MAINTENANCE OF WAY AND STRUCTURES STANDARD PROCEDURE

No 180: HOUSE TRAILERS / CAMP CARS

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File number: ORD 0120046

All previous procedures and instructions in conflict herewith are superseded to the extent of the conflict upon receipt of this procedure.
SCOPE AND NATURE

To provide a safe, uniform system of protecting and maintaining Company-owned house trailers and camp cars.

SPECIAL REFERENCES

- MW&S Standard Procedure 130  Fire Prevention
- MW&S Standard Procedure 205  Prevention of Theft and Vandalism
- Norfolk Southern Safety and General Conduct Rules
- Norfolk Southern Operating Rules, rules 36 and 36(a-f) -- Protection of Occupied Camp Cars
- Various Brotherhood of Maintenance of Way Employees Agreements
- 49 Code of Federal Regulations, Part 218, Subpart E -- FRA's "Protection of Occupied Camp Cars"
- Drawing Number SHE - 533: Trailer Ground Rod Connections
- House Trailer/Camp Car Inspection Report, Form 11317
- NON Select Requisition And Charge Out Form 11188

OUTLINE OF PROCEDURE

1. CAMPSITE
2. PROTECTION OF Occupied CAMP CARS
3. TRAILER/CAMP CAR SUPPLIES
4. TOILETS
5. WINDOWS AND DOORS
6. GROUNDING
7. ELECTRICAL SERVICE
8. FIRE EXTINGUISHERS
9. SMOKE AND FIRE DETECTORS
10. LIQUEFIED PETROLEUM GAS SYSTEM
11. HOUSEKEEPING
12. TRAILER HIGHWAY ELECTRICAL SYSTEM
13. BEFORE MOVING TRAILERS/CARS
14. STORING TRAILERS/CAMP CARS
15. TRAILER MAINTENANCE & REPAIRS
16. CAMP CAR MAINTENANCE & REPAIRS
17. TAGS, CITY/COUNTY DECALS, PROPERTY TAXES FOR TRAILERS
18. INSPECTION
19. CAMP CAR/HOUSE TRAILER POTABLE WATER PROCEDURE

PROCEDURE

1. CAMPSITE

.01 Trailers/camp cars must not be parked in or close to dead vegetation and the campsite proper must be free of accumulation of trash or other combustibles.

.02 There must be no storage of flammable liquids within 25 feet of trailers/camp cars except in Norfolk Southern approved safety cans.

.03 Trailers must not be parked within 50 feet of depots or other major structures. Trailers must be separated by at least 15 feet, except where connected by elevated walkways.

.04 Trailers must be leveled to provide for efficient operation of appliances.

.05 Trailers/camp cars must not be parked closer than 100 feet of grade crossings.

.06 All exterior camp car waste tanks, must be constructed that they will not leak and must be thoroughly cleaned and maintained in a sanitary condition.

.07 Occupied camp cars and house trailers must not be parked within ½ mile of switching or humping operations or immediate vicinity of any area where switching or humping of placarded cars is performed.

2. PROTECTION OF OCCUPIED CAMP CARS

.01 Occupied camp cars must be protected in accordance with Operating Rules 36 and 36(a-f) and the accompanying definitions immediately preceding these rules.

.02 The “effective locking device” defined in the rules is the Abloy – Model 350 lock with sleeve, 006117-0. Whenever a switch is locked with the MW&S switch lock, it is to be tagged with a “Switch Out of Service” tag, part number 634884-0.
.03 When camp cars are protected for occupancy on a main tack or another track in which cars are stored, or if part of the track is to be used by trains or cars, protection must be as specified in the Operating Rules. Additionally, the camp cars must be protected as follows dependent upon the type rail in the track:

a. Jointed Rail - Break rail apart at least 150 feet beyond the camp cars to form a derail protecting the camp cars. See exhibit page i for diagram.
b. Welded Rail - A portable derail or proper sized hinged derail is to be correctly installed on sound ties at least 150 feet from the camp cars. The derail must be of the correct hand to derail rolling stock away from the main track or most used track. In addition to the installation of the derail, two new ties must be cross laced under the rail 100 feet from the camp cars in order to offer additional protection in the event the derail should fail.

.04 An "Occupied Camp Car" warning signal must be placed at the clear point of each switch providing access to the track on which camp cars for occupancy are placed or at the location of each derail used for camp car protection.

