper (consist, work order, train list, etc.). All hazardous waste manifests must be directed to the KCS Hazardous Waste Manifest Manager at the KCS Customer Service Center for signature and waybill processing.

12. Handling Requests for Shipping Papers or Emergency Response Information

Upon receiving a request for shipping papers or emergency response information from a railroad employee, regulatory enforcement officer, or emergency response personnel in an emergency:

a) Provide **all** the information on the shipping papers for the shipment.
   and
b) Provide **all** available emergency response information.

Figure 2. Example of Radio Waybill
Additional copies of the radio waybill can be found at the end of the HazMat Instructions.

HAZARDOUS MATERIAL RADIO WAYBILL
NOTE: Print Legibly

****
* *
* HAZARDOUS MATERIAL *
* *
****

1. Train Number _____

2. Number of Cars from Head End _____
(Update the position-in-train documents)

3. Car Initial & No. _____

4. Total Quantity Notation (Circle One)

Tank Car or Car Load or Residue: Last Contained or Other

If Other specify weight or volume.

5. Number of Packages or Car(s) _____

***** Description of Articles *****

6. Identification No. (UN.NA) _____

7. Proper Shipping Name _____

_____

8. Technical Name (_____)

9. Primary Hazard Class _____

Subsidiary Hazard Class(es) _____

10. Packing Group (PG): I II III **(Circle One)**

11. Reportable Quantity (RQ): (_____)

***** Additional Information *****

12. Poison/Toxic Inhalation Hazard:

Zone A, Zone B, Zone C, Zone D **(Circle One)**

13. Marine Pollutant (_____)

14. DOT Special Permit Number(s):

_____

15. Additional Information _____

_____

16. ERP Plan No.: _____
(Canadian Shipments Only)

17. ERP Telephone No.: (____) _____-_____.
(Canadian Shipments Only)

18. Emergency Contact Name: _____

19. Emergency Contact No.: (____) _____-_____.

Completed Date: ____. / ____. / ____. Time: ____. : ____. AM
MO DAY YR PM

SECTION III - INSPECTION

1. General Requirements

a) To determine that they are in acceptable condition for transportation, all loaded and residue/empty hazardous material shipments must be inspected at these points:
   1) Before accepting hazardous material shipments from the shipper.
   2) When receiving hazardous material shipments in local interchange or in run-through train interchange.

NOTE: Run-through trains received in interchange may continue to the next inspection point before being inspected unless the train contains Rail Security-Sensitive Material (RSSM). For inspection requirements of trains containing RSSM's see Section I. General Information, Item 6 Documenting the Chain of Custody and Positive Hand-off of Rail Security-Sensitive Materials (RSSM).

   3) When placing hazardous materials in a train
   4) At other points where an inspection is required (e.g., 1,000 mile inspection)

b) Accept or transport only those hazardous material shipments that conform to these instructions.

c) In addition to inspecting rail cars for compliance with train make up, adequate buffer cars, shiftable loads and temperature control equipment (see Position in Train Chart, Instructions 1 through 5) and mechanical inspection, visually inspect each loaded or residue/empty hazardous material shipment (including flat cars transporting placarded or marked trailers or containers) and adjacent rail cars, from ground level (do not climb on or go under the car) and check for:
   i. leakage
   ii. required placards and markings, including stenciling, car certificates, and qualification dates (see section IV for details)
   iii. secure fastening of closures
   iv. signs of tampering, such as suspicious items or items that do not belong, the presence of an "Improvised Explosive Devices" (IED), and other signs that the security of the car may have been compromised.

2. Inspection Procedures

From ground level, inspect all rail cars, trailers, and containers transporting hazardous materials, whether loaded or residue/empty (including flat cars transporting placarded or marked trailers or containers) according to the following instructions:

a) Inspecting All Car Types (from ground level)

   1) Without climbing on the car, inspect the entire rail car, including the underside of the rail car (and any rail equipment transporting placarded or marked trailers or containers) from a distance close enough so that any problems can be readily identified. Inspect equipment for:
      a) Leaking contents – drips, wetness, or material on the car or on the ground.
      b) Vapor cloud
      c) Listen for hissing sounds of the contents escaping.

NOTE: If you find a hazardous material shipment leaking, follow the instruction in item 3 of this section and in Section VIII (Emergency Response), item 5.

2) Where an indication of tampering or a foreign object is found, take the following actions:
   a) Do not touch or move the car or object. Immediately move yourself and others to a safe location away from the rail equipment before using radios or cell phones to make notifications.
   b) For rail cars at a customer's facility, immediately contact local plant personnel. If local plant personnel are not available, immediately contact the yard supervisor or the train dispatcher. If any of these cannot be reached, contact the CID at (877)527-9464 or (816)983-1895.
   c) For rail cars on interchange tracks or in the yard, immediately contact the yard supervisor, yardmaster, or train dispatcher. If any of these cannot be reached, contact the CID at 877-527-9464 or 816-983-1895.
   d) If you find a hazardous material shipment leaking, follow the instructions in item 3 of this section and in Section VIII (KCSR System Special Instructions, Emergency Response), item 5.

3) Make sure placards and markings are appropriate for the shipment by comparing them to the shipping document. Make sure the placards are displayed correctly (see Section IV, Placards and Markings).
4) Before accepting a hazardous material shipment from the shipper, make certain that:
   a) All customer loading and unloading lines are disconnected.
   b) Derails, chocks, and blue flags are removed.
   c) All platforms are raised or in the clear.

b) Inspecting Placarded/Marked Tank Cars (from ground level)
Check placarded tank cars or tank cars marked with an identification number to see that:
1) Protective housing covers are closed.
2) Manway cover swing bolts are up and in place.
3) All valves and fittings appear to be closed and secure.
4) Visible plugs or caps (including bottom outlet caps) or other fittings are securely in place.

NOTE: When heater coil caps are provided, they must be applied.

5) "Double shelf couplers" and roller bearings are present.

c) Inspecting Placarded/Marked Gondola Cars (from ground level)
1) Look for loosely fastened gondola covers.
2) Make sure the cover or tie downs do not foul any safety appliances.

d) Inspecting Placarded/Marked Hopper Cars (from ground level)
- Check that discharge gates are closed and secured.

e) Inspecting Shipments Placarded EXPLOSIVES 1.1 or 1.2 (from ground level)
1) In addition to the other inspection requirements in this section, for shipments placarded EXPLOSIVES 1.1 and 1.2:
   a) Look for indications of damage to the contents, to the extent possible from exterior.
   b) Make sure that completed "car certificates" (see Figure 3, Car Certificates) are displayed on both sides of the rail car.
      1. Car certificates must be removed after the rail car, trailer, or container is unloaded.
      2. Car certificates are either 7.1 by 7.1 inches or 5.9 by 7.9 inches in size.
2) Do not accept or transport the car until all damage has been corrected and car certificates are in place.

Figure 3. Car Certificate

_____ Railroad

No. 1_____Station _____20___
_____hereby certify that I have this day personally examined Car Number _____ and that the car is in condition for service and complies with the FRA Freight Car Safety Standards (49 CFR Part 215) and with the requirements for freight cars used to transport explosives prescribed by the DOT Hazardous Materials Regulations (49 CFR Part 174).

_____
Qualified Person Designated Under 49 CFR 215.11

No. 2_____Station _____20___
I have this day personally examined the above car and hereby certify that the explosives in or on this car, or in or on vehicles or in containers have been loaded and braced; that placards have been applied, according to the regulations prescribed by the Department of Transportation; and that the doors of cars so equipped fit or have been stripped so that sparks cannot enter.

_____
Shipper or his authorized agent

_____
Qualified Person Designated Under 49 CFR 215.11

No. 3_____Station _____20___

I hereby certify that I have this day personally supervised the loading of the vehicles or containers on and their securement to the above car.

_____
Shipper or railway employee inspecting loading and securement

Note 1: A shipper must decline to use a car not in proper condition.
Note 2: All certificates, where applicable, must be signed.

f) Inspecting Placarded/Marked Intermodal (from ground level)
1) Make sure that an intermodal tank container of **hazardous material i**s not transported with a container above or below the tank.
2) Make sure that placards are fully visible when containers are loaded in a well car.
3) Make sure that intermodal tanks are placed so that the bottom outlet valves are pointed toward the ends of the well or platform.

