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How to Use This Manual

Manual Sections

The BNSF Intermodal Hub Operations Manual is designed to be viewed online via the BNSF intranet. The manual can also be printed.

The manual is divided into five areas:

- **Administration** - Explains administrative tasks including billing, inventory management, and environmental compliance.
- **Checkpoint** - Describesyard rules, in-gate and out-gate procedures, and the use of the handheld, kiosk, and AGS in checkpoint procedures.
- **Equipment Maintenance** - Explains maintenance for all equipment including loading, lifting, and yard equipment and trailers, containers, and chassis.
- **Hub Operations Safety** - Outlines safety rules for employees, track, and equipment.
- **Hub Operations Training** - Provides training guidelines, checklists and examinations.

Navigation

In addition to scrolling through the manual, there are two ways to access different sections: using the Navigation pane and clicking links.

Use the Navigation Pane

The navigation pane feature of Adobe Acrobat Reader is an area of the work space that can display different navigation panels. Typically, these panels act like a table of contents, with items you can click to jump to a specific place in the document. For example, the Bookmark panel contains links to each section and subsection of the manual

To open the navigation pane:

- Click any panel button on the left side of the work area to open that panel. (Or, choose View > Navigation Panels > Show Navigation Pane.)
- Click the Bookmarks icon  to view the Bookmarks panel.

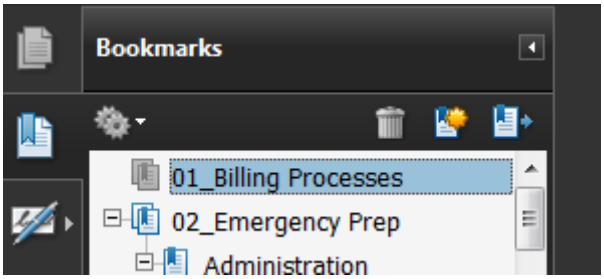


Figure 1: Bookmarks panel in Adobe Reader

Continued on next page

How to Use this Manual, continued

Using Links

Click links within the manual

The manual contains blue underlined words that, when clicked, link to other areas of the manual or to other documents on the BNSF intranet or on the Internet.

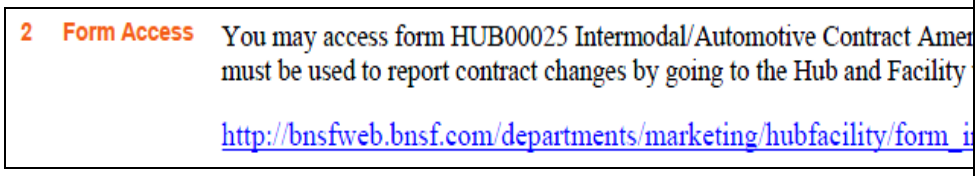


Figure 2: Example of a text link within the manual.

Reporting Broken Links

Please help us keep this manual functional by reporting incorrect or nonworking links to hubmanual@bnsf.com.

Administration

A-1 Billing Processes

Contents

This section contains the following topics:

Topic	See Page
Procedures for Contract Amendments	2

A-1.1 Procedures for Contract Amendments

1 Reporting Requirements

All Intermodal/Automotive contract changes must be reported on form HUB00025 and submitted via Outlook mail to the address indicated on the form.

Example of items that must be reported

- a contractor rate increase or decrease
- to add, delete or change a service component
- or to have the budget adjusted

2 Form Access

You may access form HUB00025 Intermodal/Automotive Contract Amendment Form, which must be used to report contract changes, by going to the Hub and Facility web site:

http://bnsfweb.bnsf.com/departments/marketing/hubfacility/form_intermodal.html

All of the required information on this form must be completed and submitted via Outlook mail to the address indicated on the form.

Administration

A-2 Local Preparedness Plan (LPP)

Contents

This section contains the following topics:

Topic	See Page
General Rules and Procedures	2
Attachment A: Emergency Response Guide	7
Attachment A: Emergency Response Numbers	8

A-2.1 General Rules and Procedures

1 General Information

Following are the rules and guidelines for preparing, testing, maintaining, and communicating an Local Preparedness Plan (LPP) for all BNSF intermodal facilities.

By their very nature, emergencies occur unexpectedly and require rapid response. A local preparedness plan, properly tailored to the needs of each individual facility, assures that the appropriate actions occur immediately to effectively deal with the emergency and hopefully prevent injuries and damage.

Emergency response actions specified in the LPP may be initiated due to, but not limited to, such events as: severe weather, fire, explosion, hazardous material spills, civil disturbances, transportation accidents, or utility incidents.

A combination of written instructions (preferably in bullet point format with concise instructions), contact lists/charts, and facility maps should comprise the LPP. To maintain its effectiveness, it is critical that each facility perform LPP drills, keep the LPP up-to-date, and communicate changes to facility personnel and to local authorities and other entities as required. *Each regional director is ultimately responsible for ensuring that this is done.*

Those developing an LPP for the first time must conform to the requirements of this section; those with an LPP already in place must review it to ensure that all required components are present or are added to the plan.

Refer to the Hazmat Local Preparedness Plans Exercise manual at http://bnsfweb.bnsf.com/departments/marketing/hubfacility/pdffiles/ibufiles/hubopsmanual/HazMatLPPExerciseManual.pdf

2 Plan Considerations

In determining applicability of the LPP components shown below, consider factors such as:

- Historical experience: What type of emergencies have occurred in the past at this facility or at nearby facilities?
- Geographical location: What type of natural hazards are common for the local area such as severe weather, earthquakes, flooding, high winds, etc.? What other types of hazards are inherently present with the facility location such as unsafe surrounding neighborhoods, proximity to other companies handling hazardous materials, proximity to airports, proximity to bodies of water, etc.?
- Mix of traffic or commodities common at the facility or routinely encountered
- Unique characteristics or unusual circumstances present/encountered at the facility

3 Unique Facility Information

Next, use the outline below as a general guideline to publishing or updating a facility-specific LPP with concise instructions and descriptions, facility maps or drawings, and lists/charts which communicate the plan components.

Continued on next page

A-2.1 General Rules and Procedures, Continued

4 LPP Guideline

I. General Facility Information

- A. Buildings
  - 1. Layout map of each building with the following highlighted:
    - a. fire extinguisher locations
    - b. normal entrances/exits
    - c. emergency exits and evacuation routes
    - d. designated internal meeting point (i.e., tornado shelter)
    - e. location of stored hazardous materials or substances
  - 2. Layout map of entire facility with the following highlighted:
    - a. fire hydrant location
    - b. normal ingress/egress
    - c. emergency evacuation routes
    - d. designated external meeting points
    - e. safe haven location
    - f. location of stored hazardous materials or substances
    - g. facility drainage
    - h. any wind socks on the property or other hazard warning indicators (i.e, horns or lights)
    - i. direction of prevailing winds or weather systems
- B. Employees
  - 1. Number typically on hand per shift in each building
  - 2. Number typically on hand out in yard
  - 3. Names or number of employees trained in first aid/CPR
- C. Proximity to Others
  - 1. Neighboring industries, businesses, and property owners
  - 2. Other nearby rail carriers (facilities or trackage)
  - 3. Local police, fire, and hospital
  - 4. Nearby city, state, or federal government offices
  - 5. Nearby water or utility plants
  - 6. Nearby major thoroughfares or bodies of water

II. Emergency Notifications

- A. Emergency Contact List
  - 1. Classify notifications by type of event (see sample in Attachment ‘A’)
  - 2. Individuals to be contacted
    - a. Names and titles
    - b. Office phone number, pager number, cellular number, home phone (Distribution of the list may be restricted or two versions created—one to include and one to omit home phone numbers—since most individuals will only be responsible for reporting the emergency to an on-duty supervisor)
  - 3. Agencies or outside parties to be contacted
    - a. Local/assigned Damage Prevention Specialist
    - b. Haz Mat Response companies
    - c. Local police department
    - d. Local fire department
    - e. Medical Responders (or 9-1-1)
    - f. Local utility companies

Continued on next page

A-2.1 General Rules and Procedures, Continued

LPP Guideline (continued)

- 4. Parties responsible for making notifications
  - (Keep responsibility for notifying outside parties to supervisory personnel; instruct all other employees to report an emergency condition to an on-duty supervisor only)

- B. Directions to Hub
  - 1. Normal entrances
  - 2. Emergency access roads/entrances
  - 3. Major roads or thoroughfares leading to the facility

III. Specific Emergency Response Procedures by Event

- A. Medical Emergency
- B. Hazardous Material Leak
- C. Evacuation Process
- D. Severe Weather Event
- E. Yard Derailment
- F. Civil Disturbance
- G. Bomb Threat
- H. Fire or Explosion
- I. Earthquake
- J. Environmental Discharge Emergency
- K. Gas Leak
- L. Power Outage
- M. Power Line Contact
- N. Other

When developing this portion of the LPP, be specific as to:

- Subclassification of the event, if applicable (i.e., Fires: electrical vs. chemical; Severe weather: flash flooding vs. tornadoes)
- Individuals/agencies and numbers to call
- Work groups and visitors to be notified and how
- Factors influencing immediate actions (i.e., wind direction)
- Immediate actions to be taken (i.e., questions to ask in the event of a bomb threat, meet at specified location and take head count, evacuate immediately, etc.)
- Specify designated meeting point (i.e., tornado shelter vs. outdoor meeting point)

IV. Maintaining and Testing the LPP

- A. Party(ies) responsible for maintaining/updating LPP
- B. Schedule for reviewing accuracy and currency of LPP
  - 1. At least twice a year

Continued on next page

A-2.1 General Rules and Procedures, Continued

LPP Guideline (continued)

- 2. Issues affecting LPP
  - a. Construction on, surrounding, or in the vicinity of the facility
  - b. Any changes to traffic flow, ingress, egress, or emergency routes
  - c. Any internal layout changes in facility buildings
  - d. Phone numbers and/or name changes of emergency contacts
  - e. Changes or additions to the hazardous materials stored or handled at the facility
  - f. Operational changes
- C. Schedule of drills for testing the LPP
  - 1. At least once a year (If a drill indicates that the LPP is ineffective in any respect, it must be revised within five business days and the changes communicated to all users and recipients of the LPP.)
- D. Method for testing functionality and effectiveness of LPP for various types of emergencies (i.e., drills that include outside agencies)
- E. List of parties supplied a copy of the LPP
- F. Party(ies) responsible for disseminating revisions to internal and external LPP users or recipients

V. LPP Awareness

- A. Availability of LPP and Support Materials
  - 1. LPP
    - a. List location(s) where LPP shall be posted or available for reference
    - b. List location(s) where emergency contact sheets shall be posted or names of individuals who shall have access to the contact sheets
    - c. List location(s) where emergency exit/evacuation information shall be posted
  - 2. North American Emergency Response Guidebook
    - a. List location(s) where this publication shall be kept
  - 3. Bureau of Explosives 6000
    - a. List location(s) where this publication shall be kept
  - 4. Visitor Sign-In Sheets
    - a. List location(s) where current visitor sign-in sheets are held
- B. Communication of LPP and Revisions
  - 1. Job Safety Briefings on LPP components
    - a. Revisions to the LPP
    - b. Temporary circumstances at the facility (i.e., construction)
    - c. Review of procedures following an emergency
    - d. As a general refresher
    - e. In preparation of a drill
    - f. In review of a drill
  - 2. Safety meetings Inclusion for same reasons as job safety briefings
  - 3. Part of new hire orientation

4. Process for notifying local authorities of changes/updates/scheduled drills. Regardless of whether a change to the LPP is temporary or permanent, it is imperative that local authorities be notified immediately of changes that occur in any of the following components: evacuation route, names and/or numbers of BNSF contact personnel, access to the facility.

Continued on next page

A-2.1 General Rules and Procedures, Continued

5 Conclusions

While the entire LPP should be discussed and understood by all personnel, be sure to stress that responsibility for certain functions rests with key people or follows a certain chain-of-command depending on who is present at the facility at a given time. This will ensure that the LPP is implemented in an orderly fashion. Remember, the above outline is provided solely as a framework for developing a facility LPP; any unique circumstances that can be foreseen as causing potential emergency situations must be included in the facility's LPP.

6 Did You Know

That the following agencies may be contacted for additional information on responding to emergency situations that could be useful when developing your LPP:

(1) American Red Cross (ARC) – call local agency

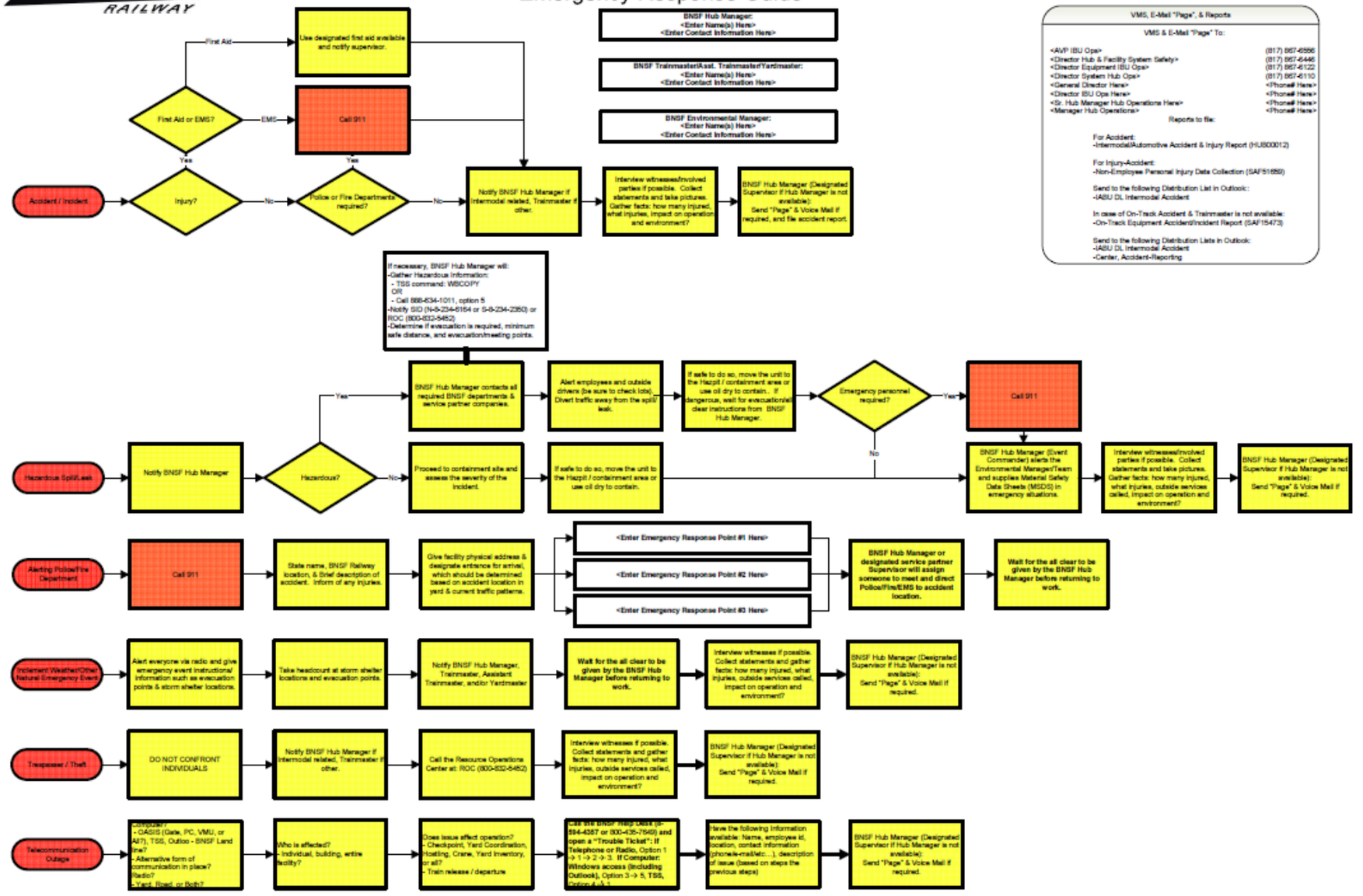
(2) Federal Emergency Management Agency (FEMA) – call local agency

(3) National Fire Protection Association (NFPA) – 1-800-344-3555

(4) National Oceanographic and Aeronautics Agency (NOAA) – 1-301-713-0090

A FEMA publication entitled, "Risks and Hazards: A State by State Guide" can assist in identifying potential emergencies, as well as contacting local authorities.

Emergency Response Guide



Attachment 'A'

(SAMPLE ONLY)

EMERGENCY RESPONSE NUMBERS

XYZ BNSF INTERMODAL FACILITY
100 MAIN STREET
FORT WORTH, TX 76131

Notify your supervisor IMMEDIATELY of any injury and/or accident that occurs within the facility. It is the supervisor's responsibility to make the following contacts.

IMMEDIATE CONTACT LIST FOR ALL EVENTS

Name	Number
John Doe, Hub Manager	(insert phone no.) (insert cellular no.) (insert pager no.) (insert home no.)
Jane Doe, Terminal Manager	(insert phone no.) (insert cellular no.) (insert pager no.) (insert home no.)

FIRE, POLICE, AND MEDICAL

Name	Number
Emergency Response	911
Fire Department	(insert local phone no.)
BNSF Police Department	(insert phone no.)
Local Police Department	(insert local phone no.)

HAZARDOUS MATERIALS/ENVIRONMENTAL MISHAP

Name	Number
Damage Prevention Services	(insert phone no.)
Emergency Response Firm	(insert phone no.)
BNSF Resource Operations Center	800-832-5452
BNSF Environmental Hotline	800-308-7513
Service Interruption Desk	North and Central: 817-234-6164 South: 817-234-2350

OTHER CONTACTS

Name	Number
Animal Care and Control	(insert phone no.)
Department of Public Works	(insert phone no.)
Department of Transportation	(insert phone no.)
Gas Company	(insert phone no.)
Hospital	(insert phone no.)
Power Company	(insert phone no.)

Administration

A-3 Environmental Hazmat

Contents

This section contains the following topics:

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Hazmat Handling Quick Reference Guide	8
Hazmat Placement Chart and Codes	9
Environmental Management Plan Introduction	12
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Environmental Compliance Requirements	33
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State Resources: Solid Waste	78
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A-3.1 Procedures and Policies

1 Current Version

The most current release of Hazardous Materials Regulations of the DOT (49 CFR - Parts 106, 107,110, 171-180, and 397) is available in the Bureau of Explosives Tariff 6000-V, effective April 29, 2008.

http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?sid=585c275ee19254ba07625d8c92fe925f&c=ecfr&tpl=/ecfrbrowse/Title49/49cfrv2_02.tpl

2 Item 25

Refer to Item 25, Prohibited Commodities, Equipment, and Associated Charges of the BNSF Intermodal Rules & Policies Guide, January 1, 2008, for a listing of those commodities that will not be accepted by BNSF.

NOTE: Not all of the restricted commodities listed in Item 25 are hazardous. Not only do some commodities require special conditions be met, some also have other specific conditions that can be checked at the gate and that must be met for acceptance of the load.

3 Item 26

Item 26, Restricted Commodities, Equipment, and Associated Charges of the BNSF Intermodal Rules & Policies Guide, January 1, 2008, contains a list of commodities that will not be accepted unless special conditions are met.

4 Item 27

Item 27, Hazardous Commodities of the BNSF Intermodal Rules & Policies Guide, January 1, 2008, contains requirements specific to the acceptance and transport of hazardous materials, substances or wastes.

5 Tank Containers

Tank containers approved for rail handling of hazardous materials MUST be legibly marked on both sides with “AAR 600” to indicate it is in compliance with AAR specifications. If these markings are missing, the unit must be rejected. Loaded tanks must also have the proper shipping name legibly marked on two opposing sides. If this requirement is not met the unit must be rejected. The UN or NA identification number must be displayed on placards, orange panels, or the white square-on-point configuration on all four sides of the tank container. Each unit containing residue of a hazardous material must have the primary material placard displayed the same as for a loaded move. Side-mounted hazardous placards must be positioned no more than 18 inches from the top and no more than 72 inches from the ends. Front and rear placards must be placed no more than 18 inches from the top. The placard must be fully visible and not blocked by the side of the well. Missing, illegible, or improperly positioned placards must be corrected by the driver, prior to accepting the unit in the gate. See E5.1.4.4, Chassis Shipping Unit Instructions (Empty CSU Unit), for proper placement of tanks so valves are on the outside of the well.

Continued on next page

A-3.1 Procedures and Policies, Continued

6 Leaking Units

If a trailer or container of hazardous materials is found to be leaking during inbound checkpoint inspection, do not touch the leaking substance. Advise the driver that the load is being rejected. The unit is to be placed on LSHOLD with the code "Hold for TOFC/COFC movement." Note on the shipping papers: "Leaking potential hazardous commodity. Rejected for rail transportation. Unsafe to return to highway; allowed to stay on BNSF property." Instruct the driver to move the load to the hub's designated safe haven location and to contact his/her dispatcher so that the drayage company or shipper's policies for handling leaking units can be set in motion. Take a copy of the hazardous materials shipping papers to the checkpoint supervisor on duty and also notify the hub manager, terminal manager, or individual in charge for their further handling.

7 TSS Limitations

WARNING! CURRENT TSS EDITING CAPABILITY IS LIMITED IN REGARDS TO PROHIBITING ASSIGNMENT OF HAZARDOUS LOADS IN VIOLATION OF GUIDELINES SHOWN BELOW.

8 Hazmat Car Counts

For purposes of transporting hazardous material shipments, each platform or well of a drawbar-connected or articulated car shall be considered as one car when determining placement. By this definition, any trailer spanning two platforms of a TTEX drawbar-connected car does NOT qualify as a car.

9 Hazmat Double-Stacking

Use of double stack equipment is allowed for hazardous material shipments without restriction to stacking, except for the following:

- UPCU (U.S. Pollution Control) containers, and hazardous open top loads are prohibited from double stack equipment.
- Tank containers are allowed only in single-level configuration loading.

10 Placard Placement

Hazard placards, if required, MUST be present on all four sides of a container or trailer and be visible after loading.

11 Specific Commodity Handling

GUIDANCE ON SPECIFIC COMMODITY HANDLING AS REQUIRED BY 49 CFR 174.85

Following is guidance on loading (or placement within the train) of hazardous material units relative to other units. The two-digit alphanumeric codes shown below in parentheses indicate the special condition codes in TSS which correspond to how a hazardous unit is placarded, based on entry of placards observed on the unit at ingate.

Continued on next page

A-3.1 Procedures and Policies, Continued

12 Explosives

Shipments Placarded Explosives, 1.1 (N1) or Explosives, 1.2 (N2):

PLACEMENT RESTRICTIONS FROM ENGINES

- When train length permits, the car may NOT be nearer than the sixth car from an engine.
- When train length does NOT permit, the car MUST be placed near the middle of the train, but not nearer than the second car from an engine.

- PLACEMENT RESTRICTIONS NEXT TO OTHER LOADS

There MUST be at least one car separating the placarded car from the following:

- An open top load
- A running refrigerated unit
- Any unit placarded with Poison Gas, 2.3 (PA)
- Any unit placarded with Poison Gas, 6.1 (PL)
- Any unit placarded Radioactive, 7
- Any other placarded hazardous load EXCEPT:
  - Another Explosives, 1.1 (N1) or Explosives, 1.2 (N2) unit
  - A unit placarded Combustible (CL)
  - A unit placarded Keep Away From Food (NF)
  - A unit placarded Class 9 (N9)
  - A unit only marked (MA) with an identification number on an orange panel or white square-on-point configuration

Continued on next page

A-3.1 Procedures and Policies, Continued

13 Radioactive

Shipments Placarded Radioactive, 7:

PLACEMENT RESTRICTIONS FROM ENGINES

- The placarded car must be separated from a locomotive by at least one non-placarded car.

PLACEMENT RESTRICTIONS NEXT TO OTHER LOADS

There MUST be at least one car separating the placarded car from the following:

- Any unit placarded with Poison Gas, 2.3 (PA)
- Any unit placarded with Poison Gas, 6.1 (PL)
- Any unit placarded Explosives, 1.1 (N1)
- Any unit placarded Explosives, 1.2 (N2)
- Any other placarded hazardous load EXCEPT:
  - Another Radioactive, 7 unit
  - A unit placarded Combustible (CL)
  - A unit placarded Keep Away From Food (NF)
  - A unit placarded Class 9 (N9)
  - A unit only marked (MA) with an identification number on an orange panel or white square-on-point configuration
- The placarded car must be separated by at least one non-placarded car from any carload of undeveloped film.

14 Poison Gas

Shipments Placarded Poison Gas, 2.3 (PA) or Poison Gas, 6.1 (PL):

PLACEMENT RESTRICTIONS FROM ENGINES

- None

PLACEMENT RESTRICTIONS NEXT TO OTHER LOADS

There MUST be at least one car separating the placarded car from the following:

- Any unit placarded with Explosives, 1.1 (N1)
- Any unit placarded with Explosives, 1.2 (N2)
- Any unit placarded Radioactive, 7
- Any other placarded hazardous load EXCEPT:
  - Another Poison Gas, 2.1 (PA) or Poison Gas, 6.1 (PL)
  - A unit placarded Combustible (CL)
  - A unit placarded Keep Away From Food (NF)
  - A unit placarded Class 9 (N9)
  - A unit only marked (MA) with an identification number on an orange panel or white square-on-point configuration

Continued on next page

A-3.1 Procedures and Policies, Continued

15 No Restrictions

Cars placarded CL, NF, N9 and cars only marked (MA) with an identification number on an orange panel or white square-on-point configuration have no train placement restrictions.

16 Hazmat Car Makeup

Train make-up rules attempt to ensure safe and efficient operation by considering such factors as car types employed in the train, total train weight, individual car weight, car count, tons per operative brake, units loaded to the car, and geographic considerations (such as routes the train will operate on, direction of travel, etc). For purposes of transporting hazardous materials, each platform or well of a drawbar-connected or articulated intermodal rail car will be counted as one (1) car when determining placement of the hazardous materials in the train. (For example, double stack and five-unit spine cars will be considered as five (5) cars).

This definition is in line with Federal regulations regarding train placement of hazardous shipments.

A-3.2 Hazmat Handling Quick Reference Guide

1 Bill Requirements

No Hazardous Material load can be accepted unless it is billed. *(Exception: can accept UPS shipments.)*

2 UPS Exception

Hazardous Material loads not billed (UPS only) must have hazardous material shipping papers tendered by the driver at the gate and contain the following information:

- Proper shipping name
- Hazard Class
- UN/NA identification number (when required)
- Packing Group (when required)
- Total quantity as described in 49 CFR
- 24-hour emergency response telephone number (when required)
- Other additional shipping instructions (paper instructions) information when required by 49 CFR in 172.200 through 172.300

United Parcel Service (UPS) uses red labels (in lieu of standard shipping papers) to provide all the necessary hazardous material shipment information. The labels must be photocopied (legible, no more than **three** per page, placed **same direction** on page, and the **equipment initials / number** must be indicated on each page) and faxed to CWC.

3 Verify Placard

If placards are in place on the vehicle, verify that the placard code indicated in the in-gate system is the same as the placards on the vehicle. If there is a discrepancy between the placard code in the system and the placards affixed to the vehicle:

- Enter placard code in the system to match the vehicle placards
- The in-gate needs to reflect what the shipper has placarded; if incorrect, then need to put on LSHOLD, notify the hub manager and/or checkpoint supervisor to get the discrepancy resolved with the shipper.

4 Placard Requirements

Verify there are visible placards on both sides and ends of the vehicle:

- Placards must be located at least one (1) foot from the top of the vehicle, four (4) feet from the vehicle's bottom, high enough from the bottom rail so that if loaded in the bottom well of a container car that the placard is clearly visible, and at least five (5) feet from the vehicle's end to ensure visibility.
- Tank containers MUST be legibly marked on both sides with "AAR 600" to indicate it is in compliance with AAR specifications.

Continued on next page

A-3.2 Hazmat Handling Quick Reference Guide, Continued

Placard Requirements (continued)

- The UN or NA identification number must be displaced on placards, orange panels, or the white square-on-point configuration on all four sides of tank containers.
- Each tank unit containing residue of a hazardous material must have the primary material placard displayed the same as for a loaded move.
- When loading tank containers the valves need to be pointing out.

5 Leaking Containers

If a trailer or container of hazardous materials is found to be leaking during inbound checkpoint inspection, do not touch the leaking substance and do not open the trailer/container doors. Advise the driver that the load is being rejected. Place the unit on LSHOLD with the code "Hold for TOFC/COFC movement."

Note on the shipping papers: "Leaking potential hazardous commodity. Rejected for trail transportation. Unsafe to return to highway; allowed to stay on BNSF property." Instruct the driver to move the load to the hub's designated safe haven location and to contact his/her dispatcher so that the drayage company or shipper's policies for handling leaking units can be set in motion.

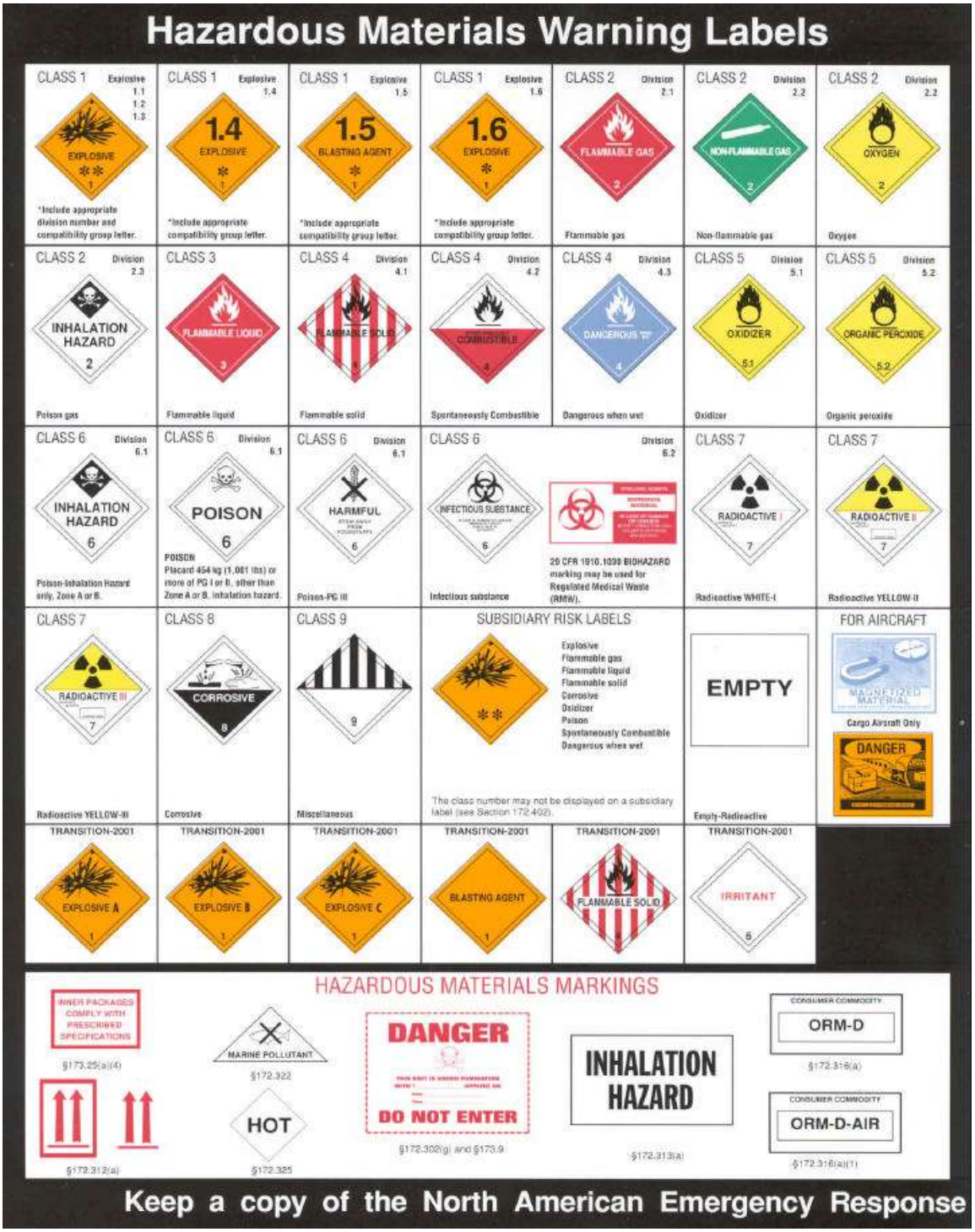
Take a copy of the hazardous materials shipping papers to the checkpoint supervisor on duty and also notify the hub manager, terminal manager, or individual in charge for further handling.

A-3.3 Hazmat Placement Chart and Codes

1 General

The Department of Transportation Chart 11 identifies guidelines for hazardous materials marking, labeling, and placarding.

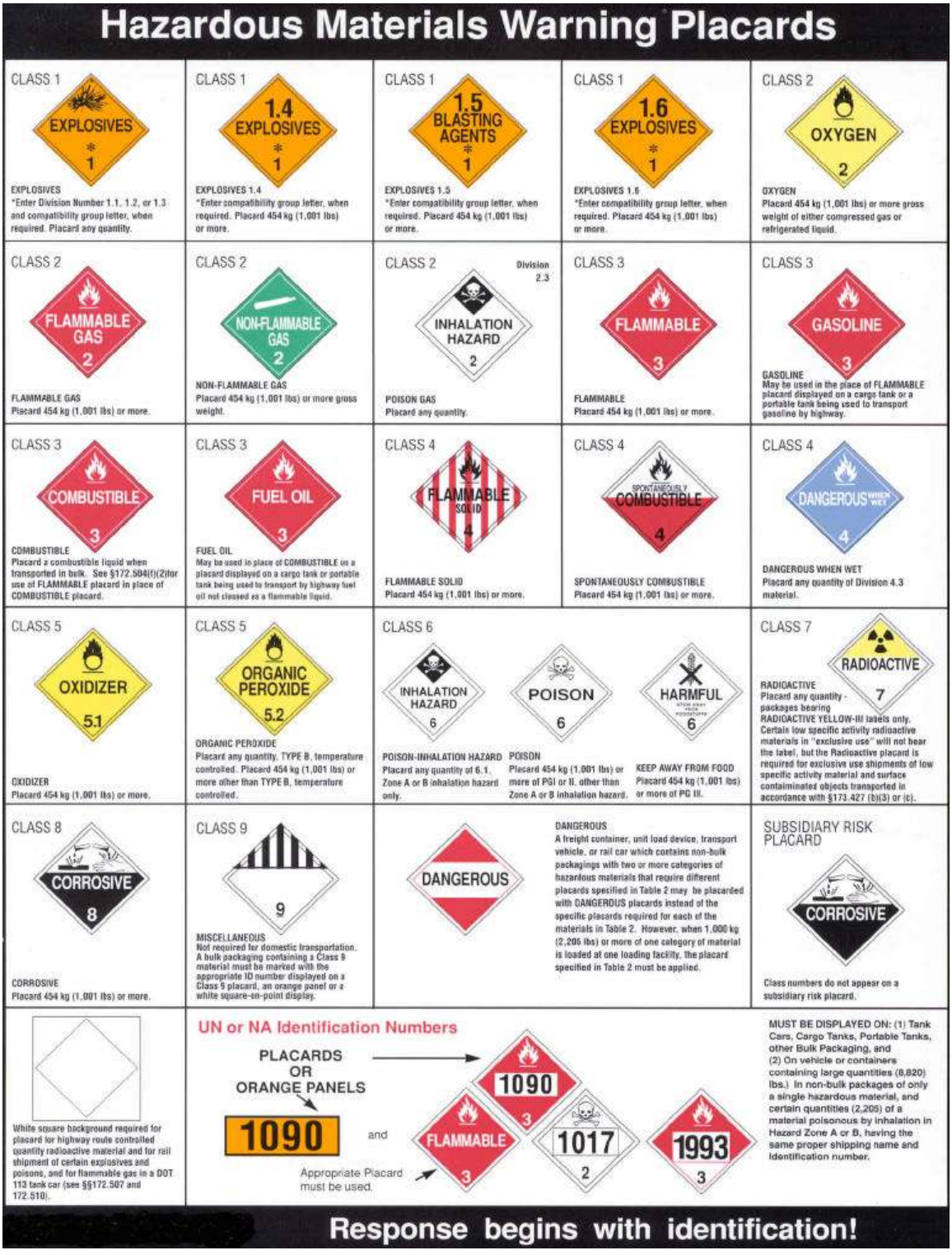
2 Hazmat Warning Labels



Continued on next page

A-3.3 Hazmat Placement Chart and Codes, Continued

3 Hazmat Warning Placards



Continued on next page

A-3.3 Hazmat Placement Chart and Codes, Continued

4 Hazardous Codes

The following Hazardous Placard (SCHI) Codes are used when marking containers:

BA	Blasting Agent
CH	Chlorine
CL	Combustible
CM	Corrosive
DA	Dangerous
DW	Dangerous When Wet
FG	Flammable Gas
FL	Flammable
FS	Flammable Solid
MA	Marked (UN/NA Number)
NF	Keep Away From Food
NG	Non-Flammable Gas
NP	No Placards Required
NS	Spontaneously Combustible
N1	Explosives 1.1
N2	Explosives 1.2
N3	Explosives 1.3
N4	Explosives 1.4
N5	Explosives 1.5
N6	Explosives 1.6
N9	Class 9 (Miscellaneous hazardous materials)
OM	Oxidizer
OP	Organic Peroxide
OX	Oxygen
PA	Poison Gas
PB	Poison
PL	Poison
PO	Poison Gas
RM	Radioactive
XA	Explosives A
XB	Explosives B

A-3.4 Environmental Management Plan Introduction

1 Overview

Most industrial and manufacturing operations in the United States are governed by a variety of federal and state environmental laws and regulations, which are designed to minimize the impact of industrial and manufacturing activities on the environment. The consequences for not complying with environmental laws and regulations can result in damage to the environment, expensive cleanup costs, irreparable harm to public relations, and substantial penalties and fines.

2 State and Local Regulations

In many instances, state environmental regulations, which are designed to supplement federal environmental regulations, can be more stringent than the federal regulations. There are even some local environmental regulations, usually in large metropolitan areas, that can be more stringent than both federal and state regulations. These layers of regulations may be confusing, and the regulated community may struggle to find the information needed to comply with environmental regulations.

3 BNSF Compliance

The BNSF Railway Company is part of the vast community regulated by federal, state, and local environmental regulations. BNSF is committed that every BNSF employee and service partner working on BNSF properties will make protecting the environment a way of life at BNSF; BNSF will comply with all environmental laws and regulations.

4 Site Environmental Management Plan (EMP)

This guide has been prepared to aid service partners working at BNSF's Intermodal and Autorack facilities in preparing a site environmental management plan (EMP). The preparation of an EMP is required as part the service partners' contract with BNSF. The EMP is based on the environmental checklist that BNSF distributed as part of its *Environmental Compliance* packet.

5 EMP Parameters

The EMP should follow these parameters:

- Should be prepared and maintained in a manner that demonstrates that site activities are in compliance with environmental regulations
- Should be updated on a regular basis to reflect applicable changes in site conditions
- Need not be lengthy or complex; however, it needs to provide a current and understandable demonstration of compliance

6 Guide Purpose

The object of this Guide is to provide service partners with environmental regulatory information, references, and tools to prepare an EMP for their site activities. As indicated above, environmental regulations vary from state-to-state. In some large metropolitan areas, local communities may have additional environmental regulations. We have attempted to provide current and complete data. However, it would be prudent for service partners to compare and review their environmental status with specific state and local regulations and/or regulators.

Continued on next page

A-3.4 Environmental Management Plan Introduction, Continued

7 Guide Outline

This Guide consists of the following parts:

Introduction and How to Use This Guide

- Environmental Compliance Checklist
- Environmental Compliance Requirements

Federal Environmental Resources

- Aboveground Storage Tanks
- Spills and Emergency Preparedness
- Solid Waste Generation
- Storm Water / Wastewater Discharges

State Environmental Resources

- Aboveground Storage Tanks
- Spills and Emergency Preparedness
- Solid Waste Generation
- Storm Water / Wastewater Discharges

8 Service Partners

Service partners should use this Guide in conjunction with other environmental compliance tools to identify environmental regulations that potentially apply to their site activities. At a minimum, service partners need to identify and complete:

- Environmental permits
- Environmental licenses
- Environmental notifications concerning site activities
- Waste streams and waste materials and methods of management and disposal
- Emergency response procedures
- Required and voluntary training
- Environmental record keeping and documentation management system, which demonstrates and substantiates compliance with environmental regulations

9 EMP Preparation

To begin preparing their EMP, service partners should review and complete the Environmental Compliance Checklist. For those statements where the service partner completes "YES," it will be necessary to address and ensure compliance with appropriate regulations in their EMP. The service partner can then reference the tabbed-section entitled Environmental Compliance Requirements. This section will provide a brief overview of things that should be included in the EMP for the area of particular of interest. Where more information is needed, the service partner can refer to the Federal Resources or State Resources sections.

Continued on next page

A-3.4 Environmental Management Plan Introduction, Continued

10 Guide Limitations

Please keep in mind that this is only a guide and does not present a comprehensive or detailed review of all environmental regulations. As such, it should not be used as a means to comprehensive environmental compliance. Additional laws and regulations may need to be consulted. It is the responsibility of the service partner to use the tools contained in this Guide to research the details necessary to provide an EMP that meets BNSF's requirements.

This document is intended for use as a guidance document only and neither BNSF nor ThermoRetec is responsible for the actions or activities, or lack thereof, of any of the service partners.

11 Checklist

As stated in service partner contracts, BNSF requires that service partners develop an EMP for each facility and furnish a copy of the plan to BNSF upon request. BNSF may review the service partner's plan upon request at any time; however, this does not imply that BNSF approves of the terms of the plan, the environmental activities at the facility, or the management of the service partner's facility operations. In addition, the service partners are responsible for complying with applicable federal, state, and local environmental laws, rules, and regulations.

A-3.5 EMP Checklist

1 Overview

The following checklist will assist BNSF management in ensuring environmental compliance at each facility. The checklist also serves as a tool for the service partner in the preparation of an EMP as well as a general framework for maintaining environmental compliance at each facility. The checklist is to serve as a guide only and satisfactory completion of this checklist does not necessarily guarantee environmental compliance.

Also included in this section are procedures for handling non-compliant environmental issues at facilities regardless of whether discovered on the Intermodal/Automotive Environmental Checklist, or ANY audit such as a BNSF audit, service partner self-audit, outside agency audit, etc.

2 Completion and Filing

The Intermodal/Automotive Environmental Checklist must be completed quarterly by each facility's hub manager, or terminal manager if there is no hub manager. A copy of each checklist must be provided to the service partner regional director, immediately upon completion. A copy of the completed checklist must be kept on file at the facility for a period of one year. If any of the questions on the checklist generate a response indicating some environmental non-compliance, the regional director must be notified immediately.

3 Handling Non-compliance

Refer to the Non-Compliant Issues section for instructions on reporting non-compliant issues and developing the required action plan.

4 Guidance Document

Immediately following the checklist is a guidance document that is intended to assist the service partner in the completion of a facility inspection and completion of the Intermodal/Automotive Environmental Checklist.

5 Additional Guidance

If you have questions that are not answered by the guidance document, contact a member of the BNSF RR Environmental Operations team (see the Environmental Operations Team Map, which includes names and phone numbers at the end of this section).