.05 Camp cars for railroad employees are not to be moved when occupied.

.06 Sperry cars, contractor rail grinding trains, etc. are to be protected by use of their private lock where provided. Switches are also to be spiked or clamped. Warning signals are required with occupied contractor equipment.

3. TRAILER/CAMP CAR SUPPLIES

Certain equipment and supplies must be furnished in house trailers and camp cars as provided for in the various Brotherhood of Maintenance of Way Agreements.

4. TOILETS

.01 Microphor Toilets

a. Drain condensation from air reservoir daily.
b. Directly behind the toilet in a metal compartment is an oil sight glass which holds a small amount of 10 wt. oil. The toilet must have oil in order to operate. This is to be checked and filled every two weeks.
c. The water valve in the supply line to the toilet must remain open.
d. Check the chlorine tablet holder twice a week and maintain it at least half full.
e. These toilets will be maintained in operating condition.
f. There must be no deposit of foreign materials in the Microphor Toilets except that for which the toilets were made.
g. Instructions for proper use are posted on toilet side of door at eye level when sitting on commode.
.02 McPherson Toilets

a. There must be no deposit of foreign materials in the McPherson Toilets except that for which the toilets were made.
b. One quart of waste digester must be flushed into the toilet after the last use on the last work day of each week.
c. Waste Digester and Chlorine Tablets, for all Microphor Toilets can be ordered through the Material System.

Waste Digester - part number: 278552-0.
Chlorine Tablets - part number: 012616-0.

.03 Chlorinator

a. These toilets require the use of Microphor Chlorine Tablets ONLY. Any other chlorine tablets may create a potential for explosion hazard, reduce the efficiency of the waste disposal process, and void the toilet warranty. There must be no substitutes.
b. Ordering Microphor Chlorine Tablets:
   (1) Order product ID 915753-0. Condition Code on NON SELECT Material Requisition (NS Form 11188) see exhibit vii.
   (2) Order 8 ounce pkgs. in lots of 50, which will be shipped in a plastic, sealed pail.
c. Chlorine tablets must be kept in a separate airtight plastic bag or container in outside storage compartment.

5. WINDOWS AND DOORS

.01 Two means of exit are provided neither of which must be blocked, wired or chained shut. Doors are not to be locked on the outside, such as with padlock, when trailer is occupied. Doors that are secured with hasps must have a second staple installed in order that the hasp is LOCKED in the OPEN position when the trailer is occupied.

.02 Doors are to be locked when trailers or camp cars are unoccupied.

.03 On trailers equipped with LPG stoves or heaters, all windows directly over the gas cylinders must be permanently fastened to prevent their being opened.

.04 All Windows that open must have screens. If door windows don't open, then unit must have screen door.

6. GROUNDING

.01 Camp trailers must be grounded in compliance with applicable electrical code before making electrical connections.
.02 If there is no local electrical code for the grounding of camp type trailers, then grounding of trailers must be in accordance with drawing SHE 533 (exhibit page ii). Grounding wire must be tightly attached to trailer and ground rod with ground rod properly driven before electricity is connected.

7. ELECTRICAL SERVICE

.01 Trailers or camp cars equipped with LP gas must be opened and inspected for gas leaks before connecting electrical service cable.

.02 Total electric trailers and camp cars and system gang kitchens require 100 amp service. Circuits to which trailers are attached must be adequate for this service.

.03 All service cables, plugs and receptacles must be in good condition and must be a heavy duty, rubber covered, weather proof type. Cables must be run away from walkway or driving areas where possible.

.04 Approved trailer plugs, receptacles, and cable are:

   a. Plugs: For 100 amp service, product ID 336186-0 (MALE) 039456-0 (FEMALE).
   b. Cable: Type 4/0-4 – 100’ roll – Product ID 272651-0

.05 Trailers and camp cars can only draw power through standard approved service cables, plugs, and receptacles. Connections may not be made utilizing any other method such as twisting bare wire around the receptacle prongs. When connecting to a pole, if there is no proper receptacle on the pole, then the connection must be made by a qualified electrician.

.06 When connecting electrical service to trailers or camp cars, all circuit breakers in housing units and on pole or generator must be in off position before connecting, then plug can be connected and breakers turned back on.