3. Handling Defects

When a hazardous material shipment does not appear to be prepared for transportation:
a) Do not accept or pull the hazardous material shipment or allow it to continue in transportation.
b) Notify the customer, train dispatcher, yardmaster, or your immediate supervisor, as appropriate, and explain the problem.

SECTION IV - PLACARDS AND MARKINGS

1. General Requirement

Hazardous material shipments, whether loaded or containing a residue (aka empty), must not be accepted for transportation or transported unless they are properly placarded and marked. Not all hazardous material shipments require placards.

2. Placard Requirements

When required, each bulk packaging, freight container, transport vehicle, or rail car containing hazardous material must be placarded on each side and each end in accordance with the instructions below.

NOTE: Unless the shipping papers indicate that the shipment is a limited quantity, all international shipments (including Canada and Mexico) of hazardous materials required placards.

Placard – a sign measuring 273 mm (10 3/4 in) by 273 mm (10 3/4 in) square-on-point, communicating a hazard by symbol, color, and words or numbers. (see Figure 4 for pictures of placards). Text indicating the hazard is not required on placard other than the DANGEROUS Placard. The hazard class text does not have to be in English.

NOTE: A placard meeting International Maritime Dangerous Goods (IMDG) Code requirements minimum of 250 mm (9 3/4 in) by 250 mm (9 3/4 in) is acceptable.

a) Placards are required when transporting any quantity (bulk or non-bulk) of these hazard classes:
   - 1.1 Explosive with mass explosion hazard
   - 1.2 Explosive with projection hazard
   - 1.3 Explosive with predominantly fire hazard
   - 2.3 Gas Poisonous (toxic) by inhalation
   - 4.3 Dangerous when wet material
   - 5.2 Organic peroxide, Type B, liquid or solid, temperature controlled
   - 6.1 Material poisonous by inhalation
   - 7 Radioactive Yellow III label or exclusive use shipments of Low Specific Activity (LSA) materials and surface contaminated objects.

b) Placards are required when transporting total weight of 1,001 lbs. (454 kg) or more (bulk or non-bulk) of these hazard classes:
   NOTE: Placards may be displayed for a total weight less than 1,001 lbs. of these materials, as long as they are appropriate for the shipment.

   - 1.4 Explosive with no significant blast hazard

   NOTE: Placards are not required for Class 1.4S materials.

   - 1.5 Very insensitive explosive; blasting agents
   - 1.6 Extremely insensitive detonating substances
   - 2.1 Flammable gas
   - 2.2 Nonflammable, nonpoisonous (nontoxic) compressed gas
   - 3 Flammable liquid
   - 4.1 Flammable solid
   - 4.2 Spontaneously combustible material
   - 5.1 Oxidizer
   - 5.2 Organic peroxide, other than “organic peroxide, Type B, liquid or solid, temperature controlled” in 2a above
   - 6.1 Poisonous (toxic) material (other than material poisonous (toxic) by inhalation)

   NOTE: For U.S. transportation of Class 6.1 PG III materials, a PG III placard may be used in place of a POISON (TOXIC) placard.

   - 8 Corrosive material.
   - 9 Miscellaneous hazardous material.

   Exception: For U.S. transportation only, Class 9 placards are not required. However, bulk shipments of Class 9 materials transported in the U.S. must be marked with the identification number (see Section IV, item 4).

   Combustible Liquids [see item c(7) below for handling combustible liquids in non-bulk packages].

   Mixed hazardous materials in this item (see Item f below).

c) Placards are not required for:
   1) Hazardous material shipments with less than 1,001 lbs. (454 kg) total weight, provided the hazard classes are included in item b above.
   2) ORM-D (Other Regulated Materials – D)
   3) Class 6.2 (Infectious Substances)
   4) Class 9 (US/Canadian transportation) materials that display the identification number
   5) Limited Quantity (LTD QTY) shipments when identified as such on shipping papers
   6) Cryogenic atmospheric gases, other than Oxygen (for example, Argon)
   7) Combustible liquids in non-bulk packaging (i.e., drums), usually found in intermodal shipments, unless the material is a hazardous substance or hazardous waste
   8) Railcars and Intermodal tanks of hazardous materials which have been cleaned and purged
   9) Shipments listed as Radioactive White I and Radioactive Yellow II on shipping papers
   10) Class 1.4S
   11) Shipments of molten sulfur moving to or from Canada, provided the identification number and the words “MOLTEN SULFUR” or “MOLTEN SULPHUR” appear on each side of the tank car.

d) Placards may be displayed for hazardous materials, even when not required, as long as the placard is appropriate for the contents of the shipment. If displayed, then all instructions for that placard apply.

e) Certain hazard classes require the display of the primary placard on a white square background, including (see Figure 4, Placard Chart): *(when required to be affixed to the rail car)*
   1) Hazard Class 1.1 or 1.2 explosives
   2) Hazard Class 2.3 or 6.1 poison/toxic inhalation hazard zone A material
   3) Hazard Class 2.1 flammable gases loaded in DOT-113 tank cars, including DOT-113 tank cars containing only a residue of the material.

f) The DANGEROUS placard may be used instead of separate placards for each hazard class when a rail car, trailer, or container is loaded with non-bulk packages of two or more classes of hazardous materials from this section’s item 2b.

   NOTE: When 2,205 lbs. (1,000 kg.) or more of one class of material is loaded at one loading facility, the placards for that class as specified in item 2b of this section must also be applied.

g) Some shipments of hazardous materials require subsidiary placards that represent secondary hazards. Subsidiary placards must not display a 4-digit identification number, but will display the hazard class or division number.

   NOTE: Subsidiary placards must be displayed when the subsidiary class is 2.3, 4.3, or 6.1 with the notation Poison-Inhalation Hazard or Toxic-Inhalation Hazard present on the shipping papers.

h) For residue/empty hazardous materials shipments, the rail car, trailer, or container must remain placarded in the same manner as the loaded shipment, unless the packaging:
   1) Has been cleaned of residue
      or
   2) Has been purged of vapor to remove any hazard
      or
   3) Has been refilled, with a material requiring different placards or no placards, to such an extent that any residue remaining in the packaging is no longer hazardous.
      or
   4) Contains a residue of an elevated temperature. These shipments may remain placarded in the same manner as when it contained a greater quantity of the material even though the material no longer meets the definition for an elevated temperature material.
      or
   5) Contains a residue of a Hazardous Substance, Class 9, that does not meet the definition of another hazard class and is not a hazardous waste or marine pollutant. These shipments may remain marked, labeled, and or placarded in the same manner as when it contained a greater quantity of the material even though the material no longer meets the definition for a Hazardous Substance.

See Next Page

for HazMat

Placards

By Hazard Class

(Figure 4)