Continued on next page

INTERMODAL/AUTOMOTIVE ENVIRONMENTAL CHECKLIST

Location:	**Inspector (print name):**
Date/Time:	**Signature:**
Instructions: 1. A facility inspection is required to complete this checklist. 2. Mark appropriate box for each question and list action items. 3. Refer to Intermodal/Automotive Environmental Checklist Guidance Document for assistance completing this checklist.	**Facility Manager Signature**: **Key:** Y = Yes N = No NA = Not Applicable

General

Does the facility have an Environmental Management Plan? ☐ Y ☐ N

1 ABOVEGROUND STORAGE TANKS

1.1	Are tanks inspected as per the SPCC Plan, or monthly if no plan required, and are records kept on-site for 3 years?	☐ Y ☐ N ☐ NA
1.2	Is tank and dispensing equipment in good condition (i.e., no leakage, holes, etc.)?	☐ Y ☐ N ☐ NA
1.3	Is tank labeled with its contents?	☐ Y ☐ N ☐ NA
1.4	Is the liquid pumped from the tank?	☐ Y ☐ N ☐ NA
1.4.a	If answered "NO" to 1.4, is a plan in place to convert to a pumped system within 90 days from the date of this inspection?	☐ Y ☐ N ☐ NA
1.5	Do all tanks have secondary containment or are they double-walled?	☐ Y ☐ N ☐ NA
1.5.a	If answered "NO" to 1.5, is a plan in place to provide containment for all tanks within 90 days from the date of this inspection?	☐ Y ☐ N ☐ NA
1.6	Is any water or fluid in the secondary containment system?	☐ Y ☐ N ☐ NA
1.7	Are secondary containment records maintained on-site for 3 years?	☐ Y ☐ N ☐ NA
1.8	Is secondary containment in good condition/water-tight?	☐ Y ☐ N ☐ NA
1.9	Are secondary containment drainage valves kept closed?	☐ Y ☐ N ☐ NA
1.10	All evidence indicates that ONLY non-contaminated fluids have been drained from the secondary containment?	☐ Y ☐ N ☐ NA

2 SPILLS AND EMERGENCY PREPAREDNESS

2.1	Were all areas where there were spills/leaks at the facility cleaned up?	☐ Y ☐ N ☐ NA
2.1.a	If answered "NO" to 2.1, is there a plan in place to address these areas within 90 days from the date of this inspection?	☐ Y ☐ N ☐ NA
2.2	Does the facility immediately report all spills/leaks to BNSF Management and SID/ROC and are notification records maintained on-site?	☐ Y ☐ N ☐ NA
2.3	Does the facility have a current SPCC Plan?	☐ Y ☐ N ☐ NA
2.4	Has SPCC training been conducted?	☐ Y ☐ N ☐ NA
2.5	Is spill response equipment (e.g., absorbent pads/pellets, oil-dry, etc.) available at the facility?	☐ Y ☐ N
2.5.a	Is contaminated spill response equipment stored properly?	☐ Y ☐ N ☐ NA
2.5.b	Is contaminated spill response equipment disposed of properly?	☐ Y ☐ N ☐ NA
2.6	Are emergency numbers (e.g., fire dept., ambulance, police, spill reporting agency, etc.) posted near telephones and readily available to all personnel?	☐ Y ☐ N
2.7	Is the emergency preparedness plan up-to-date?	☐ Y ☐ N
2.8	Does the facility have a safehaven with a watertight liner and is it clean, dry and ready for use?	☐ Y ☐ N ☐ NA
2.9	Has the facility prepared and submitted applicable SARA reports?	☐ Y ☐ N ☐ NA

3 SOLID WASTE GENERATION

3.1	Are all material/waste containers (i.e., drums, buckets, cans, etc.) labeled with their contents?	☐ Y ☐ N
3.2	Is all solid waste storage indoors/under cover or out of storm water flows?	☐ Y ☐ N
3.3	Are solid waste storage containers in good condition?	☐ Y ☐ N
3.4	Is used oil stored properly?	☐ Y ☐ N ☐ NA
3.5	Is used oil recycled or disposed of properly?	☐ Y ☐ N ☐ NA
3.6	Are used oil filters stored properly?	☐ Y ☐ N ☐ NA
3.7	Are used oil filters recycled or disposed of properly?	☐ Y ☐ N ☐ NA
3.8	Are used lead acid batteries stored properly?	☐ Y ☐ N ☐ NA
3.9	Are used lead acid batteries recycled properly?	☐ Y ☐ N ☐ NA
3.10	Are used tires handled properly?	☐ Y ☐ N ☐ NA
3.11	Is other solid waste (e.g., paper, plastic, metal, garbage, etc.) recycled or disposed of properly?	☐ Y ☐ N
3.12	Are all wastes produced at the facility classified as non-hazardous?	☐ Y ☐ N
3.13	Does the facility practice good housekeeping?	☐ Y ☐ N

4 STORM WATER/WASTEWATER DISCHARGES

4.1	Is all industrial wastewater (e.g., vehicle washings) permitted, drained to a treatment facility, or collected and disposed of properly?	☐ Y ☐ N ☐ NA
4.2	Does the facility have a storm water permit?	☐ Y ☐ N
4.2.a	If answered yes to 4.2, has training been conducted?	☐ Y ☐ N ☐ NA
4.2.b	If answered yes to 4.2, are training records filed with the SWPPP?	☐ Y ☐ N ☐ NA
4.2.c	If answered yes to 4.2, have the required sampling and/or inspections been completed?	☐ Y ☐ N ☐ NA
4.3	Does the facility have an active program to prevent storm water contamination?	☐ Y ☐ N
4.4	Are storm water culverts/ditches only discharging clean water?	☐ Y ☐ N

Comments:

A-3.5 EMP Checklist, Continued

6 Instructions

Below are the instructions for completing the Intermodal/Automotive Environmental Checklist Form.

7 General

Does the facility have an Environmental Management Plan?

An Environmental Management Plan should describe how a facility handles environmental issues, including storage tanks, spills, emergency preparedness, waste handling/disposal, wastewater and stormwater. This plan should be prepared by the operator of the facility and updated as operations, procedures, materials, or personnel change.

8 Above-ground Storage Tanks

Items 1.1 through 1.10 cover the **Aboveground Storage Tanks** section of the Intermodal/Automotive Environmental Checklist.

9 Tank Inspection

Item 1.1 Are tanks inspected as per the SPCC plan, or monthly if no plan required, and are records kept on site for 3 years?

The facility operator should inspect tanks as indicated in the facility's Spill Prevention, Control, and Countermeasure Plan (SPCC plan), or monthly if an SPCC Plan is not required for the facility (see item 2.3). Tank inspections should be documented on paper as proof tank inspections are being conducted, and should include areas covered by 1.2 through 1.9 below. Tank inspection records must remain on-site for 3 years. **NOTE**: If tanks have been inspected but records are unavailable, answer "no" to this question.

10 Tank Condition

Item 1.2 Is tank and dispensing equipment in good condition (i.e., no leakage, holes, etc.)?

All parts/components of each tank should be inspected for leaks, holes, rust, tears, loose fittings, damaged connections, dripping nozzles, etc. To minimize leaks, any item in poor condition should be immediately replaced/corrected.

11 Tank Labeling

Item 1.3 Is tank labeled with its contents?

Tank identification should include a National Fire Protection label and a label or stencil that accurately describes the contents of the tank, i.e., Diesel, Gasoline, Lubricating Oil, etc.

Continued on next page

A-3.5 EMP Checklist, Continued

12 Pumps

Item 1.4 Is the liquid pumped from the tank?

Product is either dispensed by a pump or by gravity. Tanks with gravity dispensing systems are generally elevated above the ground and have a hose directly from the tank to the dispensing nozzle. Gravity dispensing systems are not acceptable. Pumping systems are required for all tanks.

1.4.a If answered "no" to 1.4, is a plan in place to convert to a pumped system within 90 days from the date of this inspection? **NOTE**: If the answer to this question is "no," contact your BNSF Manager Environmental Operations for additional guidance.

13 Containment Type

Item 1.5 Do all tanks have secondary containment or are they double-walled?

All tanks are required to have some type of secondary containment to prevent spills/leaks from impacting the environment. Secondary containment includes double-walled tanks, and metal, concrete, or earthen walls and bottoms around tanks. The secondary containment must have a capacity greater than the capacity of the tank contained within it.

1.5.a If answered "no" to 1.5, is a plan in place to provide containment for all tanks within 90 days from the date of this inspection? **NOTE**: If the answer to this question is "no," contact your BNSF Manager Environmental Operations for additional guidance.

14 Containment Fill

Item 1.6 Is any water or fluid in the secondary containment system?

Product in the secondary containment system may indicate a leak and the source should be investigated and necessary corrective actions taken. Secondary containment systems should be kept free of rainwater or snowmelt that will reduce its holding volume. Clean water (i.e., no oily sheens, odors, etc.) should be drained from secondary containment, as necessary. Storm water contaminated by product leaks/spills should be removed and disposed of properly.

15 Record Requirements

Item 1.7 Are secondary containment records maintained on-site for 3 years?

Records of secondary containment drainage must be maintained on-site for 3 years.

16 Containment Condition

Item 1.8 Is secondary containment in good condition/water tight?

Secondary containment walls and bottoms should be free of holes, cracks, etc. and should be watertight to ensure the secondary containment will hold any spills/leaks from the tank. In addition, secondary containment systems must be kept free of any solid materials (e.g., bricks, buckets, drums, trash, etc.) that will reduce its holding capacity. If such items are in the containment area, they must be removed immediately and this question answered "no."

Continued on next page

A-3.5 EMP Checklist, Continued

17 Drainage Valves

Item 1.9 Are secondary containment drainage valves kept closed?

Water drainage valves are designed to drain rainwater or snowmelt from the secondary containment systems. Water drainage valves must be kept closed so that potential spills/leaks will be held within the secondary containment.

18 Fluid Contamination

Item 1.10 All evidence indicates that ONLY non-contaminated fluids have been drained from the secondary containment?

Stained soil or pavement near the drain valve may indicate that impacted water has been drained from the secondary containment. Any evidence of improper drainage should immediately be investigated and necessary corrective action taken.

19 Spills & Emergency Prep

Items 2.1 through 2.9 cover the **Spills and Emergency Preparedness** section of the Intermodal/Automotive Environmental Checklist.

20 Spill Cleanup

Item 2.1 Were all areas where there were spills/leaks at the facility cleaned up?

Evidence of spills/leaks can be stained or darkened soil, discolored fluid on pavement, sheen on water, etc. Spills/leaks may occur from fueling, oil dispensing, hydraulic systems, damaged drums/Intermodal trailers or containers, etc. Spilled/leaked material has the potential to contaminate soil, groundwater (i.e., water ground surface) and/or storm water runoff. Spills/leaks that occur outside must be cleaned up immediately and may require notification and further attention.

2.1.a If answered “no” to 2.1, is there a plan in place to address these areas within 90 days from the date of this inspection? **NOTE**: If no plan in place, notify the BNSF Manager Environmental Operations of the situation.

21 Spill Reporting

Item 2.2 Does the facility immediately report all spills/leaks to BNSF management and SID/ROC and are notification records maintained on-site?

The operator of each facility must report any size spill/leak to BNSF management and the Service Interruption Desk/Resource Operations Center (SID/ROC) immediately. The SID/ROC will assist in notifying regulatory agencies and initiating appropriate response activities. Spills or leaks that meet specific criteria must be immediately reported to state and/or federal environmental agencies; therefore, voice mail should not be considered an immediate notification. To answer “yes” to question 2.2 the facility should have a formal notification procedure that is known and used by site personnel. The facility operator should maintain notification records at the facility.

Continued on next page

A-3.5 EMP Checklist, Continued

Spill Reporting (continued)

NOTE: Additional information on proper spill reporting procedures can be obtained from the BNSF Manager Environmental Operations.

22 SPCC Plan

Item 2.3 Does the facility have a current SPCC Plan?

A Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) contains information and procedures for responding to, and preventing spills/leaks. SPCC Plans are required for facilities that store a combined total greater than 1,320 gallons of petroleum product in aboveground storage tanks, or greater than 42,000 gallons in underground storage tanks. Assure that the SPCC Plan remains current. A SPCC plan is considered current and up-to-date if there have been no changes to the tanks, the plan has been signed, certified and sealed by a Professional Engineer within the last three years, and the list of emergency coordinators is up-to-date.

23 SPCC Training

Item 2.4 Has SPCC training been conducted?

SPCC training should be provided at intervals frequent enough to assure adequate understanding of the SPCC Plan. Personnel involved with fuel/oil storage and dispensing must attend training. The SPCC Plan should specify what the training frequency should be; if not, it should be done yearly. New employees should be trained within six months.

24 Spill Equipment

Item 2.5 Is spill response equipment (e.g., absorbent pads/pellets, oil-dry, etc.) available at the facility?

Spill response equipment may include absorbent pads/pellets/booms/pillows, gloves, tyvek suits, shovels, drums to store used absorbent materials, etc. Spill response equipment should be available at facilities that have the potential to spill/leak materials.

2.5.a Is contaminated spill response equipment stored properly?

Contaminated spill response materials must be stored in leak-proof containers (e.g., 55-gallon drums) with sealed covers.

2.5.b Is contaminated spill response equipment disposed of properly?

Contaminated spill response materials may be disposed of through incineration, recycling, or landfilling depending on contaminant. Proper disposal includes maintaining disposal documentation on-site. These requirements apply to handling and disposal of oil-dry type materials generated during routine operations.

Continued on next page

A-3.5 EMP Checklist, Continued

25 Emergency Numbers

Item 2.6 Are emergency numbers (e.g., fire dept., ambulance, police, spill reporting agency, hazardous material responders, facility contacts, etc.) posted near telephones and/or readily available to all personnel?

Emergency numbers for the fire department, police department, ambulance, nearest hospital, and spill reporting agency, etc. should be posted near telephones and/or readily available to all personnel.

26 EMP Current

Item 2.7 Is the emergency preparedness plan up-to-date?

An emergency preparedness plan is required for facilities where potential hazards (e.g., hazardous waste storage, fires, explosive situations, etc.) exist. Review the plan and ensure that it is current (i.e., all names and phone numbers correct, correct addresses, site maps, etc.).

27 Safe-haven

Item 2.8 Does the facility have a safehaven with a watertight liner and is it clean, dry and ready for use?

Safehavens are designed to contain leaking trailers or containers so that the leaking material does not contaminate soil or water. Safehavens may be lined with concrete, steel, plastic (e.g., two layers of 10 mil polyurethane) or other watertight material and have berms to prevent overflow or storm water run-on. Run-on is water that flows into the safe-haven from surrounding areas and could flood the safehaven during rainfall. The safehaven must be kept dry and ready to use.

NOTE: If the answer to this question is "no," notify the BNSF Manager Environmental Operations of the situation.

28 SARA Reports

Item 2.9 Has the facility prepared and submitted applicable SARA reports?

Facilities that store specified hazardous substance over threshold quantities are required to submit SARA Tier Two Emergency and Hazardous Chemical Inventory Reports to State and Local Emergency Response Agencies. The BNSF Managers Environmental Operations can provide additional information regarding listed chemicals and the threshold quantities. Answer “NA” (not applicable) only if you are familiar with SARA requirements and are certain this facility is exempt from those requirements.

29 Solid Waste Generation

Items 3.1 through 3.13 cover the **Solid Waste Generation** section of the Intermodal/Automotive Environmental Checklist.

Continued on next page

A-3.5 EMP Checklist, Continued

30 Labeling

Item 3.1 Are all material/waste containers (i.e., drums, buckets, cans, totes, etc.) labeled with their contents?

Any container storing either new materials (e.g., oil, solvent, antifreeze, etc.) or wastes (e.g., used oil, spent solvent, used antifreeze, used oil filters, spent lead acid batteries, etc.) must be labeled with its contents. Labels must be readable and accurately describe the contents and can be of grease pencil, paint or other permanent marker, in addition to manufacturer applied labels and vinyl stickers.

31 Storage Location

Item 3.2 Is all solid waste storage indoors/under cover or out of storm water flows?

Solid wastes may include used oil, used oil filters, used antifreeze, used parts washing solvent, used batteries, spill cleanup wastes, etc. To minimize storm water runoff contamination, containers storing solid wastes must be stored indoors/under cover or out of storm water flows (e.g., out of ditches, etc.). Whenever possible, store solid waste containers within secondary containment systems or on an impervious (e.g., pavement, asphalt) surface.

32 Storage Condition

Item 3.3 Are solid waste storage containers in good condition?

Solid waste storage containers may include drums, buckets, tanks, steel roll-off boxes (e.g., dumpsters), etc. To prevent leaks/spills, solid waste storage containers should be in good condition (e.g., free of holes, cracks, significant rust, large dents, covered with tight lid, etc.).

33 Oil Storage

Item 3.4 Is used oil stored properly?

Used oil may be generated from vehicles, small equipment, and machinery oil changes. Used oil should be stored in appropriate containers (e.g., aboveground storage tanks, covered drums, or covered pails). These containers must be labeled “used oil.”

34 Oil Disposal

Item 3.5 Is used oil recycled or disposed of properly?

Used oil must be disposed properly through recycling or fuel burning methods. Some states, such as California and Missouri, consider used oil as hazardous waste and may have additional requirements. Contact the BNSF Manager Environmental Operations for additional information regarding used oil handling.

Continued on next page

A-3.5 EMP Checklist, Continued

35 Oil Filters

Item 3.6 Are used oil filters stored properly?

Used oil filters may be generated from vehicle, small equipment, and machinery oil filter changes. Used oil filters should be stored in appropriate containers (e.g., covered drums/pails), and properly labeled.

36 Filter Disposal

Item 3.7 Are used oil filters recycled or disposed of properly?

Used oil filters must be disposed of appropriately according to state/federal regulations. Contact the BNSF Manager Environmental Operations for additional information regarding used oil filter handling.

37 Battery Storage

Item 3.8 Are used lead acid batteries stored properly?

Lead acid batteries contain liquid acid and solid lead. Lead acid batteries are generally used in cars, tractors, trucks, and other vehicles. Used lead acid batteries should be stored in a manner to prevent any potential acid leaks from reaching water or soil. Recommended storage methods include covered plastic tubs/pails/bags, and should be properly labeled.

38 Battery Disposal

Item 3.9 Are used lead acid batteries recycled properly?

Used lead acid batteries must be recycled and may not be landfilled. Vendors who supply new batteries usually provide used battery recycling.

39 Tire Handling

Item 3.10 Are used tires handled properly?

Used rubber tires should be stored, transported, and disposed of according to local or state regulations, which can usually be determined from tire suppliers.

40 Other Disposal

Item 3.11 Is other solid waste (e.g., paper, plastic, metal, garbage, etc.) recycled or disposed of properly?

Other solid waste such as paper, cardboard, plastic, metal should be disposed of by a licensed landfill, incinerator or recycling facility. No waste is to be disposed of on-site (this includes burning, burial or use as fill).

Continued on next page

A-3.5 EMP Checklist, Continued

41 Hazards Classification

Item 3.12 Are all wastes produced at the facility classified as non-hazardous?

Certain wastes are legally classified as hazardous wastes. If hazardous wastes are produced at the facility, certain state or local requirements (e.g., notification of hazardous waste production activity, storage area requirements, manifesting, etc.) may apply. Hazardous wastes may include used parts washing solvent (low flash solvent only), unusable gasoline, liquid in aerosol cans, and paint waste. Most intermodal and automotive facilities, outside California, do not generate hazardous waste in regulated amounts.

NOTE: If the answer to this question is "no," if it cannot be answered, or if the facility is located in California, contact your BNSF Manager Environmental Operations for additional guidance.

42 House-keeping

Item 3.13 Does the facility practice good housekeeping?

Does the site look clean, neat, and orderly? Good housekeeping practices prevent accidents and reduce unnecessary waste material from being produced. Keep material storage/usage areas clean and clear of debris and all containers labeled with their contents. Proper care should be taken during container handling. Dispense liquids slowly to prevent overfilling or spillage. Inspect and maintain equipment to prevent leaks.

43 Storm-Water/Waste-water

Items 4.1 through 4.4 cover the **Storm Water / Wastewater Discharge** section of the Intermodal/Automotive Environmental Checklist.

44 Waste-water Disposal

Item 4.1 Is all industrial wastewater (e.g., vehicle washings) permitted, drained to a treatment facility, or collected and disposed of properly?

Any type of industrial wastewater (e.g., vehicle washings, parking lot washings, used liquid wastes, etc.) must not drain to storm water drains, ditches, streams, lakes, wetlands, etc. Industrial wastewater must be collected and discharged to either the city sanitary sewer systems or other wastewater treatment facilities. Facilities should identify drains/sewers as to their type (i.e., industrial, storm water, sanitary).

Facilities that discharge industrial wastewater to a treatment facility are usually required to obtain a discharge permit. To confirm that industrial wastewater is discharged properly, each facility should maintain a copy of the current permit or have available documentation that a permit is not required.

Continued on next page

A-3.5 EMP Checklist, Continued

45 Permits

Item 4.2 Does the facility have a storm water permit?

Storm water permits may be required if the facility conducts equipment cleaning, vehicle maintenance (e.g., fueling, lubrication, painting, repair, etc.), or other activities (e.g., hazardous material storage, contaminated land areas, etc.).

4.2.a If answered "yes" to 4.2, has training been conducted?

For permitted facilities, storm water pollution prevention training should be conducted annually to train facility personnel of the requirements of the Storm Water Pollution Prevention Plan (SWPPP).

4.2.b If answered "yes" to 4.2.a, are training records filed with the SWPPP?

Training records must be maintained with the SWPPP for three years.

4.2.c If answered "yes" to 4.2, have the required sampling and/or inspections been completed?

Sampling and/or inspection requirements can be found within the storm water permit. Check that the requirements applicable to this site are being met.

46 Anti-Contamination Program

Item 4.3 Does the facility have an active program to prevent storm water contamination?

To answer yes to question 4.3, the facility should implement Best Management Practices (BMPs) to prevent storm water contamination. Examples of some typical BMPs are as follows:

- Conduct repairs/maintenance indoors or under cover.
- Outside repairs/maintenance should be conducted over catch basins that drain to a wastewater treatment system or over sorbent materials.
- Store materials such as lube oil, grease fuel, antifreeze, paint, batteries, etc. indoors, under cover or within a secondary containment structure.
- Dispense liquids from drums by pumps, not by gravity.
- Dispense and handle liquids indoors or over secondary containment.
- All liquid containers should be stored upright and closed securely.
- Use funnels when adding fuel or lubricants to equipment.

NOTE: All of these examples may not be appropriate to each facility; however, each facility should practice as many of these as possible. If you need assistance in answering this question, contact your BNSF Manager Environmental Operations.

Continued on next page

A-3.5 EMP Checklist, Continued

47 Clean Stormwater

Item 4.4 Are storm water culverts/ditches only discharging clean water?

Drainage culverts/ditches should be discharging storm water runoff that is free of oily sheens, odors, soapsuds, etc. Ditches must be free of any material (e.g., oily parts, engines, drums, etc.) that could contaminate storm water runoff. There should not be any non-storm water discharges (e.g., oil, spills, etc.) from the facility. If there is a non-storm water discharge, prompt action to address the discharge and prevent future occurrences are required.

48 Non-Compliant Issues

In the event that deficiencies are found as a result of audits initiated by the BNSF Law Department, service partner self-audits, outside agency audits, or any other audit or checklist, the Project Manager Hub Facilities must be provided with a statement of non-compliant environmental findings. Upon completion of the audit, the auditing party is responsible for providing the aforementioned BNSF personnel with these non-compliant findings, with the exception of outside agency audits and those initiated by the BNSF Law Department; these statements will be provided by the Law Department.

49 Outstanding Exception Report

Outstanding Environmental Exceptions Report

The Project Manager Hub Facilities will utilize information obtained from the aforementioned statements of findings and the Intermodal/Automotive Environmental Checklist to track non-compliant issues and dispersion via the Outstanding Environmental Exceptions Report (see next page). This information will be sent to regional directors at least once a month. It is the corresponding *regional director's responsibility* to contact the service partner regarding non-compliant issues within 48 hours of receipt of the report and maintain the date, name of notified person, and method of notification, until issues have been addressed and corrected.

In addition, the Project Manager Hub Facilities will update the report as necessary to list by exception the service partner, responsible party for follow-up, target completion date, and actual completion date. The actual completion date will be the method used to track completion of corrective actions by deficient item, and will only be shown on a monthly report provided to the BNSF Environmental Department.

50 Environ-mental Action Plan

The regional director and the hub manager must work together with the service partner and ensure that non-compliant issues are addressed by the service partner and that an environmental action plan, for those items that cannot be immediately resolved, is developed and complied with. The action plan, as defined in service partner contracts, must be developed as soon as possible, but no later than 14 days from discovery of a non-compliant issue by any auditing party. The action plan must include facility location, list of deficiencies, who's responsible for correcting deficient items, corrective actions to be taken, timeline for completion, and a schedule of written progress reports.

Continued on next page

A-3.5 EMP Checklist, Continued

51 EMP Submission

The action plan must be supplied via e-mail or fax to the facility's BNSF regional director and the the Project Manager Hub Facilities.

It is the corresponding *regional director's responsibility* to ensure the Project Manager Hub Facilities is notified immediately upon a facility's elimination of issues identified in order to properly update the Outstanding Environmental Exceptions Report.

52 EMP Support

If additional guidance is necessary in addressing any issue, contact the corresponding BNSF Manager Environmental Operations (see directory at end of this section).

Continued on next page

Environmental Exceptions: Barstow

It is the regional director's responsibility to contact the service partner regarding non-compliant issues within 48 hours of receipt of this report and maintain the date, name of notified person, and method of notification, until issues have been addressed and corrected.

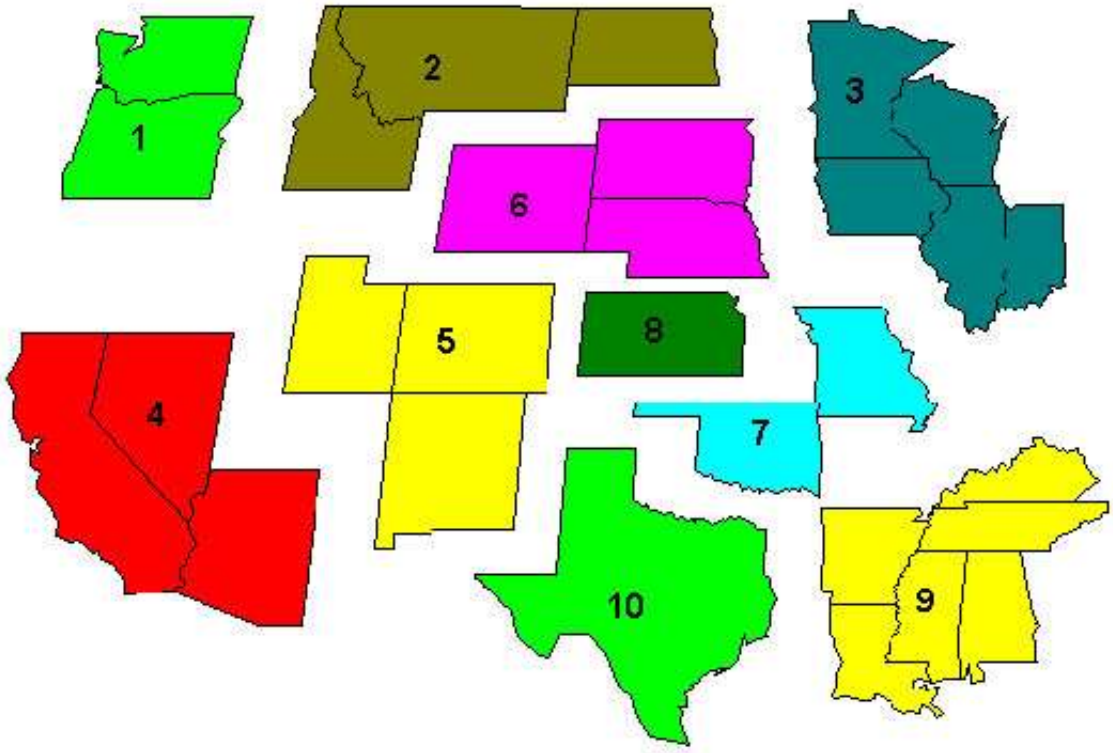
Date	Exception	Service Partner	Responsible for Follow-Up	Target Date	Completion Date
07/30/1999	Current county Hazardous Waste generator and Hazardous Material Handler permits were not available. ITS personnel described these permits as pending.	ITS	Kevin Harrington		
07/30/1999	Two chemical cleaners containing chlorinated solvents, which are not on the approved BNSF list, were observed at ITS: Master Brake Parts Cleaner (BC20), a cleaner containing perchloroethylene and methylene chloride and Mechanics Choice Loosen-It, a cleaner containing perchloroethylene.	ITS	Kevin Harrington		
07/30/1999	The Business Emergency/Contingency Plan has not been updated in the past two years and annual chemical inventory plans have not been submitted to the county as required.	ITS	Kevin Harrington		
07/30/1999	County permits were not posted as required.	ITS	Kevin Harrington		
07/30/1999	At the time of the site visit, it was unclear whether the valve on the discharge pipe from the drum containment pad was closed to prevent discharge of accumulated materials to the ground.	ITS	Kevin Harrington		
07/30/1999	Two sprayers were observed unlabeled on site.	ITS	Kevin Harrington		

A-3.5 EMP Checklist, Continued

53 Team Map

Environmental Operations Team Map

Director: Mel Burda 817-740-7354



54 Contacts

1. Jennifer Anderson, Mgr. Env. Operations
Seattle, WA 206-625-6034

2. Mike Perrodin, Mgr. Env. Operations
Havre, MT 406-265-0483

Bob Kale, Supervisor Env. Operations
Mandan, ND 701-667-2201

3. Jim Cunningham, Mgr. Env. Operations
Kansas City, KS 913-551-3990

Lorraine Pack, Supvr. Env. Operations
Kansas City, KS 913-551-4537

4. John Chavez, Mgr. Env. Operations
San Bernardino, CA 909-386-4082

5. John Meldrum, Mgr. Env. Operations
Denver, CO 303-480-7442

6. Ron Buhrman, Mgr. Env. Operations
Lincoln, NE 402-458-7633

Matt Graham, Supvr. Env. Operations
Lincoln, NE 402-458-7687

7. Don Dirard, Mgr. Env. Operations
Topeka, KS 785-435-3193

8. Ron Malleck, Mgr. Env. Operations
Topeka, KS 785-435-2257

9. Dillon Magers, Mgr. Env. Operations
Springfield, MO 417-829-4979

10. Mike Clift, Mgr. Env. Operations
Fort Worth, TX 817-740-7356

Lorraine Pack, Supvr. Env. Operations
Fort Worth, TX 817-740-2646

A-3.6 Environmental Compliance Requirements

1 ASTs

Aboveground Storage Tanks

Gasoline and petroleum-based products are typical products stored in aboveground storage tanks (ASTs). Storage of products in ASTs is becoming more common today because of the high incidence of leaking underground storage tanks (USTs), and the difficulty and expense of conducting inspections and providing leak-proof containment structures associated with USTs. Although there are many environmental benefits of placing tanks aboveground, there is also a necessity to ensure that products do not leak or spill and escape into the environment. Consequently, ASTs are required to have secondary containment to confine any products that could leak or spill.

2 AST Requirements

The presence of ASTs may require that inspections be made of the tank, associated piping, fill/dispensing system, and secondary containment. For some ASTs and USTs, where regulatory storage volume thresholds are surpassed, there are federal requirements that outline how products must be stored, storage operating systems inspected, and spill preparedness addressed. These requirements are outlined in the Spill Control and Countermeasure (SPCC) Plan Rule (40 CFR 112) (see the Spills and Emergency Preparedness section). If a SPCC Plan is not required at the service partner site, the AST operating system must be inspected at least once a month.

3 AST Registration

Some states and/or local communities (in some cases the fire department) require ASTs to be registered. Therefore, it will be necessary to check with the state and local governments to determine if ASTs at the service partner site need to be registered. In all cases, AST documentation must be kept on site for a minimum of 3 years.

4 EMP Requirements

What You Need in Your EMP

The service partner needs to provide AST compliance documentation in their EMP. If the service partner site is required to prepare a SPCC Plan, their EMP must also provide this additional documentation (see the Spills and Emergency Preparedness section).

- AST registration – a copy of the registration application. If registration is not required, provide documentation that the AST does not need to be registered
- Inventory of ASTs, including construction material (steel, concrete, polyethylene, etc.) the volume and product stored, and the type of secondary containment (double-lined tank, concrete, steel, etc.)
- Document that the ASTs are or are not subject to SPCC Plan Rules (see the Spills and Emergency Preparedness section)
- AST labeling and security (locking system to prevent tampering, theft, vandalism, etc.)

Continued on next page

A-3.6 Environmental Compliance Requirements, Continued

EMP Requirements (continued)

- Method of disposition of product and precipitation (rainfall and snow-melt) that accumulates in the secondary containment system
- Person(s) responsible for conducting and documenting AST inspection
- Spill/leak reporting system (also see the Spills and Emergency Preparedness section)
- Training records indicating appropriate personnel have been trained for reporting a spill/leak

5 AST Inventory

The service partner should begin by conducting an inventory of all ASTs, including total tank capacity, the product and volume stored, and the type of secondary containment. This documentation could be a photograph(s) of each tank posted on a page with a table showing tank information and statistics (see AST, Figure 1). The photograph(s) should show tank labeling, secondary containment, dispensing system, and drainage system. To demonstrate how AST inspections will be conducted, an example of a tank inspection log can be included in the EMP along with the name(s) of the person(s) responsible for conducting and documenting AST inspections (see AST, Figure 2).

6 AST Training

The EMP should also have a section that demonstrates that appropriate personnel have had training in spill prevention and reporting (see AST, Figures 3 and 4).

The service partner should include any other documentation that demonstrates compliance with applicable AST rules and regulations.

Continued on next page

AST, Figure 1
Storage Tank Operating System Inventory Form

Tank #1



Service Partner:

Completed by:

Date:

Site Location:

Product Gasoline

Capacity: 500 gallons

Tank Construction: Steel

Tank Installation: 1991

Status: Active

Registered: Not required (see attached regulation)

Secondary Containment: Steel – sidewalls and base

Location: North side of office

Labels:



Gasoline
Flammable 1203, NFPA

Security: Padlocked dispensing system, fenced area

Remarks: Need to have guard posts placed around tank to keep vehicles from backing into the tank. This is scheduled to be done in Spring of 2000. In the meanwhile, orange traffic cones have been placed around the tank.

AST, Figure 2
Storage Tank Operating System Inspection Log

Please print or type all information. Complete one form for each regulated waste.

Tank #1

Service Partner:	Joe's Contracting	**Date:**	4/1/2000
Inspected by:	Ed Horse	**Time:**	08 00
Site Location:	Indianapolis, IN		
Product	Gasoline		
Capacity:	500 gallons		
Tank Construction:	Steel		
Tank and Associated Piping Integrity:	No Leaks		
Tank and Associated Piping/Labeling:	Labels in-place and Visible		
Secondary Containment (circle)**:**	Yes (circled) No Type: Intact Steel		
Precipitation or Product in Containment Area (circle)**:**	Yes (circled) No *Method of Disposition:* No visible sheen or product. Water pumped into sanitary sewer with permission of Dave Adams from Public Utilities Department.		
Source of Product:	NA		
Remarks:	Telephone log with verbal permission from Dave Adams attached.		

AST, Figure 3
Personnel, Training, and Spill Prevention Procedures

Operating personnel are properly trained and instructed in the following:

1. Operation and maintenance of equipment to prevent chemical and petroleum discharges

   YES

2. Applicable pollution control laws, rules, and regulations

   YES

The following list shows those employees who have been trained in spill prevention. Training updates will be provided as necessary with the installation of new equipment and when a spill has occurred.

Name	Title	Date of Training	Update Training

AST, Figure 4
Spill and Leak Reporting

The following table lists those persons to be contacted when a spill or leak of chemical petroleum-based product or waste occurs. If the first person is not available, then contact the next person on the list until one of the designated individuals is contacted.

Name & Home Address	Title	Work Phone	Home Phone

All spills/leaks MUST also be reported to BNSF Management and Service Interruption Desk/Resource Operations Center (SID/ROC) immediately. The telephone number of the SID/ROC is 1-800-832-5452.

A-3.6 Environmental Compliance Requirements, Continued

7 Spills and Emergency Preparedness

Spills and Emergency Preparedness

Despite well-made plans and best practices, spills can and do occur. To prevent a small spill from becoming an unmanageable incident, spills require quick action based on straightforward policies and procedures. Spills that are mismanaged can result in extensive environmental damage and expensive cleanup costs. Well-founded spill and emergency preparedness plans can protect health and minimize spill damage and associated cleanup costs.

8 Oil Products

Because of the high consumption of oil and oil-related products, these products are most commonly involved in spills. Consequently, under the Federal Clean Water Act, non-transportation facilities that store oil and oil-related products in certain quantities are required to complete a Spill Prevention Control and Countermeasures (SPCC) Plan (40 CFR 112). In general a SPCC Plan is required for facilities involved with oil or oil-related products stored in the following manner:

- Products stored in aboveground tanks in excess of 1,320 gallons (regardless of the number or size of the container)
- Products stored in excess of 42,000 gallons in underground storage tanks

9 SPCC Measurement Plan

SPCC Plans must contain measures to prevent spills, demonstrate preparedness for the rapid and thorough recovery of spilled materials, establish procedures that will ensure proper resources are available, and provide protection of health, environment, and property. In some cases, state environmental regulations may require additional elements in the SPCC Plan. SPCC Plans must be prepared and/or reviewed by a registered professional engineer. For additional information on SPCC Plan Rules see the Federal Resources or State Resources sections.

10 Local Regulation

Besides requiring a SPCC Plan, some states have imposed additional regulations concerning oil storage. The service partner should consult the Federal Resources or State Resources sections and contact individual states to determine if there are individual state requirements for the service partner's facility

11 EMP Requirements

What You Need in Your EMP

The service partner needs to demonstrate the ability to effectively prevent spills and, if they should occur, the ability to appropriately respond and report them to BNSF management and appropriate regulators. Therefore, at a minimum, the service partner needs to have a spill prevention and response plan in their EMP.

Continued on next page

A-3.6 Environmental Compliance Requirements, Continued

12 Oil Inventory

The service partner should begin by conducting an inventory of oil and oil-related products (see the Aboveground Storage Tanks section) stored on site to determine if an SPCC Plan is required. If a SPCC Plan is required, the service partner should obtain information on the preparation of a SPCC Plan (see the Federal Resources or State Resources sections).

13 Minimum Requirements

Whether the service partner needs a SPCC Plan or not, the EMP must show that the facility has a spill and emergency preparedness plan. If the service partner needs a SPCC Plan, the SPCC Plan sections describing spill and emergency preparedness can be placed in the EMP. If the facility does not need a SPCC Plan, the service partner needs to prepare a spill and emergency preparedness plan.

14 EMP Spill Components

The EMP must contain the following spill and emergency preparedness elements:

- Copy of a spill log that describes spill response activities, disposition of wastes, and prevention of future spills (see Spill Preparedness, Figure 1)
- Copy of a safehaven inspection log (see Spill Preparedness, Figure 2)
- Spill equipment storage areas and persons responsible for inventory (site map clearly showing equipment storage areas)
- Emergency telephone numbers of people to be notified in the event of a spill or emergency (including Service Interruption Desk/Resource Operations Center [SID/ROC]) (see Spill Preparedness, Figure 3)
- Copy of spill and emergency preparedness training programs and record of attendees (also see the Aboveground Storage Tank portion of this section)
- Current record of changes in operations that affect spill and emergency preparedness
- If SARA Tier Two Emergency and Hazardous Chemical Inventory Reports are required (see Federal Resources section), the service partner should provide current copies of the Tier Two Reports in the EMP

15 Safehaven

To demonstrate how safehaven inspections will be conducted, an example of a safehaven inspection log can be included in the EMP along with the names of the person(s) responsible for conducting and documenting the safehaven inspections.

The service partner should include any additional documentation in the EMP that demonstrates spill and emergency preparedness.

Continued on next page

Spill Preparedness, Figure 1

Facility Spill/Leak History

Date/Time	Location	Material	Quantity Spilled	Source	Reason	Quantity of Material Recovered	Disposition of Wastes	Preventative Measures

Notes:

Spill Preparedness, Figure 2

Safehaven Inspection Log

Date/Time	Responsible Person	Condition of Lining	Filled with Water/Disposition	Condition of Substrate (sand, soil, etc.)	Required Housekeeping

*Must be kept free of debris and equipment

Notes:

Spill Preparedness, Figure 3

SPILL REPORTING EMERGENCY NOTIFICATION NUMBERS

EMERGENCY ACTIONS			
Emergency	**Person to Notify**	**Immediate Action**	**Notify Authorities (if necessary)**
Fire and/or Explosion	Emergency Coordinator	If possible, extinguish fire	Call Fire Department
Flood	Emergency Coordinator	Implement Contingency	
Spill or Release of Material	Emergency Coordinator	Take Remedial Action; if possible, contain spill	

EMERGENCY COORDINATORS			
Name & Home Address	**Title**	**Work Phone**	**Home Phone**

EMERGENCY CONTACTS		
Emergency	**Organization/Agency**	**Emergency Number**
Fire/Explosion	Fire Department	
Injury	Hospital	
Hazardous Material Spill or Release	Fire Department	
Spill reaches navigable water	National Response Center U.S. Coast Guard Washington, D.C. 2590	800-424-8802
Natural Disaster	Fire Department	
Management & Service Interruption Desk/Resource Operations Center (SID/ROC)	BNSF	1-800-832-5452

A-3.6 Environmental Compliance Requirements, Continued

16 Solid Waste Generation

Solid Waste Generation – Hazardous and Non-Hazardous Wastes

In general, under the Resource Conservation and Recovery Act (RCRA), anyone who produces or manages a waste must evaluate that waste to determine if it is hazardous or non-hazardous. The service partner must document in their EMP which wastes generated or managed on site are hazardous or non-hazardous. The EMP must also document that all wastes are being stored, managed, and disposed of properly.

17 Recycled Wastes

In some instances, service partners may be recycling wastes. Recycled wastes could include lead acid batteries, oil and oil filters, tires, plastic, paper and cardboard, metals, and antifreeze. The disposition of all recycled wastes must be documented in the EMP.

18 Document-ation

In addition to providing documentation for hazardous and recycled wastes, the service partner must also document in their EMP the disposition of non-hazardous wastes. Non-hazardous wastes could include plastic, paper and cardboard, demolition debris, food waste, and general refuse.

19 Waste Labeling

The service partner must have a labeling program in place to ensure that all chemical and petroleum-based products are adequately labeled. If chemical and petroleum-based products are not properly labeled and stored, they can become “orphan” containers; that is, no one can determine what is in the containers because the labels have fallen off or they were not properly labeled in the first place.

20 EMP Requirements

What You Need in Your EMP

The section in the EMP on solid waste generation should, at a minimum, contain a written description addressing the following elements:

- An inventory and volume of wastes generated and how they are stored
- Evaluation and documentation of hazardous and non-hazardous wastes
- Service partners’ hazardous waste generator status: conditionally exempt small quantity generator, small quantity generator (SQG), or a large quantity generator (LQG). **NOTE**: the generator status may require that other regulatory compliance activities be conducted. As an example, SQGs and LQGs may be required to have a contingency plan. In the EMP, the service partner should reference whether they have a contingency plan
- Copy of hazardous waste license and posting location (if required)

Continued on next page

A-3.6 Environmental Compliance Requirements, Continued

EMP Requirements (continued)

- An outline describing personnel training program with a signatory attachment demonstrating who received the training
- Disposal vendor(s)
- Waste labeling program (who is responsible for marking and labeling wastes)
- Copies of shipping papers (hazardous waste manifest, bill-of-lading, receipts) and, if applicable, land ban forms
- Description of housekeeping practices
- A product labeling program to ensure all chemical and petroleum-based products are adequately labeled

21 Waste Inventory

With respect to waste management, the service partner should first prepare an inventory of the wastes generated (waste stream) and then document whether the wastes are hazardous or non-hazardous, how they are stored, and disposed. Once the inventory has been prepared, the service partner can evaluate the waste in several ways:

- Obtain and review a Material Safety Data Sheet (MSDS) or other applicable information
- Product knowledge and how the waste was generated
- Obtain a sample of the waste and have it analyzed by a state-qualified laboratory

22 Waste Documentation

The service partner should document each waste stream in the EMP and attach applicable documentation (ascertained from the bullets above) to demonstrate whether it is a hazardous waste.