.07 Wiring Circuits: Interior wiring and conduit must be in serviceable condition. Circuits must not be tapped or altered by unauthorized personnel.

The proper wiring circuit for gas heated units is:

(1) Black Wire: Hot
(2) White Wire: Neutral
(3) Green Wire: Ground
The proper wiring circuit for total electric units is:

1. Black Wire: Hot
2. Red Wire: Hot
3. White Wire: Neutral
4. Green Wire: Ground

.08 Extension cords, plugs and connectors must be in good condition. Replace any spliced wires or wires that have bad insulation.

.09 Portable generators must be properly cared for, kept clean and in good operating condition, and serviced weekly when in use. No trailer/camp car will receive current from two different generators at one time.

.10 No metal clothes lines, radio or television wires, or metal objects will make contact from one trailer to another or to any other structure except elevated walkways connecting trailers.

.11 Improper Wiring/Ground Fault detector on units equipped with a light on each end of unit, under the electrical cable mounting box. (See exhibit page iii for instruction label.)
   a. When red light is on, it indicates improper wiring.
   b. DO NOT TOUCH TRAILER/CAMP CAR;
   c. Disconnect power cable from power source.
   d. Contact qualified electrician for repairs.

8. FIRE EXTINGUISHERS AND FIRST AID KITS

.01 Each trailer/camp car must have two 5 lb. dry chemical type ABC fire extinguishers, mounted inside near each of the exterior doors.

.02 Kitchen trailers/camp car must have mounted an additional 10 lb. dry chemical type ABC fire extinguisher.

.03 Automatic fire suppression systems in kitchens must be properly maintained and inspected annually by a qualified person.

.04 Fire extinguishers must be kept filled, securely mounted, and in good operating condition. The extinguisher must be inspected on a monthly basis.

.05 Fire extinguishers that do not have operating instructions posted thereon must have operating instructions posted beside each such extinguisher.
.06 See MW&S Standard Procedure 130 "Fire Prevention" for additional information and listing of product ID numbers of approved fire extinguishers.

.07 Each trailer/camp car must have at least one first aid kit that is maintained and made available for occupants of a camp car, for the emergency treatment of an injured person. First Aid Kit – product ID: 006456-0

9. SMOKE AND FIRE DETECTORS, CO DETECTORS, AND WEATHER RADIOS

.01 (2) Smoke Detectors, (2) CO Detectors, and (1) Weather radio must be installed in all trailers and camp cars except kitchens. Smoke Detector – product ID: 177574-0, CO Detector – part number: 703141-0, Weather Radio –(available at Lowes) part number: Midland #WR-120EZ. Kitchen Trailers require, (1) gas/carbon monoxide detector – part number: 580658-0.

.02 Testing Detectors should be tested monthly by a supervisor.

   a. With AC Power: Blow smoke into detector to activate alarm.
   b. With Battery Power: Disconnect AC power and test by blowing smoke into unit.
   c. If a trailer is new or has been in storage, smoke detector must be tested to ensure proper operation before being placed in service.

.03 Maintenance

   a. Batteries must be replaced annually with type specified by manufacturer.
   b. Date of replacement of batteries will be shown on adhesive tape affixed to outside cover of detector.
   c. In case detectors or weather radios become inoperable and neither new battery nor AC power will allow unit to activate, notify - Manager Mobile Equipment, (704) 378-3802, Charlotte, NC

10. LIQUEFIED PETROLEUM GAS SYSTEMS (LPG)

.01 Gas cylinders must be securely mounted and retaining bands around cylinders must be in good condition and securely attached to body.

.02 "Pigtail" copper tubing leads or rubber hose must be securely in place between regulator and cylinder valves.

.03 Piping between regulator and gas appliances must be securely fastened to body.
.04 There must be no gas leaks in the system and all appliances must be securely anchored to the floor or wall and kept in good operating condition, including the pilot lights.

.05 "WARNING" notice plates (see exhibit page iii) must be posted, one at gas cylinders and one at each gas appliance.

.06 If "OPERATING INSTRUCTIONS" are not shown on each gas appliance, they must be posted nearby.

.07 Gas range hood and exhaust fan must be kept clean and free of grease and lint.

.08 Gas furnaces:
   a. Must be free of trash or lint accumulation inside heater cabinet and between heater and walls.
   b. Must have all cabinet parts in place.
   c. Must have flue pipe in good condition with draft hood on top and no heavy accumulation of soot.