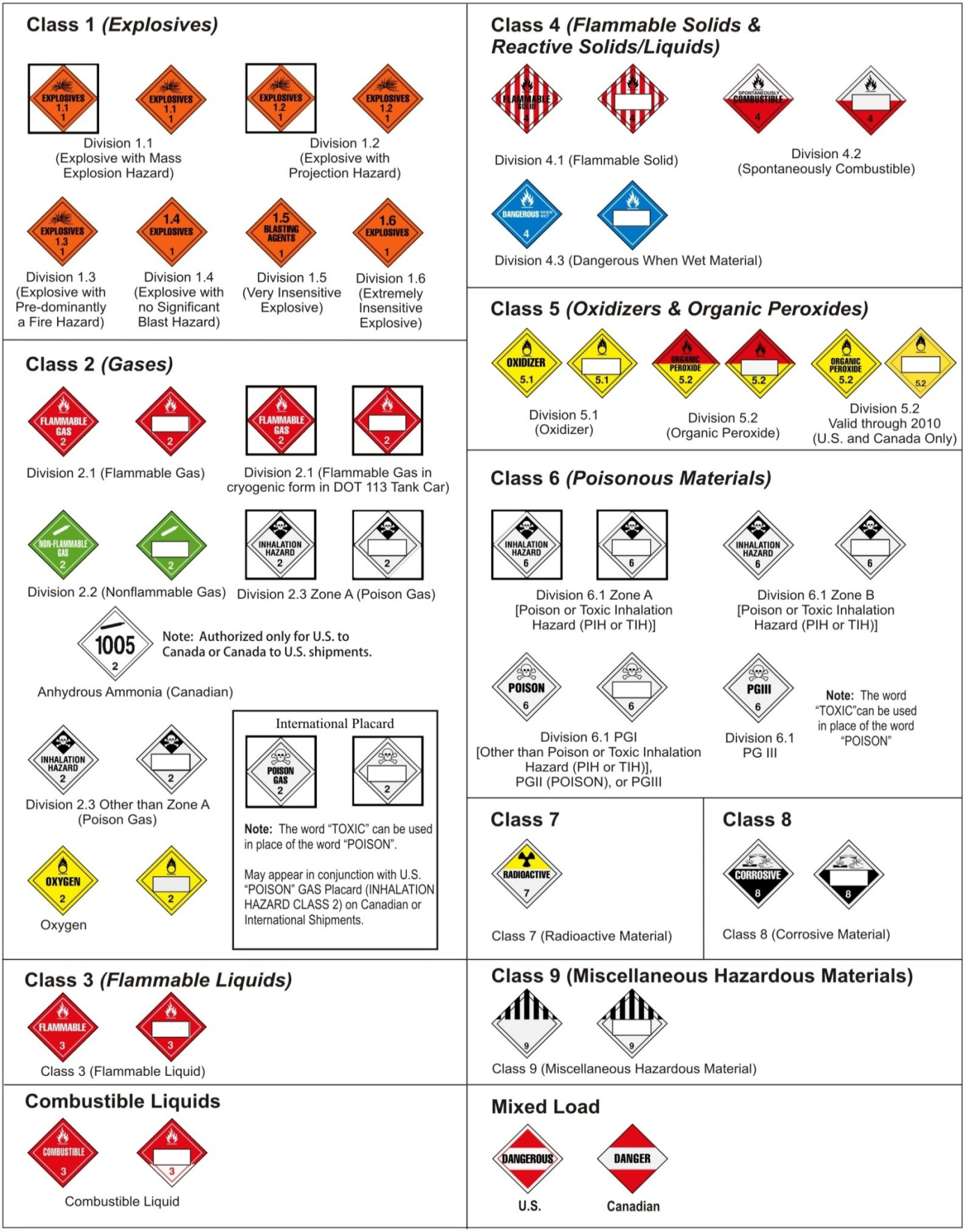


Figure 4. Placards for Hazardous Materials by Hazard Class

Text indicating the hazard is not required on placards other than the DANGEROUS and Radioactive placard. The worded hazard class text, except for DANGEROUS, does not have to be in English as long as the size, color, hazard class, and symbol are correct.

3. Inspecting for Placards

a) Make sure that all required placards are:
   1) Consistent with the shipping paper information.
   2) On both sides and both ends of the shipment.
   3) In placard holders or securely attached to the rail car, trailer, or container.
   4) Not damaged, faded - color should be similar to the color printed in this document (see Figure 4, Placard Chart), or obscured by dirt or car part.
   5) Oriented horizontally, so you can read them from left to right.
   6) Readily visible from the direction they face, except for placards on the ends of trailers and containers in or on a rail car.

b) When picking up a hazardous material shipment at the customer's facility or siding, and a placard is not correct, does not meet the standards above, or is missing:
   1) Notify the customer, train dispatcher, yardmaster, or your supervisor, as appropriate.
   2) Do not accept the hazardous material shipment until corrections have been made.

c) When a placard does not meet the standards above or is discovered missing en route, notify the train dispatcher, yardmaster, or your supervisor, as appropriate. Corrections must be made at the next inspection point.

4. Marking Requirements and Inspecting for Markings

Marking - a descriptive commodity name, identification number, caution, such as INHALATION HAZARD, HOT, MOLTEN, or MARINE POLLUTANT, FUMIGANT, NON-ODERIZED (NOT ODORIZED), or tank car qualification date displayed on hazardous material shipments.

Make sure the markings above are displayed on bulk packages as follows:

a) Identification Number Markings
   1) Identification number markings must appear on both sides and both ends either on the placard or in close proximity to the placard, when a placard is required for:
      a) Bulk packages of hazardous materials (including Class 9 when no placard is required).

      NOTE: Identification number markings are not required on the ends of multi-compartmented tank cars transporting more than one hazardous material having different DOT identification numbers.

      b) Rail cars, trailers, and containers when 8,820 lbs. (4,000 kg.) or more of non-bulk packages of hazardous materials, with the same proper shipping name and identification number, are loaded at one location and the transport vehicle does not contain any other hazardous or non-hazardous materials.

      Exception: For shipments of molten sulfur from Canada, the identification number marking must appear only on both sides of the tank car.

   2) Identification numbers can be displayed in one of three ways, as Figure 5 shows:

Figure 5. Identification Numbers

   3) Identification numbers must not be displayed on:
      i. EXPLOSIVES 1.1, 1.2, 1.3, 1.4, 1.5, or 1.6 placards
      ii. RADIOACTIVE placards
      iii. DANGEROUS placards
      iv. Subsidiary placards
   4) Make sure the identification numbers appear as required above and agree with the shipping paper entries.
   5) When **picking up** a hazardous material shipment at the customer's facility, a siding or an interchange point and the identification number is not correct, is not legible, or is missing:
      i. Notify the customer, train dispatcher, yardmaster, or your supervisor, as appropriate.
      ii. Do not accept the hazardous material shipment until corrections have been made.
   6) When an identification number is not correct, is not legible, or is missing en route, notify the train dispatcher, yardmaster, or your supervisor, as appropriate. They will arrange to correct the problem at the next inspection point.

   NOTE: Missing identification numbers must be replaced and may be entered on the appropriate placard, orange panel, or white square-on-point configuration by hand using a **black indelible** marker.

b) MARINE POLLUTANT Mark
   1) For a material described on the shipping papers as a marine pollutant and the shipment does not require a placard, make sure that the MARINE POLLUTANT mark appears on both sides and both ends of bulk packaging. The MARINE POLLUTANT mark is shown in Figure 6.

Figure 6. Marine Pollutant Mark

NOTE: MARINE POLLUTANT marks are not required when the bulk packaging displays a placard.

2) When picking up a hazardous material shipment at the customer's facility or siding or at an interchange point, and a required MARINE POLLUTANT mark is not legible or is missing:
   i. Notify the customer, train dispatcher, yardmaster, or your supervisor, as appropriate.
   ii. Do not accept the hazardous material shipment until corrections have been made.
3) When a required MARINE POLLUTANT mark is not legible or is missing en route, notify the train dispatcher, yardmaster, or your supervisor, as appropriate. They will arrange to correct the problem at the next inspection point.

c) HOT Mark
1) For a material described on the shipping papers with the words "HOT," "ELEVATED TEMPERATURE," or "MOLTEN" and transported in a bulk packaging, the word "HOT" must be marked on two opposing sides of the bulk packaging, either:
   i. On a plain white square-on-point configuration having the same outside dimensions as a placard (see Figure 7)
   or
   ii. On the packaging itself

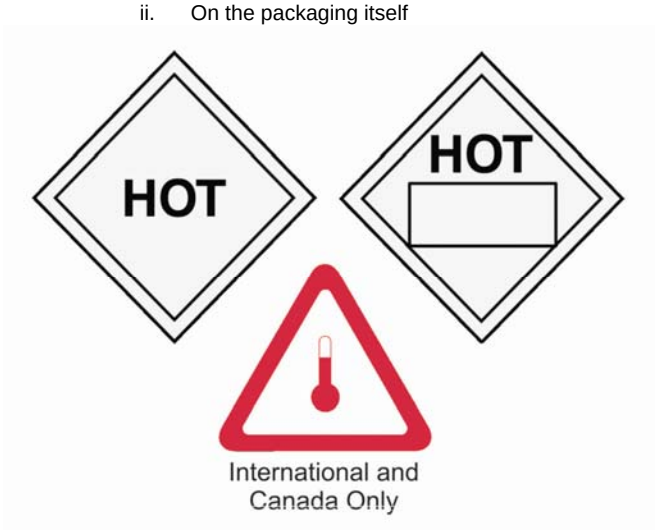


Figure 7. HOT Mark

NOTE 1: The word "HOT" is not required for bulk packaging of molten aluminum or molten sulfur marked "MOLTEN ALUMINUM" or "MOLTEN SULFUR," as appropriate.

NOTE 2: Residue/empty shipments that last contained elevated temperature material (HOT), such as asphalt, are not considered hazardous materials and do not require hazardous material shipping description entries on the shipping paper. When the shipping paper indicates empty, the shipment may be accepted and moved in rail transportation without the hazardous material shipping description entries, even though the HOT mark and identification number are displayed.