For example, if the service partner uses a parts washer machine, the service partner can contact the product supplier for a copy of the parts washer MSDS and any other information on whether the spent parts washer is a hazardous waste. The service partner should list the “spent parts washer” in their EMP along with a copy of the MSDS and the documentation from the product supplier.

23 Written Program

The service partner should have a written program that outlines procedures to ensure that chemical and petroleum-based products are adequately labeled. The documentation can include the person(s) responsible for labeling containers and how they will be labeled (e.g., grease pencil, permanent marker, paint pen, etc.).

Waste Management, Figure 1
Waste Management Form

Please print or type all information. Complete one form for each regulated waste.

Waste Type: Hazardous Waste

Service Partner:	Joe's Contracting	**Date:**	4/1/2000
Inspected by:	Ed Horse	**EPA ID #:**	XYZ0001
Site Location:	Indianapolis, IN		
WASTE NAME	Degreasing Solvent		
4-Digit Hazardous Waste Code:	D001, D039		
Year Waste was First Produced	1999		
Physical State (circle):	solid liquid gas sludges		
Source of Process of Generation:	Parts washer machine		
Estimated Amount per Year:	80 to 100 gallons/year		
Type of Storage Container(s) (circle):	*Drum pail original container above ground tank Other*		
	Indoors outdoors covered With Tarp		
Storage Location (circle)**:**	*Secondary containment* Yes Concrete		
Shipment Frequency:	4 times per year Times per month		
Transporter Name:	Safety Kleen		
Transporter ID Number	ILD984908202		
Designated Facility Name:	Safety Kleen		
Designated Facility ID Number:	MND981953045		
Designated Facility Management Method (circle):	*burn as fuel recycle incinerate chemical fixation neutralize land disposal treat/sewer other*		

Waste Management, Figure 2
Waste Management Form

Please print or type all information. Complete one form for each regulated waste.

Waste Type: Hazardous Waste

Service Partner:	Joe's Contracting	**Date:**	4/1/2000
Inspected by:	Ed Horse	**EPA ID #:**	XYZ0001
Site Location:	Indianapolis, IN		
WASTE NAME	Waste Potassium Hydroxide Solution		
4-Digit Hazardous Waste Code:	D002		
Year Waste was First Produced	1999		
Physical State (circle):	solid (liquid) gas (sludges)		
Source of Process of Generation:	Equipment Cleaning		
Estimated Amount per Year:	25 gallons/year		
Type of Storage Container(s) (circle):	(*Drum*) *pail original container above ground tank* *Other*		
	Indoors (*outdoors*) *covered*		
Storage Location (circle)**:**	*Secondary containment*		
Shipment Frequency:	1 times per year Times per month		
Transporter Name:	EOG Environmental		
Transporter ID Number	WID988580056		
Designated Facility Name:	EOG Environmental		
Designated Facility ID Number:	WID988580056		
Designated Facility Management Method (circle):	*burn as fuel recycle* (*incinerate*) *chemical fixation neutralize* *land disposal treat/sewer other*		

Waste Management, Figure 3
Waste Management Form

Please print or type all information. Complete one form for each regulated waste.

Waste Type: Hazardous Waste

Service Partner:	Joe's Contracting	**Date:**	4/1/2000
Inspected by:	Ed Horse	**EPA ID #:**	XYZ0001
Site Location:	Indianapolis, IN		
WASTE NAME	Lead Acid Batteries		
4-Digit Hazardous Waste Code:	D002, D008		
Year Waste was First Produced	1999		
Physical State (circle):	(solid) liquid gas sludges		
Source of Process of Generation:	Spent Batteries from Vehicles		
Estimated Amount per Year:	65,000 pounds/year		
Type of Storage Container(s) (circle):	*Drum pail original container above ground tank* *Other:* Polyethylene tubs or compatible storage container		
	(*Indoors*) *outdoors covered*		
Storage Location (circle)**:**	*Secondary containment*		
Shipment Frequency:	times per year 1 times per month		
Transporter Name:	Midwest Recycling		
Transporter ID Number	Exempt		
Designated Facility Name:	Gopher Smeltings		
Designated Facility ID Number:	MND006148092		
Designated Facility Management Method (circle):	*burn as fuel* (*recycle*) *incinerate chemical fixation neutralize* *land disposal treat/sewer other*		

Waste Management, Figure 4
Waste Management Form

Please print or type all information. Complete one form for each regulated waste.

Waste Type: Hazardous Waste

Service Partner:	Joe's Contracting	**Date:**	4/1/2000
Inspected by:	Ed Horse	**EPA ID #:**	XYZ0001
Site Location:	Indianapolis, IN		
WASTE NAME	Oil Sorbents		
4-Digit Hazardous Waste Code:	NA		
Year Waste was First Produced	1999		
Physical State (circle):	solid (liquid) gas (sludges)		
Source of Process of Generation:	From Equipment Oil Leaks		
Estimated Amount per Year:	110 gallons/year		
Type of Storage Container(s) (circle):	*Drum pail original container above ground tank Other:*		
Storage Location (circle)**:**	(*Indoors*) *outdoors covered* *Secondary containment*		
Shipment Frequency:	4 times per year times per month		
Transporter Name:	Medical Safety Systems		
Transporter ID Number	Exempt		
Designated Facility Name:	Medical Safety Systems		
Designated Facility ID Number:	Exempt		
Designated Facility Management Method (circle):	(*burn as fuel*) *recycle incinerate chemical fixation neutralize* *land disposal treat/sewer other*		

Waste Management, Figure 5
Waste Management Form

Please print or type all information. Complete one form for each regulated waste.

Waste Type: Hazardous Waste

Service Partner:	Joe's Contracting	**Date:**	4/1/2000
Inspected by:	Ed Horse	**EPA ID #:**	XYZ0001
Site Location:	Indianapolis, IN		
WASTE NAME	Demolition Debris		
4-Digit Hazardous Waste Code:	NA		
Year Waste was First Produced	1999 – One Time Generation		
Physical State (circle):	(solid) liquid gas sludges		
Source of Process of Generation:	Razed Storage Shed		
Estimated Amount per Year:	20 yard Roll-Off Box (Covered) – One Time		
Type of Storage Container(s) (circle):	*Drum pail original container above ground tank* *Other:* Roll-Off Box (Covered)		
Storage Location (circle)**:**	*Indoors* (*outdoors*) *covered* *Secondary containment* No		
Shipment Frequency:	1 times per year times per month		
Transporter Name:	Veit Construction		
Transporter ID Number	NA		
Designated Facility Name:	SKB Landfill		
Designated Facility ID Number:	NA		
Designated Facility Management Method (circle):	*burn as fuel recycle incinerate chemical fixation neutralize* (*land disposal*) *treat/sewer other*		

Continued on next page

A-3.6 Environmental Compliance Requirements, Continued

24 Stormwater / Wastewater

Stormwater/Wastewater Discharges and Stormwater Runoff

Materials stored or used in a setting where they come in contact with rainfall (or snowfall) could potentially contaminate stormwater or snowmelt runoff. Consequently, the Environmental Protection Agency (EPA) or state environmental agencies may require the service partner to complete a stormwater permit application. If a stormwater permit is issued, the service partner may have to prepare a Stormwater Pollution Prevention (SWPP) Plan.

25 Permits

The service partner needs to determine if a stormwater permit is required for their site activities. This determination can be made by comparing the service partner's Standard Industrial Classification (SIC) Code with a list of SIC Codes associated with industries that the EPA has determined must at a minimum complete a stormwater permit application. For many of these industries, the preparation of a SWPP Plan will also be required.

26 SIC Codes

The service partner should determine their SIC Code by contacting their accounting department (internal or external) for the SIC Code(s) used in preparation of financial documents. The SIC Code(s) can then be compared to EPA's SIC Code list. A SIC Code list can be obtained by consulting the references provided in the Federal Resources – Storm Water / Wastewater section.

27 Permits

If the service partner is required to have a stormwater permit, an application can be obtained from the specific state, or if the program is administered by the EPA, from its regional offices. In most cases the permit application is available electronically over the Internet or from the state through the U.S. mail. State contact information is provided in the State Resources – Storm Water / Wastewater section.

28 EMP Requirements

What You Need in Your EMP

The EMP must contain a section that documents stormwater permit applicability. If a stormwater permit is required, the service partner must provide appropriate documentation. This can be a copy of a completed stormwater permit application. The documentation should also include, at a minimum, how the service partner will meet the permit requirements. The service partner can take excerpts of their SWPP Plan and/or reference their SWPP Plan. The EMP should also document the on-site public location where the stormwater permit is posted, if required to be posted.

29 Minimum Documentation

If a stormwater permit is not required, the service partner should provide documentation in the EMP why it is not required. This can be as simple as a telephone log with a regulator or a comparison of the service partner's SIC Code with EPA's SIC Code list.

Continued on next page

A-3.6 Environmental Compliance Requirements, Continued

30 Wastewater Discharge

Wastewater Discharge

In many cases, facility wastewaters that are discharged to the sanitary sewer system and conveyed to a Publicly Owned Treatment Works (POTW) require that the facility obtain an industrial wastewater discharge permit. This permit is obtained through the POTW, local sewer authority, or public works department.

31 POTW

The service partner will have to obtain discharge information and criteria from the POTW to determine if they will need to obtain and maintain an industrial wastewater discharge permit. The service partner should be able to get the appropriate requirements by contacting the local public utilities, water and sewer authority, or the department of public works.

32 Permits

In some instances, some process wastewaters could be discharged to a drainage ditch, culvert, or body of water. Examples of these types of discharges are wastewaters from equipment and vehicle washing, boiler blowdown, cooling water, and water from air compressors. Because these wastewaters are discharged to "waters of the state" or "navigable waters," and may contain contaminants, the service partner may need to obtain a National Pollutant Discharge Elimination System (NPDES) Permit. NPDES Permits are administered by the state or federal government. To determine if a NPDES Permit is necessary, the service partner should contact a state or federal or state representative listed in the Federal Resources or State Resources sections.

33 EMP Requirements

What You Need in Your EMP

The EMP should contain a copy of the industrial wastewater or NPDES permit application. It is especially important that the service partner review these permit applications carefully if they are conducting onsite equipment or vehicle washing. If a permit is required, the service partner should include a copy of the permit in the EMP. The permit may require the service partner to conduct wastewater sampling and analysis (monitoring). If there are monitoring requirements, the EMP should have a section describing the monitoring requirements and how the service partner will meet those requirements.

A-3.7 Federal Resources

1 Introduction

This section provides service partners with resources for obtaining federal regulatory information. We have provided a brief overview of each environmental law and regulation that may be applicable to the service partners' operations. The environmental regulatory information and resources contained in this section are not comprehensive; they are provided as a starting point for understanding where to go for more help in the preparation of the EMP.

2 State Laws

Remember that all states must have environmental laws or regulations that are as stringent as the federal laws or regulations. However, some states and local municipalities have environmental laws and regulations that are more stringent than federal ones. For this reason, it is always important to check with state and local regulators to determine if there are environmental requirements that go beyond federal environmental requirements.

3 Law Overlap

In some instances, environmental laws and regulations may overlap. This overlap is also true with information and resources. For example, the Resource, Conservation, and Recovery Act (RCRA) hotline, which provides information on hazardous and solid waste, also handles inquiries on aboveground storage tank (AST) issues.

4 EPA

Environmental Protection Agency (EPA) headquarters and regional access numbers are provided below.

Environmental Protection Agency Headquarters

Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Phone: 202-260-2090
FAX:
Web: http://www.epa.gov

Office of Water Resource Center

Phone: 202-260-7786

Environmental Protection Agency Region 1 (CT, MA, ME, NH, RI, VT)

Suite 1100
1 Congress Street
Boston, MA 02114

Phone: 617-918-1111
FAX:617-565-3660
Web: http://www.epa.gov/region01/

Customer Call Center

Phone: 888-372-7341

Environmental Protection Agency Region 2 (NJ, NY, PR, VI)

290 Broadway
New York, NY 10007

Phone: 212-637-3000
FAX:212-637-3526
Web: http://www.epa.gov/region2/

Continued on next page

A-3.7 Federal Resources, Continued

Environmental Protection Agency Region 3 (DC, DE, MD, PA, VA, WV)

1650 Arch Street
Philadelphia, PA 19103
Boston, MA 02114

Phone: 215-814-5000 or 800-438-2474
FAX: 215-814-5103
Web: http://www.epa.gov/region03/

Water Protection Division **Phone**: 215-814-2300
Waste and Chemicals Mgmt Division **Phone**: 215-814-3110

Environmental Protection Agency Region 4 (AL, FL, GA, KY, MS, NC, SC, TN)

Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303

Phone: 404-562-9900 or 800-241-1754
FAX: 404-562-8174
Web: http://www.epa.gov/region04/

Water Management Division **Phone**: 404-562-8174
Waste Management Division **Phone**: 404-562-8651

Environmental Protection Agency Region 5 (IL, IN, MI, MN, OH, WI)

77 West Jackson Boulevard
Chicago, IL

Phone: 312-353-2000 or 800-621-8431
FAX: 312-353-4135
Web: http://www.epa.gov/region5/

Environmental Protection Agency Region 6 (AR, LA, NM, OK, TX)

Fountain Place 12th Floor
Suite 1200
1445 Ross Avenue
Dallas, TX 75202

Phone: 214-665-2200 or 800-887-6063
FAX: 214-665-7113
Web: http://www.epa.gov/region06/

Environmental Protection Agency Region 7 (IA, KS, MO, NE)

901 North 5th Street
Kansas City, KS 66101

Phone: 913-551-7003 or 800-223-0425
FAX:
Web: http://www.epa.gov/region07/

Water, Wetlands, & Pesticides **Phone**: 913-551-7030
Air, RCRA, & Toxics Division **Phone**: 913-551-7020

Environmental Protection Agency Region 8 (CO, MT, ND, SD, UT, WY)

999 18th Street, Suite 500
Denver, CO 80202

Phone: 303-312-6312 or 800-227-8917
FAX: 303-312-6339
Web: http://www.epa.gov/region08/

Environmental Protection Agency Region 9 (AZ, CA, HI, NV)

75 Hawthorne Street
San Francisco, CA 94105

Phone: 415-744-1305
FAX: 415-744-2499
Web: http://www.epa.gov/region09/

RCRA Information **Phone**: 415-744-2074

Continued on next page

A-3.7 Federal Resources, Continued

Environmental Protection Agency Region 10 (AK, ID, OR, WA)

1200 Sixth Avenue
Seattle, WA 98101

Phone: 206-553-1200 or 800-424-4372
FAX: 206-553-0149
Web: http://www.epa.gov/region10/

5 AST Federal Regulation

Aboveground Storage Tanks Regulations

Clean Water Act (CWA)

The CWA focuses on improving the quality of the nation's waters by:

- eliminating discharge of pollutants into surface waters of the United States
- restoring and maintaining the integrity of the nation's waters.

If a facility handles, transports or stores oil, and if its location gives it the potential to harm the environment by discharging into a body of water, the facility is required to prepare a spill prevention control and countermeasure (SPCC) plan. Chapter 40 of the Code of Federal Regulations Part 112 (40 CFR 112) provides detailed guidelines for preparing the SPCC plan.

6 EPA

Environmental Protection Agency (EPA) headquarters and regional access numbers are provided below.

Environmental Protection Agency (EPA)

1200 Pennsylvania Avenue, NW
Washington, DC 20460

Phone: (202) 260-2090
Web: http://www.epa.gov

EPA Office of Enforcement and Compliance Assurance (OECA)

1200 Pennsylvania Avenue, NW
Washington, DC 20004

Phone: (202) 564-7057
Web: http://www.epa.gov/oeca

EPA Office of Water

999 18th Street, Suite 500
Denver, CO 80202

Phone: (202) 260-5700
Web: http://www.epa.gov/ow/
E-mail: OW-General@epamail.epa.gov

EPA Sector Notebooks

Phone: (202) 260-2090
Web: http://www.epa.gov/oeca/sector
Web: http://www.epa.gov/region08/

Continued on next page

A-3.7 Federal Resources, Continued

Federal Railroad Administration
Mail Stop 10, 7th Floor
1120 Vermont Avenue NW
Washington, DC 20590

Phone: (202) 493-6000
Web: www.fra.dot.gov/site/index.htm
E-mail: webinq@fra.dot.gov

7 Spills Federal Reg.

Spills and Emergency Federal Regulations

Below are overviews of Federal Regulations related to Spills and Emergency Preparedness.

8 CERCLA

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

CERCLA, which is more commonly known as Superfund, enables the EPA to respond directly to releases or threatened releases of hazardous substances. The act details the procedures and standards for short-term and long-term remedial responses to such releases and threatened releases. The law specifies when releases of hazardous substances must be reported and the procedures to be followed for the cleanup of federal installations. It can also hold facility owners financially responsible for the improper disposal of hazardous wastes.

9 EPCRA

Emergency Planning and Community Right-to-Know Act (EPCRA)

EPCRA Has four major components: emergency planning, emergency release notification, community right-to-know reporting and toxic chemical release inventory reporting. The law impacts any facility that produces, uses, or stores any of the substances on the EPA's List of Extremely Hazardous Substances (http://www.epa.gov/swercepp/ehs/ehsalpha.html) in quantities equal to or greater than the threshold planning quantity established for each substance. Applicable facilities are required to notify the State Emergency Response Commission and the Local Emergency Planning Committee with information pertaining to the four components listed above. This information will allow States and local communities to develop a broad perspective of the chemical hazards for the entire community and individual facilities.

10 OPA

Oil Pollution Act (OPA)

OPA is designed to improve the nation's ability to prevent and respond to oil spills. OPA requires both the government and the industry to create contingency plans. The National Oil and Hazardous Substances Pollution Contingency Plan (http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-J/) details the requirements for preparing facility response plans for certain facilities that pose a serious threat to the environment.

Continued on next page

A-3.7 Federal Resources, Continued

11 CWA

Clean Water Act (CWA)

The CWA focuses on improving the quality of the nation's waters by:

- eliminating discharge of pollutants into surface waters of the United States
- restoring and maintaining the integrity of the nation's waters

If a facility handles, transports or stores oil, and if its location gives it the potential to harm the environment by discharging into a body of water, the facility is required to prepare a spill prevention control and countermeasure (SPCC) plan. Chapter 40 of the Code of Federal Regulations Part 112 (40 CFR 112) provides detailed guidelines for preparing the SPCC plan.

12 EPA

Environmental Protection Agency (EPA) headquarters and regional access numbers are provided below, along with relevant regulating agencies.

Environmental Protection Agency (EPA)

1200 Pennsylvania Avenue, NW
Washington, DC 20460

Phone: (202) 260-2090
Web: http://www.epa.gov

EPA Office of Emergency and Remedial Response

Crystal Gateway One
1235 Jefferson Davis Highway
Arlington, Virginia

Phone: (703) 603-9232
Web: www.epa.gov/superfund/contacts
E-mail: superfund.info@epa.gov

EPA Office of Enforcement and Compliance Assurance (OECA)

1200 Pennsylvania Avenue NW
Washington, DC 20004

Phone: (202) 564-7057
Web: www.epa.gov/oeca

Environmental Protection Agency – Oil Spill Program

Phone: (800) 424-9346
Web: www.epa.gov/oilspill/opaover.htm
E-mail: oilinfo@epa.gov

EPA Office of Solid Waste and Emergency Response

USEPA Ariel Rios (5101)
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Phone: (800) 424-9346
Web: www.epa.gov/swerrims/contact.htm
E-mail: Webmaster.OSW@epamail.epa.gov

Environmental Protection Agency Sector Notebooks

Phone: (202) 260-2090
Web: www.epa.gov/oeca/sector/

Continued on next page

A-3.7 Federal Resources, Continued

40 CFR Parts 300-399: EPCRA Regulations

Phone: (800) 467-4922
Web: www.epa.gov/docs/epacfr40/chapt-I.info/subch-J/

40 CFR 300: CERCLA Regulations

1200 Pennsylvania Avenue, NW
Washington, DC 20460

Phone: (703) 603-9232
Web: www.epa.gov/docs/epacfr40/chapt-I.info/subch-J/

40 CFR 112 CWA Regulations

Phone: (202) 260-5700
Web: www.epa.gov/docs/epacfr40/chap-I.info/subch-D/

CERCLA/EPCRA/OPA Hotline

1200 Pennsylvania Avenue, NW
Washington, DC 20460

Phone: (800) 424-9346
Web: www.epa.gov

Chem-Tel Inc

Chem-Tel Inc. is a 24-hr DOT and HAZMAT compliance emergency phone response service that provides a variety of information including Material Safety Data Sheets and hazardous materials and incident response. Chem-Tel may charge a fee for the services offered by the firm.

1313 8th Avenue
Tampa, Florida 33605

Phone: (813) 248-0573
Web: www.chemtelinc.com
E-mail: info@chemtelinc.com

Federal Railroad Administration

Mail Stop 10, 7th Floor
1120 Vermont Avenue NW
Washington, DC 20590

Phone: (202) 493-6000
Web: www.fra.dot.gov/site/index.htm
E-mail: webinq@fra.dot.gov

National Response Center

C/O U. S. Coast Guard
2100 2nd Street, Southwest – Room 2611
Washington, DC 20593-0001

Phone: (800) 424-8802
Web: http://www.nrc.uscg.mil/
E-mail: lst-nrcweb@comdt.uscg.mil

United States Department of Transportation
Research and Special Programs Administration
Office of Hazardous Materials Safety

400 7th Street S.W.
Washington, DC 20590

Phone: (800) 467-4922
Web: http://hazmat.dot.gov/

Continued on next page

A-3.7 Federal Resources, Continued

13 Solid Waste Regulation

Solid Waste Generation Federal Regulations

Below are overviews of Federal Regulations related to Spills and Emergency Preparedness.

14 RCRA

Resource Conservation and Recovery Act (RCRA)

RCRA regulates the proper storage, handling and disposal of solid wastes, hazardous wastes and the proper management of underground storage tanks. One major component of RCRA is the "cradle to grave" management system for hazardous wastes, which uses a tracking system to record the location and progress of hazardous waste from the time of generation to time of disposal.

- RCRA Subtitle C establishes the regulatory structure for managing hazardous waste from the time it is generated until its final disposal.
- RCRA Subtitle D establishes a system for managing solid (primarily non-hazardous) waste.

Many RCRA requirements are implemented by state laws, which can be more strict than the federal requirements.

15 CERCLA

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

CERCLA, which is more commonly known as Superfund, enables the EPA to respond directly to releases or threatened releases of hazardous substances. The act details the procedures and standards for short-term and long-term remedial responses to such releases and threatened releases. The law specifies when releases of hazardous substances must be reported and the procedures to be followed for the cleanup of federal installations. It can also hold facility owners financially responsible for the improper disposal of hazardous wastes.

16 SARA

Superfund Amendments and Reauthorization Act (SARA)

SARA is an amendment to CERCLA and includes changes and additions to the Superfund program. The law increased the focus on human health problems posed by hazardous waste sites and provided new enforcement authorities and settlement tools. The law stresses the importance of permanent remedies and innovative technologies for cleaning up hazardous waste sites and increases the state involvement in every phase of Superfund program.

Continued on next page

A-3.7 Federal Resources, Continued

17 TSCA

The Toxic Substances Control Act (TSCA)

TSCA authorizes the EPA to identify and control chemical substances that are distributed in the marketplace. The regulations require proper use, inspection, labeling and marking, record keeping, storage, reporting, transportation, management, and disposal of all electrical equipment containing polychlorinated biphenyls (PCBs).

18 EPA

Environmental Protection Agency (EPA) headquarters and regional access numbers are provided below, along with relevant regulating agencies.

EPA Office of Enforcement and Compliance Assurance (OECA)

1200 Pennsylvania Avenue NW
Washington, DC 20004

Phone: (202) 564-7057
Web: www.epa.gov/oeca

EPA Office of Solid Waste and Emergency Response

USEPA Ariel Rios (5101)
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Phone: (800) 424-9346
Web: www.epa.gov/swerrims/contact.htm
E-mail: Webmaster.OSW@epamail.epa.gov

Environmental Protection Agency Sector Notebooks

Phone: (202) 260-2090
Web: www.epa.gov/oeca/sector/

40 CFR Parts 260 – 299 RCRA Regulations

Phone: (800) 467-4922
Web:
www.epa.gov/docs/epacfr40/chapt-I.info/subch-I/

40 CFR 300: CERCLA Regulations

Phone: (800) 424-9346
Web:
www.epa.gov/docs/epacfr40/chapt-I.info/subch-J/

40 CFR Parts 700 – 799 TSCA Regulations

Web: www.epa.gov/docs/epacfr40/chapt-I.info/subch-R/

40 CFR Parts 300 – 399 SARA Regulations

Phone: (800) 424-9346
Web: www.epa.gov/docs/epacfr40/chapt-I.info/subch-J/

Continued on next page

A-3.7 Federal Resources, Continued

EPA Transportation Compliance Assistance Center

Phone: (202) 564-7057
Web: www.transource.org

RCRA/CERCLA Hotline

Phone: (800) 424-9346
Web: www.epa.gov/rcraonline

RCRA Online

Phone: (800) 424-9346
Web: www.epa.gov/rcraonline

Introduction to Generators (40 CFR part 262)

U.S. EPA RCRA, Superfund, and EPCRA Hotline Training Module.
Solid Waste & Emergency Response, EPA 530-R-97-054, PB 98-108-095, November 1997.

19 Stormwater/ Wastewater Regulations

Stormwater / Wastewater Discharges Federal Regulations

Below are overviews of Federal Regulations related to Spills and Emergency Preparedness.

20 CWA

Clean Water Act (CWA)

The CWA focuses on improving the quality of the nation's waters by:

- eliminating discharge of pollutants into surface waters of the United States
- restoring and maintaining the integrity of the nation's waters.

21 CWA Types

The CWA regulates two types of discharges into waters of the United States:

- point sources (from specific operations) and
- non-point sources (from multiple sources such as storm water).

22 Permits

The CWA makes it unlawful to discharge any pollutant from a point source to navigable waters unless a National Pollutant Discharge Elimination System (NPDES) permit is obtained. The permit will describe the conditions required for discharging water and ensures that all applicable water quality standards are met. The CWA also regulates discharges from non-point sources such as storm water that may convey pollutants into receiving waters.

Continued on next page

A-3.7 Federal Resources, Continued

23 POTW

If any wastewaters are routed to a local sewer system, the local Publicly Owned Treatment Works (POTW) or regional sewer authority should be contacted for further information on potential pretreatment standards and potential permitting requirements.

24 EPA

Environmental Protection Agency (EPA) headquarters and regional access numbers are provided below, along with relevant regulating agencies.

EPA Office of Enforcement and Compliance Assurance (OECA)
1200 Pennsylvania Avenue NW
Washington, DC 20004
Phone: (202) 564-7057
Web: www.epa.gov/oeca

EPA Office of Water
401 M Street SW
Washington, DC 20460
Phone: (202) 260-5700
Web: http://www.epa.gov/ow/

EPA Storm Water Hotline
Phone: (800) 245-6510
Web: http://www.epa.gov/ow/

Environmental Protection Agency Sector Notebooks
Phone: (202) 260-2090
Web: www.epa.gov/oeca/sector/

40 CFR 110-122: Clean Water Act
Phone: (202) 260-5700
Web: www.epa.gov/docs/epacfr40/chapt-I.info/subch-D/

40 CFR 400-500: Wastewater Guidelines
Phone: (202) 260-5700
Web: www.epa.gov/docs/epacfr40/chapt-I.info/subch-N/

EPA Transportation Compliance Assistance Center
Phone: (202) 564-7057
Web: www.transource.org

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A-3.7 Federal Resources, Continued

Federal Railroad Administration
Mail Stop 10, 7th Floor
1120 Vermont Avenue NW
Washington, DC 20590

Phone: (202) 493-6000
Web: www.fra.dot.gov/site/index.htm
E-mail: webinq@fra.dot.gov

A-3.8 State Resources: Environmental

1 Overview

This section provides service partners with contacts for obtaining state regulatory information. The environmental regulatory information and resources contained in this section are not comprehensive; they are provided as a starting point for understanding where to go for more help in the preparation of the EMP.

2 Federal Reminder

Remember that all states must have environmental laws or regulations that are as stringent as the federal laws or regulations. However, some states and local municipalities often have environmental laws and regulations that are more stringent than federal ones. For this reason, it is always important to check with state and local regulators to determine if there are environmental requirements that go beyond federal environmental requirements.

3 Alabama

Alabama Department of Environmental Management - Main
1400 Coliseum Boulevard
Montgomery, Alabama 36110
Phone: 334-271-7700
Web: www.adem.state.al.us

4 Arizona

Arizona Department of Environmental Quality - Main
3033 N. Central Avenue
Phoenix, Arizona 85012
Phone: 602-207-2300
Web: www.adeq.state.az.us

Arizona Department of Environmental Quality – Compliance Assistance
3033 N. Central Avenue
Phoenix, Arizona 85012
Phone: 602-207-2254 (Jack Bale, Ombudsman)
Fax: 602-207-2254
Web: http://www.adeq.state.az.us/environ/compliance/index.html

State Fire Marshall
Phone: 602-255-4964

Continued on next page

A-3.8 State Resources: Environmental, Continued

5 California

California Environmental Protection Agency – Main

555 Capitol Mall, Suite 525
Sacramento, California 95814

Phone: 916-227-4364
Fax: 916-445-6401
Web: www.calepa.ca.gov

California Environmental Protection Agency – Aboveground Storage Tank Program

State Water Resources Control Board
Division of Clean Water Programs
P.O. Box 944212
Sacramento, CA 94244-2120

Phone: 916-227-4364 (Carol Julian)
Fax: 916-227-4349
Web: www.swrcb.ca.gov/cwphome/agt/index.htm

6 Colorado

Colorado Department of Public Health and Environment – Main

4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Phone: 303-692-3300 or 888-569-1831
Fax: 303-759-5355
Web: www.cdphe.state.co.us

Colorado Department of Public Health and Environment – Customer Assistance

4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Phone: 303-692-2033
Web: www.cdphe.state.co.us/ic/ocshom.asp

7 Illinois

Illinois Environmental Protection Agency – Division of Water Pollution Control

2200 Churchill Road
Springfield, Illinois 62794-9276

Phone: 217-782-3362
Fax: 217-785-1225
Web: www.epa.state.il.us/about/org/bureau-of-water.html

Illinois Environmental Protection Agency – Bureau of Air – Accidental Release Prevention

2200 Churchill Road
Springfield, Illinois 62794-9276

Phone: 217-782-3637
Web: www.epa.state.il.us/about/org/bureau-of-air.html

Continued on next page

A-3.8 State Resources: Environmental, Continued

8 Kansas

Kansas Department of Health & Environment – Main

Forbes Field, Building 740
Topeka, Kansas 66620

Phone: 785-296-1500
Web: www.kdhe.state.ks.us

Kansas Department of Health & Environment – Bureau of Environmental Remediation

Forbes Field, Building 740
Topeka, Kansas 66620

Phone: 785-296-1679
FAX: 785-296-4823
Web: www.kdhe.state.ks.us/env_response.html

9 Michigan

Michigan Department of Environmental Quality – Environmental Assistance Division, Technical Assistance Section

P.O. Box 30457
Lansing, Michigan 48909-7957

Phone: 800-662-9278
FAX: 517-335-4729
Web: www.deq.state.mi.us/ead/tas

Michigan Department of Environmental Quality – Emergency Response

P.O. Box 30457
Lansing, Michigan 48909-7957

Phone: 517-373-7660 or 800-292-4706
Web: www.deq.state.mi.us/ead/emc

10 Minnesota

Minnesota Pollution Control Agency – Main

520 Lafayette Road
St. Paul, Minnesota 55155-4194

Phone: 651-296-6300 or 800-657-3864
Web: www.pca.state.mn.us

Minnesota Pollution Control Agency – Environmental Emergency

520 Lafayette Road
St. Paul, Minnesota 55155-4194

Phone: 651-649-5451 or 800-422-0798
State Duty Officer
FAX: 651-296-2300
Web: www.dps.state.mn.us

Continued on next page

A-3.8 State Resources: Environmental, Continued

11 Missouri

Missouri Department of Natural Resources – Technical Assistance Program

P.O. Box 176
Jefferson City, Missouri 65102

Phone: 573-526-6627 or 800-361-4827
FAX: 573-526-5808
Web: www.dnr.state.mo.us/technical.htm

Missouri Department of Natural Resources – Environmental Emergency

P.O. Box 176
Jefferson City, Missouri 65102

Phone: 573-634-2436
FAX: 573-526-3350
Web: www.dnr.state.mo.us/emergency

12 Montana

Montana Department of Environmental Quality – Main

1520 E. Sixth Ave
P.O. Box 200901
Helena, Montana 59620

Phone: 406-444-2544
Web: www.deq.state.mt.us

Montana Department of Environmental Quality – Permitting & Compliance Division

1520 E. Sixth Ave
P.O. Box 200901
Helena, Montana 59620

Phone: 406-444-0475
FAX: 406-444-1901
Web: www.deq.state.mt.us/pcd

Montana Department of Environmental Quality – Petroleum Release Section

2209 Phoenix
Helena, Montana 59620

Phone: 406-444-4970
FAX: 406-444-1923
Web:
http://web1.nris.state.mn.us/deq/rem/hwc/prs/prs.htm

13 Nebraska

Nebraska Department of Environmental Quality – Main

1200 "N" Street, Suite 400
P.O. Box 98922
Lincoln, Nebraska 68509

Phone: 402-471-2186
FAX: 402-471-2909
Web: www.deq.state.ne.us

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A-3.8 State Resources: Environmental, Continued

14 New Mexico

New Mexico Environment Department – Main

Harold S. Runnels Building
1190 St. Francis Drive
Santa Fe, New Mexico 87502

Phone: 505-827-2855 or 800-219-6157
Web: www.nmenv.state.nm.us/

15 Ohio

Ohio Environmental Protection Agency – Main

Lazarus Government Center
122 South Front Street
Columbus, Ohio 43215

Phone: 614-644-3020
Web: www.epa.state.oh.us/

16 Oklahoma

Oklahoma Department of Environmental Quality – Main

Street address:
707 North Robinson
Oklahoma City, Oklahoma 73102
Mailing address:
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Phone: 405-702-1000
FAX: 405-702-5105
Web: www.deq.state.ok.us/

Oklahoma Department of Environmental Quality – Customer Assistance

Street address:
707 North Robinson
Oklahoma City, Oklahoma 73102
Mailing address:
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Phone: 405-702-1000 or 800-869-1400
FAX: 405-702-1001
Web: www.deq.state.ok.us/CSDmain.html

17 Oregon

Oregon Department of Environmental Quality – Main

811 SW Sixth Avenue
Portland, Oregon 97204

Phone: 503-229-5696 or 800-452-4011
FAX: 503-229-6124
Web: www.deq.state.or.us/

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A-3.8 State Resources: Environmental, Continued

18 Tennessee

Tennessee Department of Environment and Conservation – Main (includes Evironmental Assistance Center)

21st Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243

Phone: 888-891-8332
FAX: 615-650-7301
Web: www.state.TN.US/Environment/

19 Texas

Texas Natural Resource Conservation Commission – Main

Street address:
12100 Park 35 Circle
Austin, Texas 78753
Mailing address:
P.O. Box 13087
Austin, Texas 78711

Phone: 512-239-1000
FAX: 512-239-5151
Web: www.tnrcc.state.tx.us

Texas Natural Resource Conservation Commission – Registration, Review & Reporting

Street address:
12100 Park 35 Circle
Austin, Texas 78753
Mailing address:
P.O. Box 13087
Austin, Texas 78711

Phone: 512-239-2106
FAX: 512-239-2177
Web: www.tnrcc.state.tx.us/homepgs/oprr.html

Texas Natural Resource Conservation Commission – Petroleum Storage Tank Division

Street address:
12100 Park 35 Circle
Austin, Texas 78753
Mailing address:
P.O. Box 13087
Austin, Texas 78711

Phone: 512-239-2106
FAX: 512-239-1422
Web: www.tnrcc.state.tx.us/permitting/r_e/pstta/

Continued on next page

A-3.8 State Resources: Environmental, Continued

20 Washington

Washington Department of Ecology – Main

Street address:
300 Desmond Drive
Lacey, Washington 98503
Mailing address:
P.O. Box 47600
Olympia, Washington 98504

Phone: 360-407-6000
Web: www.wa.gov/ecology/

A-3.9 State Resources: Spills and Emergency Preparedness

1 Spills State Resources

Spills and Emergency Preparedness

This section provides service partners with contacts for obtaining state regulatory information. The environmental regulatory information and resources contained in this section are not comprehensive; they are provided as a starting point for understanding where to go for more help in the preparation of the EMP.

2 Alabama

Alabama Department of Environmental Management - Main
1400 Coliseum Boulevard
Montgomery, Alabama 36110
Phone: 334-271-7700
Web: www.adem.state.al.us

3 Arizona

Arizona Department of Environmental Quality - Main
3033 N. Central Avenue
Phoenix, Arizona 85012
Phone: 602-207-2300
Web: www.adeq.state.az.us

Arizona Department of Environmental Quality – Compliance Assistance
3033 N. Central Avenue
Phoenix, Arizona 85012
Phone: 602-207-2254 (Jack Bale, Ombudsman)
Fax: 602-207-2254
Web:
http://www.adeq.state.az.us/environ/compliance/index.html

Arizona Department of Environmental Quality – Emergency Response
3033 N. Central Avenue
Phoenix, Arizona 85012
Phone: 602-207-2330 (Hotline)
800-234-5677 ext. 2330
Web: www.adeq.state.az.us

4 California

California Environmental Protection Agency – Main
555 Capitol Mall, Suite 525
Sacramento, California 95814
Phone: 800-72-TOXIC (duty officer)
Web: www.calepa.ca.gov

Continued on next page

A-3.9 State Resources: Spills and Emergency Preparedness, Continued

5 Colorado

Colorado Department of Public Health and Environment – Main
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Phone: 303-692-3300 or 888-569-1831
Fax: 303-759-5355
Web: www.cdphe.state.co.us

Colorado Department of Public Health and Environment – Customer Assistance
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Phone: 303-692-2033
Web: www.cdphe.state.co.us/ic/ocshom.asp

6 Illinois

Illinois Environmental Protection Agency – Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62794-9276
Phone: 217-782-3362
Fax: 217-785-1225
Web: www.epa.state.il.us/about/org/bureau-of-water.html

Illinois Environmental Protection Agency – Bureau of Air – Accidental Release Prevention
2200 Churchill Road
Springfield, Illinois 62794-9276
Phone: 217-782-3637
Web: www.epa.state.il.us/about/org/bureau-of-air.html

Continued on next page

A-3.9 State Resources: Spills and Emergency Preparedness, Continued

7 Kansas

Kansas Department of Health & Environment – Main
Forbes Field, Building 740
Topeka, Kansas 66620
Phone: 785-296-1500
Web: www.kdhe.state.ks.us

Kansas Department of Health & Environment – Bureau of Environmental Remediation
Forbes Field, Building 740
Topeka, Kansas 66620
Phone: 785-296-1679
FAX: 785-296-4823
Web: www.kdhe.state.ks.us/env_response.html

8 Michigan

Michigan Department of Environmental Quality – Environmental Assistance Division, Technical Assistance Section
P.O. Box 30457
Lansing, Michigan 48909-7957
Phone: 800-662-9278
FAX: 517-335-4729
Web: www.deq.state.mi.us/ead/tas

Michigan Department of Environmental Quality – Emergency Response
P.O. Box 30457
Lansing, Michigan 48909-7957
Phone: 517-373-7660 or 800-292-4706
Web: www.deq.state.mi.us/ead/emc

9 Minnesota

Minnesota Pollution Control Agency – Main
520 Lafayette Road
St. Paul, Minnesota 55155-4194
Phone: 651-296-6300 or 800-657-3864
Web: www.pca.state.mn.us

Minnesota Pollution Control Agency – Environmental Emergency
520 Lafayette Road
St. Paul, Minnesota 55155-4194
Phone: 651-649-5451 or 800-422-0798
State Duty Officer
FAX: 651-296-2300
Web: www.dps.state.mn.us

Continued on next page

A-3.9 State Resources: Spills and Emergency Preparedness, Continued

10 Missouri

Missouri Department of Natural Resources – Technical Assistance Program

P.O. Box 176
Jefferson City, Missouri 65102

Phone: 573-526-6627 or 800-361-4827
FAX: 573-526-5808
Web: www.dnr.state.mo.us/technical.htm

Missouri Department of Natural Resources – Environmental Emergency

P.O. Box 176
Jefferson City, Missouri 65102

Phone: 573-634-2436
FAX: 573-526-3350
Web: www.dnr.state.mo.us/emergency

11 Montana

Montana Department of Environmental Quality – Main

1520 E. Sixth Ave
P.O. Box 200901
Helena, Montana 59620

Phone: 406-444-2544
Web: www.deq.state.mt.us

Montana Department of Environmental Quality – Permitting & Compliance Division

1520 E. Sixth Ave
P.O. Box 200901
Helena, Montana 59620

Phone: 406-444-4454
Web: www.deq.state.mt.us/pcd

12 Nebraska

Nebraska Department of Environmental Quality – Main

1200 "N" Street, Suite 400
P.O. Box 98922
Lincoln, Nebraska 68509

Phone: 402-471-2186
FAX: 402-471-2909
Web: www.deq.state.ne.us

Nebraska Department of Environmental Quality – Leaking UST/Emergency Response Section

1200 "N" Street, Suite 400
P.O. Box 98922
Lincoln, Nebraska 68509

Phone: 402-471-4230
FAX: 402-471-2909
Web: www.deq.state.ne.us/lust.nsf/pages/lust

Continued on next page

A-3.9 State Resources: Spills and Emergency Preparedness, Continued

13 New Mexico

New Mexico Environment Department – Main

Harold S. Runnels Building
1190 St. Francis Drive
Santa Fe, New Mexico 87502

Phone: 505-827-2855 or 800-219-6157
Web: www.nmenv.state.nm.us/

14 Ohio

Ohio Environmental Protection Agency – Main

Lazarus Government Center
122 South Front Street
Columbus, Ohio 43215

Phone: 614-644-3020
Web: www.epa.state.oh.us/

Ohio Environmental Protection Agency – Office of Pollution Prevention

Lazarus Government Center
122 South Front Street
Columbus, Ohio 43215

Phone: 614-644-3469
FAX: 614-644-2807
Web: www.epa.state.oh.us/opp

Ohio Environmental Protection Agency – Division of Emergency and Remedial Response

Lazarus Government Center
122 South Front Street
Columbus, Ohio 43215

Phone: 614-644-2924
FAX: 614-644-3146
Web: www.epa.state.oh.us/derr/derrmain.html

15 Oklahoma

Oklahoma Department of Environmental Quality – Main

Street address:
707 North Robinson
Oklahoma City, Oklahoma 73102
Mailing address:
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Phone: 405-702-1000
FAX: 405-702-5105
Web: www.deq.state.ok.us/

Continued on next page

A-3.9 State Resources: Spills and Emergency Preparedness, Cont.