.09 Maintenance rules for stoves and heaters are shown on exhibit page iii and are to be followed.

.10 When lighting appliances, the gas valve to the appliance must not be opened until after the lit match or other flammable substance is in place at the pilot light or burner.

.11 If any problem arises with the operation of any gas appliance, no further attempt should be made to light appliance until repaired by qualified personnel. A warning must be posted on the appliance to warn others of the condition.

.12 LPG (such as Propane) Tanks When hauling tanks for refill, tanks must be on their base in an upright position and secured to the truck sides toward the front of the bed. They must NEVER be allowed to roll loose or fall off the vehicle.

.13 Gas vapor leaks must be located by using soap and water solution, and repaired by qualified personnel. Never use a match or other open flame to detect leakage. Close main supply valve on LPG tank before breaking any pipe connection or making repairs.

.14 The safety rules pertaining to LP gas equipment in the NS Safety and General Conduct Rules book.

11. HOUSEKEEPING

.01 Trailer/camp cars and lockers must be kept clean and orderly. Trash cans will be provided. Kitchen facilities and utensils must be kept clean and sanitary. See Rule GR 17.
.02 Interior walls and floor of trailer must be kept clean and free of grease and lint accumulations.

.03 Fusees must NOT be stored in trailers/camp cars.

.04 Strike anywhere matches, if being used, must be stored in a metal can with metal lid.

.05 Smoking in house trailers or camp cars is prohibited.

.06 Gasoline or other flammable solvent is not to be used as a cleaning agent.

.07 When trailers or camp cars are unoccupied over weekends or holidays, hot water heaters and water are to be turned off. When the weather is subject to freezing, the water pipes and tanks must be drained and blown dry. Anti-freeze, product ID 768768-0, must be added to system.

.08 Premises are to be left clean when vacating campsites.

.09 Large gangs are to have exterior garbage containers with covers. All garbage and trash must be disposed of in an environmentally proper manner.

.10 In preparing trailers/camp cars for movement, all appliances must be turned off and all supplies must be properly secured before moving. Check around each trailer/camp car for connection hoses or wires before moving.

.11 Cooking appliances (Hot Plates, Slow Cookers, Microwaves & Coffee Pots) are not to be used in camp cars or house trailers that do not have kitchen facilities.

12. TRAILER HIGHWAY ELECTRICAL SYSTEM

.01 Only approved "pigtail" will be used to connect running lights and brake system to receptacle on the truck.

.02 A 7 prong plug and receptacle meeting SAE standard J 560 b are used to connect the trailer to the towing vehicle. The wiring contacts are identified counterclockwise when looking into the open end of the cable plug.
<table>
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<tr>
<th>Conductor ID</th>
<th>Wire Color</th>
<th>Lamp and Signal Circuit</th>
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<tbody>
<tr>
<td>Wht</td>
<td>White</td>
<td>Ground return to towing vehicle</td>
</tr>
<tr>
<td>Blk</td>
<td>Black</td>
<td>Clearance side marker, and identification lamp</td>
</tr>
<tr>
<td>Yel</td>
<td>Yellow</td>
<td>Left-hand turn signal and hazard light</td>
</tr>
<tr>
<td>Red</td>
<td>Red</td>
<td>Stop lamps and anti-wheel lock devices</td>
</tr>
<tr>
<td>Grn</td>
<td>Green</td>
<td>Right-hand turn signal and hazard signal</td>
</tr>
<tr>
<td>Brn</td>
<td>Brown</td>
<td>Tail and license plate lamps</td>
</tr>
<tr>
<td>Blu</td>
<td>Blue</td>
<td>Brakes</td>
</tr>
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The cable used with this connector must meet SAE Standard J 1067. These items should be readily available at most auto parts houses.

.03 A running test must be made of the trailer brakes as soon as practical upon departure.

13. **BEFORE MOVING HOUSE TRAILERS/CAMP CARS**

.01 All interior contents must be securely stowed. All cabinets, windows, vents and doors are to be closed.

.02 Electrical cables, ground rod, water hose, and steps must be removed and properly stowed. Also garbage cans must be properly stowed.

.03 Gas must be cut off at cylinders.