2) When **picking up** a hazardous material shipment at a customer's facility or siding or at an interchange point and a HOT mark is not legible or is missing:
   i. Notify the customer, train dispatcher, yardmaster, or your supervisor, as appropriate.
   ii. Do not accept the hazardous material shipment until corrections have been made.

3) When a HOT mark is not legible or is missing en route, notify the train dispatcher, yardmaster, or your supervisor, as appropriate. They will arrange to correct the problem at the next inspection point.

d) INHALATION HAZARD Mark
1) For a material described on the shipping papers as "Poison (Toxic) Inhalation Hazard" or "Inhalation Hazard," the words "INHALATION HAZARD" must appear (in at least 3.9-inch high letters) on both sides of the rail car, trailer, or container, near the placards.
NOTE: When the words "INHALATION HAZARD" appear on the placards, the "INHALATION HAZARD" mark is not required on the bulk packaging.

2) When **picking up** a hazardous material shipment at the customer's facility or siding or at an interchange point and the words "INHALATION HAZARD" are illegible or missing:
   i. Notify the customer, train dispatcher, yardmaster, or your supervisor, as appropriate.
   ii. Do not accept the shipment until corrections have been made.
3) When the "INHALATION HAZARD" marking is illegible or missing en route, notify the train dispatcher, yardmaster, or your supervisor, as appropriate. They will arrange to correct the problem at the next inspection point.

e) COMMODITY NAME
1) The commodity name is required on intermodal tanks transporting any hazardous materials and on tank cars transporting certain hazardous materials. The commodity name (3.9 inches in height for tank cars and 2 inches in height for intermodal tanks) must match the proper shipping name on the shipping papers and may include the technical name, although it is not specifically required. The commodity name must be on two opposing sides of the intermodal tank or tank car.

2) When **accepting** an intermodal tank or tank car of hazardous materials from the shipper or in interchange and the commodity name is Illegible or missing:
   i. Notify the customer, train dispatcher, yardmaster, or your supervisor, as appropriate.
   ii. Do **not** accept the shipment until corrections have been made.
3) When the commodity name on a tank car is discovered illegible or missing en route, notify the train dispatcher, yardmaster, or your supervisor, as appropriate. They will arrange to correct the problem at the next inspection point.

NOTE: See Appendix 1 (on page 50) for list of materials that require the commodity name stencil on tank cars.

f) TANK CAR QUALIFICATION DATES

1) Make sure the stencils describing the tank car specification (e.g. DOT 111A100W1) and qualification dates are legible (see Figure 8). These stencils will appear on both sides of the tank car toward the end on the right as you face the car.

2) Make sure the tank car qualification dates for pressure relief devices (PRD), tank, and interior heater coils are current (a car is currently within the qualification date until the last day of the year shown) (see Figure 8).

NOTE 1: When the car is loaded before the end of the year, it may be transported for unloading purposes but must be requalified before reloading.

NOTE 2: A tank car containing the residue of a hazardous material that is overdue its periodic qualification date may move and not be in violation of DOT regulations. The regulations only address loading a tank car overdue for its periodic qualification.

3) **When the qualification date is overdue, do not accept loaded tank cars from shipper.**

4) When found en route, car may proceed to destination after contacting your supervisor.

Figure 8. Tank Car Test Date

DOT 111A100W1		STATION STENCIL	QUALIFIED	DUE
TANK QUALIFICATION		ABC-1	2002	2012
THICKNESS TEST		ABC-1	2002	2012
SERVICE EQUIPMENT		ABC-1	2002	2012
PRD:	75 PSI	DEF-1	2002	2012
INT HTR	SPGR	FGL-1	2002	2012
LINING		ABC-1	2007	2012
88.B.2 INSPECTION		ABC-1	2002	2012
STUB SILL INSPECTION		ABC-1	2002	2012

Tank Car Qualification Date (new style)

g) FUMIGANT Mark

1) As information, the purpose of the FUMIGANT mark (see Figure 9) is to warn persons unloading the rail car, trailer, or container that it has been fumigated and that they must take appropriate precautions before unloading the car. The (*) on the mark will be replaced by the name of the fumigant.

2) The FUMIGANT mark must be in English. However, EPA regulations allow another language in addition to the English version on the same Fumigant mark or on another one.

NOTE: The fumigant marking is required on international points of entry for a trailer or container.

3) Shipping Description Entries

i. For U.S. shipments that are fumigated, information on the shipping papers is not required.

ii. For International (Canadian and IMDG) shipments verify that the information for the shipment on the shipping papers includes the following entries: UN 3359. Fumigated Unit, name of the fumigant, amount of fumigant, date of fumigation and disposal information.

Figure 9. Fumigant Mark

h) Inspecting for Non-Odorized Marks

A tank car or intermodal tank container transporting Liquefied Petroleum Gas (LPG) that is unodorized must be legibly marked NON-ODORIZED or NOT ODORIZED on two opposing sides near the marked proper shipping name or near the placards.

The NON-ODORIZED or NOT ODORIZED marks may appear on a tank car or tank container used for both unodorized and odorized LPG.

Shippers may include on shipping papers the information that the shipment is not odorized, if they so choose.

SECTION V - SWITCHING

1. General Requirement

Switch placarded hazardous material shipments only in compliance with the restrictions on the Switching Chart (see Figure 10).

Switching is defined as "the operation of moving rail cars within a yard in order to place them in a train or on a classification, repair, or storage track." Switching also includes making pickups and setouts at a customer's facility or Interchange points. Switching does **not** include moving rail cars to or from a shipper's facility or industry track into or out of the yard.

Reminder: When moving rail cars to or from a shipper's facility or on an industrial lead into or out of the yard, comply with both the train placement restrictions in Section VI and the required documentation requirements in Section II.

WHEN HAZMAT RAIL CARS ARE CUT OFF IN MOTION, THE COUPLING SPEED MUST NOT EXCEED 4 MILES PER HOUR.

2. Safety

Before coupling, position yourself toward the end of a tank car, if possible, away from the manway and valves. Contents of tank cars may splash during or immediately following coupling, due to improperly secured closures.

3. When to Use the Switching Chart

Refer to the Switching Chart:

a) When moving placarded hazardous material shipments in a yard to place them in a train or on a classification, repair, or storage track.
b) When making pickups or setouts of placarded hazardous material shipments at a customer's facility, interchange point, or other setout point.

4. How to Use the Switching Chart

a) Select the applicable column and row of the Switching Chart. To do so:
   1) Identify the placards and/or markings applied to the car, either from information on the shipping papers or from observation.

   NOTE: When placards are displayed but are not required by regulation (permissive placarding), the rail car must be switched as required for the placard displayed.

   2) Determine whether the car is loaded or residue/empty.

   NOTE: Residue/empty tank cars are identified on switch lists, track lists, and track inquiries with an "E" in the appropriate field. The notation "RESIDUE: LAST CONTAINED" on the shipping papers indicates a residue/empty shipment (if the "HAZARDOUS" button was selected when printing from MCS).