Oklahoma Department of Environmental Quality – Customer Assistance

Street address:
707 North Robinson
Oklahoma City, Oklahoma 73102
Mailing address:
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Phone: 405-702-1000 or 800-869-1400
FAX: 405-702-1001
Web: www.deq.state.ok.us/CSDmain.html

16 Oregon

Oregon Department of Environmental Quality – Main

811 SW Sixth Avenue
Portland, Oregon 97204

Phone: 503-229-5696 or 800-452-4011
FAX: 503-229-6124
Web: www.deq.state.or.us/

Oregon Department of Environmental Quality – Spill Management Program

811 SW Sixth Avenue
Portland, Oregon 97204

Phone: 503-229-6931 or 800-452-4011
FAX: 503-229-6954
Web: www.deq.state.or.us/wmc/cleanup/spl0.html

17 Tennessee

Tennessee Department of Environment and Conservation – Main

21st Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243

Phone: 888-891-8332
FAX: 615-650-7301
Web: www.state.TN.US/Environment/

Tennessee Department of Environment and Conservation –Evironmental Assistance Center

21st Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243

Phone: 888-891-8332
FAX: 615-650-7301
Web: www.state.TN.US/Environment/

18 Texas

Texas Natural Resource Conservation Commission – Main

Street address:
12100 Park 35 Circle
Austin, Texas 78753
Mailing address:
P.O. Box 13087
Austin, Texas 78711

Phone: 512-239-1000
FAX: 512-239-5151
Web: www.tnrcc.state.tx.us

Continued on next page

A-3.9 State Resources: Spills and Emergency Preparedness, Continued

19 Washington

Washington Department of Ecology – Main

Street address:
300 Desmond Drive
Lacey, Washington 98503
Mailing address:
P.O. Box 47600
Olympia, Washington 98504

Phone: 360-407-6000
Web: www.wa.gov/ecology/

Washington Department of Ecology – Spills Program

Street address:
300 Desmond Drive
Lacey, Washington 98503
Mailing address:
P.O. Box 47600
Olympia, Washington 98504

Phone: 360-407-7455
FAX: 360-407-7288
Web: www.wa.gov/ecology/spills/spills.html

A-3.10 State Resources: Solid Waste

21 Solid Waste State Resources

Solid Waste Generation State Resources

This section provides service partners with contacts for obtaining state regulatory information. The environmental regulatory information and resources contained in this section are not comprehensive; they are provided as a starting point for understanding where to go for more help in the preparation of the EMP.

22 Alabama

Alabama Department of Environmental Management - Main

1400 Coliseum Boulevard
Montgomery, Alabama 36110

Phone: 334-271-7700
Web: www.adem.state.al.us

Alabama Department of Environmental Management - Land

1400 Coliseum Boulevard
Montgomery, Alabama 36110

Phone: 334-271-7730
FAX: 334-279-3050
Web: www.adem.state.al.us
E-mail: Landmail@adem.state.al.us

23 Arizona

Arizona Department of Environmental Quality - Main

3033 N. Central Avenue
Phoenix, Arizona 85012

Phone: 602-207-2300
Web: www.adeq.state.az.us

Arizona Department of Environmental Quality – Compliance Assistance

3033 N. Central Avenue
Phoenix, Arizona 85012

Phone: 602-207-2254 (Jack Bale, Ombudsman)
Fax: 602-207-2254
Web:
http://www.adeq.state.az.us/environ/compliance/index.html

Arizona Department of Environmental Quality – Waste Programs Division – Solid Waste Section

3033 N. Central Avenue
Phoenix, Arizona 85012

Phone: 602-207-4117 or 800-234-5677 ext. 4117
FAX: 602-207-2383
Web:
http://www.adeq.state.az.us/environ/waste/index.html

Continued on next page

A-3.10 State Resources: Solid Waste, Continued

24 California

California Environmental Protection Agency – Integrated Waste Management Board

555 Capitol Mall, Suite 525
Sacramento, California 95814

Phone: 916-255-2200
Web: www.calepa.ca.gov

25 Colorado

Colorado Department of Public Health and Environment – Main

4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Phone: 303-692-3300 or 888-569-1831
Fax: 303-759-5355
Web: www.cdphe.state.co.us

Colorado Department of Public Health and Environment – Customer Assistance

4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Phone: 303-692-2033
Web: www.cdphe.state.co.us/ic/ocshom.asp

26 Illinois

Illinois Environmental Protection Agency – Division of Land Pollution Control – Solid Waste Management

2200 Churchill Road
Springfield, Illinois 62794-9276

Phone: 217-785-8604
Fax: 217-524-3219
Web: www.epa.state.il.us/about/org/bureau-of-land.html

Continued on next page

A-3.10 State Resources: Solid Waste, Continued

27 Kansas

Kansas Department of Health & Environment – Main

Forbes Field, Building 740
Topeka, Kansas 66620

Phone: 785-296-1500
Web: www.kdhe.state.ks.us

Kansas Department of Health & Environment – Bureau of Environmental Remediation

Forbes Field, Building 740
Topeka, Kansas 66620

Phone: 785-296-1679
FAX: 785-296-4823
Web: www.kdhe.state.ks.us/env_response.html

28 Michigan

Michigan Department of Environmental Quality – Environmental Assistance Division, Technical Assistance Section

P.O. Box 30457
Lansing, Michigan 48909-7957

Phone: 800-662-9278
FAX: 517-335-4729
Web: www.deq.state.mi.us/ead/tas

Michigan Department of Environmental Quality – Land & Water Management Division

P.O. Box 30457
Lansing, Michigan 48909-7957

Phone: 517-373-1170
FAX: 517-373-9965
Web: www.deq.state.mi.us/lwm/

29 Minnesota

Minnesota Pollution Control Agency – Main

520 Lafayette Road
St. Paul, Minnesota 55155-4194

Phone: 651-296-6300 or 800-657-3864
Web: www.pca.state.mn.us

Minnesota Pollution Control Agency – Solid Waste Management Facility Permitting Program, Groundwater Solid Waste Division, Solid Waste Section

520 Lafayette Road
St. Paul, Minnesota 55155-4194

Phone: 651-297-1779 or 651-297-1780
FAX: 651-297-7709
Web: www.pca.state.mn.us/programs/swmf_p.html

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A-3.10 State Resources: Solid Waste, Continued

30 Missouri

Missouri Department of Natural Resources – Technical Assistance Program

P.O. Box 176
Jefferson City, Missouri 65102

Phone: 573-526-6627 or 800-361-4827
FAX: 573-526-5808
Web: www.dnr.state.mo.us/technical.htm

Missouri Department of Natural Resources – Solid Waste Management

P.O. Box 176
Jefferson City, Missouri 65102

Phone: 573-751-5401
FAX: 573-526-3902
Web: www.dnr.state.mo.us/deq/swmp

31 Montana

Montana Department of Environmental Quality – Main

1520 E. Sixth Ave
P.O. Box 200901
Helena, Montana 59620

Phone: 406-444-2544
Web: www.deq.state.mt.us

Montana Department of Environmental Quality – Permitting & Compliance Division

1520 E. Sixth Ave
P.O. Box 200901
Helena, Montana 59620

Phone: 406-444-4400
FAX: 406-444-1374
Web: www.deq.state.mt.us/pcd

Montana Department of Environmental Quality – Air & Waste Management Bureau

1520 E. Sixth Ave
P.O. Box 200901
Helena, Montana 59620

Phone: 406-444-3490
FAX: 406-444-1499
Web: www.deq.state.mt.us/pcd/awm/index.html

32 Nebraska

Nebraska Department of Environmental Quality – Main

1200 "N" Street, Suite 400
P.O. Box 98922
Lincoln, Nebraska 68509

Phone: 402-471-2186
FAX: 402-471-2909
Web: www.deq.state.ne.us

Nebraska Department of Environmental Quality – Integrated Waste Management Section

1200 "N" Street, Suite 400
P.O. Box 98922
Lincoln, Nebraska 68509

Phone: 402-471-4210
FAX: 402-471-2909
Web: www.deq.state.ne.us/IWM.nsf/Pages/IwmMain

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A-3.10 State Resources: Solid Waste, Continued

33 New Mexico

New Mexico Environment Department – Main

Harold S. Runnels Building
1190 St. Francis Drive
Santa Fe, New Mexico 87502

Phone: 505-827-2855 or 800-219-6157
Web: www.nmenv.state.nm.us/

New Mexico Environment Department – Solid Waste Bureau

Harold S. Runnels Building
1190 St. Francis Drive
Santa Fe, New Mexico 87502

Phone: 505-827-2775
FAX: 505-827-2902
Web: www.nmenv.state.nm.us/

34 Ohio

Ohio Environmental Protection Agency – Main

Lazarus Government Center
122 South Front Street
Columbus, Ohio 43215

Phone: 614-644-3020
Web: www.epa.state.oh.us/

Ohio Environmental Protection Agency – Division of Hazardous Waste Management

Lazarus Government Center
122 South Front Street
Columbus, Ohio 43215

Phone: 614-644-2917
FAX: 614-728-1245
Web: www.epa.state.oh.us/dhwm/welcome.html

Continued on next page

A-3.10 State Resources: Solid Waste, Continued

35 Oklahoma

Oklahoma Department of Environmental Quality – Main

Street address:
707 North Robinson
Oklahoma City, Oklahoma 73102
Mailing address:
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Phone: 405-702-1000
FAX: 405-702-5105
Web: www.deq.state.ok.us/

Oklahoma Department of Environmental Quality – Customer Assistance

Street address:
707 North Robinson
Oklahoma City, Oklahoma 73102
Mailing address:
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Phone: 405-702-1000 or 800-869-1400
FAX: 405-702-1001
Web: www.deq.state.ok.us/CSDmain.html

Oklahoma Department of Environmental Quality – Waste Management Division

Street address:
707 North Robinson
Oklahoma City, Oklahoma 73102
Mailing address:
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Phone: 405-702-5100 Solid Waste Permitting and Compliance & Inspection
405-702-5152 Hazardous Waste Permitting
FAX: 405-702-5101
Web: www.deq.state.ok.us/waste/index.html

36 Oregon

Oregon Department of Environmental Quality – Main

811 SW Sixth Avenue
Portland, Oregon 97204

Phone: 503-229-5696 or 800-452-4011
FAX: 503-229-6124
Web: www.deq.state.or.us/

Oregon Department of Environmental Quality – Waste Management and Cleanup Division

811 SW Sixth Avenue
Portland, Oregon 97204

Phone: 503-229-5913 or 800-452-4011
FAX: 503-229-6124
Web: www.deq.state.or.us/wmc/hw/hw.htm

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A-3.10 State Resources: Solid Waste, Continued

37 Tennessee

Tennessee Department of Environment and Conservation – Main

21st Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243

Phone: 888-891-8332
Web: www.state.TN.US/Environment/

Tennessee Department of Environment and Conservation –Evironmental Assistance Center

21st Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243

Phone: 888-891-8332
FAX: 615-650-7301
Web: www.state.TN.US/Environment/

Tennessee Department of Environment and Conservation –Division of Solid and Hazardous Waste Management

5th Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243

Phone: 615-532-0780
FAX: 615-650-7301
Web: www.state.tn.us/Environment/

38 Texas

Texas Natural Resource Conservation Commission – Main

Street address:
12100 Park 35 Circle
Austin, Texas 78753
Mailing address:
P.O. Box 13087
Austin, Texas 78711

Phone: 512-239-1000
FAX: 512-239-5151
Web: www.tnrcc.state.tx.us

Texas Natural Resource Conservation Commission – Waste Permits Division

Street address:
12100 Park 35 Circle
Austin, Texas 78753
Mailing address:
MC 126
P.O. Box 13087
Austin, Texas 78711

Phone: 512-239-2334
FAX: 512-239-2007
Web: www.tnrcc.state.tx.us/homepgs/oprr.html

Continued on next page

A-3.10 State Resources: Solid Waste, Continued

39 Washington

Washington Department of Ecology – Main

Street address:
300 Desmond Drive
Lacey, Washington 98503
Mailing address:
P.O. Box 47600
Olympia, Washington 98504

Phone: 360-407-6000
Web: www.wa.gov/ecology/

Washington Department of Ecology – Solid Waste and Financial Assistance

Street address:
300 Desmond Drive
Lacey, Washington 98503
Mailing address:
P.O. Box 47600
Olympia, Washington 98504

Phone: 360-407-7451
Web: www.wa.gov/ecology/swfa/swhome.html

Washington Department of Ecology – Hazardous Waste and Toxics Reduction

Street address:
300 Desmond Drive
Lacey, Washington 98503
Mailing address:
P.O. Box 47600
Olympia, Washington 98504

Phone: 360-407-6700
FAX: 360-407-6715
Web: www.wa.gov/ecology/hwtr/index.html

A-3.11 State Resources: Stormwater/Wastewater

1 Stormwater /Wastewater State Resources

Stormwater/Wastewater State Resources

This section provides service partners with contacts for obtaining state regulatory information. The environmental regulatory information and resources contained in this section are not comprehensive; they are provided as a starting point for understanding where to go for more help in the preparation of the EMP.

2 Alabama

Alabama Department of Environmental Management - Main
1400 Coliseum Boulevard
Montgomery, Alabama 36110
Phone: 334-271-7700
Web: www.adem.state.al.us

Alabama Department of Environmental Management - Water
1400 Coliseum Boulevard
Montgomery, Alabama 36110
Phone: 334-271-7823
FAX: 334-270-5631
Web: www.adem.state.al.us/h2owebpg.html
E-mail: Landmail@adem.state.al.us

3 Arizona

Arizona Department of Environmental Quality - Main
3033 N. Central Avenue
Phoenix, Arizona 85012
Phone: 602-207-2300
Web: www.adeq.state.az.us

Arizona Department of Environmental Quality – Compliance Assistance
3033 N. Central Avenue
Phoenix, Arizona 85012
Phone: 602-207-2254 (Jack Bale, Ombudsman)
Fax: 602-207-2254
Web:
www.adeq.state.az.us/environ/compliance/index.html

Arizona Department of Environmental Quality – Water Quality Compliance
3033 N. Central Avenue
Phoenix, Arizona 85012
Phone: 602-207-4466
FAX: 602-207-4467
Web: www.adeq.state.az.us/environ/water/index.html

Continued on next page

A-3.11 State Resources: Stormwater/Wastewater, Continued

4 California

State Water Resources Control Board

P.O. Box 1977
Sacramento, California 95812-1977

Phone: 906-657-0903
FAX: 916-657-1011
Web: www.swrcb.ca.gov/stormwtr/index.html

5 Colorado

Colorado Department of Public Health and Environment – Main

4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Phone: 303-692-3300 or 888-569-1831
Fax: 303-759-5355
Web: www.cdphe.state.co.us

Colorado Department of Public Health and Environment – Customer Assistance

4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Phone: 303-692-2033
Web: www.cdphe.state.co.us/ic/ocshom.asp

6 Illinois

Illinois Environmental Protection Agency – Division of Water Pollution Control

2200 Churchill Road
Springfield, Illinois 62794-9276

Phone: 217-782-3362
Fax: 217-785-1225
Web: www.epa.state.il.us/about/org/bureau-of-water.html

7 Kansas

Kansas Department of Health & Environment – Main

Forbes Field, Building 740
Topeka, Kansas 66620

Phone: 785-296-1500
Web: www.kdhe.state.ks.us

Kansas Department of Health & Environment – Bureau of Water

Forbes Field, Building 740
Topeka, Kansas 66620

Phone: 785-296-5549
FAX: 785-296-5509
Web: www.kdhe.state.ks.us/water.html

Continued on next page

A-3.11 State Resources: Stormwater/Wastewater, Continued

8 Michigan

Michigan Department of Environmental Quality – Environmental Assistance Division, Technical Assistance Section

P.O. Box 30457
Lansing, Michigan 48909-7957

Phone: 800-662-9278
FAX: 517-335-4729
Web: www.deq.state.mi.us/ead/tas

Michigan Department of Environmental Quality – Land & Water Management Division

P.O. Box 30457
Lansing, Michigan 48909-7957

Phone: 517-373-1170
FAX: 517-373-9965
Web: www.deq.state.mi.us/lwm/

Michigan Department of Environmental Quality – Surface Water Quality Division

P.O. Box 30438
Lansing, Michigan 48909-7957

Phone: 517-373-1949 (Mark Fife)
FAX: 517-373-9958
Web: www.deq.state.mi.us/swq/

9 Minnesota

Minnesota Pollution Control Agency – Main

520 Lafayette Road
St. Paul, Minnesota 55155-4194

Phone: 651-296-6300 or 800-657-3864
Web: www.pca.state.mn.us

Minnesota Pollution Control Agency – Stormwater Program

520 Lafayette Road
St. Paul, Minnesota 55155-4194

Phone: 612-296-3960 or 800-657-3864
Web: www.pca.state.mn.us/water/stormwater-i.html

10 Missouri

Missouri Department of Natural Resources – Technical Assistance Program

P.O. Box 176
Jefferson City, Missouri 65102

Phone: 573-526-6627 or 800-361-4827
FAX: 573-526-5808
Web: www.dnr.state.mo.us/technical.htm

Missouri Department of Natural Resources – Water Pollution Control Program

P.O. Box 176
Jefferson City, Missouri 65102

Phone: 573-751-1300
Web: www.dnr.state.mo.us/deq/wpcp/homewpcp.htm

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A-3.11 State Resources: Stormwater/Wastewater, Continued

11 Montana

Montana Department of Environmental Quality – Main

1520 E. Sixth Ave
P.O. Box 200901
Helena, Montana 59620

Phone: 406-444-2544
FAX: 406-444-1374
Web: www.deq.state.mt.us

Montana Department of Environmental Quality – Permitting & Compliance Division

1520 E. Sixth Ave
P.O. Box 200901
Helena, Montana 59620

Phone: 406-444-4454
Web: www.deq.state.mt.us/pcd

Montana Department of Environmental Quality – Water Protection Bureau

1520 E. Sixth Ave
P.O. Box 200901
Helena, Montana 59620

Phone: 406-444-3080
Web: www.deq.state.mt.us/pcd/awm/index.html

12 Nebraska

Nebraska Department of Environmental Quality – Main

1200 "N" Street, Suite 400
P.O. Box 98922
Lincoln, Nebraska 68509

Phone: 402-471-2186
FAX: 402-471-2909
Web: www.deq.state.ne.us

Nebraska Department of Environmental Quality – Surface Water Section

1200 "N" Street, Suite 400
P.O. Box 98922
Lincoln, Nebraska 68509

Phone: 402-471-4700
FAX: 402-471-2909
Web: www.deq.state.ne.us/SurfaceW.nsf/pages/SurWater

Nebraska Department of Environmental Quality – Permits & Compliance Section – NPDES Program

1200 "N" Street, Suite 400
P.O. Box 98922
Lincoln, Nebraska 68509

Phone: 402-471-4239
FAX: 402-471-2909
Web: www.deq.state.ne.us/Permitsa/nsf/pages/NPDES

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A-3.11 State Resources: Stormwater/Wastewater, Continued

13 New Mexico

New Mexico Environment Department – Main

Harold S. Runnels Building
1190 St. Francis Drive
Santa Fe, New Mexico 87502

Phone: 505-827-2855 or 800-219-6157
Web: www.nmenv.state.nm.us/

New Mexico Environment Department – Water & Waste Management Division – Surface Water Quality Bureau

Harold S. Runnels Building N2050
1190 St. Francis Drive
Santa Fe, New Mexico 87502

Phone: 505-827-0187
FAX: 505-827-0160
Web: www.nmenv.state.nm.us/swqb/swqbtop.html

14 Ohio

Ohio Environmental Protection Agency – Main

Lazarus Government Center
122 South Front Street
Columbus, Ohio 43215

Phone: 614-644-3020
Web: www.epa.state.oh.us/

Ohio Environmental Protection Agency – Division of Surface Water

Lazarus Government Center
122 South Front Street
Columbus, Ohio 43215

Phone: 614-644-2001
FAX: 614-644-2329
Web: www.epa.state.oh.us/

15 Oklahoma

Oklahoma Department of Environmental Quality – Main

Street address:
707 North Robinson
Oklahoma City, Oklahoma 73102
Mailing address:
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Phone: 405-702-1000
FAX: 405-702-5105
Web: www.deq.state.ok.us/

Continued on next page

A-3.11 State Resources: Stormwater/Wastewater, Continued

Oklahoma Department of Environmental Quality – Customer Assistance

Street address:
707 North Robinson
Oklahoma City, Oklahoma 73102
Mailing address:
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Phone: 405-702-1000 or 800-869-1400
FAX: 405-702-1001
Web: www.deq.state.ok.us/CSDmain.html

Oklahoma Department of Environmental Quality – Water Quality Division

Street address:
707 North Robinson
Oklahoma City, Oklahoma 73102
Mailing address:
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Phone: 405-702-8100
FAX: 405-702-8101
Web: www.deq.state.ok.us/water1/home/index/html

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16 Oregon

Oregon Department of Environmental Quality – Main

811 SW Sixth Avenue
Portland, Oregon 97204

Phone: 503-229-5696 or 800-452-4011
FAX: 503-229-6124
Web: www.deq.state.or.us/

Oregon Department of Environmental Quality – Waste Quality Division

811 SW Sixth Avenue
Portland, Oregon 97204

Phone: 503-229-5279
FAX: 503-229-5408
Web: www.waterquality.deq.state.or.us/wq/

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17 Tennessee

Tennessee Department of Environment and Conservation – Main (includes Environmental Assistance Center)

21st Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243

Phone: 888-891-8332
FAX: 615-650-7301
Web: www.state.tn.us/Environment/

Tennessee Department of Environment and Conservation –Division of Water Pollution Control

6th Floor, L & C Annex
401 Church Street
Nashville, Tennessee 37243

Phone: 615-532-0625
FAX: 615-650-7301
Web: www.state.tn.us/Environment/

Continued on next page

A-3.11 State Resources: Stormwater/Wastewater, Continued

18 Texas

Texas Natural Resource Conservation Commission – Main

Street address:
12100 Park 35 Circle
Austin, Texas 78753
Mailing address:
P.O. Box 13087
Austin, Texas 78711

Phone: 512-239-1000
FAX: 512-239-5151
Web: www.tnrcc.state.tx.us

Texas Natural Resource Conservation Commission – Waste Permits & Resource Management Division

Street address:
12100 Park 35 Circle
Austin, Texas 78753
Mailing address:
MC 147
P.O. Box 13087
Austin, Texas 78711

Phone: 512-239-4300
FAX: 512-239-4888
Web: www.tnrcc.state.tx.us/homepgs/oprr.html

Texas Natural Resource Conservation Commission – Registration, Review, & Reporting

Street address:
12100 Park 35 Circle
Austin, Texas 78753
Mailing address:
MC 133
P.O. Box 13087
Austin, Texas 78711

Phone: 512-239-2106
FAX: 512-239-2177
Web: www.tnrcc.state.tx.us/homepgs/oprr.html

19 Washington

Washington Department of Ecology – Main

Street address:
300 Desmond Drive
Lacey, Washington 98503
Mailing address:
P.O. Box 47600
Olympia, Washington 98504

Phone: 360-407-6000
Web: www.wa.gov/ecology/

Washington Department of Ecology – Water Quality Southwest Regional Office

Street address:
300 Desmond Drive
Lacey, Washington 98503
Mailing address:
P.O. Box 47600
Olympia, Washington 98504

Phone: Stormwater request line 360-407-6300
FAX: 360-407-6305
Web: www.wa.gov/ecology/

Administration

A-4 Security

Contents

This section contains the following topics:

Topic	See Page
Homeland Security	2
Handling Visitors	3
Facility Authorization Process	6
Systems Access	11
Media Communication	16

A-4.1 Homeland Security

1 Overview

The following information pertains to intermodal and automotive work place security. In light of the recent events, as employees of the transportation industry, we have a responsibility to ourselves, our co-workers and the communities we serve to reduce hazard exposure wherever possible. We must continue to remain vigilant about our personal safety, the safety of others and the safety of the equipment we use.

2 Guidelines

We must watch for those who wish to harm us, or the companies we work for. We do not want to give them the option of disrupting rail service. Here are steps intermodal and automotive facility employees can take:

1. Peacefully confront strangers or visitors on property. Determine if they have the required Vendor/Visitor credentials and a business need to be there or arrange to have them escorted off the property. Notify local resource protection agents as soon as possible, or call resource protection at (800) 832-5452. DO NOT PLACE YOURSELF IN HARM'S WAY with trespassers.
2. Keep a positive attitude about your ability to make a difference. The two largest breaks in the FBI's investigation of the terrorist act on September 11 came from an Amtrak conductor in Texas and a parking lot attendant at Logan Airport. Their observance in their normal duties paid large dividends in the security of our country.
3. Review local emergency preparedness plan. Ensure security lights near buildings' parking areas and material storage areas are operational. Verify the security of chemical storage areas.
4. Secure your computer when you leave it unattended. DO NOT ALLOW entry into the databases by unauthorized personnel.
5. Always lock switches and derails to prevent unauthorized access to intermodal loading tracks.
6. Lock company vehicle doors or cabs to prevent unauthorized use. Remove keys from open cab vehicles when unattended.
7. Ensure proper verification of driver's license, truck license, and correct pick-up numbers are provided prior to releasing units to customers.
8. Do not provide yard information, ETA or availability on shipments to anyone who cannot be identified as a party on the waybill.
9. Be aware of personal conversations with others off the property concerning your job and workplace. Unusual interest in technical details should heighten your suspicion and should be acted upon.
10. Immediately report lost or stolen equipment to the appropriate authorities.

A-4.2 Handling Visitors

1 General

Supplemental rules applicable to anyone entering the property who is not employed full-time at the facility, other than truck drivers delivering units for rail movement. Some rules govern requirements prior to entry being allowed; others dictate behavior expected while in the confines of a BNSF intermodal facility. Individuals who cannot or who fail to comply with the rules applicable to them may be refused entry, refused the opportunity to conduct business at the facility, and/or removed from the property at the hub manager'(or designee's) discretion

2 Documentation

Since enforcement of some of the rules may require intervention by BNSF Resource Protection Services (RPS) personnel, a copy of the standard rules and any additional rules agreed to by the hub manager and regional director should be provided to local RPS personnel. In addition to any formal documentation required for certain incidents, hub managers should maintain an incident log with the minimum elements of date, who was involved, which rule was violated, remedial action taken, and whether the individual had past offenses.

3 Privilege Revocation

Such documentation is helpful in justifying the decision to forfeit an individual's privilege to conduct business at, or enter, any BNSF intermodal facility because of repeated compliance failures. The final decision for permanent revoking of individual privilege can only be made at the general directors' level and above.

4 Visitor Rules

All individuals must comply with the applicable rules while in the confines of any BNSF intermodal facility. Failure to comply with these or any reasonable request of any agent of the BNSF may result in refusal of entry, refusal to conduct business, and/or removal from BNSF property at the hub manager's (or designee's) discretion. Repeated compliance failures will result in forfeiting the privilege of conducting business at, or entering, any BNSF intermodal facility.

1. Alcohol, illegal drugs, and/or firearms or any other weapons are prohibited on BNSF property. Entering the property under the influence of alcohol or illegal drugs is prohibited.
2. ALL accidents MUST be reported promptly to ramp personnel at the terminal building.
3. No littering and no unloading of any trash while on BNSF property. This includes trash or debris from any trailer, container, or tractor.
4. No loitering, congregating, or staging. Depart the facility as soon as your business is completed.
5. No pets allowed on BNSF property.
6. Abusive or threatening behavior toward any BNSF employee or representative may result in refusal of entry or removal from the facility.

Continued on next page

A-4.2 Handling Visitors, Continued

Guidelines (continued)

7. Anyone denied access or requested to leave the facility must depart immediately.
8. BNSF Police have the right to request a search with just cause of any vehicle on the property. Requests which are denied may result in refusal of entry or removal from the facility.
9. Climbing on or into railcars, lift equipment, or any other Company vehicle is prohibited by non-authorized persons.
10. All vehicle drivers must have a vehicle operator's license and produce it upon demand. Those drivers operating on an interim or temporary license must also have some form of photo identification in their possession. All other persons entering the property must have photo identification in their possession.
11. Exercise caution at all times.
12. All posted signs, signals, or painted markings (such as fire lanes, etc.) must be obeyed. Stop at all flashing signal lights and burning flares.
13. All State vehicle code regulations apply. Vehicles with inoperative safety equipment may be refused entry.
14. Vehicle headlights must be on at all times; turn indicators or hand signals must be used to indicate turns.
15. Stay with your vehicle. Unattended non-Company or non-service partner vehicles will be towed at owner's expense.
16. Use of horns on the facility is limited to emergency situations only and should be avoided unless absolutely necessary to warn of a potential or impending hazard.
17. ALL yard vehicles, trains, and pedestrians have the right-of-way. Maintain vigilance for train movement. The presence of track lights, when available, does not diminish the need for personal attention to potential movement on tracks.
18. Do not drive or park on designated crane travel pathways or crane guide rails. Do not impede lift equipment movement.
19. Cross tracks only at designated crossings. Do not drive under lift equipment unless instructed to do so during "live lift" Operations. Live lift is a process where a container is lifted directly to/from the truckers chassis while trucker is attached to the chassis.
20. All unattended vehicles must place standard transmission in low gear, automatic transmission in park with engine shut off.

Continued on next page

A-4.2 Handling Visitors, Continued

5 Foreign Delegations

Following are the procedures established for handling visiting foreign delegations to BNSF Intermodal/Automotive facilities. The recent security briefings suggest an appropriate background review be conducted on all foreign delegations visiting American corporations to view their structure, information systems, and business or operating practices. While these visits may appear innocuous, they provide vast amounts of information and networking opportunities to these delegations. While exchanges of this type are beneficial to both the delegates and BNSF, the appropriate safeguards will diminish potential for abuse or harm.

All facilities must provide Senior Manager Resource Operations Call Center (ROC), 817-352-2100, with advance notice of any scheduled visits by foreign delegations. BNSF Resource Protection will accrue the necessary information to validate the involved parties and check with other law enforcement or Intel agencies to identify potential backgrounds or profiles that may create a concern. Working with the Resource Protection team will ensure a successful visit, while protecting BNSF interest.

A-4.3 Facility Authorization Process

1 Facility Authorization Pass

All vehicles operating within the facility (except outside truckers and assigned facility vehicles) must display a Facility Authorization Pass through the front windshield. All Facility Authorization Passes must be issued by BNSF Hub Management, along with securing a 'Release of Claim and Indemnity Agreement,' and logged as a permanent record on form Hub 00028.

2 Guidelines

BNSF Hub Management must use careful consideration before a facility authorization pass is issued, and drivers must be properly trained in the Hub Safety rules before pass is issued. ***Supervisor must determine whether or not an escort is required.*** Vehicles can be limited to specific routes within the facility, particularly when workers must drive a private vehicle to their workplace within the hub property. Authorized vehicles, which are limited to a specific route within the Hub, cannot be used to drive to any other locations within the facility.

3 PPE Requirements

Personal protective equipment (PPE) requirements that apply to all individuals on the facility are outlined in the BNSF safety rules publications. Those individuals who frequently visit the facility should come prepared with their own PPE. "General visitors" (those infrequently visiting the facility or who are visiting for non-business-related reasons) will likely not have their own PPE; ***in these cases, the facility should be prepared to loan required PPE items to these individuals or to instruct them to remain in their vehicle where PPE is not required.***

4 Indemnity

In most cases, individuals must sign a "Release of Claim and Indemnity Agreement" before entering a BNSF facility. This is determined by whether an existing contractual agreement has already covered the release elements via a "corporate" form executed independently of any hub involvement. In these cases, no additional release form must be signed. A standard "local use" release form must be executed for any individual not already covered explicitly by a separate agreement.

5 Pass Example

A Facility Authorization form is to be issued to all allowed on Intermodal/Automotive facilities. Passes must be collected when individual leaves facility and departure noted on Sign In Form Hub00028.


BNSF RAILWAY
Facility Authorization Pass
Please comply with all safety rules
This Pass is Not Transferable to Anyone
07383
YARD RULES
1. Obey the Speed Limit
2. Turn on Headlights; Signal Turns
3. Obey Traffic Control Devices
4. Stop for Flares and Flashing Lights
5. Yield to Trains, Yard Equipment and Pedestrians
6. Avoid Lift Equipment Runways and Do Not Drive Under Lift Equipment
7. Keep Off Trains and Yard Equipment
8. Report Accidents Promptly to Terminal
9. Alcohol, Drugs, and Firearms are Prohibited
10. No Trespassing, No Loitering
11. Present Vehicle Operator's License and Photo I.D. on Demand
12. Do Not Break Seals Unless Required for Gate Inspection
13. All Vehicles Subject to Search
14. Unattended Vehicles Will Be Towed At Owner's Expense
This Pass is Not Transferable to Anyone

FACILITY AUTHORIZATION PASS ISSUED

Name	Company	Lic Plate #	Purpose	Date Pass Issued	Signature	Pass #	Date Trained	Name of BNSF Mgmt. authorizing pass	Veh. Limited to specific route	Indemnity agreement signed or on file

RELEASE OF CLAIM AND INDEMNITY AGREEMENT

I, _____ , as an agent, employee, and/or representative for,
(Personal name)
_____, (Hereinafter called "Permittee") requests to go onto the
(Company name)
premises of THE BNSF RAILWAY COMPANY (hereinafter called "Railroad") with access to the premises limited to the area of normal operation, for the purpose of _____.

Permittee fully realizes that its presence on Railroad's premises involves danger and risk to Permittee, including the possibility of Permittee's injury or death and damage to or loss of its property. Permittee also realizes that its presence may be a cause of damage to property of others or injury or death to other persons, including employees of Railroad.

THEREFORE, in consideration of Railroad permitting Permittee to enter onto its premises for the purposes stated above and exercises/activities incidental thereto, **Permittee HEREBY RELEASES, DISCHARGES, DEFENDS, SAVES HARMLESS AND INDEMNIFIES** Railroad, its agents and employees from liability or claim for injury or death to Permittee, or any other persons, and for loss of or damage to any property (including without limitation environmental damages) which occurs as a result of Permittee's, or Permittee's servants, presence on the premises. **THE LIABILITY ASSUMED BY PERMITTEE SHALL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DESTRUCTION, DAMAGE, DEATH, OR INJURY WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILROAD, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR GROSS NEGLIGENCE OF RAILROAD.**

PERMITEE FURTHER AGREES, REGARDLESS OF ANY NEGLIGENCE OR ALLEGED NEGLIGENCE OF RAILROAD OR ITS AFFILIATED COMPANIES OR WHEN CLAIMS ARE BASED ON PRODUCTS LIABILITY OR STRICT LIABILITY, TO INDEMNIFY AND HOLD HARMLESS RAILROAD AND ITS AFFILIATED COMPANIES AGAINST AND SHALL ASSUME THE DEFENSE OF, ANY CLAIMS, SUITS, AWARDS, DEMANDS EXPENSES (INCLUDING ATTORNEY'S FEES), FINES, PENALTIES OR JUDGMENTS BROUGHT AGAINST RAILROAD OR ITS AFFILIATED COMPANIES UNDER THE FEDERAL EMPLOYERS' LIABILITY ACT (FELA) WHENEVER EMPLOYEES OF THE RAILROAD MAKE CLAIMS FOR WHICH CONTRACTOR HAS ASSUMED THE LIABILITY HEREIN OR WHENEVER EMPLOYEES OR AGENTS OF THE PERMITEE CLAIM OR ALLEGE THAT THEY ARE EMPLOYEES OF RAILROAD OR ITS AFFILIATED COMPANIES. THIS INDEMNITY SHALL ALSO EXTEND, ON THE SAME BASIS, TO FELA CLAIMS BASED ON ACTUAL OR ALLEGED VIOLATIONS OF ANY FEDERAL, STATE OR LOCAL LAWS OR REGULATION, INCLUDING BUT NOT LIMITED TO THE SAFETY APPLIANCE ACT, THE BOILER INSPECTION ACT, THE OCCUPATIONAL HEALTH AND SAFETY AND ANY SIMILAR STATE OR FEDERAL STATUTE.

Updated: August 31, 2007 INDEMNITY FORM

Permitee further agrees, at its expense, in the name and on behalf of Railroad, that it shall adjust and settle

all claims made against Railroad, and shall, at Railroad's discretion, appear and defend any suits or actions at law or in equity brought against Railroad on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Permitee under this Agreement for which Railroad is liable or is alleged to be liable. Railroad shall give notice to Permitee, in writing, of the receipt or pendency of such claims and thereupon Permitee shall proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railroad, Railroad may forward summons and complaint or other process in connection therewith to Permitee, and Permitee, at Railroad's discretion, shall defend, adjust, or settle such suits and protect, indemnify, and save harmless Railroad from and against all damages, judgments, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims of suits.

Permittee will not interview, talk with or in any way disturb any of Railroad's employees or other persons performing work on Railroad's property. Any agent, invitee or contractor performing any work, or present on Railroad's premises with or on behalf of Permittee in connection with Permittee's use of the premises shall be conclusively deemed to be the servant of Permittee acting on behalf of the Permittee. Railroad shall have the right to terminate this agreement immediately, if Railroad finds that Permittee is working in an unsafe manner or performing unsafe acts.

THE ABOVE IS UNDERSTOOD, ACCEPTED AND AGREED UPON FOR A DURATION OF 1 YEAR FROM THE DATE SIGNED BELOW:

Date Signed: _____

Name: _____

(PRINT)

Phone: _____

Valid Driver License Number & State issued, or Federal ID number (required)_____

Address: _____

_____

Signed: _____

(Signature)

Updated: August 31, 2007 INDEMNITY FORM

A-4.4 Systems Access

1 Intranet Access

To access the BNSF Intranet Remote Access Gateway from any computer follow these steps:

1. Open up any Internet browser (Technology Services recommends Netscape 4.75 or higher and Internet Explorer 5.5 or higher)
2. Go to http://www.bnsf.com
3. Enter your User Name for NT or mainframe and your password
4. For help, contact the BNSF Help Desk at Company line 8-593-4357 or 817-593-4357 or (800) 435-7649 and select options 3, 2.

2 ODIS

The Online Dispatching Information System (ODIS) is an online product that allows you to view current Train-Tracking and Train-Data information. This web site generates Tracking displays by ***Subdivisions***, ***Regional Areas*** and ***Stations***, along with ***Train-Data*** and ***Train Summary*** Reporting. In addition, a ***Train Inquiry*** option allows for search/lookup of specific train information. To access (ODIS), from a web browser type in http://nocopsodisp.rails.rwy.bnsf.com/odis/ON1homePage.html and press enter.

3 ODIS Formats

The below information will appear giving you a detailed description of each available format:

Tracking by System Map: System Map Sample | Region Map Sample | Detailed Description

These displays will present train location information per "Red Dots" on BNSF System and Regional maps. Each map contains links to subdivision displays per user inputs.

Tracking by Subdivision: These displays will present train location information by most BNSF Sub-divisions per a ***Text-List*** type display and two Graphical type (Vertical and Horizontal) displays.

Text-List Display:	Small Font Sample	Large Font Sample	Detailed Description
Vertical Graphical:	Small Font Sample	Large Font Sample	Detailed Description
Horizontal Graphical:	Small Font Sample	Large Font Sample	Detailed Description

Tracking by Region: Same Display (So. Trans-con) | Detailed Description

These formats are ***semi-graphical*** displays and are used to present ***"large"*** territories. Each display contains multiple ***contiguous*** subdivisions with station/train information.

Tracking by Station: Sample Display (Kansas City) | Detailed Description

These graphical displays detail ***Inbound Traffic*** for selected city locations. Displays detail sub-division, station, track schematics, mileposts and train location information.

Continued on next page

A-4.4 Systems Access, Continued

Guidelines (continued)

Tracking by System Map:	System Map Sample	Region Map Sample	Detailed Description
Train Data Information:	Sample Train-Data	Sample Locomotive-Detail	Description

Detailed information for each active train including locomotive and soup information.

Train Summary List	Sample B-Type Display	Detailed Description

Summary List of all active trains on the BNSF with links to tracking and reporting data

Train Inquiry/Lookup:	Sample Inquiry Output	Detailed Description

Menu driven Interactive program allowing the input of train characteristics from which a search of the ODIS database is made, then returning a list of matching train items.

4 Selecting

Make your selection by using the ***Train Tracking Links*** in the ***left margin*** to select the type of tracking format desired. One preferred format for tracking is by subdivision with a ***graphic*** display. When this option is selected the graphical format will display train-tracking information in a more ***user-friendly*** format for easier readability and understanding. By displaying the trains in proportion to the subdivision territory, this display may provide for a better description of train spacing and any potential conflicts. When you click on the train symbol it will provide you all of the details pertaining to the train.

5 "333_ stations"

The subdivision territories have been defined as active "333_stations" only, thus not all the stations may be identified. Reported CAD locations are converted to the appropriate 333_station for display. Each train is displayed at its last reported station. The last reported location of the train may not be its actual location, it is the last known location of the train.

6 Color Codes

Trains will display color-coded according to tardiness. All trains ahead of schedule will display in ***"Green".*** All train up to 60 minutes behind schedule will display in ***"Yellow"***. All trains more than one hour behind schedule will display in ***"Red"***. Any train without a schedule will be displayed in white.

7 Accessing Outlook

BNSF's homemail gives you private access to your Microsoft Outlook or Microsoft Exchange personal e- mail account so that you can view your Inbox from any web browser. It also allows you to view Exchange server public folders and the Address Book from the World Wide Web. To access from a web browser type in http://www.bnsf.com/homemail/ and press enter. The following screen will appear. Read the information before you continue to the next screen.

Continued on next page

A-4.4 Systems Access, Continued

8 Outlook – Screen 1

Home Mail

SCREEN # 1

IMPORTANT NOTICE
PLEASE READ BEFORE LOGGING ON

This computer system is the property of BNSF Railway. By logging on, each user consents that the Company or its designees may inspect, copy, or disclose any e-mail, electronic communications, or other information on this system at any time without further notice.

All communications made through this system and all material placed on it must conform with BNSF Railway Company information management policies, schedules, and guidelines, including the Company's Electronic Mail System Policy and Information Security Schedule. This information can be obtained by contacting the Information Management Hotline at 352-2300 (company line).

Only authorized users are allowed to access the system and any data on it, and the system is to be used only for business purposes. Unauthorized access, use, dissemination may be grounds for disciplinary action up to and including termination. Violation of Company policy, including use of this system for inappropriate or offensive material, should be reported to the Employee Hotline at 1-800-241-5689

Continue

Select continue to go to the next screen.

Continued on next page

A-4.4 Systems Access, Continued

9 Outlook – Screen 2

SCREEN #2



Helpful links and tools

- Microsoft Word Viewer and browser plug-in for read-only access to Word Documents

  Windows 95/98/NT
  Windows 3.1

- Outlook Web Access Information

  OWA FAQ

BNSF ISS does not support or endorse the use of any of these tools.

10 Outlook – Screen 3

SCREEN #3



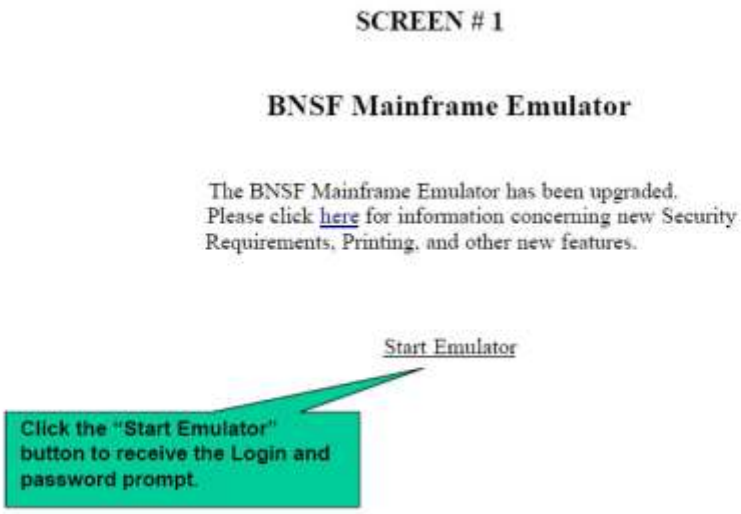
11 Emulator

BNSF's Mainframe Emulator gives you access to mainframe 3270 session, which allows you to perform functions from the World Wide Web as though on a normal mainframe terminal or emulation. To access from a web browser, type http://www.bnsf.com/emu/ and press enter. The following screen will appear.