.04 Trailer brakes, tires, running gear and wheel lugs must be in good condition and checked before each move. Hitch and frame must be free of cracks and without loose parts. Hitch must be latched and safety bolt in place with safety chains properly hooked to truck.

.05 Camp cars must be inspected prior to movement to ensure that they are not over width from items such as TV antennas or window air conditioners.

.06 When camp cars are billed for rail movement, instructions must be issued: "DO NOT HUMP."
14. **STORING HOUSE TRAILERS/CAMP CARS**

.01 Trailers and camp cars as to be clean and free of debris.

.02 Water pipes and tanks must be drained and blown dry. Anti-freeze, product ID 768768-0, must be added to system.

.03 Spray interior with household Lysol.

.04 Turn off LP Gas supply at tank. Disconnect LP gas supply to the gas tanks if possible.

.05 Trailer wheel lugs must be tightened.

.06 House trailers are to be banded.

.07 When trailers or camp cars are to be stored for long periods of time such as at the end of the work season, they should be moved to secure locations in yard and terminals to prevent theft and vandalism.

.08 Make House Trailer/Camp Car Inspection report Form 11317 (see exhibit page vi) indicating in the "OTHER REMARKS" section that the trailer/camp car is being placed into storage.

15. **TRAILER MAINTENANCE AND REPAIRS.**

.01 Purchase of Tires for House Trailers.

  a. Tires may be purchased from any Goodyear or Continental - national account vendor. All tires purchased for house trailers must be coordinated through the Manager Mobile Equipment, (704) 378-3802, Charlotte, NC.
    a. Continental 7400467
    b. Goodyear 6111
  b. Tires for house trailers are local purchase/ODP items. Approval and handling of invoice must be in accordance with current purchasing instructions.

16. **CAMP CAR MAINTENANCE AND REPAIRS – CAMP CARS, TRAILERS AND GENERATORS**

.01 Repairs to all system gang house trailers and rail mounted camp cars and generators are coordinated through the Manager Mobile Equipment in Charlotte, NC. (704) 378-3802.

.02 Repairs to the car body and running gear of all camp cars are made by the NS Mechanical Department.

.03 Any repairs that are directed to be performed by outside parties are subject to current applicable instructions for purchase of materials and services.
17. TAGS, CITY/COUNTY DECALS, PROPERTY TAXES FOR TRAILERS

.01 Requests for purchase of license plates, city/county decals or tags, and for payment of trailer property tax will be handled by the Manger Mobile Equipment, 312 W. Liddell St., Charlotte, NC 28206.

.02 A separate request must be made for each government agency involved (i.e. County and City) unless the agencies have an arrangement such that all the fees may be paid through one agency. The fees for each trailer must be determined prior to making request. Request for up to five trailers (and/or vehicles) may be made on one Form 11018 A provided that all the plates, decals, or taxes may be purchased/paid at a single location.

.03 In order that the check be returned to the requesting office the "Pay to" portion must read as follows: 

Name of Government Agency

c/o Name of Requester, Title

Complete Address of Requester

.04 Requester forwards prepared Form 11018 A to his appropriate supervisor who has proper "APPROVED FOR PAYMENT" authority. After Form 11018 A has proper approval for payment, it is sent to:

Norfolk Southern Corporation

Manager Accounts Payable

110 Franklin Rd, Blg. Box 32

Roanoke, Virginia 24042-0032

Request should be mailed to Accounting at least two weeks before check is needed.

.05 For vehicles with tags purchased in the State of Georgia only, send a photocopy of the tag receipt to:

Norfolk Southern Corporation

Taxation Department

110 Franklin Rd., Blg. Box 28

Roanoke, VA 24042 0028
18. **INSPECTION**

.01 Inspection is to be made monthly of all trailers/camp cars under each field supervisor. House Trailer/Camp Car Inspection, Form 11317 (see exhibit page vi) is to be utilized while making the inspection.

.02 Inspection is to be made at time trailers/camp cars are placed into or removed from storage. So indicate in the "OTHER REMARKS" section of the inspection form.

.03 If any trailers are not in use, the supervisor is to still make an inspection report and indicate across the body of the report "Trailer Not in Use" or "Trailer in Storage".

.04 Distribution of Inspection Report will be as follows:

a. Original to: NS Corp. – c/o Manager Mobile Equipment, 312 W. Liddell Street, Charlotte, NC 28206
b. First copy retain by supervisor.
c. Second copy to division engineer or general division engineer as applicable.