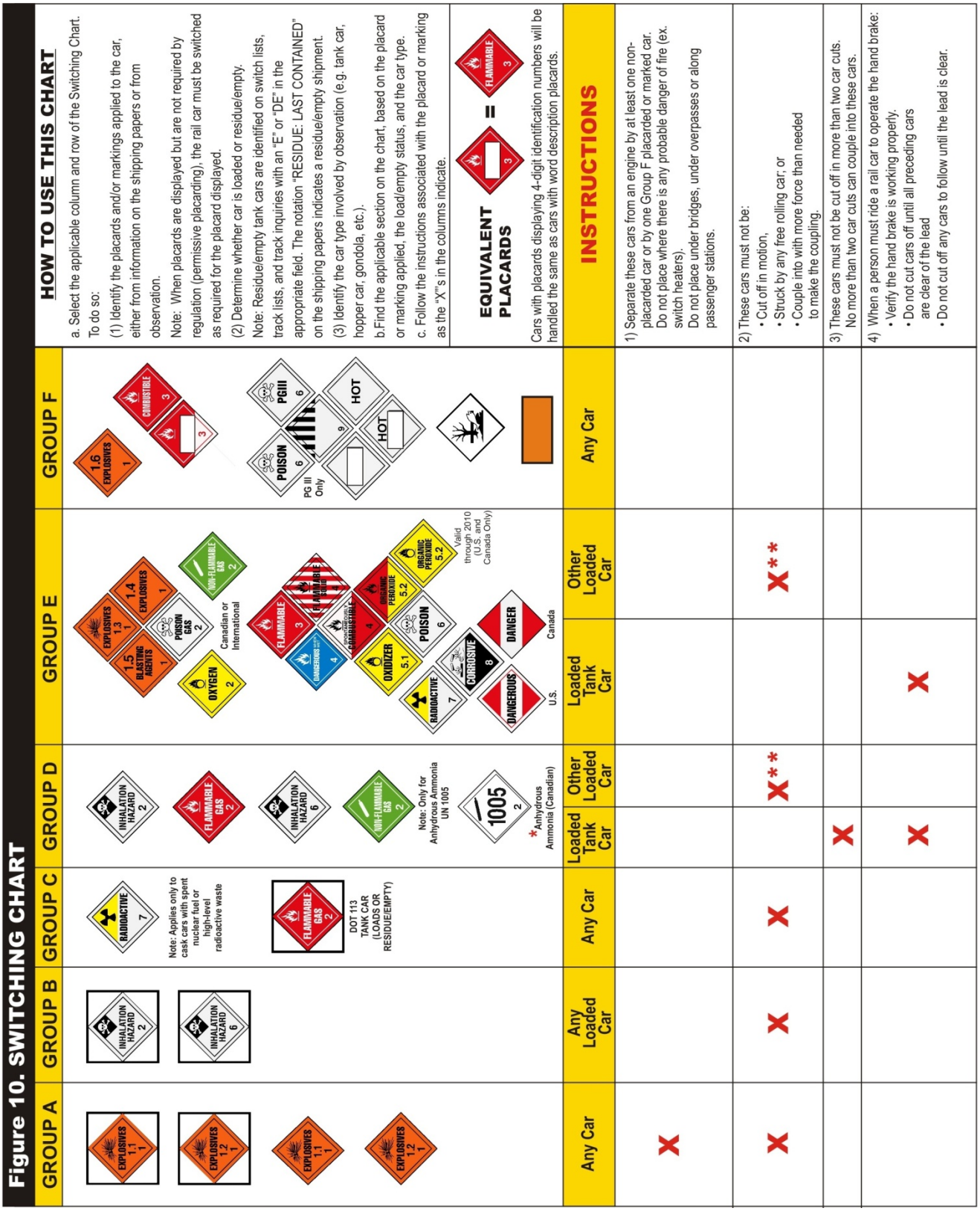
   3) Identify the car type involved by observation (e.g. tank car, hopper car, gondola, etc.).
b) Find the applicable section on the chart, based on the placard or marking applied, the load/empty status, and the car type.
c) Follow the restrictions associated with the placard or Marking as the "X"s in the columns indicate.

See Next Page

for HazMat

Switching Chart

(Figure 10)



*Authorized only for U.S. to Canada or Canada to U.S. shipments.
**Applies only to placarded flatcars, trailers, portable tanks, tote bins, intermodal portable tanks, or U.N. portable tanks.
NOTE: The word "toxic" can be used in place of the word "poison" on placards displayed in Group E and Group F.

Figure 10. HazMat Switching Chart

SECTION VI - TRAIN PLACEMENT

1. General Requirement

Place placarded hazardous material shipments in a train so as to comply with the instructions on the Position-in-Train Chart (Figure 11).

NOTE: Correct hazardous material train placement errors at the first location that allows switching, once error is identified.

A **Train** is one or more engines coupled, with or without rail cars, displaying a marker, and requiring an appropriate air brake test.

2. When to Use the Position-in-Train Chart

Use the chart to make sure placement position in train is correct:

a) Before a train departs the initial terminal
b) Before a train departs an intermediate station where pickups and setouts were made en route
c) When delivering cars to interchange tracks that are owned and operated by another railroad.

3. How to Use the Position-in-Train Chart

a) Select the applicable column of the Position-in-Train Chart. To do so:
   1) Identify the placards and/or markings applied to the car, either from the shipping papers or from observation.

   NOTE: When placards are displayed but are not required by regulation (permissive placarding), the rail car must be switched as required for the placard displayed.

   2) Determine whether the car is loaded or residue/empty.

   NOTE: Residue/empty tank cars are identified on switch lists, track lists, and track inquiries with an "E" in the appropriate field. The notation "RESIDUE: LAST CONTAINED" on the shipping papers indicates a residue/empty shipment (if the "HAZARDOUS" button was selected when printing from MCS).

   3) Identify the car type involved by observation (e.g. tank car, hopper car, gondola, etc.).

b) Find the applicable section on the chart, based on the placard or marking applied, the load or residue/empty status, and the car type.
c) Follow the instructions associated with the placard or marking, as the "X"s in the columns indicate.

4. General Information

a) For train placement purposes, each platform or well of an intermodal rail car counts as one car.
b) A buffer car is a:
   1) non-placarded rail car
   2) rail car with a placard or marking shown in Group E.
   3) residue/empty tank car, as long as it complies with Instruction # 2 on the Position-in-Train Chart.
   4) placarded rail car, other than a tank car, as long as it complies with Instruction # 6 on the Position-in-Train Chart

c) The word "TOXIC" can appear in place of the word "POISON" on placards.
d) A business car train is not a passenger train**.**
e) An engine, working or not working and regardless of placement in train, is always considered as an engine for train placement of hazardous materials.

See Next Page

for HazMat

Train Placement

Chart

(Figure 11)

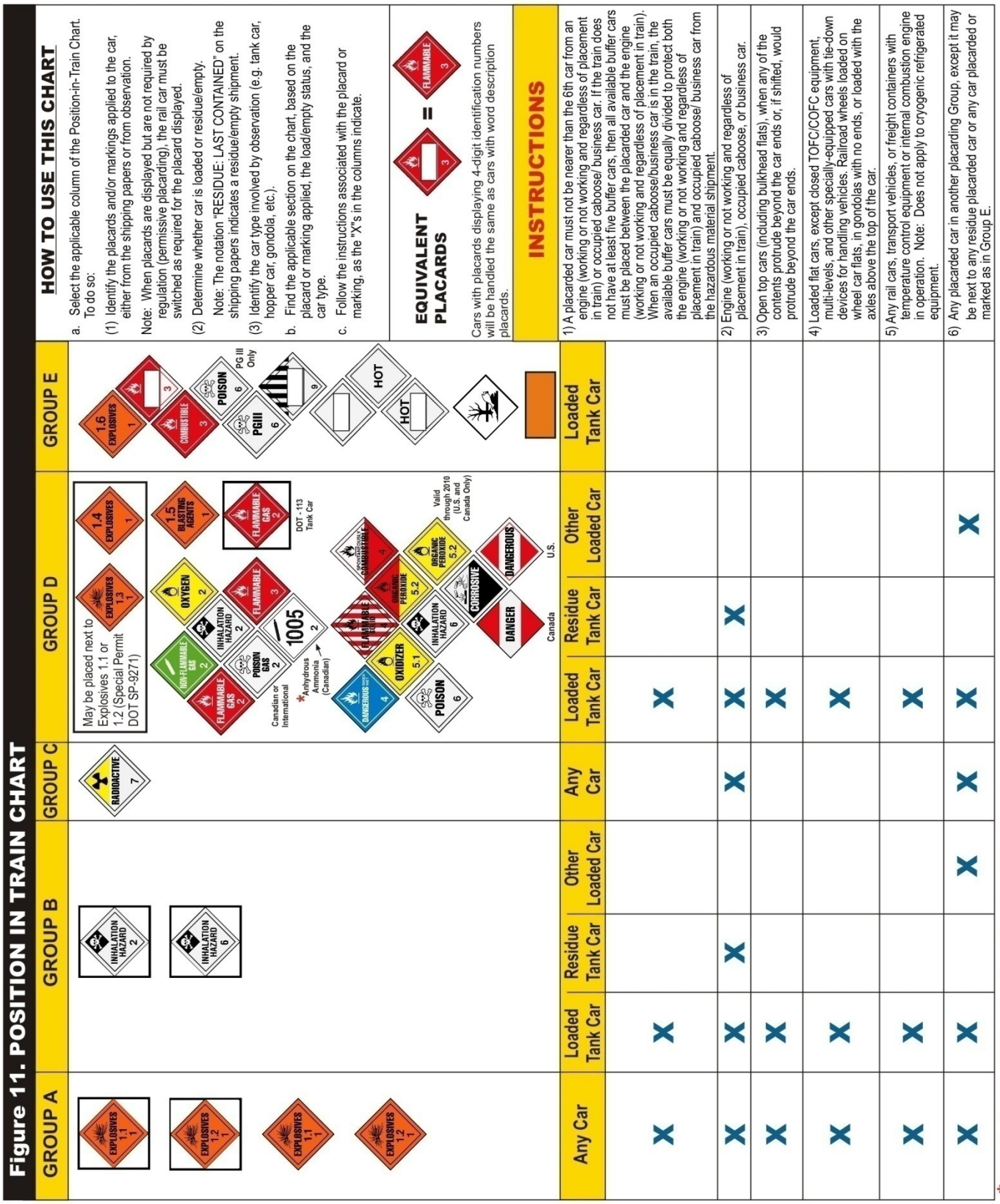


Figure 11. HazMat Train Position Chart

NOTE: The word “toxic” can be used in place of the word “poison” on placards displayed in Group D and Group E.