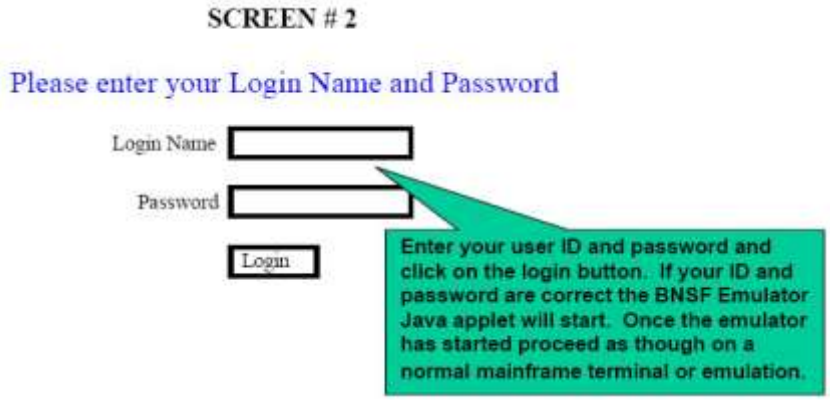
Continued on next page

A-4.4 Systems Access, Continued

12 Emulator Screen 1



13 Emulator Screen 2



14 Additional Information

If necessary refer to the Instructions to the left on the login screen. The documentation provided here will give additional general instructions for access to the BNSF Mainframe Emulator.

A-4.5 Media Communication

1 Media Request Policy

Media requesting rides on BNSF trains will be required to provide:

- Letter or e-mail of request from media representative
- Résumés or bios of those who will be riding train (including technicians) (Résumé or bio will not be required from media representatives with whom BNSF has established relationships)
- Statement of purpose and outline of the story or book to be produced

VP Corporate Relations will provide recommendation, with supporting materials listed above, to CEO for signature approval before media will be allowed on a BNSF train.

2 Exceptions

Exception will be made for media coverage of events arranged by BNSF (BNSF Special, media tours, Officer on Train, for example).

3 Other Media

Media include writers of books and producers of videos as well as reporters for traditional print and electronic media.

4 Protective Equipment Requirements

Media are expected to comply with all personal protective equipment requirements that apply to BNSF employees and service partner employees.

5 Other Requests

Media requests to visit BNSF property for purposes other than train rides will be treated according to established Corporate Relations approval practices.

Administration

A-5 Reporting Guidelines

Contents

This section contains the following topics:

Topic	See Page
Accident General Information and Responsibilities	2
Accident Reporting Requirements	12
Security Compromise Reporting	24
Deramp Reporting	27
Late Train Release and Late Train Departure Reporting	28
Other Reporting	29
End-of-Month Lift Count Validation Process	30

A-5.1 Accident General Information and Responsibilities

1 Accident Definition

Within an intermodal facility, an "Accident" is defined as an unforeseen and unplanned incident that causes or has the potential to cause injury, or damage to equipment, vehicles, and permanent structures such as buildings, power poles, etc. Accidents may result from many factors such as rule and policy violations, inadequate training or supervision, misunderstood business processes, or failure to take the "safe course" or pay adequate attention to the task at hand.

2 Purpose

Accidents are preventable. The Intermodal Safe Terminal Operations Process (I-STOP) teams were developed with the purpose of STOPPING accidents and injuries and promoting safe work practices within the intermodal facilities. The closed loop safety process has been introduced to all intermodal and automotive facilities, as well as the people based/ behavioral- based safety process, which is supported by all site safety teams and by facility safety audits

3 Vision Statement

This same philosophy is incorporated into the corporate Safety Department's safety vision and is stated as follows:

We believe every accident or injury is preventable. Our vision is that BNSF Railway Company will operate free of accidents and injuries. BNSF Railway Company will achieve this vision through:

- ***A Culture** that makes safety our highest priority and provides continuous self-examination as to the effectiveness of our safety process and performance*
- ***A work environment**, including the resources and tools, that is safe and accident-free, where all known hazards will be eliminated or safe-guarded*
- ***Work practices and training** for all employees that make safety essential to the tasks we perform*
- ***An empowered work force**, including all employees, that takes responsibility for personal safety, the safety of fellow employees, and the communities in which we serve.*

Through these processes and our safety vision, we strive to eliminate at-risk behavior and achieve a workplace free of injury and accidents. As a result, our employees will recognize safety as a value and a quality of life.

4 Reporting and Analysis

All accidents which occur within an intermodal facility must follow proper reporting and incident analysis procedures regardless of the owner of the equipment or vehicle involved in the incident, or the seriousness of the event. It is the BNSF hub manager's and corresponding regional director's responsibility to ensure that accident reporting is submitted and handled properly. Information obtained from proper incident analysis may be used as a basis for facility safety action plans and identifying and correcting deficiencies in business processes

Continued on next page

A-5.1 Accident General Information and Responsibilities, Continued

5 Accident Requirements

There are also reporting requirements in place with the BNSF Corporate Safety Department. This section includes responsibilities by job function, immediate actions to be taken when an accident occurs, and rules and procedures to follow when analyzing an accident. Proper reporting procedures for non-BNSF and BNSF employees are handled in the following sections.

6 Responsibilities

Several lists must be maintained of designated persons showing responsibility for specific roles to take in the event an accident occurs as well as in the analysis step of the accident analysis. These lists must also be included in the yearly facility safety action plans. By maintaining a list of key personnel, effective communication is easily established and may expedite attending to injured persons, securing and analyzing an accident site, and providing timely reports to intermodal management and the corporate Safety Department.

7 Job Function Responsibilities

There are certain responsibilities that must be assigned to job functions and may vary by facility, while, in most cases, certain tasks apply to job functions system-wide. For example:

- *It is the responsibility of each and every person within an intermodal facility to immediately contact their supervisor when they witness an accident.*
- *Since the supervisor is potentially one of the first persons on the scene, it is typically his/her responsibility to:*
    - ensure the respective emergency response organization(s) are contacted immediately after receiving knowledge of the accident. In some cases, it may be appropriate for someone else to physically make the calls; however, it is ultimately the supervisor's responsibility to ensure the calls are made.
    - remain at the accident scene until emergency responders arrive or until relieved by a designated person such as a hub/terminal manager or service partner safety manager.
    - note what type of protective equipment all persons involved in the accident are wearing.
- *A hub manager or terminal manager is ultimately responsible for:*
    - the findings of the accident investigation in conjunction with the service partner safety manager.
    - ensuring that all policies and procedures are communicated to all personnel, adhered to, and that drug tests are administered through proper procedures.
- *If a hub/terminal manager is not at the facility, a designated supervisor or safety manager must step in and conduct the investigation. Also, this person must be trained in what to look for and what questions to ask prior to being assigned this duty.*

Continued on next page

A-5.1 Accident General Information and Responsibilities, Continued

8 Facility Responsibility

Each facility must:

- designate responsibilities to certain job functions and list back-up personnel (in case of absence) for the role each function will play in the event of an accident.
- ensure that all assignments encompass each action identified in "IMMEDIATE ACTIONS TO TAKE WHEN AN ACCIDENT OCCURS" and in the "ACCIDENT ANALYSIS" section discussed on the following pages.
- maintain a list of designated persons centrally located with, at a minimum, the coordinator. The list of designated persons may need to be placed at various locations throughout the facility.
- ensure that the coordinator and all supervisors have an emergency contact list easily accessible.

9 Approval List

It may be a good idea to include a list of persons who are always approved for certain responsibilities or to make certain decisions. For example, the safety manager may always be approved to provide an escort for drug testing; however, a contact list may show other approved designated personnel (see example on page 6). An alternative to this would be to designate responsibilities to job functions based on the seriousness of the event.

10 Immediate Actions

IMMEDIATE ACTIONS TO TAKE WHEN AN ACCIDENT OCCURS
(The following actions may occur simultaneously)

11 Notify Supervisor

Notify your supervisor immediately.

12 Notify Emergency Contacts

Notify the appropriate emergency contacts:

In the event of a fire, police or medical emergency, hazardous material spill, or environmental mishap:

- Contact the respective emergency response organization(s) immediately after receiving knowledge of the accident.
- Instruct the emergency responders to proceed to the access gate that will be most easily accessible to the accident site.
- Immediately after making the emergency call, a designated person within the facility must wait at the designated access gate to escort the emergency responders to the accident site.
- A designated person must remain at the accident scene until emergency responders arrive.

Continued on next page

A-5.1 Accident General Information and Responsibilities, Continued

13 Notify Managers

Notify the hub/terminal manager on duty and service partner safety manager:

If the hub/terminal manager is not on duty at time of accident:

- Notify the hub/terminal manager at home if any of the following conditions occur:
  - personal injury
  - fatality
  - disruption to facility operations
  - hazardous materials spill
  - derailment
  - emergency responders notified, or
  - premium customers adversely affected due to the accident (i.e. UPS, LTL, etc.).
- Notify the hub/terminal manger via phone mail and page no later than close of work shift for all accidents that do not meet the aforementioned conditions.

14 Preserve Site, Attend Injured

Preserve and secure accident site, and attend to injured persons:

The accident scene must be inspected to ensure that:

- all hazards are removed before entering the accident zone (i.e., electricity has been turned off to power lines that may be in contact with equipment or ground, etc.).
- no hazards exist to other personnel who may be entering the area.
- the proper steps are taken to ensure injured persons are attended to and that no additional injuries occur as a result of unsafe conditions. If an injured person is unable to stand up and walk on his/her own accord, the person must not be moved unless further injury is imminent (i.e., the person is on the tracks, or in the path of outside traffic, etc.).

The accident site must be preserved and properly secured for further investigation. To secure the scene:

- A designated person must ensure that the proper securing devices (i.e., barricades, caution tape, cones, etc.) and facility camera are available at the accident scene. Until then, the scene must be verbally secured by informing all work group(s) personnel to stay clear and not move any equipment involved in the accident.
- It is important to immediately note what type of protective equipment all persons involved in the incident are wearing.
- A site must be physically secured after an accident involving an environmental mishap, hazardous spill, fire, and any other event that required emergency responders be called. In the event of minor incidents which did not result in personal injury, it is acceptable to secure the area by verbal and visual means. In this case, the designated person must not leave the area until inspection of the site is complete.
- The hub manager or designated personnel may determine if any equipment involved in the accident should be moved. It is very important that all efforts be made to photograph the accident site before any equipment is moved unless there is imminent danger to the individual or the present condition prevents assisting the injured.
- The accident site must remain secured until all photos, drawings, written statements, and investigations are complete.

Continued on next page

A-5.1 Accident General Information and Responsibilities, Continued

15 Drug Tests

Non-injured employees involved in accident must be removed from current duties and made to complete drug test:

- Any non-injured personnel involved in the accident must be removed and accompany the designated escort to the drug testing center designated for that facility.
- The drug and alcohol test procedure should NEVER be initiated without providing the employees with an escort to the center, and if possible, the escort should be in a supervisory role. Regardless of who is chosen to be the escort, there must always be a list of designated persons, including name and title, centrally located at the coordinator's desk for each operating shift. For example, the list could include:

1st Shift

1st Contact: <Name>, Assistant Supervisor

2nd Contact: <Name>, Administrative Assistant

3rd Contact: <Name>, Person Designated by Supervisor on Duty

***2nd and 3rd Shift**

1st Contact: <Name>, Leadman

2nd Contact: Person Designated by Supervisor on Duty

Mobile Testing Center: (800) 123-4567

** Due to operating hour restrictions, coordinators on second and third shifts may be required to contact a mobile drug testing company that is designated by the service partner. If this is the case, all employees involved in the accident must be escorted to the mobile establishment and the escort must remain until all tests have been administered.*

- A drug test must be administered within three hours of the accident:
  - If the employees are BNSF employees, they must adhere to the "BNSF Drug and Alcohol Testing Supervisor Guidelines." http://bnsfweb.bnsf.com/departments/hr/medical/DandA/Supervisor_Guidelines_January_2010.pdf
  - If non-BNSF employees, the associated service partner's drug and alcohol policy must be adhered to.

Continued on next page

A-5.1 Accident General Information and Responsibilities, Continued

16 Accident Analysis

The proper steps must be taken to conduct a thorough investigation of all accidents. The goal of a thorough investigation is to determine contributing factors and root causes as well as to develop corrective actions that may prevent recurrence of similar accidents. To accomplish this goal, there must be a standard investigation procedure in place for all intermodal hubs.

After all injured parties have been treated and the site preserved and secured, the investigation must begin immediately, because as time passes conditions may change due to changes in weather, personnel, etc.

If an accident site remains secure and an investigation is in progress during a shift change, the next shift must be notified during the job safety briefing of the ongoing investigation as well as what areas and/or equipment to stay clear of.

17 Interview All Eyewitnesses

The first step in conducting an investigation is to interview all eyewitnesses. It is important to interview each witness separately and to ask probing questions that refer to the facts on hand. If a witness offers conjecture or opinion, these must be separated from the facts. It may be necessary to interview an injured witness at a later time once the person has recovered. Examples of questions to ask an eyewitness are as follows:

- What type of protective equipment was being worn by the persons involved in the incident?
- What were the persons involved in the incident doing and how?
- Explain the accident as you saw it in chronological order?
- What is your opinion of what happened?

18 Inspect Accident Site

Thorough inspections of accident sites, regardless of magnitude, are crucial determinants in ascertaining the root causes and contributing factors of all incidents. Necessary tools to aid in concluding an investigation are thorough inspections of all damaged equipment, photographs, distance measurements, and drawings or sketches.

19 Photograph Accident Site

All facilities are required to be equipped with a camera to ***photograph the accident site*** immediately following the incident. Numerous photographs should be taken of the following, and if possible before any equipment is moved:

- positioning of all equipment (from several different angles).
- positioning of all persons involved when the accident occurred relative to the equipment and/or anything else involved.
- permanent structures that may have been involved in the accident relative to the impact point.

Once the investigation is complete, pictures of the accident site must be either electronically mailed, if photographed with a digital camera, or mailed U.S. or company mail to the Director Hub & Facility Operations and Director Hub & Facility System Safety.

A-5.1 Accident General Information and Responsibilities, Continued

20 Load Inspection

In the event a container/trailer or its lading is severely damaged due to an accident or lading is suspected to be improperly blocked/braced, the load must be inspected following proper inspection procedures and may require transloading to another trailer/container. **Prior to any inspection that requires a safety seal be broken, a BNSF Resource Protection Special Agent or Load and Ride Solutions (LARS) Manager must be notified and on hand (if available) to serve as a witness to the inspection.** The following must be investigated:

21 Improper Blocking

1. Was improper blocking or bracing the cause of the accident?

Improper blocking and bracing may be suspect if the accident resulted from any imbalance in container/trailer (i.e., tilting, collapsing, etc.). In either case, Damage Prevention Services (DPS) must be notified and the load inspected. Intermodal hub personnel must contact a BNSF Resource Protection Special Agent (if available), or a local DPS manager (if available) to serve as witness to breaking the seal. In many cases, hub management is able to determine if a load is properly blocked and braced and/or if the blocking and bracing failed. In cases where it is unknown by hub management if the load is properly blocked and braced, DPS must be notified to inspect the load and make the final determination.

If determined that the load is properly blocked and braced, no additional contacts outside the normal reporting requirements are necessary.

If determined that the load is improperly blocked or braced, a minimal attempt may be made by Load and Ride Solutions (LARS) personnel to properly block and brace the load; however, if unable to provide some temporary fix to the improper blocking and bracing, hub personnel must immediately enter an LSHOLD or STOP ORDER in addition to a problem log into TSS to prohibit further movement of the unit. The appropriate LARS Manager must then be notified to inspect the load, notify the customer, and coordinate transloading activities if necessary.

22 Container Damage

2. Was the container/trailer damaged severely enough to require transloading?

Transloading may be deemed necessary if container support beams, corner posts, or castings are damaged (i.e., buckling, cracked, or crushed), or if the container was punctured during the incident, etc. Any event which poses safety risks if the container/trailer were to move either by rail or road requires the container be taken out of service and the lading transloaded. It is the responsibility of the hub manager, assistant hub manager, terminal manager, or DPS manager (if locally based) to make this determination. The DPS manager must be notified immediately when transloading is necessary and will coordinate all transloading activities.

Continued on next page

A-5.1 Accident General Information and Responsibilities, Continued

23 Lading Damage

3. Was lading damaged as a result of the accident?

Damage to lading may be suspect if the container/trailer fell on its side, was crushed at some point, tilted in any direction, or collapsed on one end, etc. If any of the aforementioned conditions occur during an accident, the appropriate DPS manager must be notified immediately. It is DPS' responsibility to determine if lading has been damaged and, in turn, to complete the appropriate paper work associated with the damaged lading and to coordinate transloading, if necessary.

24 Reporting

In either of the three aforementioned scenarios regarding lading and transloading activities, it is necessary for the intermodal hub to complete all the necessary forms associated with the accident as defined in the Accident/Incident Reporting Requirements section that follows.

25 Drawing

A drawing or sketch of the accident scene can be key in determining contributing factors and root causes. ***Distance measurements*** of factors such as skid marks, distances from an impact point to where the equipment/person stopped or landed are also key factors to note on the drawing. These may help determine what speed a vehicle was moving or at what distance a person was thrown upon impact with a vehicle, for example.

26 Site Clearing

Only after all data is collected and the designated person determines inspection of the site to be fully complete, the site may be cleared and operations in the area may resume. Any equipment or vehicle involved in an accident must be inspected by LARS personnel and approved for use before the equipment/vehicle is allowed back into operation.

27 Determine Contributing Measures

Determine Contributing Measures

All contributing factors must be considered so that contributing measures may be correctly identified. A contributing factor is anything that may have played a role in bringing about the accident, or contributing to the cause of the accident, and in effect may have caused it to be more serious.

In other words, a contributing factor is a "symptom" of the accident/injury and relates to specific facts or details of the incident. For example, consider the following when determining contributing factors:

1. work hazards
2. unsafe work practices
3. improperly trained or non-certified personnel, if applicable, for the job at hand
4. yard rules that were not adhered to (i.e., speeding)
5. non-compliance with any policy or procedure (including non-compliance from customers such as improper blocking and bracing)

Continued on next page

A-5.1 Accident General Information and Responsibilities, Continued

Determine Contributing Measures (continued)

6. environmental issues such as weather (i.e., extreme heat or cold, rain causing surfaces to be slippery, or low visibility, etc.), dust, etc.
7. employee being unfamiliar with an area
8. physiological conditions, and
9. equipment condition or maintenance.

Once the contributing factors have been determined, corrective actions are put into place. There are always contributing measures of an accident/injury –reasons or circumstances that brought about the incident. At times the contributing measures are easy to determine, at others it is not. Determining contributing measures is key in learning how to prevent similar recurrences, training personnel on safe work practices, and determining if current business processes and procedures are efficient and adequate. Contributing measures could result from some process inefficiency such as inadequate or lack of understanding of rules, policies, procedures, processes, and/or training.

28 Key Questions

In determining the contributing measures of an accident, the following should be considered. Was the accident the result of:

- improper or inadequate PPE, safety tools, or equipment (only as it relates to a process)?
- improperly trained or non-certified personnel, if applicable, for the job at hand?
- lack of or inefficient process, procedure, or best practice?

29 Accident Reenactment

It is necessary to perform an ***accident reenactment,*** which may be an integral step in confirming root causes of an accident. When a reenactment is to be performed, the hub/terminal manager must supervise the staging and all necessary precautions must be in place to ensure no injuries or equipment damage result from the reenactment.

Initial contributing measures must be identified no later than 24 hours after the occurrence of the incident and included on the appropriate forms; however, final determination of contributing measures must be completed no later than 72 hours after the accident.

30 Corrective Actions

Develop, Implement, and Evaluate Corrective Actions

The validation of contributing measures may result in a new business process being put into place or a revision to a current process.

Continued on next page

A-5.1 Accident General Information and Responsibilities, Continued

31 Timeline

As previously stated, final determination of root causes must be completed within 72 hours following the incident as well as corrective actions identified. In addition, this information must be communicated to the regional general director, regional director, AVP Hub & Facility Operations, director Hub & Facility Operations, director Hub & Facility System Safety, and project manager Hub & Facility via e- mail. At this point the *investigation is considered closed* and implementation of corrective actions must begin within 24 hours.

32 Communication

All investigation findings and conclusions including contributing measures and corrective actions to be implemented must be communicated to all intermodal personnel at the next job safety briefing immediately following completion of the accident analysis.

33 Measure

Implementation of corrective actions must be evaluated and measured for effectiveness. After a severe accident or injury, it is imperative that measurement tools be developed to ensure corrective actions are sufficient in preventing accidents in the future. An example of a measurement tool would be an analysis chart indicating whether trends are developing or trend lines are decreasing. A repeat of an accident, occurrence of a similar accident, or increasing trend line would indicate inadequate corrective actions. The hub manager must continually evaluate the effectiveness of corrective actions as well as make adjustments when needed. Goals and objectives must also be included in the facility Safety Action Plan to test for effectiveness.

A-5.2 Accident Reporting Requirements

1 Report Types

ACCIDENT/ INCIDENT/DEATH REPORTING REQUIREMENTS

The corresponding accident forms must be completed and forwarded to the appropriate BNSF personnel. There are varying report handling procedures in place depending on whether the person(s) involved in the accident is a BNSF or non-BNSF employee as well as varying time frames for form submission that must be adhered to. Accident, incident, injury, or death reporting, applicable to intermodal, may include any of the following type events:

- BNSF employee and non-BNSF employee injuries – FRA reportable and non-reportable
- When a death occurs on BNSF property to any person – FRA reportable
- Intermodal equipment accidents/incidents – FRA reportable and non-reportable injuries, and non-injuries
- Rail equipment accidents/incidents within intermodal facility – FRA reportable and non-reportable depending on total monetary damage (contract switching only), all injuries and non-injuries
- Company vehicle incidents – all injuries and non-injuries

2 Accident Types

BNSF intermodal management requires that all accidents and incidents occurring within an intermodal facility, regardless of extent of damage to any equipment or injury, be reported. ANY event which results in injury, death, damage to a vehicle, equipment, or permanent structure, or which results in emergency responders being notified is considered BNSF intermodal-reportable and must be reported using proper reporting procedures.

3 FRA Requirements

BNSF Corporate Safety and Intermodal Accident Reporting Forms

BNSF must comply with certain reporting requirements established by the Federal Railroad Administration (FRA). Because these reporting requirements are administered by the BNSF Corporate Safety Department, they require that all injuries and any death, regardless of whether a BNSF employee or non-employee, be reported to the Accident Incident Reporting Center (AIRC).

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A-5.2 Accident Reporting Requirements, Continued

4 Accident Reporting Forms

The AIRC will determine if injuries are considered FRA-reportable or non-reportable (see Other Reporting for explanation of FRA reportable and non-reportable injuries – for informational purposes only).

If assistance is needed with the following forms please contact the 24hr Medical and Environmental team at 888-634-1011 or 817-593-4900.

Following is a description of BNSF Corporate Safety forms, as well as one form that is specific to intermodal, that must be used in the event of an accident/injury. The forms to be used vary depending on the type of event, as well as whether the injury or any death involves BNSF or non-BNSF employees. There are some cases where more than one form may be required. The corporate safety forms may be found when opening a "new" document in MSWord under the "Corporate Forms" tab and all begin with "SAF." All reporting forms beginning with "SAF" must be faxed to the AIRC within the required time frame.

5 Form Descriptions

ACCIDENT USER FORM MASTER. Every incident involving any type of equipment and injury or any death on an intermodal facility is considered reportable to intermodal management and must be submitted using this form regardless of magnitude. This form can be found on the BNSF Intranet, Form number HUB00012. It should be completed and e-mailed to the Outlook Distribution Lists "IABU DL Intermodal Accident" and "IABU DL IBU Maintenance" if the accident involves any intermodal equipment (i.e., trailers, containers, chassis, lift equipment, etc.) as well as to the appropriate DPS manager if lading is damaged due to an accident.

SAF 51658 Supervisor's Report of Employee Injury/Illness. When injury or any death involves a BNSF employee, only the employee's supervisor must complete this form. This form now exists online.

SAF 51659 Non-Employee Injury Report. BNSF hub management must submit this form when injury or any death occurs to service partners or non-BNSF employees (including all outside parties).

SAF 51662 Employee's Personal Injury/Illness Notification. When an FRA-reportable injury involves a BNSF employee, the injured employee must complete this form (contact AIRC to determine if reportable/non-reportable). The supervisor should never complete this report unless the employee cannot. The original form must be sent to the appropriate BNSF Claims Representative (contact the AIRC for the name and address of the appropriate claims representative).

SAF 51663 Lost and/or Restricted Work Day Status Worksheet. This form must be completed for BNSF employees who are subject to lost and/or restricted workdays due to an on-duty injury, and at time case is closed.

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A-5.2 Accident Reporting Requirements, Continued

Form Descriptions (continued)

SAF 51665 Non-Reportable Injury Follow-up Instructions. This form must be completed by BNSF hub management when an FRA non-reportable injury involves a BNSF employee (contact AIRC to determine if reportable/non-reportable).

SAF 51657 On-Track Equipment Accident/Incident Report. This form is necessary only when an event involves on-track equipment. The intermodal facility must complete this form if contract switching is performed and the event occurs within the intermodal facility; otherwise, the operations department completes the form.

6 Additional Information

NOTE: For additional information regarding BNSF Safety Department reporting requirements, contact the BNSF Accident Incident Reporting Center at 352-1003 or 800-697-6736, or Manager, Accident Incident Reporting Center at 352-1142.

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7 Non-BNSF Employees

Reporting Requirements for Non-BNSF Employees

The chart below delineates specifically which form(s) must be submitted depending on type of accident/incident which occurs involving non-BNSF employees. In addition, the chart includes form number and name, responsible party, submission time frame, and actions to be taken.

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8 Notification

In the event of personal injury or death IMMEDIATELY send an e-mail with "Page" in the subject line with Complete Initial Injury/Incident Report and email to the affected hub e-mail distribution list (IABU DL "Hub Name" A&I). This list includes the corresponding Senior Hub Manager, Regional Director, General Director, AVP Intermodal Hub Operation, and Director System Safety Hub & Facility. Notification must also be made in the case of any event which requires that emergency responder(s) be dispatched to the facility, or any event which significantly interferes with facility operations. In the case of any death, notification must also be made IMMEDIATELY to the Network Operations Center service interruption desk 817-234-6164.

Any event resulting in a service interruption and all deaths must be communicated by the hub manager or regional director to the Network Operations Center (NOC) immediately at 817-234-6164.

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A-5.2 Accident Reporting Requirements, Continued

9 Form Submission

Accident/Incident Form Submission

Following are guidelines when considering which accident/injury form(s) must be submitted (see the following for additional details):

- ***All injuries and any death must be***:
  - e-mailed to the Outlook distribution list "IABU DL Intermodal Accident" using "HUB00012 Accident Form" as soon as possible but no later than 12 hours following the injury.
  - e-mailed to "Center, Accident-Reporting" the BNSF AIRC utilizing form SAF 51659 as soon as possible but no later than 24 hours following the injury or death.
- ***All events regardless of severity, including accidents that did not result in injury***, must be e-mailed to the Outlook distribution list "IABU DL Intermodal Accident" using the "new" document on the BNSF intranet entitled "HUB00012 Accident Form" no later than 12 hours following the incident. All events involving any type of intermodal equipment must also be forwarded to the Outlook distribution list "IABU DL IBU Maintenance" at time of form submission. All events involving lading damage or potential transloads must be forwarded to the appropriate DPS manager.
- ***Any on-track event occurring within the intermodal facility*** WHICH INVOLVES CONTRACT SWITCHING OF CARS must be reported on form SAF 51657 and e-mailed to "Center, Accident-Reporting" the AIRC within 48 hours of the incident (for non-contract switching locations, operating department personnel will complete form submission).

INTERMODAL ACCIDENT/INCIDENT REPORTING REQUIREMENTS NON-BNSF EMPLOYEES				
CATEGORY	**FORM #/NAME**	**RESPONSIBLE PARTY**	**FORM SUBMISSION TIME FRAME**	**FORM SUBMISSION/ ACTIONS TO BE TAKEN**
All Injuries and any death	N/A	Hub Manager, Assistant Hub Manager, or Regional Director (if no Hub Manager at facility)	***ANY DEATH – Send e-mail with "Page" in subject line immediately*** ***PERSONAL INJURY - Send e-mail with "Page" in subject line immediately***	***Page****: AVP*, Dir. Sys. Safety, Dir. Hub & Fac. Oprs., Director and General Director ***Notify via e-mail:*** IABUDLHubSeniorManagers@bnsf.com ***For all deaths include –*** NOC Service Interruption 817-234-6164. And the local claims manager
	HUB00012 ACCIDENT FORM found on the BNSF Intranet	Hub Manager, Assistant Hub Manager, or Regional Director (if no Hub Manager at facility)	as soon as possible but no later than 12 hours following injury or any death	**All Events –** Outlook DL "IABU DL Intermodal Accident". **Events involving intermodal equipment** -forward to Outlook DL "IABU DL IBU Maintenance". **Events involving lading damage or potential transloads** – forward to appropriate LARS manager.
	SAF 51659 Non-Employee Injury or death Report	Hub Manager, Assistant Hub Manager, or Regional Director (if no Hub Manager at facility)	as soon as possible but no later than 24 hours following injury	*E-mail to the AIRC
All Incidents Including Non-Injury Accidents	HUB00012 ACCIDENT FORM found on the BNSF Intranet	Hub Manager, Assistant Hub Manager, or Regional Director (if no Hub Manager at facility)	as soon as possible but no later than 12 hours following incident	**All Events –** Outlook DL "IABU DL Intermodal Accident". **Events involving intermodal equipment** -forward to Outlook DL "IABU DL IBU Maintenance". **Events involving lading damage or potential transloads** – forward to appropriate LARS manager.
Emergency Responder Called, Any Event Significantly Interfering w/ Facility Operations	n/a	Hub Manager, Assistant Hub Manager, or Regional Director (if no Hub Manager at facility)	as soon as possible but no later than close of work shift	Notify via e-mail to the Senior Manager's address: IABUDLHubSeniorManagers@bnsf.com
On-Track Accidents within Intermodal Facility (CONTRACT SWITCHING ONLY)	SAF 51657 On-Track Equipment Accident/ Incident Report	**Service Interruption –** Hub Manager or Regional Director. **All events –** Hub Manager, Assistant Hub Manager, or Regional Director	no later than 48 hours following accident	**Service Interruption –** notify NOC immediately at 817-234-6164. **All events** - *E-mail to AIRC
** AIRC E-mail Address: Center, Accident-Reporting* *Contact the AIRC at 352-1003 or 800-697-6736 with any question regarding corporate safety forms or form submission.*				

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A-5.2 Accident Reporting Requirements, Continued

10 BNSF Employees

Reporting Requirements for BNSF Employees

All incidents involving personal injuries, any death and/or occupational illnesses, a company vehicle, or rail equipment involving BNSF employees are considered reportable by the BNSF Corporate Safety Department. In either instance, any incident with the aforementioned circumstances must be reported to the BNSF Accident Incident Reporting Center (AIRC). It is the responsibility of the AIRC to determine if the injury or the monetary amount of equipment damage meets and exceeds the minimum requirements considered reportable by the FRA.

It is imperative that all injuries, regardless of severity be communicated to the AIRC no later than the close of work shift on the day of the accident. The Corporate Safety Department uses this information to produce a Daily Performance Report (DPR) which is manually updated each morning to encompass all injuries that occurred on third shift. This report is subsequently distributed to BNSF upper management to review during a morning conference call.

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11 Injury Reporting

Although Intermodal is not encompassed within BNSF Operations Management, the intranet site http://bnsfweb.bnsf.com/departments/safety/reporting/is included in this document to provide guidelines in obtaining medical treatment and handling reporting requirements for BNSF employees. Any questions regarding this link should be directed to general director, Safety Reporting and Analysis at 817-352-1140.

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12 Notification

As with non-BNSF employees, in the event of ***personal injury*** or ***death*** **IMMEDIATELY** send an e-mail with “Page” in the subject line to: IABUDLINTERMODALACCIDENT@bnsf.com. Notification must also be made for any event which requires that emergency responder(s) be dispatched to the facility, or any event which significantly interferes with facility operations. In the case of ***any death***, notification must also be made IMMEDIATELY to the hub director and Network Operations Center service interruption at 817-234-6164. The notification must include a summary of information compiled on the “ACCIDENT USERFORM MASTER” form.

Any event resulting in a service interruption and all deaths must be communicated by the hub manager or regional director to the Network Operations Center (NOC) immediately at 817-234-6164.

In the event of ***personal injury*** or ***death*** **IMMEDIATELY** send an e-mail with "Page” in the subject line to: IABUDLIntermodalAccident@bnsf.com. Notification must also be made in the case of any event which requires that emergency responder(s) be dispatched to the facility, or any event which significantly interferes with facility operations. In the case of ***any death***, notification must also be made IMMEDIATELY to the Network Operations Center service interruption desk 817-234-6164, and a page sent to IABUDLHubSeniorManagers@bnsf.com

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A-5.2 Accident Reporting Requirements, Continued

13 Form Submission

Accident/Incident Form Submission

Form completion and submission are more stringent when reporting injuries to the BNSF Corporate Safety Department involving BNSF employees than with non-BNSF employees. In most cases, it is required that more than one form be completed for each injured employee depending on the circumstances of the injury.

Refer to the chart on the following pages for a detailed step-by-step representation of reporting procedures for accidents/injuries involving BNSF employees. Following are guidelines when considering which accident/injury form(s) must be submitted and to whom:

- ***All injuries and any death must be***:
  - reported utilizing form SAF 51658 and emailed to "Center, Accident-Reporting" the AIRC no later than close of work shift on day of injury or death.
  - e-mailed to Outlook distribution list "IABU DL Intermodal Accident" within 12 hours of injury or death.
  - determined FRA reportable or non-reportable by contacting the AIRC who will make the determination.
- ***All FRA reportable injuries*** must be reported on form SAF 51662, completed by the injured employee, and e- mailed to "Center, Accident-Reporting" the AIRC, or faxed (817-352-7595) if e-mail not available, no later than the close of work shift on day of injury. (AIRC must be contacted prior to completing the form to determine if injury is reportable or non-reportable).
- ***Injuries resulting in lost and/or restricted work day*** cases must be reported on form SAF 51658 if known initially. If unknown at time of initial reporting, this information must be subsequently reported on form SAF 51663 as "initial entry." Otherwise, this form must be submitted any time there is a change in status due to lost time, restricted duty, vacation, or holiday. In addition, the form must be submitted when the case is closed, (i.e., the employee returns to full duty).
- ***All events, regardless of severity, including accidents that did not result in injury***, must be reported on the HUB0012 Accident Form found on the BNSF Intranet within 12 hours of injury or accident. All events involving any type of intermodal equipment must also be forwarded to the Outlook Distribution List "IABU DL IBU Maintenance" at time of form submission and to the appropriate DPS manager if lading is involved.
- ***Any on-track event occurring within the intermodal facility*** WHICH INVOLVES CONTRACT SWITCHING OF CARS must be reported on form SAF 51657 and e-mailed to "Center, Accident-Reporting" the AIRC within 48 hours of the incident (for non-contract switching locations, operating department personnel will complete form submission).

Continued on next page

INTERMODAL ACCIDENT/INCIDENT REPORTING REQUIREMENTS BNSF EMPLOYEES				
CATEGORY	**FORM #/NAME**	**RESPONSIBLE PARTY**	**FORM SUBMISSION TIME FRAME**	**FORM SUBMISSION/ ACTIONS TO BE TAKEN**
All Injuries and any death	N/A	Hub Manager, Assistant Hub Manager, or Regional Director (if no Hub Manager at facility)	***ANY DEATH – Send e-mail with "Page" in subject line immediately***	***Page**: E-Mail Distribution List to corresponding Hub (IABU DL "Hub Name" A&I)* This includes: AVP, Dir. Sys. Safety, Dir. Hub & Fac. Operations, General Director & Sr. Manager that pertains to that hub. **Any deaths-*Immediately contact* –** NOC Service Interruption at 817-234-6164 and local Claims Dept. Manager.
			PERSONAL INJURY - Send e-mail with "Page" in subject line immediately	***Page**: E-Mail Distribution List to corresponding Hub (IABU DL "Hub Name" A&I)* This includes: AVP, Dir. Sys. Safety, Dir. Hub & Fac. Operations, General Director & Sr. Manager that pertains to that hub.
	HUB00012 ACCIDENT FORM found on the BNSF Intranet	Hub Manager, Assistant Hub Manager, or Regional Director (if no Hub Manager at facility)	as soon as possible but no later than 12 hours following injury or any death	**All Events –** Outlook DL "IABU DL Intermodal Accident". **Events involving intermodal equipment** -forward to Outlook DL "IABU DL IBU Maintenance". **Events involving lading damage or potential transloads** – forward to appropriate LARS manager.
	SAF 51658 Non-Employee Injury or death Report	Injured Person's Supervisor (exempt only)	Sections 1-4 to be transmitted no later than close of work shift, section 6 to be transmitted no later than 48 hours following injury or any death	*E-mail to the AIRC
	HUB00012 ACCIDENT FORM found on the BNSF Intranet	Hub Manager, Assistant Hub Manager, or Regional Director (if no Hub Manager at facility)	as soon as possible but no later than 12 hours following injury	**All Events –** Outlook DL "IABU DL Intermodal Accident". **Events involving intermodal equipment** -forward to Outlook DL "IABU DL IBU Maintenance". **Events involving lading damage or potential transloads** – forward to appropriate LARS manager.
FRA Reportable Injuries Only ***(Contact AIRC to Determine if Reportable/Non-Reportable)*	SAF 51662 Employee's Personal Injury/Illness Notification	Injured Person	no later than close of work shift	**Original** - BNSF Claims Rep. (contact AIRC for name/address) **Copy** - *E-mail to AIRC
Lost and/or Restricted Work Day Cases	SAF 51663 Lost and/or Restricted Workday Status	Designated at the local level	**'Initial Entry'** status- when lost and/or restricted workday status is known (only if	*E-mail to AIRC

	Worksheet		section 4 of SAF 51658 stated "No lost time/No restricted duty" at time of initial reporting). **'Status Update'** - as status changes for employee, including changes due to lost, restricted, vacation, holiday or close status. **'Cased Closed'** status - when employee returns to full duty	
All Incidents Including Non-Injury Accidents	HUB00012 ACCIDENT FORM found on the BNSF Intranet	Hub Manager, Assistant Hub Manager, or Regional Director (if no Hub Manager at facility)	as soon as possible but no later than 12 hours following incident	**All Events –** Outlook DL "IABU DL Intermodal Accident". **Events involving intermodal equipment** -forward to Outlook DL "IABU DL IBU Maintenance". **Events involving lading damage or potential transloads** – forward to appropriate LARS manager.
Emergency Responder Called, Any Event Significantly Interfering w/ Facility Operations	n/a	Hub Manager, Assistant Hub Manager, or Regional Director (if no Hub Manager at facility)	as soon as possible but no later than close of work shift	Notify via e-mail to the Senior Managers' e-mail address: IABUDLHubSeniorManagers@bnsf.com
On-Track Accidents within Intermodal Facility (CONTRACT SWITCHING ONLY)	SAF 51657 On-Track Equipment Accident/ Incident Report	**Service Interruption –** Hub Manager or Regional Director. **All events –** Hub Manager, Assistant Hub Manager, or Regional Director	no later than 48 hours following accident	**All Events –** Outlook DL "IABU DL Intermodal Accident". **Events involving intermodal equipment** -forward to Outlook DL "IABU DL IBU Maintenance". **Events involving lading damage or potential transloads** – forward to appropriate LARS manager.
** AIRC E-mail Address: Center, Accident-Reporting* ***Contact the AIRC at 352-1003 or 800-697-6736 with any question regarding corporate safety forms or forms and to distinguish between FRA reportable and non-reportable submission.*				

Continued on next page

A-5.2 Accident Reporting Requirements, Continued

14 Conclusions

Proper accident analyses and accurate timely form submission may prevent incident recurrences and injuries in the future as well as ensures meeting Federal reporting requirements. By providing management with facts that may identify deficiencies in current business processes or the need for new processes, management is able to make sound business decisions based on key information provided through the contributing factor, root cause, and corrective actions analysis process.

15 References

BNSF Drug and Alcohol Testing Program: Supervisor Guidelines:

http://bnsfweb.bnsf.com/departments/hr/medical/DandA/Supervisor_Guidelines_January_2010.pdf

BNSF Drug & Alcohol Field Testing Guide:

http://bnsfweb.bnsf.com/departments/hr/medical/Drug/Flow_Chart_Supv_Guidelines_2007.pdf

Accident/Incident Reporting Forms and Injury Reporting Policy:

http://bnsfweb.bnsf.com/departments/marketing/hubfacility/form_intermodal.html

http://bnsfweb.bnsf.com/departments/safety/reporting/personal-injuries.html

The following e-mail distribution lists have been created and activated for the purpose of initial notifications in instances where an injury has occurred.

LOCATION	E-MAIL DISTRIBUTION ADDRESS
ALBUQUERQUE	IABUDLAlbuquerqueAI@bnsf.com
ALLIANCE	IABUDLAllianceAI@bnsf.com
AMARILLO	IABUDLAmarilloAI@bnsf.com
ARGENTINE	IABUDLArgentineAI@bnsf.com
BILLINGS	IABUDLBillingsAI@bnsf.com
BIRMINGHAM	IABUDLBirminghamAI@bnsf.com
CICERO	IABUDLCiceroAI@bnsf.com
CORWITH	IABUDLCorwithAI@bnsf.com
DENVER	IABUDLDenverAI@bnsf.com
DILWORTH	IABUDLDilworthAI@bnsf.com
ELPASO	IABUDLElPasoAI@bnsf.com

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References (continued)

FRESNO	IABUDLFresnoAI@bnsf.com
HOUSTON	IABUDLHoustonAI@bnsf.com
LOGISTICS PARK	IABUDLLPCAI@bnsf.com
LOS ANGELES	IABUDLLosAngelesAI@bnsf.com
LA PORTS	IABUDLLosAngelesPortsAI@bnsf.com
MEMPHIS	IABUDLMemphisAI@bnsf.com
NEW ORLEANS	IABUDLNewOrleansAI@bnsf.com
NBAY	IABUDLNBayAI@bnsf.com
OAKLAND	IABUDLOaklandAI@bnsf.com
OMAHA	IABUDLOmahaAI@bnsf.com
PHOENIX	IABUDLPhoenixAI@bnsf.com
PORTLAND	IABUDLPortlandAI@bnsf.com
RICHMOND	IABUDLRichmondAI@bnsf.com
SAN BERNARDINO	IABUDLSanBernAI@bnsf.com
SIG	IABUDLSIGAI@bnsf.com
SOUTH SEATTLE	IABUDLSSeattleAI@bnsf.com
SPOKANE	IABUDLSpokaneA&I@bnsf.com
STLOUIS	IABUDLStLouisA&I@bnsf.com
STPAUL	IABUDLStPaulA&I@bnsf.com
STOCKTON	IABUDLStocktonA&I@bnsf.com
WILLOW SPRINGS	IABUDLWillowSpringsA&I@bnsf.com

16 Report Format

Employee Injury/Incident Initial Notification of Injury/Incident Report Format:

This is a _____ Hub report of an employee injury/incident to a ___ year old _____ with ___ years/months of service.

The injury occurred on _____ (date) at ____ am – pm

Employee reports or was involved in: (other than trauma relief).