19. **CAMP CAR / HOUSE TRAILER POTABLE WATER PROCEDURE**

Mobile housing (camp car or trailer) provided for company forces must be provided with potable water from a known source and the camp water system maintained in a sanitary manner.

.01 Source of Water

a. Water may be supplied by direct connection to local municipal source or by commercial delivery service.
b. Identify source of water. If municipal, contact camp car water system service contractor for copy of the certificate of water quality.
c. Certificate must be posted in the camp diner for the duration of the connection. All certificates of water quality will be renewed yearly and sent to all system gangs.
d. When the connection is terminated, a copy of the certificate of water quality, must be sent to: NS Corp. – M of W Department, Process Engineer Track, 1200 Peachtree St. – Atlanta, Ga. 30309. This document must be retained for one year.

.02 Connecting to a Local Water Supply

a. Local water connections must be inspected and cleaned prior to connecting to a camp car potable water system.
b. Only a trained person may make potable water connections.
c. Inspect the hose bib, hydrant, or other connection to ensure that it is clean and that the area around it is free of potential contaminants of concern.
d. Briefly flow the water from the source to verify that it is flows clear.
e. Don PPE – Hard Hat, Safety Glasses, disposable nitrile gloves, protective clothing or coveralls to prevent bleach damage.

f. Prepare a diluted bleach solution in a 5 gallon bucket by adding 3 tablespoons of regular bleach to 5 gallons of water. Wait 5 minutes to allow the bleach solution to mix completely.

g. Fill a spray bottle with the diluted bleach solution.

h. Thoroughly spray the point of connection with the diluted bleach solution. Lightly brush the connection with a nylon bristle brush. Spray the connection again.

i. Only food grade hoses may be used, (Novaflex) blue Water Hose – product ID124896-0. All hoses between the local connection and the camp must be disinfected. Use the remaining bleach solution and carefully add it to the hose using a funnel. Note that both ends of the hose will need to be open in order to properly fill the hose.

j. Allow 15 minutes of contact time before wiping the connection surface clean and dry & flushing.

k. Connect the hose to the local water supply. Briefly flow the water from the source to rinse the bleach solution from the hose before connecting to the camp.

l. Mark your connection with an NS approved tag (Attached at the end of the procedure) or sign indicating that it is a potable water connection.

m. Protect the hose that leads to the potable water storage tank from physical damage.

n. Complete record keeping requirements (Green and red border - Attached at the end of the procedure) and post in gang camp car diner.

1. Certification of Training (Green border - Attached at the end of the procedure) – certifies that NS gang employee has been trained to inspect & sanitize camp car water systems and hose/hydrant connections as required by FRA regulations. This document must be posted in gang diner at all times and additional copy sent to (NS Corp. – M of W Department, Process Engineer Track, 1200 Peachtree St. – Atlanta, Ga. 30309. This document must be retained for one year.

2. Connection Sanitization Certification (Red border - Attached at the end of the procedure) – certifies that the hose/hydrant connections have been sanitized by Norfolk Southern and the water has been determined to be potable by the local water authority. This document must be posted in gang diner and replaced and updated after every camp move, with additional copy sent to: NS Corp. – M of W Department, Process Engineer Track, 1200 Peachtree St. Atlanta, Ga. 30309.
   This document must be retained for one year.

.03 Signs, Tags, and Labels

a. Water tanks should be labeled with vinyl decals, to indicate that the contents are potable and record of the last disinfection should be displayed on main tank with vinyl decal.
b. Connections should be labeled or tagged to indicate that the water is known to be potable. Use of laminated signage or tags is appropriate (Attached at the end of the procedure).

c. Fittings on camp cars where a potable water hose should be labeled to indicate that the fitting is only for potable water connections. Laminated signage (Attached at the end of the procedure).