NOTE: A rail car placarded in Division 1.1 or 1.2; Division 2.3 (Hazard Zone A: Poisonous Gas); or Division 6.1 (PG I. Hazard Zone A: Poisonous Liquid) in a moving or standing train must be next to and ahead of any car occupied by the guards or technical escorts accompanying placarded rail car. However, if a rail car occupied by the guards or technical escorts has temperature control equipment in operation, it must be the fourth car behind any car requiring Division 1.1 or 1.2 (Explosives) placards.

SECTION VII - KEY TRAINS

1. General Requirement

Trains carrying specified numbers of loaded rail cars, trailers, or containers of hazardous materials must be operated as "Key Trains."

2. Key Train Definition

A "Key Train" is any train with:

a) One or more car loads of Spent Nuclear Fuel (SNF), High Level Radioactive Waste (HLRW);
b) Five or more tank car loads of Poison or Toxic Inhalation Hazard (PIH or TIH), anhydrous ammonia (UN1005), or ammonia solutions (UN3318). These cars will be flagged on printed train documents, track lists, wheel reports and consists with the term **** KEY 5 Shipment **** located just below the initial and number;
OR
c) 20 or more car loads or intermodal portable tank loads of a combination of PIH or TIH, anhydrous ammonia (UN1005), ammonia solutions (UN3318), Division 2.1 flammable gas, Class 1.1 or 1.2 explosives, and environmentally sensitive chemicals. These cars wills be flagged on the printed train documents, track lists, wheel reports and consists with the term **** Key 20 Shipment **** located just below the initial and number.
Exception: Do not count box cars, trailers, or containers of hazardous materials when determining key train status.

Table 3. Environmentally Sensitive Chemicals and STCC Numbers

- Ally Chloride (4907412)
- Carbon Tetrachloride (4821831, 4860106, 4921830, 4921831, 4960115)
- Chlorobenzene (4909153)
- Chloroform (4921767, 4921769, 4925224, 4925225)
- o-Dichlorobenzene (4915132, 4925203)
- Dichloropropane (Propylene dichloride) (4909265)
- Dichloropropane/Dichloropropene mixture (4910234)
- Dichloropropene (4909255)
- Ethyl Chloride (4905712, 4908129, 4908162)
- Ethylene Dichloride (4909166, 4912081, 4908129, 4910437, 4913242, 4913295, 4921030)
- Epichlorohydrin (4921005)
- Methyl Chloroform
- (1,1,1 Trichloroethane) (4825182, 4925182, 4910463, 4910475, 4925310, 4960205)
- Methylene Chloride (Dichloromethane) (4925131, 4905764)
- Methylene chloride/chloroform mixture (4960150)
- Perchloroethylene (Tetrachlorothylene) (4825202, 4910134, 4925202)
- Perchloroethylene/Trichloroethylene mixture (4940373)
- Trichloroethylene (4825181, 4925181)

3. Identifying Key Trains

a) A computer-generated train consist/train list will identify Key Train status in the header block on the first page.
b) When a computer-generated train consist/train list is not available, or hazardous material cars are added to a train, the conductor must review the shipping papers for all hazardous material cars and determine Key Train status.
c) After picking up or setting out hazardous material shipments en route, the Key Train status may change. The conductor must determine whether or not Key Train status has changed and, if so, promptly notify the train dispatcher.

4. Instructions for Operating Key Trains

a) The maximum authorized speed for Key Trains is 50 MPH, unless further restricted.

NOTE: Where lower speed restrictions are in effect, or when the train is restricted to a lower speed for other reasons, the lower speed governs.

b) A key train will hold the main track, when practicable, unless a speed of greater than 10 MPH is authorized for the siding or auxiliary track.
c) Only cars equipped with roller bearings will be allowed in a Key Train.
d) When a defect in a Key Train is reported by a wayside/trackside warning detector but a visual inspection fails to confirm evidence of a defect, the train must not exceed 30 MPH until it has passed over the next wayside detector or is delivered to a terminal for a mechanical inspection. If the same car sets off the next detector or is found to be defective, it must be set out from the train.
e) Unless relieved of the requirement to do so by the operating railroad's train dispatcher, the crew operating a Key Train on a foreign railroad must, at the earliest opportunity, notify the foreign railroad's train dispatcher that the train is a Key Train as defined by the operating railroad.

SECTION VIII - EMERGENCY RESPONSE

1. General Requirement

When an emergency occurs, SAFETY IS OF FIRST IMPORTANCE.

a) Make an emergency call as radio rules require, providing the train dispatcher, yardmaster, or critical incident desk (877)527-9464 or (816)983-1895 with as much information as is available.
b) Look for a fire or vapor cloud.
c) Determine the status of crew members in the area.
d) Warn and keep everyone at a safe distance.

2. When a Fire or Vapor Cloud is Visible

a) Take the shipping papers (including the emergency response information) and the Emergency Response Guidebook and move yourself and other crew members uphill and upwind the evacuation distance recommended in the Emergency Response Guidebook. Stay out of ditches and low areas.
b) Do not smoke or use fuses.
c) Provide the train dispatcher, yardmaster, or critical incident desk (877)527-9464 or (816)983-1895 with as much of the following information as is available:
   1) Specific location of the emergency (station, mile post location, nearest street or crossing)
   2) Type of emergency
   3) Status of crew members
   4) Cars involved, including each car's initials and numbers and their extent of involvement (for example, leaking, derailed, or on fire).
   5) Surroundings (e.g., proximity to populated areas, local bodies of water, or nearby drainage ditches or storm sewers; description of terrain; location of access roads; weather conditions)
   6) Resources necessary to handle the situation (for example, fire, ambulance, and law enforcement agencies)
   7) Location where a crew member with shipping papers will meet arriving emergency response personnel.

d) Once you are in a safe location:
   1) Identify yourself and cooperate with the local emergency response personnel as described in Section VIII item 4.
   2) Review your shipping papers and emergency response information.
   3) If necessary, move to the farthest distance recommended in:
      i. Information from the Emergency Response Guidebook.
         or
      ii. Other supplementary emergency response information printed as part of the train list/consist.

3. When No Fire or Vapor Cloud is Visible

a) Review the shipping papers for hazardous material shipments.
b) Take the shipping papers (including the emergency response information) and the Emergency Response Guidebook and inspect the train to identify the railcars, trailers, or containers involved, and look for indications of the release of hazardous materials.
c) When you encounter a hazardous material release, unusual smells, or noises during this inspection:
   1) Avoid contact with the material and its vapors.
   2) Move yourself and other crew members upwind and uphill the evacuation distance recommended in the Emergency Response Guidebook. Stay out of ditches and low areas.
   3) Eliminate any ignition sources (no smoking, no fuses).
   4) Warn all bystanders to stay away.

d) After completing the inspection, notify the train dispatcher, yardmaster, or critical incident desk (877)527-9464 or (816)983-1895 with as much of this information as is available:
   1) Status of crew members
   2) Cars involved, including each car's initials and numbers and their extent of involvement (for example, leaking, derailed, or on fire).
   3) Surroundings (e.g., proximity to populated areas, local bodies of water, or nearby drainage ditches or storm sewers; description of terrain; location of access roads; weather conditions).
   4) Resources necessary to handle the situation (for example, fire, ambulance, and law enforcement agencies).
   5) Location where a crew member with shipping papers will meet arriving emergency response personnel.

e) Once you are in a safe location:
   1) Identify yourself and cooperate with the local emergency response personnel as described in Section VIII item 4.
   2) Review your shipping papers and emergency response information.
   3) If necessary, move to the farthest distance recommended in:
      i. Information from the Emergency Response Guidebook.
         or
      ii. Other supplementary emergency response information printed as part of the train list/consist

4. Cooperating with Local Emergency Responders

a) Share any requested information from the shipping papers with emergency response personnel.
   1) Provide an extra copy of the train consist/train list, when available.