_____

Briefly describe incident:

_____

Continued on next page

Report Format (continued)

The employee ____ (has or has not) requested medical attention and/or is being seen at:

Employee was diagnosed (or treated) for _____ (or alleges injury to i.e. twisted ankle, pain, soreness, exposure) to _____and given prescription(s), for (pain, inflammation, etc.) of _____.

This incident/injury will result in _____ (restricted/lost) time. (This sentence if applicable)

The employee 6 month Safety Observation record lists ___ testing events with __ passes and ___failures. Of those tests in the last 6 months, __ were associated with _____. (If related to incident)

Time on duty for this shift was ____; employee had ____ hours off duty prior to this shift. Employee has __ & __ as rest days.

Corrective or Protective action(s) will be to:
_____

A reenactment will be performed on _____ to include
_____

Additional narrative as needed:
_____

A-5.3 Security Compromise Reporting

1 General

Procedures for Handling Facility Security Compromises

Following are the procedures established for handling intermodal and automotive facility security compromises. All security compromises that are found at the facility, including broken seals or bolts on all loads, break-ins to any trailer, container, vehicle or facility office, and any known thefts must be reported immediately to Resource Protection. Form HUB00019 must be completed and submitted via outlook mail to: *RPST TIPS Center, BB.IABU.Hub-Operations.IntermodalAccidents and IABU DL Hub Directors.* When a new seal is applied it shall be recorded in the system *(With TSS Command SEALCHG)* and in the seal logbook. All facilities must consistently follow these procedures.

Form HUB00019 "Intermodal/Automotive Facility Security Compromise Report" (see sample) must be used to report facility security compromises. The form may be accessed by going to: http://bnsfweb.bnsf.com/departments/marketing/hubfacility/pdffiles/ibufiles/Forms/Hub00019Facilitysecuritycompromisereport.doc

2 Report Sections

The following sections of the Intermodal/Automotive Facility Security Compromise Report must be completed:

The following information is required when completing form HUB00019:

Facility: location where the security compromise occurred
Person Completing Form: individual completing the form
Date Form Completed: indicate the actual date the form is completed

Trailer/Container Information – Section (If Applicable)
The following information if applicable is required for this section of form HUB00019:

Unit Initial: indicate the alpha mark of the unit
Unit Number: indicate the numeric mark of the unit
Contents: indicate the commodity loaded in the unit
Shipper: indicate the name of the customer shipping the unit
Consignee: indicate the name of the customer receiving the unit
New Seal Number Applied: indicate the number of the seal applied to the unit

Vehicle Information – Section (If Applicable)
The following information if applicable is required for this section of form HUB00019

Vehicle ID Number: indicate the identification number of the vehicle
Manufacturer: indicate the maker of the vehicle

Continued on next page

A-5.3 Security Compromise Reporting, Continued

Measure (continued)

Reported to BNSF Resource Protection
The following information is required when completing this section of form HUB00019:

Date: indicate date, month, day and year Resource Protection was notified
Time: indicate the time Resource Protection was notified
Reported By: indicate the name of the individual reporting the information
Reported To: indicate the name of the individual in Resource Protection receiving the information

Compromise Found
The following information is required when completing this section of form HUB00019:

Date Found: indicate date the security compromise was discovered
Time Found: indicate time the security compromise was discovered
By whom: indicate name of the individual that found the security compromise
Describe what was found: provide a detailed description of what was found and reported to Resource Protection

Action Taken
The following information is required when completing this section of from HUB00019:

Describe what action was taken: indicate what action item was taken (i.e., unit held for further review by Resource Protection, unit release to customer, etc.)

After the form is completed send via outlook mail to: RPST TIPS Center, IABU DL Hub Directors and BB.IABU.Hub-Operations.IntermodalAccidents.

Continued on next page

INTERMODAL / AUTOMOTIVE FACILITY SECURITY COMPROMISE REPORT	
All security compromises that are found at an Intermodal or Automotive Facility must be reported immediately to Resource Protection. This will include the following: Broken seals or bolts on all loads Break-ins to any trailer, container, vehicle or facility office Any known thefts This form must be completed and submitted via outlook mail to: RPST TIPS Center, *IABU DL Hub Directors and BB.IABU.Hub-Operations.IntermodalAccidents*	

Facility:	Person Completing Form:	Date Form Completed:
Trailer/Container Information (If Applicable)		
Unit Initial:	Unit Number:	Contents:
Shipper	Consignee:	New Seal Number Applied:
Vehicle Information (If Applicable)		
Vehicle ID Number:	Manufacturer:	
Reported to BNSF Resource Protection		
Date:	Time:	Reported by: / Reported To:
Compromise Found		
Date Found:	Time Found:	By Whom:
Describe what was found:		
Action Taken		
Describe what was found:		

HUB 00019

A-5.4 Deramp Reporting

1 Purpose

Deramp reporting ensures accurate inventory management indicating when units are physically off flatcars. Increased customer satisfaction is achieved by eliminating premature arrival at the ramp from inaccurate deramp notifications. A more accurate measurement of BNSF Service Performance, hub performance, and lift equipment utilization.

2 Deramp Timing

At Hub locations utilizing RF terminal operating systems, individual containers/trailers shall be reported as deramped only after being removed from the railcar and prior to performing further work. Reporting shall be performed via the on-board computer within the associated lift device.

At Hub locations utilizing TSS to report deramping, all trains or individual segments thereof shall be reported deramped only after ALL units on that train or segment are actually on the ground. (Hubs shall monitor service scheduling availability times to protect service commitments. If necessary, “hot” deramps shall be reported individually after the unit is on the ground.)

3 Backdating

Backdating of deramp times is prohibited except during down time recovery periods. To remove the risk that units meeting their availability time are reported as failures, the deramp event shall be entered in the computer as soon as possible after the above criteria has been met.

There are no exceptions to this policy.

A-5.5 Late Train Release and Late Train Departure Reporting

1 Purpose

Define train release and establish guidelines for reporting late train releases and late train departures.

2 Late Train Release

All BNSF ramps shall report all late train releases off the hub and late train departures on a daily basis. A late train release shall be reported even if the train departs on time. Conversely, a late train departure shall be reported even if the train released on time.

Train release is defined as the time when the track or track segment designated for an intermodal train is physically loaded, assignment and ramp processes complete, and Intermodal has communicated this information to the Operating department.

Any train released after the scheduled release time is late. This includes any release delayed from problems detected by mechanical inspection if chargeable to the IBU.

3 Train Departure

Train departures occurring more than thirty (30) minutes past the published train departure time are considered late and must be reported.

4 Reporting

Reports shall be made using your existing outbound exception distribution lists which notifies local hub personnel, the AVP, Hub and Facility Operations, the Director, Hub and Facility System Support, and Manager, Hub and Facility System Support. Identify the train or segment, time of its release or departure, how much it missed its scheduled time, number of units affected, and reason for lateness. This same information shall also be reported in your hub's email bulletin board.

5 Rationale

Governed by a standard definition, intermodal train release becomes a more accurate indicator of our goal accomplishment because it is independent of any stipulations other departments attempt to impose. Clearly defined reporting criteria ensures a consistent comparison of performance across the system.

A-5.6 Other Reporting

6 FRA Reporting

The key difference between FRA-reportable and non-reportable injuries is that medical treatment is FRA-reportable while first aid is not.

7 FRA Reportable

The following are medical treatments and are considered FRA-REPORTABLE:

- Closure of a wound using sutures, Steristrip, butterfly suture, etc.
- Application of a cast, splint, or sling regardless of amount of time worn
- Injection
- Treatment of a bruise by drainage of blood
- Surgical removal of dead or damaged skin
- Treatment of second or third degree burn if the size of the burn is larger than a quarter
- Treatment that required prescription medication (a single treatment is considered first aid)
- Eye injury
- Positive x-ray
- Whirlpool treatment more than once
- Multiple treatment (does not include routine examinations such as those where bandages are removed for example)
- Any injury that restricts regular work duty, and
- Loss of consciousness due to work condition or environment

8 NOT FRA Reportable

The following are considered first aid treatments and are generally NOT FRA-REPORTABLE:

- Application of an antiseptic or ointment
- Use of a nonprescription medication
- Use of a hot or cold compress
- Treatment of a first-degree burn
- Routine follow-up visit
- Bandaging of a wound
- Removal of embedded or foreign object that is not in the eye and does not require a medical professional
- Administration of oxygen for less than an hour, and
- Use of a protective cover on a finger or thumb that does not extend beyond one joint, and
- Loss of consciousness that was not due to work condition or environment

9 Additional Information

For additional questions regarding FRA-reportable and non-reportable injuries, contact the BNSF Accident Incident Reporting Center at 352-1003 or 800-697-6736, or Manager, Accident Incident Reporting Center at 352-1142.

A-5.7 End-of-Month Lift Count Validation Process

1 Purpose

Establish consistency for calculating and verifying monthly lift numbers at all BNSF Hub facilities. Each hub's process should include checks and balances that help you ensure that BNSF only pays for services rendered. Adherence to this policy is in compliance with BNSF accounts payable requirements.

2 Commands

Effective immediately there are two new commands available to determine accurate payable lifts for a facility: LIFTTOT and DUPLIFTS.

3 LIFTTOT

This command takes the current VANCOUNT number and subtracts any duplicate lifts at your station.

To determine accurate payable lifts for your facility, take the monthly LIFTTOT number and subtract the number of lifts in Oasis that were not performed by a lift device.

The formula is:

LIFTTOT results - Oasis NON lift device ramp/deramp events = Actual lifts that should be reported to BNSF Finance Department for payment to Service Partner.

VANCOUNT alone CANNOT be used to determine payable lifts.

Any exceptions to this process (i.e. duplicate lifts account a b/o railcar) must be approved by the BNSF Hub Manager that is authorized to adjust payable lifts for your facility and appropriate written records should be kept on file locally.

4 DUPLIFTS

This command will allow you to see unit specific detailed information about the units that are on the LIFTTOT report. This program is not necessary to calculate the lift count for your facility. This command is time-consuming, so you may want to keep the requested date range as small as possible.

Please ensure that your payable lift counts are emailed to Sherman Coker and Carol Bricker by the end of the 3rd business day of the new month. They will compile together and give to the Finance Department on your behalf.

5 Rationale

This policy clearly establishes the process and controls for End of Month Lift Count Validation processes.

Administration

A-6 Inventory Management

Contents

This section contains the following topics:

Topic	See Page
List of Policy Statements for Inventory Management	2
Supplies and Maintenance Ordering	3

A-6.1 List of Policy Statements for Inventory Management

1 Policy Statements

Below is the current list of Hub Policy Statements pertaining to Inventory Management.

Number	Title	Issue/Revision Date
1996-01B	Container Ground Stacking (Section E-4.3)	June 28, 1999
1996-02A	Deramp Reporting (Section A-5.4)	June 2, 1997
1997-05B	Verification of Proper Handling and Securement	June 21, 1999

A-6.2 Supplies and Maintenance Ordering

1 Ordering Placards

Information for Ordering Hazardous Materials Transportation Placards

The following BNSF web site will provide the latest revisions to the hazardous materials placard regulations, and placard ordering instructions. All facilities should use the BNSF HAZMAT Placard Guide located on the BNSF web at: http://bnsfweb.bnsf.com/departments/envhaz/haz%20mat.htm when ordering Hazardous Material Transportation Placards.

This site under the BNSF HAZMAT Placard Guide section will provide you with detailed step-by-step instructions for ordering the necessary placards for your facility through the BNSF Millennium System.

2 Ordering OASIS

OASIS Equipment, Supplies and Repairs

The following information is provided for ordering OASIS equipment, supplies and hardware repairs. All facilities shall follow these procedures when requesting OASIS equipment, supplies and repairs.

3 Oasis Equipment

Ordering OASIS Equipment

To order any new OASIS equipment, please fill out an IT Request form (MS Word form ISS 28288) and e-mail to *MKTG, IT Request*. The request will be reviewed to ensure proper equipment is requested and shipped for programming when necessary

4 Oasis Printer Paper

Ordering OASIS Printer Paper

OASIS paper supplies need to be ordered through the BNSF eMESA system with the below part numbers. No IT Request form is needed.

What to order:

- Standard Thermal Paper (part # 759811) - (50 rolls per carton)
- Premium Thermal Paper (part # 759815) - (50 rolls per carton)
- Standard Kiosk Paper (part # 1384067) - (8-8” rolls per carton)
- Moisture Resistant Kiosk Paper (part # 1410035) - (8-8" rolls per carton)

Continued on next page

A-6.2 Supplies and Maintenance Ordering, Continued

5 TEKLOGIX

Ordering TEKLOGIX (Hand Held & VMU supplies)

What to order:

- 7030 Antenna (P/N 19906-015)
- 7030 Hand strap Kit (P/N 19904-002)
- 7030 Shoulder Strap (P/N 30585)
- 7030 Metal Plate (for hand strap) (P/N 19903-002)
- 7030 Hand Held Unit (Cold Hardened)
- 7030 Hand Held Unit
- 2100mamp battery for 7030 (P/N 19505) It is free if ordered with the hand held
- 3 slot charger for 7030 (P/N 7962)
- 6 slot charger for 7030 (P/N 7965)
- 8055 VMU Unit (P/N 8055STD)
- 8060 VMU Unit (P/N 8060STD)

6 Hand Held Repairs

Repairs for Hand Held Unit:

Call 1-800-387-8898 for RMA (Return Material Authorization). They will need MODEL # (7030,8045,8055…) and SERIAL # of the unit. All units should be under the BNSF maintenance agreement, unless they show physical abuse.

Shipping address:

1810 Airport Exchange Blvd.
Suite 500
Erlanger, KY 41018

Include a reason for bad order on each device sent in for repair. Teklogix has a 48-hour repair time. Teklogix will return repaired units via ground unless an overnight UPS label is included with the device when sent in for repair.

Continued on next page

A-6.2 Supplies and Maintenance Ordering, Continued

7 Ordering Printer Cables

Ordering BuyUpTime (Printer Cables)

What to Order:

- Part #00401090 - Teklogix 7030 to O'Neil MicroFlash 3 Printer

Submit IT Request to "Request, IT" in Outlook. They will be stocking these in BNSF Inventory to get volume cost savings. They also have a new design to reduce breakage.

8 Repairs for Printer Cables

Repairs for Printer Cables:

Call BuyUpTime at (888) 288-8843 and requests cables be return for test/evaluation. Following information to be given:

a) Quantity (required)

b) Part number (required) #00401090 or #20435

c) Original customer PO number, BuyUpTime order number, or APC invoice number.

d) Description of problem, as detailed as possible.

e) BNSF location to provide shipping address that we are to return the product to, contact name and phone number. (required)

f) BNSF location to provide preferred carrier and account number for 3rd party billing. (required)

Shipping Address: Company Information:

ABL Electronics Buyuptime.com
Subsidiary of APC 801 Corporate Center Drive
Attn TEA# St. Charles, MO. 63304
350 Clubhouse Rd
Hunt Valley MD 21031 Contact:

Tele: (888-288-8843
Fax: (877) 411-2080

Continued on next page

A-6.2 Supplies and Maintenance Ordering, Continued

9 Ordering O'Neil Printers

Ordering O'Neil (Gate Printers):

What to Order:

- Micro Flash-3 printer (P/N 200060-000)
- MF3 battery (NiMH)-(P/N 550020-000)

Sales:

(949) 458-0500 x 231 FAX – (949) 458-0708
8 Mason
Irvine, CA 97618

10 Repairs for O'Neil Printers

Repairs for Oneil (Gate Printers):

Call (949) 458-0500 x 214 (Arlene Rodriguez) for RMA(Return Material Authorization). They will fax you the shipping label.

11 Ordering SPAN

Ordering SPAN (Gate Printer Chargers):

What to Order:

- Dual Slot Charger for MF3 printer - (P/N DRC223036U)

Sales:

(317) 347-2646 FAX – (317) 347-2640
5605 West 73rd St.
Indianapolis, IN 46278

12 Repairs for SPAN

Repairs for SPAN (Gate Printer Chargers):

We have not seen a charger come back for repair; please feel free to call in case of a need for a RMA.

Continued on next page

A-6.2 Supplies and Maintenance Ordering, Continued

13 KIOSK Components & Maintenance

KIOSK Components and Maintenance Support Overview

Various BNSF departments are involved and necessary to support the BNSF Driver-Assisted In-gate/Out-gate Kiosk. The Kiosk is a BNSF designed device manufactured for BNSF Railway by Spectra Technologies, Inc of Euless, Texas. The Kiosk incorporates devices from various vendors including some that BNSF has used in past projects. The Kiosk contains an air conditioner, heater, temperature control modules, intercom, camera, radio frequency (RF) terminal, keyboard and antenna, strip printer, and card reader. A special control board designed by Spectra controls these devices. BNSF supplied Spectra with the RF vehicle mounted unit (VMU) device, the printer and printer power supply and card reader. Each intermodal hub has spare devices, should replacement or repair become necessary. Each intermodal hub was supplied with two copies of Spectra's Installation & Operation manual. This manual has a parts list showing which company supplies what parts. There is a one-year warranty on the Kiosk and parts supplied by Spectra. Warranties on parts supplied by BNSF are subject to the part manufacturer policy.

14 Teklogix VMU Maintenance

Maintenance Policy for the Teklogix VMU:

The Teklogix VMU is maintained under the same maintenance contract used for any Teklogix RF device, handheld or VMU, and is handled under the same maintenance policy. Normally the intermodal hub is responsible for requesting the RMA (Return Material Authorization) number from Teklogix and shipping to the Teklogix repair facility.

15 RF Device Replacement

Removable and Replacement of Vehicle Mounted RF Device:

At some intermodal hubs Telecommunications removes and replaces vehicle mounted RF devices; at others the local service partner is responsible. ISS is requesting that Telecommunications be responsible for removal of the VMU, the printer and power supply, card reader, intercom and camera. However the hub manager may designate other parties to remove these devices.

16 Paper and Filter Replacement

Printer Paper Replacement and Cleaning Air Conditioner Filters:

The printer paper replacement and cleaning of air conditioner filters are the responsibility of hub personnel. To clean the filters, remove both filters from the bottom of air conditioner unit and wash with a detergent and warm water bath to remove any contaminant material. See page 11 of the KOOLTRONIC operator's manual in the air conditioner tab in the Spectra Installation & Operation manual for additional instructions.

Continued on next page

A-6.2 Supplies and Maintenance Ordering, Continued

17 Defective Control Board / Temp Control Devices

Handling Defective Control Board or Temperature Control Devices:

Should the control board or temperature control devices become defective, the hub manager will need to arrange with Telecommunications or others for repair or replacement

18 Spectra Technologies

Spectra Technologies, Inc.

The stainless steel enclosure, shroud, brackets, etc are from Spectra and are described in the Installation & Operation manual. Replacement parts, or repair to existing parts, are to be ordered from:

Spectra Technologies, Inc
1505 Royal Parkway
Euless TX 76040

Phone (817) 540-4475

Spectra supplied RMA numbers may be required on repairable parts. Air Conditioner, heater control board, 12-Volt or 24-Volt DC power supplies, intercom and camera will also be replaced/repaired by the previous procedure.

19 Teklogix

Teklogix

Teklogix maintains the TEKLOGIX VMU and keyboard under the current maintenance policy in effect for all Teklogix RF equipment.

The Teklogix equipment repair procedure is to call Teklogix at (800) 387-8898 to request RMA number for the defective device then mail the device to:

Teklogix
1810 Airport Exchange Blvd
Suite 500
Erlanger, KY 41018.

The Teklogix keyboard cover is ordered by submitting an IT Request, Form 28288 to:

Teklogix
2313 Coit Rd
Suite D
Plano TX, 75075
(972) 612-8405

Part description and part number: Keyboard cover, #19347-001

Continued on next page

A-6.2 Supplies and Maintenance Ordering, Continued

20 O'Neil

O' Neil Product Division

O'Neil printer repair policy is to call O'Neil at:

(949) 458-0500 option 0
Request RMA number for the defective part.
A mailing label will be faxed to the requesting person to use in mailing the part for repair.

The process to replace the O'Neil printer power supply is to submit an IT Request, Form 28288 to:

O'Neil Product Division
8 Mason
Irvine, CA 92618

Part description and part number: AC adapter part number 220112-000

Include in the Special Handling section: Order from O'Neil Product Division; 8 Mason; Irvine, CA 92618 949-458-0500 option 0

21 Mag-Tek Southwest

Mag-Tek Southwest

The card reader has to be replaced if it becomes defective. Ten cleaning cards per Kiosk are provided to the hub at the time of the Kiosk installation. To order replacement reader, or cleaning cards, submit an IT Request, Form 28288 to:

CARD READER

Mag-Tek Southwest
7221 West Plano Parkway
Suite 200
Plano, TX 75075

(888) 562-4835
Fax (972) 422-6387

Continued on next page

A-6.2 Supplies and Maintenance Ordering, Continued

Mag-Tek Southwest (continued)

CLEANING CARDS

High Tech Sales
1 (800) 229-0216

Part description and part number: MT-215 RS-232 port-powered, reverse-read, insertion card reader, #21065090 Insertion card reader cleaning cards, #96700004

Any defective part not covered above may be ordered from Spectra Technologies, Inc.

Administration

A-7 Securement Audit

Contents

This section contains the following topics:

Topic	See Page
Securement Audit Guidelines	2
BNSF Intermodal Securement Safety Audit Form	4
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Verification of Proper Handling and Securement	8

A-7.1 Securement Audit Guidelines

1 Rail Management Audits

The SOP requires that securement audits be conducted by rail management at various volume related intervals using an industry standard securement audit form. These audits are intended to ensure compliance with all aspects of the SOP. Included in this section is form Hub00020, the BNSF Intermodal Securement Safety Audit Form to be used when conducting these audits. (These audits are separate and distinct from I-STOP.)

NOTE: Previous versions of this form are in circulation; please discontinue use of any previous versions, and only use the version shown in here.

2 Securement Audit Process

In addition to the use of a standard audit form, auditors shall occasionally administer a securement questionnaire to lift crews and securement verifiers to test their knowledge of issues related to securement.

	Securement Audit Process
1	Securement audits will be conducted at the following intervals: (a) Terminals with 60,000 or less annual lift count: 4 audits per year (b) Terminals with 60,001 through 350,000 annual lift count: 8 audits per year (c) Terminals with 350,000 and higher annual lift count: 12 audits per year
2	Each audit must include inspection of a reasonable number of cars as appropriate to the operation.
3	Audits shall be performed after the Loading Process and Post Loading/Pre-Departure inspections have been performed and signatures logged.
4	Completed audit results (Intermodal Securement Safety Audit Form "Hub00020) must be submitted via outlook mail to address ***"IABU DL SECUREMENT AUDITS"*** To e-mail the Intermodal Securement Safety Audit Form, complete the following: • Go to http://bnsfweb.bnsf.com/departments/marketing/hubfacility/pdffiles/ibufiles/Forms/Hub00020Securementsafetyaudit.doc • Double click the "HUB00020 IBU Securement Safety Audit" form • Complete the form and save as an MSWord document for your record • E-mail to "IABU DL SECUREMENT AUDITS"
5	You may review all Securement Audit reports sent to ***"IABU DL SECUREMENT AUDITS"*** in Outlook mail by going to the Public Folders – All Public Folders – BNSF Bulletin Board – IABUHub Operations – Securement Audits. Deficiencies/failures of any item covered by the audit form require a written response from the hub within one week of the audit describing the actions taken to correct the deficiency and prevent future deficiencies. Questions missed on the securement questionnaire shall be reviewed individually with the person submitting the questionnaire and be covered for overall discussion during job safety briefings at the beginning of each shift.
6	A copy of the audit results should be maintained at each hub for a period of one year. An individual's Securement questionnaire shall be placed in his/her personnel file.

Continued on next page

A-7.1 Securement Audit Guidelines, Continued

3 FRA or AAR Audits

Other parties, such as the FRA or the AAR, may also visit a BNSF intermodal facility for the purpose of auditing securement of TOFC/COFC units to railcars. When this happens, a BNSF employee or representative must follow the process below.

	FRA/AAR Audit Process
1	Accompany the auditors on their inspection, if possible.
2	Assist the inspectors by providing any requested information. Identify tracks available for auditing. NOTE: Only tracks that have been released for departure or spotted for deramp should be available for securement audit purposes.
3	Notify local mechanical and TTX forces of the visit if cars will be inspected.
4	Notify the hub manager if off-duty (or terminal manager if no hub manager).
5	Notify via e-mail using the IABUDLHubSeniorManagers@bnsf.com as soon as practical, but no later than immediately after departure of the inspectors from the facility. If advanced notice of an audit is known, the 917-0060 distribution list must be notified of the expected date and time of the audit. Include a description of audit findings and comments made regarding the operation or provide a follow-up e-mail upon completion of the inspection.
6	Provide the individuals in item 5 with a written response within one week of the audit to address any deficiencies noted, regardless of whether any violation is recommended. No written response is required if the deficiencies noted are car condition items on bare trailer or container securement devices.

Continued on next page

BNSF INTERMODAL SECUREMENT SAFETY AUDIT FORM

Railroad: _____ **Location:** _____ **Date:** _____

(Mark an X in Yes or No, if an exception was found describe below, referencing the exception code)

		Yes	No	Excep. Code
1	**AAR TRAILER AND CONTAINER SECUREMENT POSTERS**: Posted in conspicuous locations as appropriate throughout the facility.	☐	☐	(1)
2	**ALL PERSONNEL INVOLVED IN THE LOADING PROCESS HAVE**:			
	a. Received training with the AAR Intermodal Trailer and Container Securement Manual	☐	☐	(2)
	b. Viewed Securement video(s) on trailer and/or container Securement	☐	☐	(3)
	c. Received training in responsibilities specific to Securement	☐	☐	(4)
	d. Received classroom portion of training	☐	☐	(4a)
	e. Received on the job training with mentor	☐	☐	(4b)
	f. A personnel record notation that training and video viewing have been completed	☐	☐	(5)
	g. Securement verifiers have minimum one year's experience with the current employer	☐	☐	(5a)
	h. Training with Securement module: new hires within 120 days; recurrent once each year	☐	☐	(5b)
3	**POST LOADING / PRE-DEPARTURE INSPECTION:**			
	a. Was a post loading / pre-departure inspection made?	☐	☐	(6)
	b. Was the verification list signed off indicating an independent inspection was performed and	☐	☐	(7)
	c. Was a walking inspection performed?	☐	☐	(8)
	d. Were all units verified?	☐	☐	(9)
	e. Was supplemental lighting used when lighting or visibility was inadequate?	☐	☐	(10)
	f. Are sign-off sheets maintained on file for the previous month and the current month?	☐	☐	(11)

Describe "NO" responses for exception codes 1-11 and include corrective actions

Excep. Code	Exceptions Noted	Corrective Actions

(Mark the following items with an X to indicate whether "OK" or "FAIL"

		OK	FAIL	
4	**INSPECTION ELEMENTS: (Ensure intermodal track protection is in place prior to inspection)**			
	Trailers	☐	☐	(12)
	a. Hitch jaw or rotor locked (indicator flush or flag down)			
	b. Hitch diagonal strut locked	☐	☐	(13)
	c. Trailer kingpin properly engaged in jaw or rotor assembly	☐	☐	(14)
	d. Trailer tires properly positioned (not overriding rub-rail/raised side sill or resting on a	☐	☐	(15)
	e. All trailer tires present and not flat	☐	☐	(16)
	f. Trailer landing gear properly clear of deck	☐	☐	(17)
	g. Unit not shifted or leaning in/on car	☐	☐	(18)
	h. Trailer doors closed	☐	☐	(19)
	i. Auxiliary lock not broken or missing	☐	☐	(19a)
	Containers	☐	☐	(20)
	a. Container pedestal latch or twist lock properly engaged and locked			
	b. Bulkhead railcar flipper guides in proper position for top container	☐	☐	(21)
	c. Railcar container width guides properly positioned for size of container	☐	☐	(22)
	d. IBC's properly positioned (not upside down and top container present)	☐	☐	(23)

BNSF INTERMODAL SECUREMENT SAFETY AUDIT FORM -Continued

Railroad: _____ **Location:** _____ **Date:** _____

(Mark an X in Yes or No, if an exception was found describe below, referencing the exception code)	Yes	No	Excep. Code
e. IBC's present at all positions	☐	☐	(24)
f. IBC's properly locked	☐	☐	(25)
g. IBC's properly stowed	☐	☐	(26)
h. Manual IBC's proper type (left hand locking only)	☐	☐	(27)
i. IBU locking handle not broken, missing, or bent so as to contact the container above or	☐	☐	(28)
J. Container not contacting partially collapsed hitch or rub-rail so as to prevent proper	☐	☐	(29)
k. Container handling fitting properly engaged on Securement device	☐	☐	(30)
l. Container handling fitting (casting) not broken or bent so as to prevent proper Securement	☐	☐	(31)
m. Container to Chassis Securement devices locked and secured	☐	☐	(32)
n. 20-foot containers loaded only in wells approved for 20-foot loading	☐	☐	(33)
o. No single container less than 40 feet in length loaded in the bottom position of double stack	☐	☐	(33a)
p. No single 20-foot container loaded on articulated cars with twist locks or latches at only one	☐	☐	(33b)
q. Container doors closed	☐	☐	(34)
Flatbed / Rack Chains and Binders	☐	☐	(35)
a. Hitch jaw or rotor locked (indicator flush or flag down)			

INSPECTION SUMMARY

CARS INSPECTED _____ **PLATFORMS INSPECTED** _____ **UNITS INSPECTED** _____

Describe "NO" responses for exception codes 12-35 and include corrective actions

Car Initial/Number	Cont/Trlr Init/No.	Exception Code	Exceptions Noted

SIGNATURES:

Auditor's Name: _____ Auditor's Signature: _____ Date: _____

Auditor's Name: _____ Auditor's Signature: _____ Date: _____

Manager's Signature _____ Date: _____

Other Company	Signature	Title	Date

OUTSIDE AGENCY AUDITS

Formerly 0630 FRA Audit form

LOCATION: _____ **DATE:** _____ **ARRIVAL TIME** _____ **DEPARTURE TIME** _____

AGENCY _____ **INSPECTOR NAME(S):** _____

ITEMS CHECKED:

- □ Employment records for proper training/certification of personnel
- □ Training materials and written guidance on policies and procedures (service partner and/or BNSF)
  - □ Present and accessible
  - □ Employee knowledge and awareness
- □ Presence and location of appropriate regulatory and/or advisory materials
- □ Knowledge and/or adherence of personnel to:
  - □ Hazardous materials regulations (placarding, billing, documentation, train placement, etc.)
  - □ Securement SOP
  - □ Emergency response procedures, evacuation routes, and/or Safety Action Plans for facility
  - □ Track protection for facility
  - □ AAR Interchange rules (including equipment repair and billing)
  - □ Loading rules/car selection for type of load
  - □ Safe Container Act, FHWA decals
  - □ Environmental regulations
  - □ Personal Protective Equipment (PPE)
  - □ Other (Please specify:)_____
- □ Car condition/defect items (including bad order process)
- □ Good housekeeping
- □ Proper lighting/markings/signs/hazard identification
- □ Inbound trains (loading, securement, placarding, billing, train placement, car condition)

Train ID:		# tracks checked:		# cars checked:		# TOFC units checked		# COFC units checked	
Train ID:		# tracks checked:		# cars checked:		# TOFC units checked		# COFC units checked	
Train ID:		# tracks checked:		# cars checked:		# TOFC units checked		# COFC units checked	

- □ Outbound trains (loading, securement, placarding, billing, train placement, car condition)

Train ID:		# tracks checked:		# cars checked:		# TOFC units checked		# COFC units checked	
Train ID:		# tracks checked:		# cars checked:		# TOFC units checked		# COFC units checked	
Train ID:		# tracks checked:		# cars checked:		# TOFC units checked		# COFC units checked	

- □ Environmental isues
  - □ Drainage, runoff, spill prevention, containment, presence of current SPCC (if required)
  - □ Storage, labeling, transportation and/or disposal of regulated materials
  - □ Spill handling, reporting, and clean up
  - □ Permits
- □ Other (Describe)_____

OUTSIDE AGENCY AUDITS, continued

LOCATION _____ **DATE** _____ **AGENCY** _____

General comments by the inspector(s), if any: _____

EXCEPTION NOTED:
If Applicable:

Car Init/Number:_____

Unit Init/Number:_____ **Discovered:** **On Car** □ **Off Car** □ **Before Inspection** □ **After Inspection** □

Train:_____ **Inbound:** □ **Outbound:** □

Hitch Type: _____ **Container Securement Device Type** _____

Actions Taken to Correct Exception _____

Delays Incurred Due to Audit: **Yes** □ **No** □ **Length of Delay** **Late Release:** □ **Late Departure:** □

EXCEPTION NOTED:
If Applicable:

Car Init/Number:_____

Unit Init/Number:_____ **Discovered:** **On Car** □ **Off Car** □ **Before Inspection** □ **After Inspection** □

Train:_____ **Inbound:** □ **Outbound:** □

Hitch Type: _____ **Container Securement Device Type** _____

Actions Taken to Correct Exception _____

Delays Incurred Due to Audit: **Yes** □ **No** □ **Length of Delay** **Late Release:** □ **Late Departure:** □

EXCEPTION NOTED:
If Applicable:

Car Init/Number:_____

Unit Init/Number:_____ **Discovered:** **On Car** □ **Off Car** □ **Before Inspection** □ **After Inspection** □

Train:_____ **Inbound:** □ **Outbound:** □

Hitch Type: _____ **Container Securement Device Type** _____

Actions Taken to Correct Exception _____

Delays Incurred Due to Audit: **Yes** □ **No** □ **Length of Delay** **Late Release:** □ **Late Departure:** □

Administration

A-7.2 Verification of Proper Handling and Securement

1 Purpose

Summarize necessary verification steps throughout a trailer or container's handling to ensure its acceptable condition while under control of an intermodal hub; does NOT encompass corrective actions for discrepancies discovered during verification.

2 Verifications

The following verifications must be made to guard the condition and associated data collected on a trailer/container. Verification is defined as (1) any review of a previous action, or (2) any action performed or notation made specifically for the purpose of safe and proper handling of a unit.

3 In-gate Verification

1. Data collected from a driver matches the unit and is printed on the J1/1202, particularly unit/chassis initial and number, load vs empty status, seal number, unit length, any placards, and TOFC vs COFC movement status
2. Physical condition is checked to identify any unsafe or other condition which precludes acceptance of the unit
    2a. Flatracks/beds and over-dimensional loads are also placed on LSHOLD for further verification by Mechanical that the unit is suitable for movement
3. Completeness of hazardous material paperwork, appropriateness of placarding, and proper positioning of placards
4. Proper blocking/bracing for safe rail movement (placarded haz loads only except LTL, unless conducting periodic spot checks)
5. Return of clean rail-controlled empties for next customer's use (no dunnage, etc.)

4 Loading Verification

1. Track is protected prior to commencing activities associated with loading
2. Spotted cars are in operative/safe condition and all securement devices functioning
3. Correct units are loaded/spotted for loading using LLIST or DTKI
4. Lift equipment container alignment visual aids indicate proper engagement of the lifting device and container
5. Suspected overweights are not loaded but referred to a supervisor for determination of the unit's condition

Continued on next page

A-7.2 Verification of Proper Handling and Securement, Continued

Loading Verification (continued)

6. Units are properly secured to railcars during loading:

6a. Perform reverse lift equipment move to ensure kingpin is locked in the jaw or rotor

6b. Check hitch visual locking indicators (yellow pins, flags, or handles) for a locked indication.

6c. Verify IBCs are:

- in proper working order,
- properly installed on all four corners of any unit to be stacked on,
- locked after loading,
- used ONLY when a container will be loaded on top, and
- placed in the car's storage bin when not in use (verify no IBCs have been left on the car's deck nor in a container casting).

6d. For narrow containers in double stack wells, ensure container guides have been positioned properly to effectively reduce well size

6e. For top containers in bulkhead cars, verify the flippers are properly positioned

5 Pre-Departure Verification

1. Ensure over-dimensional loads have received Clearance Bureau approval

2. Ensure Federal hazmat placement restrictions have been complied with

3. Two individuals must:

3a. Confirm all units are properly seated, secured by securement devices, and that the securement devices are locked

3b. Sign outbound verification lists if no loading exceptions are found, or sign after any loading exceptions have

6 Post-Arrival Verification

1. Track is protected prior to commencing activities associated with unloading

2. Use TSS commands PRTTRK or INB to cross-check all flatcars and unitinitial/numbers on a track with what the computer shows

3. Prior to deramp, examine cars and units to identify damage or unsecured condition

Continued on next page

A-7.2 Verification of Proper Handling and Securement, Continued

7 Out-gate Verification

1. Containers going outgate have no IBCs in their castings.

2. Integrity of the shipment:

   (a) Correct initial/number

   (b) Seal intact (physically pull to ensure)

   (c) Bolt still present

   (d) On empties, interior of unit empty

3. Unit is being released to the appropriate party:

   (a) Match truck logo with 1202 inspection form

   (b) Record tractor number and verify license plate number

   (c) Match driver's license picture with driver

   (d) Verify driver's license number with inspection form

   (e) Compare driver's signature on license with signature on 1202

   (f) Required pick up number is provided, if applicable

4. Haz mat units have the appropriate haz mat information and placards, if needed

8 Rationale

Summarization of all verification steps easily identifies the common thread of activities at BNSF intermodal facilities which are designed to ensure safe and proper movement or release of a unit, with hand-off to the next party in proper condition.

Administration

A-8 Service Issues

Contents

This section contains the following topics:

Topic	See Page
Service Recovery Procedures	2
UPS Peak Season Failure Prevention	5

A-8.1 Service Recovery Procedures

1 Purpose

The purpose of having set procedures for the service recovery is to effectively deal with Intermodal shipment problems so that service failures do not occur. This is accomplished by:

- standardizing the communications process to report on both potential and actual problems; and
- outlining the review process of all hub-caused or hub-affected incidents to avoid future recurrences.

Communication is the key to achieving the goal of zero service failures and should be initiated at the first indication or perception that a problem is arising. Below are the proactive steps to prevent service failures.

2 Communication Problems

At the first signs of ANY real or perceived problem with a unit, the hub contact MUST immediately communicate any preliminary details of the problem by direct phone call to the IBU-OPS desk at 817-867-5121 (North lines) or 817-867-5116 (South lines). The hub contact must specifically identify what problem is developing, what actions are planned, and where assistance is believed to be required from others.

UPS SHIPMENTS MUST ALSO BE REPORTED TO E-MAIL DISTRIBUTION LISTS IABUDLHUBEXECUTIVES@bnsf.com and MKTDLUPSServiceFailures@bnsf.com. THIS RULE APPLIES REGARDLESS OF HOW MINOR A SITUATION MAY SEEM.

Do NOT wait until all details of the problem are known or identified before communicating to the distribution list and to the IBU-OPS desk. As the situation progresses, the hub contact must provide updates to the distribution list and direct to the IBU-OPS desk until the issue is resolved.

3 Over-the-Road

If the hub contact believes that an over-the-road move might be a possibility, he/she shall order shop personnel to conduct a pre-trip inspection using the pre-trip inspection list and pre-trip report.

NOTE: Customer Solutions personnel are the only individuals who make the actual decision whether a unit shall move over-the-road; the hub contact's decision to initiate a pre -trip inspection is in proactive anticipation of what may be required to avoid unnecessary delays if and when the OTR decision is made.

Any required repairs must be initiated immediately and the location of the unit provided to the hub contact with location updates whenever the unit is moved. The hub contact must share location information with checkpoint personnel and any other hub personnel who typically are questioned by drivers about unit locations.

Continued on next page

A-8.1 Service Recovery Procedures, Continued

4 Notification

If Customer Solutions decides the unit will move over-the-road, they shall notify the hub contact of this plan. The hub contact must provide Customer Solutions with the condition of the unit (okay to go or under repair with estimated ready time) and the location of the unit at the facility, with updates if any of this information changes.

Customer Solutions shall notify Highway Services of the over-the-road decision and include the hub contact's information. Highway Services shall arrange pickup of the unit by a drayage company and communicate drayman and pickup time information to both Customer Solutions and the origin and destination hubs. Notification to origin and destination hubs shall be via e-mail message.

5 Responsibility

NOTE: The drayage company selected may or may not be subscribed through a UIIA agreement. Highway Services shall identify such selections to Customer Solutions and the origin and destination hub contacts. The origin hub contact shall be responsible for ensuring pickup is in fact made by the drayman Highway Services has designated. Both the origin hub contact and Customer Solutions are responsible for monitoring that the unit is picked up in a timely manner; however, PRIMARY RESPONSIBILITY FOR ENSURING PROPER HANDLING OF THE UNIT UNTIL OUTGATE RESTS WITH THE HUB CONTACT.

Highway Services is responsible for following the progress of the unit over-the-road to ensure timely arrival at destination and communicating any difficulties to both Customer Solutions and the destination hub.

6 Belen, NM

SERVICE RECOVERY PLAN UTILIZING BELEN, NM

A service recovery plan has been developed, effective November 25, 1999, which utilizes an overhead crane and two tracks in Belen, NM, to rework units in jeopardy of failing service.

The IBU-OPS desk (South Lines), in conjunction with Customer Solutions, shall determine which units will be reworked in Belen and shall notify the Belen Operating Department accordingly. The Belen Operating Department will call ITS Terminal Manager (Albuquerque) at 915-497-3022, who is the primary contact for intermodal traffic to be reworked at Belen. The ITS Terminal Manager will communicate with the Belen Operating Department and make necessary arrangements to rework the unit, prepare for an over the road move, etc. ITS Terminal Manager and the Belen Operating Department are ultimately responsible for coordinating all necessary activities to expedite rework of a unit.

Continued on next page

A-8.1 Service Recovery Procedures, Continued

7 Albuquerque NM

Additional contacts at the Albuquerque Intermodal facility for Belen intermodal traffic are as follows:

- Terminal Operator numbers: ITS Terminal Manager office phone: 505-767-6893; cell phone: 915-497-3022
- BNSF Trainmaster at Albuquerque: 505-767-6848
- BNSF Intermodal Ramp: 505-767-6893

NOTE: The aforementioned rules regarding "COMMUNICATION OF PROBLEMS" relative to notifications, over-the-road moves, etc. must also be adhered to in conjunction with any requirements involving the Belen, NM, facility.

8 Barstow, CA

SERVICE RECOVERY UTILIZING BARSTOW, CA.

Follow recovery plan as listed for UPS Service Recovery Procedure.

9 Havre, MT / Spokane, WA

SERVICE RECOVERY PLAN UTILIZING HAVRE, MT and SPOKANE, WA.

Follow recovery plan as listed for UPS Service Recovery Procedure.

10 Contact Role

The hub contact is responsible for providing a thorough recap of all relevant information including the following:

- Unit specifics: initial/number, gate arrival time, cutoff time, scheduled train
- Who was involved
- At what point the problem was identified and by what means
- Step-by-step occurrences and corresponding corrective actions planned vs. taken
- Resulting effects of corrective actions taken
- Analysis of failed corrective actions: wrong approach vs. failure of personnel to initiate or properly carry out corrective actions

A-8.2 UPS Peak Season Failure Prevention

1 Purpose

The purpose of having set procedures for the UPS peak season is to effectively deal with UPS shipment problems so that service failures do not occur. This is accomplished by:

- assigning responsibility;
- identifying assistance through TSS;
- standardizing the communications process to report on both potential and actual problems;
- highlighting responsibilities associated with potential and actual over-the-road (OTR) moves;
- and outlining the review process of all hub-caused or hub-affected incidents to avoid future recurrences.

Communication is the key to achieving the goal of zero service failures and should be initiated at the first indication or perception that a problem is arising. Below are the proactive steps to prevent service failures.

2 Hub Contact and Assignment Responsibilities

Each UPS peak season, intermodal regional directors shall designate one BNSF contact at each hub who will be responsible for UPS issues 24 hours a day, seven days a week. This information will be compiled into a Hub Contact list, which will be updated and redistributed each year to reflect any assignment changes.