.04 System Disinfection

a. Disinfection of camp car plumbing systems must occur every 120 days.
b. Gang supervision will coordinate with the camp car water system service contractor. Supervision to ensure that there is a suitable water supply, that camp is accessible, and will arrange for contractor to have access to the interior of all cars and ensure that connections to the sanitary sewer or external septic tanks are in place. Discharge of chlorinated water to the storm sewers is not allowed under any circumstances.
c. Connect the camp to the local water system in accordance with section, 19.02 and ensure main water storage tank is full, before starting sanitization.
d. Close the valves between the main water storage tank (2,000 gallon SS), the local water connection and the general camp plumbing system.
e. Ensure that all hot water heaters are turned off.
f. Drain water completely from the camp car plumbing system, except from the main water storage tank. Accomplish this by opening all faucets and or shower heads. This will effectively drain all water storage including the hot water heaters. Close all faucets and shower heads after the water has completely drained.
g. Don PPE – Hard Hat, safety glasses, disposable nitrile gloves, protective clothing or coveralls to prevent bleach damage.
h. Using a funnel, carefully add four (4) gallons of regular Clorox bleach to the main water storage tank. Wait (60) minutes before proceeding to the next step.
i. Open the valve between camp plumbing system to the main water storage tank, allowing the bleach solution to flow through the system and refill the various holding tanks and plumbing. Open and close faucets and shower fixtures to ensure that the chlorinated water reaches all parts of the plumbing system. Close the valve when each camp car has been refilled.
j. The bleach solution must be held in the plumbing system for sixty (60) minutes. During this time, sanitize all faucets and shower heads using a diluted bleach solution. See section 19.05, (Sanitizing Faucets and Shower Heads). Now drain the main water supply tank of remaining chlorinated water.
k. Open valve connecting the main water supply tank to the local water supply and refill the main water supply tank with potable water.
l. Drain the plumbing system of each camp car to remove the diluted bleach solution from the plumbing. Accomplish this by opening all faucets and or shower heads. This will
effectively drain all water storage including the hot water heaters. Close all faucets and shower heads after the water has completely drained.

m. Open the valve from the main water storage tank and allow the clean potable water to refill the plumbing system in the camp. Faucets and shower heads should be run briefly to remove any remaining chlorinated water in the plumbing system.

n. Test water using (EXTECH CL200) or equivalent chlorine testing meter, to verify that chlorine concentrations are less than 5 parts per million. If water exceeds 5 parts per million of chlorine, continue flushing the system until satisfactory results are obtained.

o. Restore power to hot water heaters and refill main water tank.

p. Complete record keeping requirements and label main tank with sanitation date.

q. Camp Car Sanitation Certification (Blue border - Attached at the end of the procedure) - completed by NS contractor that sanitized gang. (copy of document posted in gang diner and additional copy sent to: NS Corp. – M of W Department, Process Engineer Track, 1200 Peachtree St. Atlanta, Ga. 30309. This document must be retained for one year.

r. Potable Water Check List (Attached at the end of the procedure) – completed by NS contractor that sanitized gang. Copy of document must be posted in gang diner and additional copy sent to: NS Corp. – M of W Department, Process Engineer Track, 1200 Peachtree St. – Atlanta, Ga. 30309. This document must be retained for one year.

.05 Sanitizing Faucets and Shower Heads

a. Planning - Faucets and shower heads must be routinely disinfected at the same time the camp car water system is disinfected or following reported concerns of unusual taste or health issues.

b. Don PPE – Hard Hat, Safety Glasses, disposable nitrile gloves, protective clothing or coveralls to prevent bleach damage.

c. Prepare a diluted bleach solution in a 5 gallon bucket by adding 3 tablespoons of regular bleach to 5 gallons of water. Wait 5 minutes to allow the bleach solution to mix completely.

d. Fill a spray bottle with diluted bleach solution.

e. Thoroughly spray the faucet and shower head with the diluted bleach solution. Clean up any unintended overspray.

f. Allow 15 minutes of contact time before wiping the surface clean and dry.

.06 Storage of Hoses & Supplies Associated with the Water System

a. Store all hoses, equipment and related supplies in an organized and hygienic manner that prevents contamination.

b. Equipment used for potable water systems shall be used exclusively for this purpose.

c. Do not store chemicals in spaces containing water storage tanks.

d. Do not store flammable or combustible materials in, on, or around hot water heaters.

.07 Response to Taste and Health Complaints
a. Reports of taste complaints or health problems require a rapid response within 24 hrs. Immediately notify, Manager Mobile Equipment, Charlotte, NC – ph. (704) 378-3802, who will in turn coordinate with the NS Industrial Hygiene, to have a licensed local professional take water samples.

b. Water sampling must be performed only by trained and qualified personnel.

c. If alternate housing is needed while water testing is being performed, NS Industrial Hygiene will notify Manager Mobile Equipment and gang supervision.