   NOTE: Retain any waybills and a copy of the train consist/train list until you can deliver them to the first railroad manager on the scene or incident commander.

   2) Provide a copy of the emergency response information provided with the shipment.

b) Help emergency response personnel identify cars and the commodities involved. Use shipping papers or observations from a safe location to accomplish this task.
c) Give the first railroad manager on the scene an oral description of the incident and indicate any assistance you provided emergency responders.
d) Remain at the scene, at a safe distance, until a railroad manager relieves you.
e) A railroad spokesperson will handle discussing the incident with the media or other non-emergency response personnel.

5. Handling Leaking Hazardous Material Shipments

Take these actions when there is any sign of leakage:

a) Do not allow the hazardous material shipment to continue in transportation until the leak is controlled.

NOTE: Leaking hazardous material shipments may be moved, with proper railroad authority, only as far as necessary to reduce or eliminate the immediate threat of harm to human health, the environment, or railroad operations. Movement of leaking hazardous material shipments may require government approval.

b) When it is necessary to move a leaking hazardous material shipment, use an adequate number of buffer cars between the locomotive and the leaking car, to prevent chemical exposure.

APPENDIX

List of materials that require the commodity name stencil on tank cars:

- Division 2.1 materials
- Division 2.3 materials
- Acrolein, stabilized
- Ammonia, anhydrous, liquefied
- Ammonia solutions (more than 50% ammonia)
- Bromine or Bromine solutions
- Bromine chloride
- Chloroprene, stabilized
- Dispersant gas or Refrigerant gas
- Formic acid
- Hydrocyanic acid, aqueous solutions
- Hydrofluoric acid, solution
- Hydrogen cyanide, stabilized (less than 3% water)
- Hydrogen fluoride, anhydrous
- Hydrogen peroxide, aqueous solutions (greater than 20% hydrogen peroxide)
- Hydrogen peroxide, stabilized
- Hydrogen peroxide and peroxyacetic acid mixtures
- Nitric acid (other than red fuming)
- Phosphorus, amorphous
- Phosphorus, white dry or Phosphorus, white, under water or Phosphorus white, in solution, or Phosphorus, yellow dry or Phosphorus, yellow, under water or Phosphorus, yellow, in solution
- Phosphorus white, molten
- Potassium nitrate and sodium nitrate mixtures
- Potassium permanganate
- Sulfur trioxide, stabilized
- Sulfur trioxide, uninhibited

GLOSSARY

Attended – a situation where an employee or authorized representative:

1. Is physically located on site in reasonable proximity to the rail car;
   and
2. Can and does immediately:
   a. Contact law enforcement. Respond to any unauthorized access or activity at or near the rail car;
      or
   b. Contact law enforcement.

Buffer car – a non-placarded rail car, a railcar with a placard or marking shown in Group F on the Switching Chart or Group E on the Position-in-Train Chart, a residue/empty tank with no other restrictions, or a placarded rail car with no other restrictions.

Bulk packaging – packaging with capacity greater than 119 gallons or 882 pounds. For example, bulk bags, intermodal (IM) portable tanks, portable tanks, portable bins, gondola cars, hopper cars, or tank cars.

Container – any freight container, intermodal (IM) portable tank, portable tank, or portable bin.

Emergency – an unforeseen combination of circumstances or the resulting state that calls for immediate action (for example, derailment and leaks).

Emergency response information – hazard and response information for each hazardous material, contained in the Emergency Response Guidebook (ERG) and supplemented with the train documentation, to assist response personnel at hazardous material incidents.

Engine – means a locomotive propelled by any form of energy and used by a railroad.

Hazard class – the category of hazard assigned to a material. A class may be subdivided into divisions for clarity. A class may be expressed as a number or with words.

Hazardous material – a substance or material which the Secretary of Transportation has determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. The term “hazardous material” includes hazardous substances, hazardous wastes, elevated temperature materials (HOT or MOLTEN), and marine pollutants.

Hazardous material shipment – a hazardous material in rail cars, trailers, or containers in rail transportation. All hazardous material shipments require shipping papers. When moved in rail cars, trailers, or containers, hazardous material shipments may or may not be placarded or marked with an identification number.

Hazardous waste manifest – a document specifically for tracking hazardous wastes in transportation. It contains the shipping description and identifies the waste generator, each transporter, and the disposal facility. This document is directed to the KCS CSC for proper handling.

Hazard zone – one of four levels of inhalation hazard (Hazard Zones A through D) assigned to gases, and one of two levels of hazard (Hazard Zones A and B) assigned to liquids that are poisonous/toxic by inhalation. For example, when the hazard zone is “A,” it is shown on the shipping paper as “Zone A.” Zone A is the most hazardous, and Zone D is the least hazardous.

High Threat Urban Area (HTUA) – means an area comprising one of more cities and surrounding areas including a 10-mile buffer zone identified as such by the Transportation Security Administration (TSA). HTUA's directly served by KCSR are:

- Baton Rouge, LA;
- New Orleans, LA;
- Kansas City and Independence, MO; Kansas City, Olathe and Overland Park, KS;
- St. Louis, MO;
- Dallas, Fort Worth, Arlington, Carrollton, Garland, Grand Prairie, Irving, Mesquite and Plano, TX;
- Houston and Pasadena, TX

And all points within 10 miles from the border of each city or combination of cities, including Wylie, TX.

Improvised Explosive Device (IED) - A device fabricated in an improvised manner incorporating explosives or destructive, lethal, noxious, pyrotechnic, or incendiary chemicals in its design, and generally includes a power supply, a switch or timer, and a detonator or initiator.

Inhalation Hazard – Term used to identify certain gases and liquids that may cause health problems if breathed in very low concentrations for short periods of time.

Interchange – the process of transferring rail cars to or from another railroad.

Limited Quantity (LTD QTY) – a term used on shipping papers to indicate a hazardous material shipment which is allowed an exception to the labeling, packaging, and placarding requirements because the hazard associated with a small package is low.

Marking – a descriptive commodity name, identification number, caution (such as INHALATION HAZARD, HOT, MOLTEN, or MARINE POLLUTANT), or tank car test date displayed on hazardous material shipments. (See Section IV for marking requirements.)

Movement Approval – a onetime authorization to move a non-conforming package not meeting the applicable hazardous material regulations. This provides no relief of any regulations other than specifically stated on the approval.

N.O.S. – initials, found on shipping papers, which mean "Not Otherwise Specified".

Non-bulk packaging – packaging with a capacity equal to or less than 119 gallons or 882 pounds. For example, bags, bottles, boxes, cylinders, or drums.

ORMD – (Other Regulated Materia**l** - D) a material such as a consumer commodity that, due to its form, quantity, and packaging, presents such a limited hazard that it is not subject to the hazardous material regulations when transported by rail.

Packing group – a grouping of hazardous materials according to the degree of danger:

- Packing Group I (shown as "PG I" or "I" on the shipping papers) indicates great danger.
- Packing Group II (shown as "PG II" or "II" on the shipping papers) indicates medium danger.
- Packing Group III (shown as "PG III" or "III" on the shipping papers) indicates minor danger.

Placard – a sign measuring 10 3/4 inches by 10 3/4 inches square-on-point, communicating a hazard by symbol, color, and words or numbers. Some placards must be displayed on a square background which is white with a black border (see Figure 4 for examples of placards).

Placarded car – a rail car displaying placards in accordance with DOT regulations.

Poison Inhalation Hazard (PIH) – term used to identify certain gases and liquids that may cause health problems if breathed in very low concentrations for short periods of time.

Position-in-Train document – a document showing the current position of all hazardous material shipments within the train. This document could be the train consist/Train List or a separate document specifically for this purpose.