Go to UPS Peak Daily Plan found in Outlook /Public Folders/All Public Folders/BNSF Bulletin Board/UPS.

These designated individuals shall be the sole contact on hub problems involving UPS at their respective facilities and have delegable power to accomplish tasks as required to avoid or to investigate service failures, although final responsibility and accountability ultimately rests with them. In addition, hub contacts are responsible for reviewing the contents of these UPS Peak Season procedures with all hub personnel to ensure complete understanding and compliance and to avoid a breakdown in the process.

In the event a hub contact is unavailable to perform this role (i.e., illness, business trips), it is the hub contact's responsibility to notify his/her regional director through direct discussion (NOT through voicemail or electronic mail) of their unavailability to monitor UPS activities. This notification shall be provided with as much lead time as possible.

The regional director is then responsible to appoint a temporary BNSF replacement or personally assume the responsibility for monitoring activities; this temporary appointment (including anticipated duration) must be communicated to director Hub and Facility Operations - 817-867-6110.

Continued on next page

A-8.2 UPS Peak Season Failure Prevention, Continued

3 Proper Gate Handling

Ensure proper speedbill and ingate procedures are employed at checkpoint. Gate personnel must not rely solely on driver-provided shipping information but must cross-check information printed on the J1, or "buck slip" if using hand-helds. Ensure that a copy of the J1 or buck slip is kept with the paperwork submitted by the driver.

In the event of any discrepancy, including any handwritten changes made on the paperwork, gate personnel must verify shipment information with trip tickets located on the rear doors of the unit.

If the trip ticket is not found on the rear doors, the driver must call their dispatcher to verify destination. Hub personnel must not change destination after units are in the gate unless they have previously received a revised shipping order showing the correct destination.

4 Downtime Protection

Hub contacts are responsible for ensuring that UPS units coming ingate during downtime periods are properly protected through communication and passage of J1 copies (or "buck slips" from hand-helds) to coordinators for loading preparation. After train release, verify all UPS units were loaded by crosschecking them against the J1s or buck slips. If there are any discrepancies between the J1s and what was loaded, immediately notify the UPS MKTDLUPSServiceFailures@bnsf.com, UDLHUBEXECUTIVES@bnsf.com distribution list with "page" in the subject line and the IBU-OPS desk directly at 817-867-5121 for North lines or 817-867-5116 for South lines.

5 TSS Programs

The following TSS commands MUST be run frequently as a mandatory regimen for readily identifying problem units:

Classification	TSS Command	Purpose
Ingate/Planning	SSNOWB HAZAGE	Identifies UPS units which did not speed bill Identifies UPS loads ingate as hazardous but not updated in TSS with hazmat information

Continued on next page

A-8.2 UPS Peak Season Failure Prevention, Continued

TSS Programs (continued)

Classification	TSS Command	Purpose
Load Sheet Browses	SSLB SSLSTRN SSLSAL	View units on service scheduling load sheet by: Specific yard block Specific train symbol Specific station (to plan appropriate assignment and ramping)
Outbound Loading/Trains	IGLS PRTTRK SSARRDPT SSDTRS SSCRTRP	Displays errors preventing unit from loading Shows service scheduling details of one or more selected tracks at a specific location Shows service scheduling details of terminal departures for a specific station Train consist with units tied to goal Retrip units remaining only after assignment process entirely completed for a train symbol*

6 UPS Left Behinds

*There should be no UPS units left behind without express approval of IBU-OPS and a UPS Account team director and managers; however, running SSCRTRP immediately after the assignment process is completed ensures no units were mistakenly left behind. ALL EFFORTS MUST BE MADE TO LOAD ANY UPS UNIT SHOWN ON SSCRTRP TO ITS ORIGINALLY SCHEDULED TRAIN. If the unit cannot be loaded on the train, you must contact IBU-OPS immediately (direct contact; no voicemail or electronic mail) before retripping the unit via SSCRTRP, so they can study alternatives and determine what actions to initiate.

7 Inbound TSS

Classification	TSS Command	Purpose
Inbound Trains	SSINBHUB SSINBSNP SSARRDPT SSDTRS SSRCHYD HOT I PRTTRK	Inbound hub snapshot indicating unit failure times relative to arrival Shows a snapshot of the service scheduling details of the inbound train line-up for a specific station Shows service scheduling details of terminal arrivals for a specific station Train consist with units tied to goal Searches a specific station, track, track type, turnover or train symbol with chosen criteria for a response containing various service scheduling details Displays hot train status Shows service scheduling details of one or more selected tracks at a specific station

Continued on next page

A-8.2 UPS Peak Season Failure Prevention, Continued

Inbound TSS (continued)

Classification	TSS Command	Purpose
Notification	HOLDMATE FAXOPEN	Ensure UPS notification will automatically occur for enroute/arrived units, cars, or trains Monitor fax notifications to ensure no failures
Yard Check	PRTUNK NEVERYC	Identify exceptions found thru yard checks** Unknown and missing units from yard check Units in yard with no lot check
Performance Measurement	SSIMMEAS	Intermodal service scheduling morning measurement report

8 Yard Checks

**Yard checks should be conducted at least once every 8 hours to determine if any UPS units have excessive dwell times.

Other programs may prove useful in maintaining control over performance and should be utilized as needed.

9 Other Considerations

Attention should be given to the following situations which can impact handling of UPS units in a timely manner:

- Service partner staffing fluctuations (due to illness, vacation, etc.) and their anticipated impact on maintaining timely operations
- Lift equipment downtime and scheduled preventive maintenance to mitigate or prevent any negative impact on operations

10 Problem Communication

At the first signs of ANY real or perceived problem with a UPS unit, the hub contact MUST immediately communicate any preliminary details of the problem to the UPS MKTDLUPSServiceFailures@bnsf.com, distribution list with "page" in the subject line and by direct phone call to the IBU-OPS desk at 817-867-5121 (North lines) or 817-867-5116 (South lines). The hub contact must specifically identify what problem is developing, what actions are planned, and where assistance is believed to be required from others.

THIS RULE APPLIES REGARDLESS OF HOW MINOR A SITUATION MAY SEEM.

Do NOT wait until all details of the problem are known or identified before communicating to the distribution list and to the IBU-OPS desk. As the situation progresses, the hub contact must provide updates to the distribution list and direct to the IBU-OPS desk until the issue is resolved.

Continued on next page

A-8.2 UPS Peak Season Failure Prevention, Continued

11 Over-the-Road

If the hub contact believes that an over-the-road move might be a possibility, he/she shall order shop personnel to conduct a pre-trip inspection using the pre-trip inspection list and pre-trip report attached (Attachment 3).

NOTE: Customer Solutions personnel are the only individuals who make the actual decision whether a unit shall move over-the-road; the hub contact's decision to initiate a pre -trip inspection is in proactive anticipation of what may be required to avoid unnecessary delays if and when the OTR decision is made.

Any required repairs must be initiated immediately and the location of the unit provided to the hub contact with location updates whenever the unit is moved. The hub contact must share location information with checkpoint personnel and any other hub personnel who typically are questioned by drivers about unit locations.

12 Customer Notification

If Customer Solutions decides the unit will move over-the-road, they shall notify the hub contact of this plan. The hub contact must provide Customer Solutions with the condition of the unit (okay to go or under repair with estimated ready time) and the location of the unit at the facility, with updates if any of this information changes.

Customer Solutions shall notify Highway Services of the over-the-road decision and include the hub contact's information. Highway Services shall arrange pickup of the unit by a drayage company and communicate drayman and pickup time information to both Customer Solutions and the origin and destination hubs. Notification to origin and destination hubs shall be via Outlook e-mail message. The origin and destination hub contacts MUST contact Highway Services confirming receipt. Failure to do so will result in a call from Highway Services to director hub and facility operations at 817-867-6110 for confirmation of receipt.

13 Responsibility for Proper Handling

NOTE: The drayage company selected may or may not be subscribed through a UIIA agreement. Highway Services shall identify such selections to Customer Solutions and the origin and destination hub contacts. The origin hub contact shall be responsible for ensuring pickup is in fact made by the drayman Highway Services has designated.

Both the origin hub contact and Customer Solutions are responsible for monitoring that the unit is picked up in a timely manner; however, PRIMARY RESPONSIBILITY FOR ENSURING PROPER HANDLING OF THE UNIT UNTIL OUTGATE RESTS WITH THE HUB CONTACT. Highway Services is responsible for following the progress of the unit over-the-road to ensure timely arrival at destination and communicating any difficulties to both Customer Solutions and the destination hub.

Continued on next page

A-8.2 UPS Peak Season Failure Prevention, Continued

14 Service Recovery Plan – Belen, NM

A service recovery plan has been developed, effective November 25, 1999, which utilizes an overhead crane and two tracks in Belen, NM, to rework UPS units in jeopardy of failing service.

The IBU-OPS desk (South Lines), in conjunction with Customer Solutions, shall determine which units will be reworked in Belen and shall notify the Belen Operating Department accordingly. The Belen Operating Department will call ITS Terminal Manager (Albuquerque) at 915-497-3022, who is the primary contact for intermodal traffic to be reworked at Belen. The ITS Terminal Manager will communicate with the Belen Operating Department and make necessary arrangements to rework the unit, prepare for an over the road move, etc. ITS Terminal Manager and the Belen Operating Department are ultimately responsible for coordinating all necessary activities to expedite rework of a unit.

15 Amarillo, TX

Operations Manager Inter-Rail Transport, Inc.

BNSF Amarillo Auto Unloading Facility
3504 Airpark Dr.
Amarillo, TX 79103

Mobile: 806-517-0933
Office: 806-379-3426 BNSF
E-mail: Tyler.McCarty2@bnsf.com
IRT e-mail: tjmccarty@interrail-transport.com.

16 Additional Albuquerque Contacts

Additional contacts at the Albuquerque Intermodal facility for Belen intermodal traffic are as follows:

- Terminal Operator numbers: ITS Terminal Manager office phone: 505-767-6893; cell phone: 915-497-3022
- BNSF Trainmaster at Albuquerque: 505-767-6848
- BNSF Intermodal Ramp: 505-767-6893

NOTE: The aforementioned rules regarding “COMMUNICATION OF PROBLEMS” relative to notifications, over-the-road moves, etc. must also be adhered to in conjunction with any requirements involving the Belen, NM, facility.

17 Service Recovery – Barstow, CA

San Bernardino must be contacted to coordinate service recovery at Barstow:

- Coordinator: 909-806-3722
- San Bernardino Hub Manager office phone: 909-806-3775

Continued on next page

A-8.2 UPS Peak Season Failure Prevention, Continued

18 Incident Review

All UPS incidents (regardless of whether a service failure resulted) with a hub cause or hub effect will be reviewed with the responsible and affected parties within 24 hours. Emphasis shall be placed on solving the problem and preventing future recurrences by identifying the root cause. The review will be organized and coordinated through director of Hub Operations and will include respective regional directors, hub managers, service partner terminal managers, and service partner employee(s) and/or agents involved. All parties involved MUST be present, regardless of scheduled days off.

The hub contact is responsible for providing a thorough recap of all relevant information including the following:

- Unit specifics: initial/number, gate arrival time, cutoff time, scheduled train
- Who was involved
- At what point the problem was identified and by what means
- Step-by-step occurrences and corresponding corrective actions planned vs. taken
- Resulting effects of corrective actions taken
- Analysis of failed corrective actions: wrong approach vs. failure of personnel to initiate or properly carry out corrective actions

19 UPS E-mail Distribution Page

Use these distribution lists to report issues with ups units at the first sign of problems:

IABUDLHUBEXECUTIVES@bnsf.com

MKTDLUPSServiceFailures@bnsf.com

Ensure that you place "PAGE" in the subject line of the e-mail.

20 UPS Pre-Trip Inspection List

1. Check all tires. All tires are to have 85-95 lbs. of air. All wheel studs, lugs and wedges should be present and tight. All tires should have a minimum of 4/32" tread depth. All tires should be properly matched as close as possible in height. Any tire that appears smaller (not in contact with ground), should wither be swapped or replaced with tire of comparable diameter. No mismatched tires (i.e., Radials with Bias or Tubeless with Tube type).
2. Brakes should be checked to ensure there are no cracked, broken, or missing shoes. No cracked or broken brake drums. Air system, no leaks, (this includes Glad Hands). Brakes adjusted properly. Push Rod Travel within correct travel limits (1/4").
3. Hubs should be checked to ensure no leaking oil or grease seal is evident. Where applicable, oil level checked and corrected if found to be low.
4. Mud flaps present and secure.
5. All lights and reflectors present and working.
6. All units to have valid FHWA inspection along with valid sticker/decal present on unit.
7. All Tandem Locking Pins present and in locked position.

A-8.2 UPS Peak Season Failure Prevention, Continued

UPS Pre-Trip Inspection List (continued)

8. Roll check of landing gear to ensure high and low gear engaged and no damage to gear box. All leg braces securely fastened. All securements (bolts/welds) intact.
9. Valid license plate and registration.
10. Unit is to be checked to make sure no structural defects exist that allow for load damage from water. Roof, sides, and doors checked. Any holes or cuts that would allow exterior elements to enter should have temporary repairs performed to enable the load to be delivered.

21 Pre-Trip Report

DATE_____	
BNSF LOCATION_____	
UNIT NUMBER_____	
LOT LOCATION_____	
1. Tires (air pressure 85-95 lbs.) a. Wheel studs, lugs, and wedges b. Minimum 4/32" tread depth c. Tires should match Same height/bias or tubeless	OK_____ OK_____ OK_____ OK_____
2. Brakes a. No cracked, broken, or missing brake shoes b. No cracked or broken brake drums c. No air leaks (includes Glad Hands) d. Brakes properly adjusted (1/4" brake rod travel)	OK_____ OK_____ OK_____ OK_____
3. Hubs a. Check for leaks and fill if needed	OK_____ OK_____
4. Mud flaps present and secure	OK_____
5. All lights and reflectors present and working	OK_____
6. Valid FHWA inspection and sticker present	OK_____
7. All Tandem Locking Pins present and locked	OK_____
8. Landing gear a. Leg Braces, all welds and bolts secure b. High and low gear work properly	OK_____ OK_____ OK_____
9. Valid license plate and registration	OK_____
10. Check for holes, cuts, or cracks in sides and roof a. Repair, seal or do temporary repairs to protect load.	OK_____ OK_____
Mechanic _____	

Continued on next page

A-8.2 UPS Peak Season Failure Prevention, Continued

22 Havre, MT / Spokane WA

Havre, MT, and Spokane, WA, have Service Interruption/Exception Drayage Plans in place.

23 Purpose: Service Interruption/ Exception Drayage Plan

To have a contingency plan in the event of service interruption, train delay or terminal delay that impacts the BNSF PNW Intermodal Operations Team from achieving the goal of ZERO FAILURES during the UPS Peak Season.

Everyone involved in the service recovery plan must be on standby 24 hours-a-day from first to last sort, able to respond to an emergency at a moment's notice. This plan involves a series of procedures for communication/documentation and operations.

24 Success Measures

Measures of success include:

- Prevent exception situations from deteriorating and becoming failures
- Minimization of domino effect through system from non-standard operations
- Cost reduction for service recovery
- Improved customer satisfaction

25 Communi-cation

Communication/Documentation plan includes:

- Daily conference calls to identify potential train service problems.
- Monitor PNW weather reports (potential flooding/washouts).
- Maintaining communications with UPS, BNSF, and all Service Partners involved to ensure adequate manpower protecting all potential trailers/containers (with surplus trucks and back up carriers) on any given day through peak.
- A e-mail will be sent to the PNW team and the MKTDLUPSServiceFailures@bnsf.com, UPS distribution list at start of plan, completion of plan, and in case of any complications.
- A spreadsheet will be maintained on each movement (stored on shared N drive). This will be broadcast to the UPS service recovery fax distribution list at both start and completion.

Continued on next page

A-8.2 UPS Peak Season Failure Prevention, Continued

26 Operations Plan

Upon launching this plan (once authorized by the IBU Operations Desk), the following action takes place.

- A e-mail is sent to the PNW team and the MKTDLUPSServiceFailures@bnsf.com, UPS distribution list.
- IBU Operations and hub staff will notify the Operating department that train "ZXXXXXX-XX" must be set to the MC strip tracks in Havre for deramp.
- OPS North desk will work with the UPS team to identify hot loads for priority dispatch and to determine whether they will go yard-to-yard or direct to the UPS facility. Hub staff will notify the local UPS team of the service interruption. Periodic updates will be given to local UPS as to status of unit and best information as to ETA.
- Destination Hubs will be responsible for making sure that Local UPS is kept informed of Service recovery plan and provide best ETA.
- OPS North Desk will contact all necessary parties for Haver and Spokane to determine how many trucks are necessary. Service partner employees will contact drivers for immediate dispatch. All drivers are to be equipped with cell phones to report any problems that occur as they are happening so that corrective measures can be taken immediately.
- Service partner employees will check road and pass conditions to determine the quickest route to the destination hub.

27 Havre, MT

At ***Havre*** upon deramp/ramp, mechanics will complete an intensive examination of each unit for roadworthiness.

28 Spokane, WA

At ***Spokane*** upon deramp/ramp, mechanics will complete an intensive examination of each unit for roadworthiness

29 Info Requirements

A list of all units moving over the road will be compiled with the following information:

- Unit Number
- Origin
- Destination
- Hazardous Material (Y/N)
- **O**ut **Y**ard or **O**ut **G**ate
- Trucker
- ETD and actual gate departure
- ETA and actual gate arrival

This spreadsheet will be maintained on the shared N drive (Pacific Division, PNW Hub Ops, and UPS Peak folder). An e-mail of this list will be sent to the MKTDLUPSSERVICEFAILURES @BNSF.com e-mail distribution list. The South Seattle Hub will be contact used to maintain information and documentation as well as provide any assistance needed in computer updates.

Continued on next page

A-8.2 UPS Peak Season Failure Prevention, Continued

30 Stop Orders

Stop orders will be placed on each unit at both origin and destination hubs to ensure that checkpoint and regional arrival/departure personnel handle correctly regarding OY/OG, IY/IG and Hazardous paperwork. The destination hub will monitor each unit making notification to UPS with each arrival.

Expected dray time between Havre and Spokane is 10 hours (498.2miles;) Spokane and Seattle is 5 hours and 28 minutes (289.7 miles); dray time between Spokane and Portland is 7 hours and 47 minutes (360 miles).

A response time of 1 hour will be needed to provide 1-to-5 trucks, 6-to-10 trucks requires 3 hours, and 30-to-50 trucks will require 12 hours lead time. These can be sleeper teams if so specified. When dispatching, king pin setting must be advised so that proper 5th wheel setting can be arranged as in the case of UPS pup trailers. We must also provide goal availability to trucker.

When all units have arrived and destination and notification is complete, the destination hub sends out a e-mail to the UPS group with the completed UPS OTR spreadsheet to the fax distribution list.

31 PNW Hub Ops

PNW Hub Operations UPS Service Recovery Team (include on all Broadcasts)

St Paul Hub Manager - 298-7045

Seattle Sr. Hub Manager - 658-1659

Stockton Sr. Hub Manager - 460-6002

Stockton Hub Manager - 460-6000

Fresno Terminal Manager - 457-7629 Fresno

Seattle Hub Manager - 658-1615 or 1612

DII Dispatch - 800-332-5131

Director of Hub Operations Seattle - 658-1688

Hub Manager Oakland/North Bay - 460-6462

Eagle Coordinator - 509-536-2413 Office; 536-2540 VMX Only

Hub Manager Portland - 241-4481

Eagle Terminal Manager - 256-4227, Billings, MT

Eagle Terminal Manager Spokane - 509-536-2413 Office; 536-2297 VMX Only

Continued on next page

A-8.2 UPS Peak Season Failure Prevention, Continued

32 Havre Reload

Havre Reload Process

Once it has been determined by the North Ops desk that bad order car will need to be reloaded at Havre, the following will act as a check list to ensure proper procedures are followed to execute timely handling of reload:

- Service recovery plan is identified inclusive of train reload and goal commitments
- Ops desk notifies Havre Trainmaster to set bad order car to MC 1 track for reload
- Ops desk notifies Patrick construction of Bad order reload
- Patrick construction will respond within 30 minutes of notification by the North Ops desk
- Patrick construction lock track protection (pole gate derail /switch) and check hand brake setting
- Train master to set and provide new car number to IBU North Ops desk to allow update in computer by Customer Solutions desk. S. Seattle Hub or Spokane Hub can assist if necessary with computer updates.
- Units are reloaded to new car by Patrick construction
- Securement inspection is performed by Patrick construction in accordance to BNSF Hub policy and loading guides inclusive of sign-off signatures of all parties inspecting car inclusive of Mechanical forces
- Patrick will remove all track protection and release to Havre trainmaster
- Patrick construction will leave voicemail to PNW service recovery phone mail list with date and time reload was complete along unit numbers and flat car number. Any problems that may arise during the reload process such as lift equipment problems need to be immediately conveyed to the Intermodal North Ops desk. This would be inclusive of Switching issues, Lift equipment problems, paper work documentation problems.

Checkpoint

C-1 Yard Rules

Contents

This section contains the following topics:

Topic	See Page
General Information	2
Yard Rules Listing	5
Trailer Repair Vehicle Requirements	8
Trailer Repair Example Photos	11
Crane Path	16
Car Raised Off-Center	18
Lift Equipment Struck Vehicle in Crane Path	21
Safest Course of Action	23
Stationary Objects	25

C-1.1 General Information

1 Applicability

This section covers standard yard rules applicable to all BNSF intermodal facilities. In addition to the rules presented herein, individual facilities may initiate other yard rules as necessary based on a unique circumstance or situation at that facility. **However, the appropriate regional director must be notified of any proposed additional rule to ensure it is reasonable and enforceable, in line with other business unit or Company rules, and does not create any form of liability.**

2 Three Categories

The rules are segregated into three categories and are predominantly safety and/or security-based:

- **General Yard Rules**
  Applicable to all individuals entering the facility
- **Additional Yard Rules For Truckers Only**
  Supplemental rules applicable only to truckers
- **Vendor, Visitor, and Service Partner Agent Rules**
  Supplemental rules applicable to anyone entering the property who is not employed full-time at the facility, other than truck drivers delivering units for rail movement

3 Rule Coverage

Some rules govern requirements prior to entry being allowed; others dictate behavior expected while in the confines of a BNSF intermodal facility. Individuals who cannot or who fail to comply with the rules applicable to them may be refused entry, refused the opportunity to conduct business at the facility, and/or removed from the property at the hub manager's (or designee's) discretion. **Since enforcement of some of the rules may require intervention by BNSF Resource Protection Services (RPS) personnel, a copy of the standard rules and any additional rules agreed to by the hub manager and regional director should be provided to local RPS personnel.**

4 Documentation

In addition to any formal documentation required for certain incidents, hub managers should maintain an incident log with the minimum elements of date, who was involved, which rule was violated, remedial action taken, and whether the individual had past offenses. Such documentation is helpful in justifying the decision to forfeit an individual's privilege to conduct business at, or enter, any BNSF intermodal facility because of repeated compliance failures. The final decision for permanent revoking of individual privilege can only be made at the general directors' level and above.

5 Yard Rule Signs

Each BNSF intermodal facility is required to have a yard rule sign posted at its main entrance. Following are the standard sign items:

1. Speed Limit _____ M.P.H. (varies by facility)

Continued on next page

C-1.1 General Information, Continued

Yard Rule Signs (continued)

2. Turn on Headlights; Signal Turns
3. Obey Traffic Control Devices
4. Stop for Flares and Flashing Lights
5. Yield to Trains, Yard Equipment and Pedestrians
6. Avoid Lift Equipment Runways and Do Not Drive Under Lift Equipment
7. Keep Off Trains and Yard Equipment
8. Report Accidents Promptly to Terminal
9. Alcohol, Drugs, and Firearms are Prohibited
10. No Trespassing, No Loitering
11. Present Vehicle Operator's License and Your Company Photo I.D. on Demand
12. Do Not Break Seals Unless Required for Gate Inspection
13. All Vehicles Subject to Search
14. Unattended Vehicles Will Be Towed At Owner's Expense
15. Park Units in Designated Locations

6 Sign Requirements

These items must be present on any yard rule sign produced, but can be augmented by additional items of relevance to a particular location. Selection of additional rules for inclusion on the gate sign should be limited to those with the greatest applicability or potential to influence activities for a particular facility. **Regional directors should again be advised as to any proposed additional items for a facility's signs.**

Sign items 1 - 8 are safety based; item 9 is both safety and security based; items 10 - 13 are security based; items 14 - 15 are classified as "other." *If additional rules are added to the sign, determine which categorization they fall into and place them at the end of their respective classification.*

7 Facility Authori-zation Pass

Facility Authorization Pass

All vehicles operating within the facility (except outside truckers and assigned facility vehicles) must display a Facility Authorization Pass through the front windshield. All Facility Authorization Passes must be issued by BNSF Hub Management, along with securing a "Release of Claim and Indemnity Agreement," and logged as a permanent record on form Hub 00028.

Continued on next page

C-1.1 General Information, Continued

8 Pass Requirements

BNSF Hub Management must use careful consideration before a facility authorization pass is issued, and drivers must be properly trained in the Hub Safety rules before pass is issued. Vehicles can be limited to specific routes within the facility, particularly when workers must drive a private vehicle to their workplace within the hub property. Authorized vehicles, which are limited to a specific route within the Hub, cannot be used to drive to any other locations within the facility.

9 PPE

Personal protective equipment (PPE) requirements which apply to all individuals on the facility are outlined in the BNSF safety rules publications. Those individuals who frequently visit the facility should come prepared with their own PPE. “General visitors” (those infrequently visiting the facility or who are visiting for non-business-related reasons) will likely not have their own PPE; in these cases, the facility should be prepared to loan required PPE items to these individuals or to instruct them to remain in their vehicle where PPE is not required.

In most cases, individuals must sign a “Release of Claim and Indemnity Agreement” before entering a BNSF facility. This is determined by whether an existing contractual agreement has already covered the release elements via a “corporate” form executed independently of any hub involvement. In these cases, no additional release form must be signed. A standard “local use” release form must be executed for any individual not already covered explicitly by a separate agreement

10 Resources

- ADDITIONAL FACILITY AUTHORIZATION PASSES may be obtained from PROJ MGR HUB & FACIL SYS SUP - 817-867-6849
- Link to Facility Authorization Pass Sign-In Form – HUB00028: http://bnsfweb.bnsf.com/departments/marketing/hubfacility/pdffiles/ibufiles/Forms/Hub00028FacilityAuthorizationSign-InForm.xls
- Indemnity Form - http://bnsfweb.bnsf.com/departments/marketing/hubfacility/pdffiles/ibufiles/hubopsmanual/04-Red%20(Specific%20Category)/05-Yard%20Rules/04IndemnityAgreement.pdf

C-1.2 Yard Rules Listing

1 General Yard Rules

GENERAL YARD RULES

NOTICE TO PARTIES ENTERING:
All individuals must comply with the applicable rules while in the confines of any BNSF intermodal facility. Failure to comply with these or any reasonable request of any agent of the BNSF may result in refusal of entry, refusal to conduct business, and/or removal from BNSF property at the hub manager's (or designee's) discretion.

Repeated compliance failures will result in forfeiting the privilege of conducting business at, or entering, any BNSF intermodal facility.

1. Alcohol, illegal drugs, and/or firearms or any other weapons are prohibited on BNSF property. Entering the property under the influence of alcohol or illegal drugs is prohibited.
2. ALL accidents MUST be reported promptly to ramp personnel at the terminal building.
3. No littering and no unloading of any trash while on BNSF property. This includes trash or debris from any trailer, container, or tractor.
4. No loitering, congregating, or staging. Depart the facility as soon as your business is completed.
5. No pets allowed on BNSF property.
6. Abusive or threatening behavior toward any BNSF employee may result in refusal of entry or removal from the facility.
7. Anyone denied access or requested to leave the facility must depart immediately.
8. BNSF Police have the right to request a search with just cause of any vehicle on the property. Requests which are denied may result in refusal of entry or removal from the facility.
9. Climbing on or into railcars, lift equipment, or any other Company vehicle is prohibited by non-authorized persons.
10. All vehicle drivers must have a vehicle operator's license and produce it upon demand. Those drivers operating on an interim or temporary license must also have some form of photo identification in their possession. All other persons entering the property must have photo identification in their possession.
11. Exercise caution at all times.
12. All posted signs, signals, or painted markings (such as fire lanes, etc.) must be obeyed. Stop at all flashing signal lights and burning flares.
13. All State vehicle code regulations apply. Vehicles with inoperative safety equipment may be refused entry

Continued on next page

C-1.2 C-1.2 Yard Rules Listing, Continued

General Yard Rules (continued)

14. Vehicle headlights must be on at all times; turn indicators or hand signals must be used to indicate turns.
15. Stay with your vehicle. Unattended non-Company or non-service partner vehicles will be towed at owner's expense.
16. Use of horns on the facility is limited to emergency situations only and should be avoided unless absolutely necessary to warn of a potential or impending hazard.
17. ALL yard vehicles, trains, and pedestrians have the right-of-way. Maintain vigilance for train movement. The presence of track lights, when available, does not diminish the need for personal attention to potential movement on tracks.
18. Do not drive or park on travelift lines. Do not drive under travelifts unless instructed to do so during direct-to-car operations. Do not impede lift equipment movement.
19. Cross tracks only at designated crossings and do not drive down any tracks.
20. All unattended vehicles must place standard transmission in low gear, automatic transmission in park with engine shut off.

2 Truckers Only

ADDITIONAL YARD RULES FOR TRUCKERS ONLY

1. Tractor must be licensed and display permanently attached logos on both sides.
2. Only the driver is permitted outside the tractor.
3. All trailers or containers entering or exiting any BNSF facility must have proper paperwork, (required hazardous and rail-bond documents when applicable).
4. Do NOT open any sealed trailer or container while at a BNSF facility unless inspection is required at the gate.
5. Park trailers, containers, or chassis with care in their proper designated locations.
6. Hooking or unhooking a trailer/container/chassis at a 90-degree angle trackside is prohibited.
7. Prior to hooking up to any unit in the vicinity of the ramp tracks, first ensure the surrounding area is free of pedestrians and any lift equipment is at least 100 feet away.

   Then, complete the following steps:

   a. Hook both air lines
   b. Charge trailer air
   c. Set trailer brakes

Continued on next page

C-1.2 Yard Rules Listing, Continued

Truckers Only (continued)

d. Ensure rear movement safety

After completing hook up, you are advised to follow these safety procedures:

a. Ensure king pin is coupled and locked

b. Ensure sliding tandems are locked

c. Chassis locks are in place and container is properly secured

d. Ensure any flatbed, flat rack, or other open freight load is adjusted and secure prior to leaving the facility.

3 Vendor Rules

VENDOR, VISITOR, and SERVICE PARTNER AGENT RULES

While service partner agents and vendors have legitimate business to conduct at the facility, visitor access is a courtesy extended by BNSF or its designee. Visitor access can be denied if the hub/terminal manager determines that the visit will hamper operations or if individuals seeking entry have no legitimate purpose for entering the property.

While on BNSF property, service partner agents, vendors and visitors must:

1. Use personal protective equipment when dictated by Company and/or Business Unit policy.
2. Comply with published General Yard Rules.
3. Do the following before entry into the facility will be allowed:
    a. Sign a “Release of Claim and Indemnity Agreement” unless already covered explicitly by a separate agreement
    b. Obtain a “Facility Authorization Pass” by BNSF Hub Management
    c. Display the Facility Authorization pass through your front windshield
    d. Tire and trailer repair vehicles: Display contents of vehicle for inspection and inventory
4. Do the following before exiting the facility:
    a. Tire and trailer repair vehicles: Display contents of vehicle for inspection and inventory.

C-1.3 Repair Vehicle Requirements

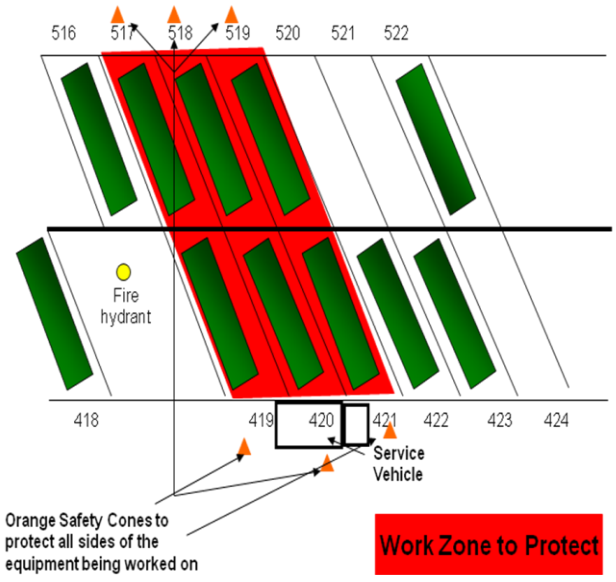
1 Require-ments

While on BNSF property all trailer repair vehicles must comply with all of the following requirements:

- Chassis Deflector Bars
- Strobe light should be located on opposite corners of trucks @ 360 degrees (RR, LF)
- Company logos on the doors and unit numbers for identification purposes
- 6- to 36-inch safety cones are required 6- 36” safety cones are required that are stenciled with company logo or other descriptive identifier
- Safety cones should be mounted appropriately (do not obstruct the view of the driver) on a post or stacked and secured inside the vehicle
- Ladders should be mounted on the outside of the vehicle or inside of the vehicle and secured appropriately.



DO NOT move safety cones without permission from the worker that placed it.



Continued on next page

C-1.3 Repair Vehicle Requirements, Continued

2 Not Allowed

Items Not Allowed Inside of Trailer Repair Vehicle:

- No recreational electronics such as microwaves, TVs, computer games, etc.
- No material in violation of BNSF policy such as pin-up photos or any other inappropriate material.

3 Equipment Allowed Inside

Equipment Allowed Inside of Trailer Repair Vehicle:

- Combustible Fuel - maximum gasoline allowed is 5 gallons, stored in a spring-loaded steel gasoline safety can.
- All vehicles that transport explosive/combustible fuel (e.g., propane, acetylene, and gasoline) for auxiliary equipment and/or furnaces must be equipped with an enclosed storage compartment vented to the outside. Adequately secure the container to prevent it from moving when the vehicle is being operated. Leaking containers must be promptly taken out of service and replaced.
- Welding Machine – if in an enclosed vehicle, must be bolted to the floor, and vented through the floor. Cables will be secured up off the floor; welding rods will be secured and stored so as not to create a tripping hazard.
- Air Compressor – if in an enclosed vehicle, must be bolted to the floor. All hoses secured and stored up off the floor.
- All moving gears, belts and pulleys will have the appropriate manufactures safety guards in place.
- All internal combustion accessory drive engines, such as welders and compressors and generators, installed inside vehicles must be vented outside to prevent accumulation of exhaust gases inside the truck. The vent apparatus must be installed in such a manner as to preclude individuals from being burned or from having exhaust fumes accumulate in the vehicle.

Continued on next page

C-1.3 Repair Vehicle Requirements, Continued

Equipment Allowed Inside (continued)

- Oxygen and Acetylene Tanks
  - Both tanks should be capped while vehicle is moving (upon arrival or departure from the facility)
  - Gauges must be in proper working condition with no broken or damaged parts They must be stored in a manor to prevent contamination from any petroleum products. Hoses should be intact, no splices, frayed, or taped areas and must be stored off the floor to prevent tripping hazards
  - Torch lines must be equipped with flash arrestors at the torch and the tank/cylinder end
- Ladders
  - (1) 16-foot extension ladder, minimum length, ladder should meet OSHA standards/requirements
  - (1) 6-foot step ladder, minimum length, ladder should meet OSHA standards/requirements
- (1) – 10 unit first aid kit
  - A first aid kit is required to be in the vehicle for all outside service partner repair employees working within the facility
- Fire Extinguisher
  - Every repair vehicle must be equipped with a 5- to 10-lb. fire extinguisher
  - Fire extinguisher must be properly mounted for easy access within the truck cab
  - Fire extinguisher must be tagged and up-to-date in good working condition
- Flammable Cabinet
  - Every repair vehicle must have a flammable cabinet to store all flammable material and aerosol cans
  - Flammable cabinet must be secured inside the repair vehicle
- Electrical hardware Cabinet to store cords, connectors, and lugs (this cabinet needs to be secured)
- Secured storage rack for hammers, bars, and tools
- Secured bolt bin
- Trailer jack stand (OSHA standards/requirements)
- Repair vehicle should have adequate shelving for parts, should be along the wall bolted to the floor
- Employees tool box
  - Tools should be stowed in tool box
  - No tools should be on the floor, or loose in the cab
  - 1 grease gun
- Vise should be stowed properly, if it is a removable vise
- Portable lighting that is up to OSHA code
  - Bulbs should be shielded
  - Lighting should be stowed and secured properly
- MSDS (Material Safety Data Sheets)
  - Every employee should have reasonable access to a MSDS manual while working within the facility
- Seat Belts
  - Vehicle must be equipped with working seat belts
- Bench grinders should be mounted and have proper shields items
- Tire locking ring and wheel information charts

Continued on next page

C-1.3 Repair Vehicle Requirements, Continued

Equipment Allowed Inside (continued)

- A secured tool rack for hammers and tire bars
- 1 – wheel chock
- Jack
    - Need appropriate jack for weight to be lifted
    - Jack stand and jack should be stored when not in use
    - Appropriate impact gun for tire replacement, capable of a minimum of 500-foot pounds of torque. Proper impact sockets for wheel replacement.
- Air valve
    - Appropriate airing methods must be utilized
    - Remote air valve 24 inches away from tire valve (OSHA standards/requirements)
- Portable fans are acceptable
- Vehicle Registration
    - All vehicles and/or related equipment must conform to State & Federal Motor Vehicle Safety Standards
- No tools or garbage inside of the cab
- Personal Protective Equipment (PPE)
    - Hard hat
    - Safety glasses with side shields
    - Hearing protection OSHA approved
    - Reflective vest
    - Safety boots (steel toe boots, 6-inch lace up with defined heel)
    - Protective gloves
    - Waist, ankle and arm protection acceptable
- Vehicle must be equipped with Reverse signal alarms
- Push brooms and trashcans must be used to clean up work area and discard replaced material and debris (welding rods, nuts, bolts, etc.)
- Pick-ups with towed equipment are acceptable with safety chains and brake light connection
- 12-volt batteries are allowed in vehicles, only when secured in a battery box

C-1.4 Trailer Repair Example Photos

1 Examples

Below are examples of proper uses of trailer repair equipment and storage.



Continued on next page

C-1.4 Trailer Repair Example Photos, Continued





Continued on next page

C-1.4 Trailer Repair Example Photos, Continued





Continued on next page

C-1.4 Trailer Repair Example Photos, Continued





Continued on next page

C-1.4 Trailer Repair Example Photos, Continued



C-1.5 Crane Path

1 Overview

I STOP TEAM

INTERMODAL SAFE TERMINAL OPERATIONS PROCESS TEAM

Pictured below is a yard vehicle that hit a bare chassis head on, completely destroying the occupant area of the vehicle. The individual was performing a yard check and was driving inside the crane path when he hit the chassis, which was properly parked in accordance with parking and positioning guidelines. The individual received severe injuries which could have been fatal.





(Illustration from an I-STOP poster)

2 Root Cause

- Yard checker was driving inside crane path.
- The chassis was parked trackside and in compliance with the parking and positioning requirements stated in the BNSF Intermodal Hub Operations Manual.

3 Contributing Factors

- Excessive speed is suspected due to length of skid marks
- Accident occurred at 02:35 hours; area is poorly lit and visibility may have been a factor
- Vehicle was not properly equipped with chassis deflectors; injury and property damage could have been avoided or less serious if the vehicle had been equipped with a chassis deflector

4 Impacts

- severe neck and face laceration
- no damage to chassis
- total loss of yard vehicle estimated at $25,000

Continued on next page

C-1.5 Crane Path

1 Lessons Learned

The following lessons were learned as a result of the recent accident:

1. All vehicles, operating on a BNSF intermodal facility, must have bars sufficient to deflect a chassis in the event of a collision; otherwise the vehicle is restricted from operation in the vicinity of tracks.
2. Drivers must avoid lift equipment runways and trackside spotting areas at all times.
3. All drivers must comply with posted speed limit signs.

C-1.6 Car Raised Off-Center

1 Overview

I STOP TEAM

INTERMODAL SAFE TERMINAL OPERATIONS PROCESS TEAM

Actions required when a car is suspected or is raised off-center while performing hitchraising or ramp/deramp functions.

An off-center car condition moving online could potentially result in separation of a truck and platform and could subsequently result in a derailment; therefore, all ramp personnel must comply with the following off center policy.

- Ramp/deramp personnel must be alert to the possibility of raising railcars off-center during hitch raising or ramp/deramp activities.
- Although an off-center condition may not be readily identifiable, any difficulties encountered while performing lifts or raising hitches must be investigated and followed by a thorough examination of the center pin.
- If such a condition is suspected or known to exist, Mechanical personnel must be notified immediately.

2 Definition

An off-center condition exists when a body bolster center plate (male part) does not securely fit into the truck bolster center plate (female part) at a minimum of 1 1/16". The depth of the plate may vary up to 2" by car type but must be fitted together at a minimum depth of 1 1/16" according to AAR regulations. When properly centered, a large pin goes through the center of the bolster plates and securely connect the two plates.

In severe cases, the pin may actually sit on the truck bolster center plate instead of actually penetrating the hole (see photos). This is an extreme case and not very feasible. In most cases, an off-center condition may only be detected by examining underneath the car and visually ensuring that the male and female plates are fitted together securely.

One indication that a car may be raised off-center is

- if shiny metal on the body or truck bolster center plates can be seen
- the car is slightly elevated
- the car is cocked to the right or left
- or if articulated, the wheels do not appear to be centered between the platforms (if not an end truck).

See photos for identification of bolster plates, extreme off-center car conditions, and centered car.