.08 Training /Qualification of Personnel

a. Persons responsible for maintaining camp car water conditions must receive training on an as needed basis. Changes to procedures over time may necessitate additional training.
   • Certification of Water Sources
   • Connections
   • Disinfection Procedures
   • Response to Water Quality Complaints

b. For all training, gang supervision should contact Manager Mobile Equipment in Charlotte, NC.

Approved by the Office of Assistant Vice President, MW&S

Atlanta, GA
This document certifies that the portable water system for the following Gang camp cars/trailers has been determined to be portable by the Local Water Authority, and that the source of water has not been contaminated by Norfolk Southern Employees or Contractors. It is illegal for either to add anything to the water from their equipment or vehicles. Norfolk Southern Camp Cars Water Sanitation Certification
Manager Mobile Equipment

Norfolk Southern: Randy Smith

DATE:

DATE:

WORK GROUP/GANG:

Required by FRA Regulations, trained to inspect & sanitize camp car portable water systems and hose/hydrant connections as

This document certifies that Norfolk Southern employee

WATER SYSTEM - CERTIFICATION TRAINING

NORFOLK SOUTHERN CAMP CAR
Post this document in camp car diner.

Norfolk Southern Employee: __________________________

DATE: __________________________

CARG #: __________________________

LOCATION: __________________________

DEPARTMENT: __________________________

This document certifies that the hose/hydrant connections, as required by FRA Regulations, have been determined to be portable by the local water authority. The connections were sanitized by Norfolk Southern technicians and that the source of water has been NORFOLK SOUTHERN EQUIPMENT.

WATER SANITATION CERTIFICATION.
NORFOLK SOUTHERN RAILROAD CERTIFICATION

EQUIPMENT POTABLE WATER - SANITIZED CHECK LIST

Date ____________ Location ___________________________ Equip. # ______________

Equipment Rep __________________________ Technician ___________________________

Copy of Source Certification Posted Yes _______ No _______

Hydrant/Connection Inspected Yes _______ No _______

Hydrant/Connection Sanitized Yes _______ No _______

Conveyance Sanitized Yes _______ No _______

Start drain/flush Time __________

Complete drain/flush Time __________

Certification Posted on Equipment Yes _______ No _______

Copy submitted to office Date __________________________

Tech Signature __________________________

OFFICE USE ONLY

Date Form Received __________________________

Form Received By __________________________

Date Entered __________________________

Date Submitted to Atlanta, GA __________________________

- Certification valid for 120 days.
- Post this document in camp car diner.
The water is not suitable for human consumption.
Do not drink the water.
Not for cooking or cleaning.
Potable water information board layout.
Sketch showing procedure to follow when roadway machines are tied up in one end of siding and opposite end of siding remains in service.
GROUND WIRE ASSEMBLY

NOTES:
1. Ground rod and clamp to be galvanized.
2. When trailers are parked on paved areas, extra wire must be provided for connecting trailers to one or more common ground rods driven into ground at edge of pavement.

GROUND ROD

SCALE: NONE
MAINTENANCE RULES
STOVES & HEATERS

1. Stoves and heaters are to be cleaned, adjusted, or repaired only by persons authorized by the Foreman.
2. Foreman to have in his possession and understand “Service Instructions” for each type of stove or heater under his care.
3. Any stove or heater not working properly or leaking is to be turned off and not used again until repaired and known to be in good working condition.
4. Any stove or heater which cannot be repaired locally must be reported immediately to officer in charge who will arrange for repairs.

WARNING

1. Be sure all appliance valves are closed before opening container valve.
2. Connections at the appliance, regulator and containers shall be checked periodically for leaks with soapy water or its equivalent.
3. Never use a match or flame when checking for leaks.
4. Container shut-off valves shall be closed when vehicle is in motion.

GROUND FAULT DETECTOR

1. If indicator light is on, there may be a defect in the electrical system.
2. Avoid contact with trailer.
3. Immediately disconnect power cord.
4. Obtain a qualified electrician for necessary repairs.

White printing on red. These decals are stocked by the Manager Mobile Equipment - Charlotte, NC (704) 378-3802.