Positive Hand-off or RSSM Shipments – a situation where an RSSM shipment must be:

1. Attended by an employee or authorized representative of both the railroad and the shipper/receiver or interchanging railroad;
2. Inspected by the designated employee or crew member accepting the RSSM. Inspection must include looking for signs of tampering and for foreign objects, including IED's;

   and

3. Documented by recording the car initial and number, the first and last name of the individual who attended the transfer, the location of the transfer, and the date and time of the transfer.

Radio waybill – a form used to record shipping description entries provided orally.

Rail car – equipment used in rail transportation. For example, box car, flat car, gondola car, hopper car, tank car, or caboose, but not an engine**.**

Rail Security-Sensitive Material (RSSM) – a shipment of one or more of the categories quantities below:

1. Rail car containing more than 5,000 lbs (2,268 kg) of a Division 1.1, 1.2, or 1.3 (explosive) material;
2. Loaded tank car containing a material poisonous by inhalation including anhydrous ammonia;

   and

3. Rail car containing a Class 7 (radioactive) material moving under the following Hazardous Materials Response Codes – 4929142, 4929143, 4929144, and 4929147.

Residue – the hazardous material remaining in a packaging, including a tank car, after its contents have been unloaded to the maximum extent possible. It is indicated on the shipping papers by the phrase "RESIDUE: LAST CONTAINED" before the proper shipping name.

Special Permit – Special Permit means a document issued by the Associate Administrator under the authority of 49 U.S.C. 5117 permitting a person to perform a function that is not otherwise permitted under subchapter A or C of this chapter, or other regulations issued under 49 U.S.C. 5101 et seq. (e.g. Federal Motor Carrier Safety routing requirements). The terms "special permit" and "exemption" have the same meaning for purposes of subchapter A or C of this chapter or other regulations issued under 49 U.S.C. 5101 through 5127. An exemption issued prior to October 1, 2005, remains valid until it is past its expiration date, terminated by the Associate Administrator, or issued as a special permit, whichever occurs first.

Shipper's Certification – a signed (or electronically printed) declaration on the shipping paper provided by the shipper to the first transporter for a loaded hazardous material shipment. It indicates compliance with the DOT regulations. The certification must be signed by hand or mechanically. It may read either:

> "This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation."
>
> **or**
>
> "I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations."

Shipping paper – any document providing the appropriate entries for a hazardous material shipment. (See Section II for shipping paper requirements.)

Switching – the operation of moving rail cars within a yard, at a customer's facility, or at an interchange point, in order to place them in a train or on a classification, repair, or storage track. It does **not** include moving rail cars to or from a shipper's facility or industry track into or out of the yard.

Technical name – a recognized chemical name used in scientific and technical handbooks, journals, and texts to further identify a hazardous material.

Toxic Inhalation Hazard (TIH) – term used to identify certain gases and liquids that may cause health problems if breathed in very low concentrations for short periods of time.

Train – one or more engines coupled, with or without rail cars, displaying a marker, and requiring an appropriate air brake test.

Yard – a system of tracks, other than main tracks and sidings, used for making and breaking up trains and for other purposes, such as repair or storage of cars.

Additional Radio Waybill Forms:

HAZARDOUS MATERIAL RADIO WAYBILL
NOTE: Print Legibly

****
* *
* HAZARDOUS MATERIAL *
* *
****

1. Train Number _____
2. Number of Cars from Head End _____
   (Update the position-in-train documents)
3. Car Initial & No. _____
4. Total Quantity Notation (Circle One)
   Tank Car or Car Load or Residue: Last Contained or Other
   If Other specify weight or volume.
5. Number of Packages or Car(s) _____

***** Description of Articles *****

6. Identification No. (UN.NA) _____
7. Proper Shipping Name _____
   _____
8. Technical Name (_____)
9. Primary Hazard Class _____
   Subsidiary Hazard Class(es) _____
10. Packing Group (PG): I II III **(Circle One)**
11. Reportable Quantity (RQ): (_____)

***** Additional Information *****

12. Poison/Toxic Inhalation Hazard:
    Zone A, Zone B, Zone C, Zone D **(Circle One)**
13. Marine Pollutant (_____)
14. DOT Special Permit Number(s):
    _____
15. Additional Information _____
    _____
16. ERP Plan No.: _____
    (Canadian Shipments Only)
17. ERP Telephone No.: (____) _____-_____.
    (Canadian Shipments Only)
18. Emergency Contact Name: _____
19. Emergency Contact No.: (____) _____-_____.

Completed Date: ____. / ____. / ____. Time: ____. : ____. AM PM
MO DAY YR

HAZARDOUS MATERIAL RADIO WAYBILL
NOTE: Print Legibly

****
* *
* HAZARDOUS MATERIAL *
* *
****

1. Train Number _____
2. Number of Cars from Head End _____
   (Update the position-in-train documents)
3. Car Initial & No. _____
4. Total Quantity Notation (Circle One)
   Tank Car or Car Load or Residue: Last Contained or Other
   If Other specify weight or volume.
5. Number of Packages or Car(s) _____

***** Description of Articles *****

6. Identification No. (UN.NA) _____
7. Proper Shipping Name _____
   _____
8. Technical Name (_____)
9. Primary Hazard Class _____
   Subsidiary Hazard Class(es) _____
10. Packing Group (PG): I II III **(Circle One)**
11. Reportable Quantity (RQ): (_____)

***** Additional Information *****

12. Poison/Toxic Inhalation Hazard:
    Zone A, Zone B, Zone C, Zone D **(Circle One)**
13. Marine Pollutant (_____)
14. DOT Special Permit Number(s):
    _____
15. Additional Information _____
    _____
16. ERP Plan No.: _____
    (Canadian Shipments Only)
17. ERP Telephone No.: (____) _____-_____.
    (Canadian Shipments Only)
18. Emergency Contact Name: _____
19. Emergency Contact No.: (____) _____-_____.

Completed Date: ____. / ____. / ____. Time: ____. : ____. AM PM
MO DAY YR

Internal Control Plan

Internal Control Plan
Policy Statement
of
The Kansas City Southern Railway Company
& Gateway Eastern Railroad

Concerning Complete and Accurate
Reporting of Accidents and Injuries,
without Harassment or Intimidation

Harassment

KCSR and GWER are committed to complete and accurate reporting of all accidents, incidents, injuries, and occupational illnesses arising from the operation of the railroad, to full compliance with the letter and spirit of the Federal Railroad Administration's accident reporting regulations, to the principle, in absolute terms, that harassment or intimidation of any person that is calculated to discourage or prevent such person from receiving proper medical treatment or from reporting such accident, incident, injury or illness will not be permitted or tolerated and will result in disciplinary action against any employee, supervisor, manager or officer committing such harassment or intimidation.

Complaints

KCSR and GWER will investigate all complaints from any person about the policy stated above being violated and impose the appropriate prescribed disciplinary actions on any employee, supervisor, manager, or officer of the Company found to have violated the policy. This railroad shall provide "whistleblower" protection to any person subject to this policy. Any violation of this policy or any other should be reported to the Speak Up hotline at 800-727-2615 or to any company official. Reports to the Speak Up hotline may be made anonymously.

This policy statement is required by Federal regulation, 49 CFR § 225.33.

KCS Vision

Our Vision . . .

To be a strong, independent transportation company that consistently delivers exceptional service to our customers, challenging careers to our employees and increasing value to our customers.

Our Values . . .

Safety:

We recognize that Safety is our first priority. Every employee is responsible for their own safety and the safety of others and is empowered to take the actions necessary to accomplish this goal.

Customer Focus:

We are focused on satisfying our customers by consistently meeting or exceeding their service expectations. This is accomplished by promising only what we can deliver and always delivering what we promise.

Financial Results:

We are committed to providing a financially strong company for our customers, employees, and shareholders by reliably executing our service commitments, effectively managing our company resources, and strategically investing for growth.

Accountability:

We recognize that individual efforts contribute to the success of our company and employees are given ownership of the processes they control and the responsibility for the outcome of their effort.

Communications:

We support an environment of honest, open communications where dialogue and information sharing are valued and individual contributions are encouraged and respected.

Quality Principles:

We operate our company by focusing on the customer and meeting their needs through effective planning and control, teamwork and fact-based decision making, and relentless emphasis on continuous process improvement.

KCS Legacy:

We honor and carry on the unique legacy of KCS - its ambitious, entrepreneurial spirit and can-do attitude. We continue our tradition of being committed to family and being responsible citizens in the communities where we live and work.