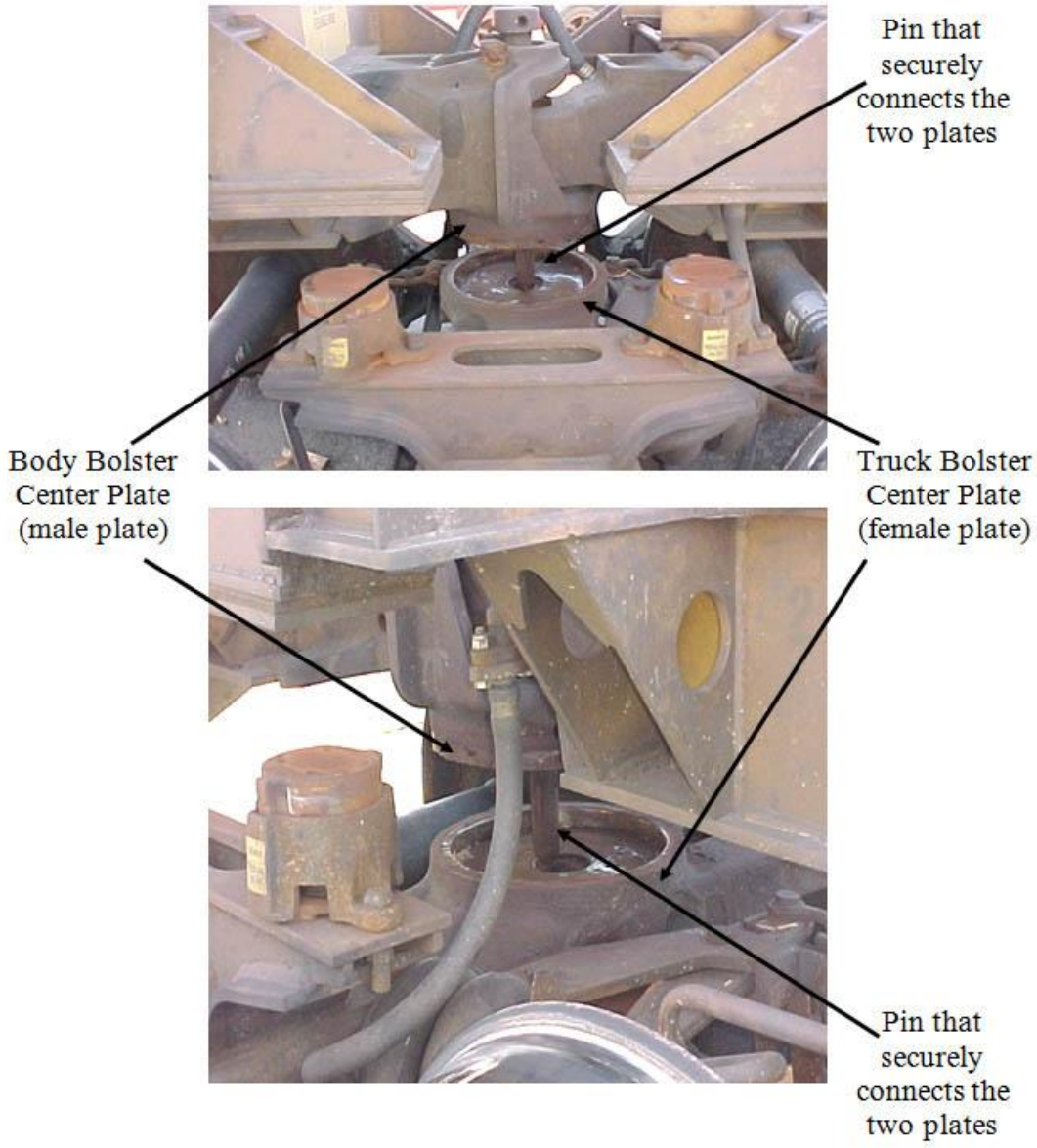
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C-1.6 Car Raised Off-Center, Continued

3 Response

If examination indicates that a car was pulled off-center, or if hub personnel are concerned that this has occurred, Mechanical personnel must be contacted for handling correction of the car. If there are no Mechanical personnel assigned on property, the car cannot be loaded and must be bad ordered.

4 Off-Center Examples

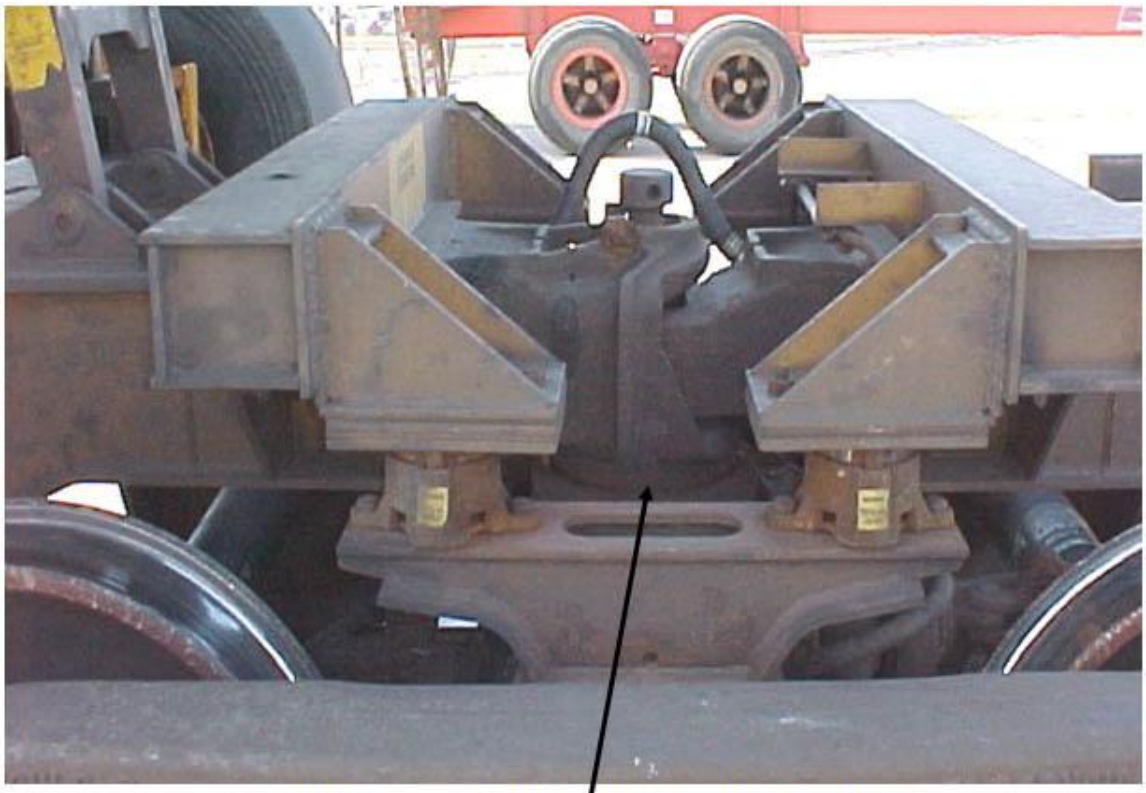


(Illustration from an I-STOP poster)

Continued on next page

C-1.6 Car Raised Off-Center, Continued

5 Centered Example



Truck Bolster Center Plate (female plate) and Body Bolster Center Plate (male plate) securely connected

C-1.7 Lift Equipment Struck Vehicle in Crane Path

1 Purpose

I STOP TEAM

INTERMODAL SAFE TERMINAL OPERATIONS PROCESS TEAM

LIFT EQUIPMENT STRUCK VEHICLE PARKED IN CRANE PATH

Several accidents have occurred recently, one with injuries, when a travel lift struck vehicles parked within the lift equipment lanes. These incidents could have resulted in a far more serious injury or could have been fatal.

2 Root Cause

Improper procedures being followed by parking vehicle in lift equipment lane:

1. Vehicle driver did not follow current Intermodal Yard Rule "Do Not drive or park in lift equipment lanes, under lift equipment, or impede lift equipment movement"
2. Driver did not communicate the need to foul lift equipment lane with a vehicle
3. The lift equipment operator's visibility of the opposite side was impeded due to double stack equipment obstructing the view
4. The passenger in the parked vehicle was not attentive and alert to the surroundings and left self in harm's way
5. No vehicles are allowed to drive on interior lift equipment pads (adjacent to ramp track)

3 Lessons Learned

1. Never position yourself or equipment in harm's way
2. Never drive or park in lift equipment lanes, under lift equipment, on interior lift equipment pads (adjacent to ramp track), or impede lift equipment movement
3. Never stop, park or foul tracks
4. Establish proper protection before performing work if you must foul tracks or lift equipment lanes

Continued on next page

C-1.7 Lift Equipment Struck Vehicle in Crane Path, Continued





(Illustration from an I-STOP poster)

Vehicle parked in the lift equipment lane. There is not enough clearance for this vehicle to park in this area	Lift equipment struck vehicle improperly parked in the lift equipment lane

C-1.8 Safest Course of Action

1 Overview

I STOP TEAM

INTERMODAL SAFE TERMINAL OPERATIONS PROCESS TEAM

The following rules have been identified as vital in creating and maintaining a safe work environment. These rules shall not be viewed as a comprehensive list of safety issues, nor emphasized to the exclusion of other safety issues. These rules should be viewed as areas where extra precaution must be placed.

2 Safety Guidelines

THE SAFEST COURSE OF ACTION MUST ALWAYS BE TAKEN

1. Establish proper track protection before performing work
2. Vehicles must not STOP on, PARK on, or FOUL tracks
3. Do not drive or park on lift equipment lanes, under lift equipment, or impede lift equipment movement
4. Obey all posted safety signs, signals, and painted markings
5. All vehicles must turn on headlights and use turn signal
6. Never place any part of your body in a pinch point position or walk under equipment being lifted
7. Maintain three-point contact when getting on and off equipment

3 Rules 1-3





(Illustration from an I-STOP poster)

# 1 - Establish proper track protection before performing work	# 2 - Vehicles must not STOP on, PARK on, or FOUL Tracks	# 3 - Do not drive or park on lift equipment lanes, under lift equipment, or impede lift equipment movement

Continued on next page

C-1.8 Safest Course of Action, Continued

4 Rules 4-7






(Illustration from an I-STOP poster)

# 4 - Obey all posted safety signs, signals, and painted markings # 5 - All vehicles must turn on head lights and use turn signal	# 6 - Never place any part of your body in a pinch point position or walk under equipment being lifted (reenactment done with artificial hand)	# 7 - Maintain three-point contact when getting on and off equipment (reenactment)

C-1.9 Stationary Objects

1 Purpose

Provide requirements for physically marking stationary objects which could potentially be struck by vehicles and lift equipment operating in high traffic/lifting areas; provide additional warning of the presence of stationary objects.

2 Rationale

Requiring physical markings of objects in high traffic areas and lift equipment operating areas can serve to heighten awareness of hazards. Physical marking standards in high traffic areas consider the safety and height/visibility requirements of those operating yard or outside vehicles, and lift equipment

3 Statement

BNSF intermodal hubs are required to physically mark stationary objects (i.e., light/utility poles, etc.) within high traffic areas and lift equipment operating areas. High traffic areas are those areas accessible by vehicular traffic including, but not limited to, normal ingress/egress routes. Equipment operating areas are those areas consistently traveled and/or used by lift equipment.

Due to the unique configuration of each intermodal hub, it is the responsibility of the hub manager, or terminal manager if no hub manager, to denote high traffic areas and lift equipment operating areas and, therefore, determine which obstructions must be physically marked by means of reflective material, safety zones, physical barriers, etc. Stationary objects determined by hub management to be outside a high traffic or equipment operating area are exempt from this policy and do not need to be marked.

Installation of any physical barriers or safety zones around stationary objects must consider the effect of forcing traffic into an unacceptable range of power lines. In addition, it may be necessary to take other actions relative to traffic flow, type of equipment allowed to pass through, etc., in order to maintain the appropriate clearance from the power lines according to their voltage, as stipulated in Safety Rule 17.2.5 in the various BNSF safety rules publications.

4 General Rules

Stationary objects must be physically marked, at a minimum, with reflective material, safety zones, or physical barriers.

1	Reflective material must be affixed to light/utility poles at a height determined by intermodal hub personnel that is easily visible to personnel operating in the area. If reflective tape is utilized, the band(s) of tape must equate to 2'-3' wide measured from top to bottom when affixed to pole. If reflective buttons are utilized, they must be no less than 3" in diameter and be placed on the poles as to provide maximum visibility for personnel operating in the area. ***NOTE:*** *Prior to affixing reflective material to utility poles, permission must be obtained from the owner/user of the pole in question (i.e., local utility company, BNSF, or Service Partner). If permission is not obtained, the pole(s) in question must be protected by safety zone or physical barrier.*

Continued on next page

C-1.9 Stationary Objects

2	"Safety zones" must include physical pavement markings painted safety yellow with each line being a minimum of 4 inches wide and fanning outward from the perimeter of the object at a distance sufficient to provide adequate visibility. Vehicle and lift equipment operators must exercise extreme caution if entry into these designated safety zones is necessary.
3	BNSF strongly encourages that physical barriers, such as k-rail, bollards, etc., be placed around stationary objects and that they be painted safety yellow for visibility. Vertical poles may be installed from ground level to a minimum height and distance from an object that is easily visible to personnel operating in the area. In lieu of vertical poles from ground level, hub management may elect to install vertical extensions from the top of concrete bases. Such physical barriers often afford increased protection to the stationary object, to personnel, and to any equipment if a collision occurs. It is the responsibility of the hub manager, or terminal manager if no hub manager, to determine if barriers should be reflective. If poles and/or extensions are utilized, they must be: 1. of sufficient height or placed at a sufficient height so as to be visible considering the type of vehicles/lift equipment operating in the area, 2. installed so as to provide maximum protection to the pole and operator in the event the object is struck, and 3. placed in close proximity to the object in a way that provides the most visibility to the direction of travel or operation. ***NOTE**: Prior to digging in the vicinity of any utility pole for the purpose of installing physical barriers, hub personnel must receive approval from the local utility company to ensure that no lines are buried beneath ground penetration points. If permission is not obtained, other means to protect the pole must be utilized*

5 Objects Not Easily Seen

STATIONARY OBJECTS NOT EASILY SEEN

A number of stationary objects in high-traffic and lift equipment operating areas may not be easily seen due to their placement or height, i.e., located adjacent to blind corner, object low to ground, etc. Again, it is the responsibility of the hub manager, or terminal manager if no hub manager, to determine which stationary objects are "not easily seen" in these areas.

"Safety zones" warn of stationary objects not easily seen when operating vehicles or lift equipment and MUST be established around the perimeter of such objects to avoid striking them. Where pavement markings are not feasible (i.e., surface around stationary object is not paved), or when such markings do not adequately warn of the stationary object due to its height, placement, or location (i.e., positioned at a blind corner), then hub personnel MUST protect the objects by means of a physical barrier

Checkpoint

C-2 In-Gate

Contents

This section contains the following topics:

Topic	See Page
General Information	2
Hazardous Material Handling	12

C-2.1 General Information

1 General Information

A critical component of the intermodal operations starts at checkpoint. The checkpoints are in daily contact with the truck drivers who work for many of the companies that move their product on the BNSF. It is extremely important the checkpoint provides prompt and courteous service to all drivers who come through the BNSF checkpoint. The relationship with the truck drivers is an important part of our overall service.

All drivers must be treated with respect and courtesy at all times. Checkpoint Operations are the frontline for access to BNSF facilities. They provide initial validation for facility authorization, completion of the BNSF Indemnity Agreement and visual verification of BNSF Facility Passes.

2 Safety

BNSF Intermodal checkpoints are extremely busy with large semi-trucks moving in different directions in multiple lanes. It is important that all checkpoint equipment employees be familiar with the potential hazards of working around this heavy equipment, and that they never take unnecessary risks while working at checkpoint. First and foremost, all checkpoint personnel must wear the proper mandatory Personal Protective Equipment (PPE) as outlined in the respective safety rules publication, which consists of

- Safety Glasses with permanent side shields
- Hard hats applicable to designated crafts and work areas that meet ANSI standard Z89.1, Type I, Class E & G specifications, found in the BNSF Safety and Health Equipment Catalog.
- Steel Toe Safety Boots
- Enhanced-Visibility Wear in accordance with Intermodal Hub Policy Statement 1999-01C.

3 Other Considerations

Emergency response numbers list prominently displayed of individual's names and numbers to be contacted in the event of an emergency. List should be specific to the emergency at hand (i.e., unit leaking potential hazardous materials; accident or injury reporting; security-related events; etc.).

1. "Safety Rules and General Responsibilities for All Employees" is available for online access or hard copy on hand of the safety rules publications applicable to the functions at the facility. Regional directors, hub managers, office personnel, gate personnel, coordinators, and yard checkers are subject to the Employee Safety Rules publication.
2. Checkpoint booths/office/restrooms (where applicable) are clean/orderly. No slip, trip, or fall hazards; no drinks near computers, printers, or telephones; no debris or excessive amounts of trash; no defacement or graffiti; sufficient and unobscured visibility to view activities outside; paperwork organized (not strewn about); in-gate and out-gate haz mat documentation flowcharts and out-gate procedures checklist posted or known.
3. Checkpoint outside area clean and free of debris. No trash or objects lying in roadways or walkways, including used and unused security bolts.
4. Be aware of any potential slip, trip, or fall hazards. Keep your work area clear of all such obstacles. Know where curbs, poles, and other fixed objects are located. Checkpoint area booth must be clean and orderly.

Continued on next page

C-2.1 General Information, Continued

Other Considerations (continued)

5. Never begin the inspection of the equipment until the vehicle is completely stopped and the driver acknowledges your presence.
6. Standing, walking, or running in front of any moving equipment is dangerous and is prohibited; never run in the checkpoint area and always look both directions before crossing lanes.
7. Never take risks by opening doors on all units without securing locking bars with restraint straps.
8. Never crawl, walk, or position yourself under a trailer, tractor, container, or chassis.
9. Never walk between trailer, containers, or chassis until both drivers acknowledge that they see you.
10. Be aware of the risks associated with hazardous material, and never assume it is safe to touch materials or breathe vapors.

Checkpoint personnel must observe the weather and be aware of the additional safety hazards associated with periods of undesirable weather conditions. Extreme caution shall be taken during adverse weather conditions.

Always be ALERT, NEVER TAKE UNNECESSARY RISKS. Be Safe, Not Sorry!

4 Equipment Types

The checkpoint personnel must be familiar with the different types of equipment coming in checkpoint. There are basically three types of equipment which require inspection upon arrival at checkpoint. They are **trailers**, **containers**, and **chassis**.

Trailer, containers, and chassis are built out of many different types of materials, including aluminum, steel, and composite materials. The ownership of the trailers, containers, and chassis that move on BNSF fall into two categories: rail-controlled or private. Rail-controlled means the equipment is either owned or leased by railroads or railroad agents. Private means the equipment is owned or leased by a shipper, such as J B Hunt, Schneider, or Maersk Steamship Lines.

All equipment has a unique initial and number, which identifies that specific unit, and the owner of the equipment. Some examples are: a container with initials JBHU belongs to J.B. Hunt and a trailer with initials SNLZ belongs to Schneider National Truck Lines. The initial and number will be displayed on the ends and sides of most equipment.

5 Trailer

A ***trailer*** is a freight vehicle with a permanently attached undercarriage and wheels used for highway or rail transportation.

6 Container

A ***container*** is a freight vehicle without a permanently attached undercarriage and wheels. Enclosed containers are commonly referred to as “boxes.” Since containers have no wheels, a chassis is required to provide containers with an undercarriage and wheels. Most containers without chassis can be stacked one atop another either in railcars or on the ground.

Continued on next page

C-2.1 General Information, Continued

7 Chassis

A ***chassis*** is a vehicle specifically designed to mate under a container. Chassis have permanently attached wheels and locking mechanism specifically designed to attach the container to the chassis. Chassis meet all requirements for movement on highway, whether they are loaded with container or not.

8 Interchange Process

There may be variations in the inspection process of vehicles based on what type of equipment is to be interchanged. Refer to the Association of American Railroads (AAR) TOFC/COFC Interchange Rules Including Billing and Repair Procedures - http://www.uiia.org/documents/AAR-B-F-G_RULES_2008-12.pdf - for all of the applicable Interchange Rules.

9 Interchange Purpose

The purpose of the Interchange is to provide a means of allowing the trucker and BNSF to record the exchange of trailer, container, or chassis. This process includes a series of steps that when completed, legally and physically transfer the equipment between the trucker and BNSF. This process is very similar to the exchange that takes place when an individual rents a vehicle from a car rental company. It is of utmost importance this transaction is recorded accurately and in a timely manner. The Interchange process consists of three steps, that take place simultaneously:

1. The physical inspection
2. Accurate computer input/verification of the required transaction elements
3. Accurate notation of equipment condition and/or damages

10 Physical Inspection

The physical inspection requires a complete walk around of the entire tractor and trailing unit by the inspector. The inspector must check the equipment for damages, which would affect the integrity of the equipment. The inspector must verify that all of the information required is correct in the system, and/or on the J-1/1202. This would include the following information:

	Physical Inspection Verification
1	All computer-generated and manually- entered information must be confirmed present, correct, and legible; unit & chassis initial/number, load/empty, seal number, drivers license number, trucking company, tractor number and/or license plate, unit length, and required hazardous material documentation. The system and/or J-1/1202 are noted with: damage; grade if rail-controlled empty; any and all placards; blocking/bracing type and condition if a hazardous load; refrigerated unit condition and temperature settings, and any rejection reasons
2	Inspector must ensure seals are properly applied, secured, and intact. The seal number must be recorded in the system and/or on the J-1/1202. If the seal is missing a seal must be applied and recorded in the system and/or on the J-1/1202 and in the seal logbook.

Continued on next page

C-2.1 General Information, Continued

10 Physical Inspection (continued)

3	The inspector must properly inspect unit for general condition and/or damages to tires, dolly legs, frames, twist locks/bolster pins (chassis), vented doors, top/bottom rails, roof, and front/rear/sides of unit; placards present on all four sides (if required), the license plate is present and the tractor has permanent markings and logo. Check roof integrity from the outside for loads and the inside for empties Refer to the Freight Vehicle In-Gate Quick Reference Guide.
4	**Flatracks** when in-gated must be placed on **LSHOLD "F"** and held for the necessary inspections, as outlined in the Hub Operations Manual, sub-section E-1.11 Equipment Loading.
5	When it is necessary to inspect a load for blocking/bracing the following procedure shall be followed: • The inspector must first insert the intermodal ***safety strap*** between the lock bars and buckle leaving only enough slack to peek inside the load. • Open ***only*** the right door cautiously, increasing the slack as you see that the lading will not fall out on top of you. If you have a problem, call your supervisor immediately before proceeding. • Check for securement by observing from the ground; ensure that there are no hazardous materials in contact with the rear doors and that the blocking/bracing is acceptable to prevent load shifts. (Refer to the hazardous material procedures and policy section in the Intermodal Operations manual for hazardous material blocking/bracing). • Close door, reseal and properly record the results in the system and/or J-1/1202.

Continued on next page

C-2.1 General Information, Continued

Physical Inspection (continued)

6	Use the following procedure for any leaking load: • If a trailer or container is found to be leaking during inbound inspection, do not touch the leaking substance and do not open the unit doors. (If already open, leave as is. The safety strap should prevent the door from opening any further.) Remember, just because a load is not placarded as hazardous it doesn't mean that it isn't. It may be hazardous in limited quantities. • Notify your supervisor, the hub manager, and the appropriate personnel immediately for instructions. If the leak is identified as a hazardous material, isolate everybody from the leak by moving the minimum distance away from the hazard. (Consult your copy of the "Emergency Response Guidebook" for safe distances.) • Advise the driver that the load is being rejected. If the unit is allowed in the gate, place on LSHOLD with the code "Hold for TOFC/COFC movement." Note on the shipping papers: "Leaking potential hazardous commodity. Rejected for rail transportation. Unsafe to return to highway; allowed to stay on BNSF property." • Copy of all hazardous material shipping documents must be provided to checkpoint supervisor. • Direct the driver to drop the unit in the "Safehaven Pit for Leaking Hazardous Materials." • Have the driver follow a spotter or ramp supervisor if there is any chance of getting lost in the facility. Gate handling procedures for Hazardous Material Commodities: • Refer to the Hub Operations Manual, Intermodal Hazardous Material Procedures & Policy.

11 Methods of Reporting

BNSF checkpoints have several methods to facilitate real-time input of the inspection data and the ability to print an interchange transaction receipt for the driver. Accurate verification and computer input of the required information as indicated in the above Physical Inspection section is of the utmost importance. The following are the different methods currently used by BNSF facilities to report the trucker interchange:

Automated Gate System (AGS): Provides an automated process to record images of the unit during the in-gate and out-gate process and a kiosk-driven environment for real-time driver input. When the inspection process is completed, the driver is provided with a printed receipt of the transaction referred to as a "buck slip." All of the gate events and images are captured within the AGS and BNSF Systems.

Continued on next page

C-2.1 General Information, Continued

11 Methods of Reporting (continued)

OASIS Hand-Held: System allows for real-time input/verification of the information as required in the Physical Inspection section. When the inspection is completed it provides the driver with a printed receipt, referred to as a "buck slip." All of the gate events and equipment damage is captured with the OASIS hand-held device.

OASIS Desktop: Mainframe system allows for the input/verification of the information as required in the Physical Inspection section. When the inspection is completed the driver is provided with a computer-generated document, referred to as a "plan paper copy" or "buck slip." All of the gate events are captured with the mainframe system. Equipment damage events are handled manually.

Hand-written document: At a small number of locations a hand-written document is used to report the information as required in the Physical Inspection section. When the inspection is completed the driver is provided with a copy of the hand-written document, referred to as a "J1/1202."

12 Equipment Damage

When documenting damages, remember the ***three*** required parts of any damage description:

1. You must state ***what*** is damaged such as the roof, door, floor, etc.
2. You must state ***where*** the damage is located such as Left front, Left rear, Left side, Right inner rear, etc.
3. You must state ***why*** "damaged." Never use the word "damaged." It is too vague and makes claim processing difficult. Use only the words; bent, broken, cut, dirty, etc., to describe what is wrong.
4. Finally, you must give the approximate size of the damaged area, both length, and width.

Do not forget to list all collateral damages. For example, if a top rail is bent in, then the roof is certainly bent or cut as well. Furthermore, if a side panel is bent in, then there must be some side posts bent as well.

13 Oasis

For Oasis Hand-Held Function Keys/Damage Codes, refer to the Equipment section of this manual.

Continued on next page

C-2.1 General Information, Continued

14 AGS Components

AGS is comprised of three major components: the Portal, the Kiosk, and the Driver Assistance Building (DAB).

- The Portal produces high-definition images of all containers, trailers, chassis, and/or vehicles that enter or exit the facility.
- The Kiosk operations facilitate data entry by the driver after image processing and OCR (Optical Character Recognition) is completed through the Portal.
- The Driver Assistance Building (DAB) provides a central location for driver inquiries and the AGS Technicians to perform unit inspections by way of the high-definition images produced at the Portal.

15 AGS Safety Rules

All physical inspections and when dealing with exceptions, must be handled at the DAB, using the following procedures:

When performing a physical inspection at the DAB, you must:

- Driver must shut off the ignition of the truck.
- Ensure any adjacent parking spaces are clear.
- Place a safety cone in the adjacent parking stalls and at the rear of the unit.
- Exercise caution when performing the physical inspection. (Refer to Hub Policy Statement 2004-01C).

When performing maintenance tasks at the Kiosks, Gate Arm Controls, or in lanes where vehicle activity could be present, you must:

- Cones must be placed at the first point of entry to the lane and maintain a minimum of 35 feet from the location where the maintenance work will be performed.

16 QRG Freight In-Gate

Quick Reference Guide:
Intermodal Freight Vehicle In-Gate Inspection

Unit is driven through In-Gate Portal. Imaging and OCR is processed by In-Gate Portal.

1.0	**Start at rear of the vehicle (after vehicle is stopped & the driver acknowledges your presence)**
1.0.1	Record 'L' load or 'E' empty, vehicle initial & number, and vehicle length **1.0.1.1** Is vehicle an empty chassis? If yes refer to Chassis Quick Ref. or, if no go to 1.0.1.2 **1.0.1.2** Is vehicle on a chassis? If yes go to 1.0.2 or, if no go to 1.0.2.1

Continued on next page

C-2.1 General Information, Continued

16 QRG
Freight In-Gate

1.0.2	Record chassis initial and number, go to 1.0.2.1 **1.0.2.1** Was the vehicle a load or empty? If load go to 1.0.2.2 or, if empty go to 1.0.3 **1.0.2.2** Is vehicle an open top load? If yes place on LSHOLD 'F' or, if no go to 1.0.2.3 **1.0.2.3** Is vehicle a reefer load under protected svc? If yes go to 1.0.4 or, if no go to 1.0.2.4 **1.0.2.4** Is vehicle HAZMAT load? If yes refer to Haz. Quick Ref. or, if no go to 1.0.5
1.0.3	Inspect inside empty: 1. If cleaned, 2. Roof sheet, 3. Roof bows, 4. Interior side ply liners, 5. Scuff liners, 6. Floor, and 7. Stacking post. Ensure door securely closed after interior inspection. **1.0.3.1** If rail controlled empty record grade code 'B' = good, 'H' = Bad, go to 2.0
2.0	**Perform vehicle door and component inspection:** Corner posts Locking bar guides, latches, handles, keepers and cams Rear door headers Door moldings Door hinges Rear sill Tail light assembly, clearance lights DOT bumper Mud flaps and mud flap brackets
3.0	**Inspect right side rear to right side middle of vehicle:** Wheel assembly (wheels, and cap condition) Top and bottom side-rails Side panels Exterior side posts, stacking posts
4.0	**Inspect right side middle to right front nose of vehicle :** Same as **3.0** above items 2 - 4 Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft) Radius post, corner cap
5.0	**Inspect front nose of vehicle:** Top and bottom nose rails Nose panels, exterior nose posts Corner caps Radius posts Front chassis bolster Record name of trucking company Record tractor number or tractor license number if not available

Continued on next page

C-2.1 General Information, Continued

16 QRG Freight In-Gate

6.0	**Inspect left front nose to middle left side of vehicle:** Same as **4.0**
7.0	**Inspect left side middle to rear of vehicle:** Same as **3.0** **7.0.1** Rear of freight vehicle: If load - inspect seal & record seal number Press PF5 to process & give receipt to driver

17 QRG Bare Chassis In-Gate

Quick Reference Guide:
Intermodal Bare Chassis In-Gate Inspection

1.0	**Start at rear of the vehicle (after vehicle is stopped & the driver acknowledges your presence)**
2.0	**Perform rear chassis component inspection:** Inspect rear bolster, Twist Lock pins are present and useable Tail light assembly, marker lights DOT bumper Mud flaps and mud flap brackets Inspect chassis cross braces from rear center Inspect frame for alignment
3.0	**Inspect right side rear to right side front of chassis:** Wheel assembly (wheels, cap condition, and air pressure of tires) Main frame rail Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft) Side panels Exterior side posts, stacking posts
4.0	**Inspect front bolster of chassis :** Twist lock present and useable Marker lights Glad hands Record name of trucking company Record tractor number or tractor license number if not available
5.0	**Inspect left side front to left side rear of chassis:** Same as **3.0**
6.0	**Rear of chassis:** Verify chassis ownership by stencil markings on chassis Press PF5 to process & give receipt to driver

Continued on next page

C-2.1 General Information, Continued

18 AGS IG Flow

1. Unit moves through IG Portal
2. Images are queued up for AGS Technician to inspect.
3. Unit Image is viewed and validated against OCR Input.
4. Unit initial and number are compared and validated against OCR input. If good then next step.
5. AGS Technician Inspect unit for physical damage and structural integrity.
6. When unit stops in Kiosk Lane the LPR (License Plate Recognition) camera will match the license plate on the tractor to the unit image in queue from the portal LPR. This enables the system to display the correct unit data to the driver Kiosk and AGS Kiosk screen queue. AGS Technician can view all gate lanes by number and view transactions by lane ID.
7. AGS Technician will correct any discrepancies with unit ID, container, trailer or chassis reporting marks.
8. AGS Technician will use the AGS Damage Input screens to report any damage or exceptions to the unit.
9. All Non-Standard or not fully enclosed containers or trailers must be put on LSHOLD in TSS.
10. 1.0.2.2 Is vehicle an open top load? If yes place on LSHOLD 'F' or, if no go to 1.0.2.3
11. Driver will complete Kiosk Data entry screens concurrent with the inspection process.
12. Driver Kiosk Input Process
13. AGS Technician will use rear camera to verify seal integrity on in gate loads and record image of seal.
14. AGS Technician will be prompted to validate and sign off on seal integrity.
15. Driver will be prompted at the Kiosk to validate seal number populated from waybill date; if no seal number present, driver will be requested to provide seal ID.
16. If no exceptions and billing is in place driver will receive an in gate receipt known as a “buckslip” or “J1.

C-2.2 Hazardous Material Handling

1 Paperwork Requirements

With exception of UPS, all customers must have Hazardous material billed via EDI prior to driver arriving at gate. The information needs to contain the following – change effective in BNSF Intermodal Rules and Policy Guide July 1, 2008 (pg. 12 item 8):

- Trailer or container initial/number
- Description of commodity:
    - Proper shipping name (see Bureau of Explosive Tariff 6000: Table 172.101)
    - Hazard Class (and division, if applicable)
    - Identification Number (UN/NA Number)
    - Packing Group, if required
    - Quantity and unit of measure
    - Technical name in parentheses, if an N.O.S. (Not Otherwise Specified) shipment, if required
    - RQ and technical name, if a material with a reportable quantity
        - An example of a mandatory commodity description would be:

"GASOLINE, 3, UN 1203, PG II"

- Emergency response telephone number, if required
- Shipper's certification signature, legible

2 UPS Red Labels

In lieu of standard shipping papers, United Parcel Service (UPS) uses red labels to provide all necessary hazardous material shipment information. These labels must be photocopied (no more than three per page, placed the same direction on page, and the equipment initials / number must be indicated on each page) for faxing to the Centralized Waybilling Center (CWC). The quality of the photocopy should be ensured prior to faxing (i.e., not too dark, not too light, information not cut off, etc.)

3 Emergency Response

Shippers are no longer required to provide an emergency response telephone number on shipping papers under the following conditions:

- When shipping limited quantities of hazardous materials
- When shipping the following Proper Shipping Name commodities:
    - Battery powered equipment
    - Battery powered vehicle
    - Carbon dioxide, solid
    - Castor bean
    - Castor flake
    - Castor meal
    - Castor pomace
    - Dry ice
    - Engines, internal combustion
    - Fish meal stabilized
    - Fish scrap, stabilized
    - Refrigerating machine
    - Wheelchair, electric

Continued on next page

C-2.2 Hazardous Material Handling, Continued

4 Placards – Table 1

See the following Hazardous Materials DOT Chart 11 for the types of placards and markings, that MUST be used for any amount of a Table 1 hazard class commodity. Table 1 hazard classes (listed on the backside of the chart) are:

- Explosives, 1.1
- Explosives, 1.2
- Explosives, 1.3
- Poison Gas, 2.3
- Dangerous When Wet, 4.3
- Poison, 6.1 (PG I, Inhalation Hazard Only)
- Radioactive, 7 (Yellow-III label)

5 Placards – Table 2

The Hazardous Materials DOT Chart 11 also shows the types of placards to be used for any combined weight of 1,001 pounds or more of Table 2 hazard classes and provides a listing of these hazard classes on the back side of the chart.

6 Multi-Placard Codes

Since the VIN screen in TSS will only accommodate one placard code, the placard code corresponding with the most restrictive commodity being shipped MUST be entered on the VIN screen if more than one type of placard is present.

7 Placard Discrepancy

Ensure that placard on trailer matches what is on the EDI billing. The discrepancy must be corrected prior to accepting unit.

8 Placard Requirements

To improve hazardous placard visibility, shipments which must be placarded, as directed by the AAR, Hazardous Material placard placement will change as noted in Item 44: Hazardous Shipments:

- Side -mounted hazardous placards must be positioned no more than 18 inches from the top and no more than 72 inches from the ends.
- Front and rear placards must be placed no more than 18 inches from the top.

9 Corrections

Any corrections made to placards must be noted on the shipping papers, which are then faxed to CWC. Centralized Waybilling Control can possibly use that documentation to resolve TSS hazardous errors.

Continued on next page

C-2.2 Hazardous Material Handling, Continued

10 Logging Reconciliation

Shippers are no longer required to provide a placard notation or endorsement on shipping papers (1996 change to federal hazardous material regulations). Therefore, ALL placards affixed to a unit coming in the gate should be reconciled to the Description of Commodity on the shipping papers and electronically logged in the handheld device. Likewise if a unit doesn't need and doesn't have placards, 'NP' (no placards) should be logged in the handheld device.

Checkpoint

C-3 Out-Gate

Contents

This section contains the following topics:

Topic	See Page
General Information	2
Computer Input	5

C-3.1 General Information

1 General Information

A critical component of the intermodal operations starts at checkpoint. The checkpoints are in daily contact with the truck drivers who work for many of the companies that move their production BNSF. It is extremely important the checkpoint provides prompt and courteous service to all drivers who come through the BNSF checkpoint. The relationship with the truck drivers is an important part of our overall service.

All drivers must be treated with respect and courtesy at all times. Checkpoint Operations are the frontline for access to BNSF facilities. They provide initial validation for facility authorization, completion of the BNSF Indemnity Agreement and visual verification of BNSF Facility Passes.

2 Safety

BNSF Intermodal checkpoints are extremely busy with large semi-trucks moving in different directions in multiple lanes. It is important that all checkpoint equipment employees be familiar with the potential hazards of working around this heavy equipment, and never take unnecessary risks while working at checkpoint. First and foremost, all checkpoint personnel must wear the proper mandatory Personal Protective Equipment (PPE) as outlined in the respective safety rules publication, which consists of

- Safety Glasses with permanent side shields
- Hard hats applicable to designated crafts and work areas that meet ANSI standard Z89.1, Type I, Class E & G specifications, found in the BNSF Safety and Health Equipment Catalog.
- Steel Toe Safety Boots,
- Enhanced-Visibility Wear in accordance with Intermodal Hub Policy Statement 1999-01C.

3 Other Considerations

Emergency response numbers posted list prominently displayed of individuals' names and numbers to be contacted in the event of an emergency. List should be specific to the emergency at hand (i.e., unit leaking potential hazardous materials; accident or injury reporting; security-related events; etc.).

1. "Safety Rules and General Responsibilities for All Employees" available online access or hard copy on hand of the safety rules publications applicable to the functions at the facility. Regional directors, hub managers, office personnel, gate personnel, coordinators, and yard checkers are subject to the Employee Safety Rules publication.
2. Checkpoint booths/office/restrooms (where applicable) are clean/orderly; no slip, trip, or fall hazards; no drinks near computers, printers, or telephones; no debris or excessive amounts of trash; no defacement or graffiti; sufficient and unobscured visibility to view activities outside; paperwork organized (not strewn about); in-gate and out-gate haz mat documentation flowcharts and out-gate procedures checklist posted or known.
3. Checkpoint outside area clean and free of debris No trash or objects lying in roadways or walkways, including used and unused security bolts.
4. Be aware of any potential slip, trip, or fall hazards. Keep your work area clear of all such obstacles. Know where curbs, poles, and other fixed objects are located. Checkpoint area booth must be clean and orderly.

Continued on next page

C-3.1 C-3.1 General Information, Continued

Other Considerations (continued)

5. Never begin the inspection of the equipment until the vehicle is completely stopped and the driver acknowledges your presence.
6. Standing, walking or running in front of any moving equipment is dangerous and is prohibited; never run in the checkpoint area and always look both directions before crossing lanes.
7. Never take risks by opening doors on all units without securing locking bars with restraint straps.
8. Never crawl, walk, or position yourself under a trailer, tractor, container, or chassis.
9. Never walk between trailer, containers, or chassis until both drivers acknowledge that they see you.
10. Be aware of the risks associated with Hazardous Material, and never assume it is safe to touch materials or breathe vapors.
11. Checkpoint Personnel must observe the weather and be aware of the additional safety hazards associated with periods of undesirable weather conditions. Extreme caution shall be taken during adverse weather conditions.

Always be ALERT, NEVER TAKE UNNECESSARY RISKS. Be Safe, Not Sorry!

4 Equipment Types

The checkpoint personnel must be familiar with the different types of equipment coming in checkpoint. There are basically three types of equipment which require inspection upon arrival at checkpoint. They are **trailers**, **containers**, and **chassis**.

Trailer, containers, and chassis are built out of many different types of materials, including aluminum, steel, and composite materials. The ownership of the trailers, containers, and chassis that move on BNSF fall into two categories: rail-controlled or private. Rail-controlled means the equipment is either owned or leased by railroads or railroad agents. Private means the equipment is owned or leased by a shipper, such as J B Hunt, Schneider, or Maersk Steamship Lines.

All equipment has a unique initial and number, which identifies that specific unit, and the owner of the equipment. Some examples are: a container with initials JBHU belongs to J.B. Hunt and a trailer with initials SNLZ belongs to Schneider National Truck Lines. The initial and number will be displayed on the ends and sides of most equipment.

5 Trailer

A ***trailer*** is a freight vehicle with a permanently attached undercarriage and wheels used for highway or rail transportation.

6 Container

A ***container*** is a freight vehicle without a permanently attached undercarriage and wheels. Enclosed Containers are commonly referred to as “boxes.” Since containers have no wheels, a chassis is required to provide containers with an undercarriage and wheels. Most containers without chassis can be stacked one atop another either in railcars or on the ground.

Continued on next page

C-3.1 C-3.1 General Information, Continued

7 Chassis

A ***chassis*** is a vehicle specifically designed to mate under a container. Chassis have permanently attached wheels and locking mechanism specifically designed to attach the container to the chassis. Chassis meet all requirements for movement on highway, rather loaded with container or not.

8 Interchange Process

There may be variations in the inspection process of vehicles based on what type of equipment is to be interchanged. Refer to the Association of American Railroads (AAR) TOFC/COFC Interchange Rules Including Billing and Repair Procedures - http://www.uiia.org/documents/AAR-B-F-G_RULES_2008-12.pdf - for all of the applicable Interchange Rules.

9 Interchange Purpose

The purpose of the Interchange is to provide a means of allowing the trucker and BNSF to record the exchange of trailer, container, or chassis. This process includes a series of steps that when completed, legally and physically transfer the equipment between the trucker and BNSF. This process is very similar to the exchange that takes place when an individual rents a vehicle from a car rental company. It is of utmost importance this transaction is recorded accurately and in a timely manner. The Interchange process consists of three steps, that take place simultaneously:

1. The physical inspection
2. Accurate computer input/verification of the required transaction elements
3. Accurate notation of equipment condition and/or damages

10 Physical Inspection

Outbound inspections are to be performed on an "exception only" basis, when the driver requests an exception inspection to verify damage recorded by the driver. In an AGS environment, the Portal records the out-gate images and a record of the physical condition of the unit. The driver is still responsible to alert and request the Checkpoint Operation to record any damages or exceptions the driver may have noted. The inspector or AGS Technician should verify that all of the information required is correct in the system, and/or on the trucker interchange receipt. This would include the following information: (Refer to the Intermodal Out- Gate Quick Reference Guide).

	Physical Inspection Verification
1	All computer-generated and manually- entered information must be confirmed present, correct, and legible (unit & chassis initial/number, load/empty, drivers license number, trucking company, tractor number and/or license)
2	If Storage is due the unit must not be allowed out the gate. For procedures on how to handle units with storage, refer to the Checkpoint-Out, subsection Storage Guarantees Procedures.
3	The inside of empty units must be inspected to ensure stolen merchandise is not placed in empty units.

C-3.2 Computer Input

1 Methods of Reporting

BNSF checkpoints have several methods to facilitate real-time input of the inspection data and the ability to print an interchange transaction receipt for the driver. Accurate verification and computer input of the required information as indicated in the above Physical Inspection section is of the utmost importance. The following are the different methods currently used by BNSF facilities to report the trucker interchange:

Automated Gate System (AGS): Provides an automated process to record images of the unit during the in-gate and out-gate process and a Kiosk driven environment for real time driver input. When the inspection process is completed the driver is provided with a printed receipt of the transaction referred to as a "buck slip." All of the gate events and images are captured within the AGS and BNSF Systems.

OASIS Hand-Held: System allows for real-time input/verification of the information as required in the Physical Inspection section. When the inspection is completed it provides the driver with a printed receipt, referred to as a buck slip. All of the gate events and equipment damage is captured with the OASIS hand-held device.

OASIS Desktop: Mainframe system allows for the input/verification of the information as required in the Physical Inspection section. When the inspection is completed the driver is provided with a computer-generated document, referred to as a "plan paper copy" or "buck slip." All of the gate events are captured with the mainframe system. Equipment damage events are handled manually.

Hand written document: At a small number of locations a hand written document is used to report the information as required in the Physical Inspection Section. When the inspection is completed the driver is provided with a copy of the hand written document, referred to as a "J1/1202."

2 Equipment Damage

When documenting damages, remember the ***three*** required parts of any damage description:

1. You must state ***what*** is damaged such as the roof, door, floor, etc.
2. You must state ***where*** the damage is located such as Left front, Left rear, Left side, Right inner rear, etc.
3. You must state ***why*** "damaged". Never use the word "damaged". It is too vague and makes claim processing difficult. Use only the words; bent, broken, cut, dirty, etc., to describe what is wrong.

Finally, you must give the approximate size of the damaged area, both length, and width.

Do not forget to list all collateral damages. For example, if a top rail is bent in, then the roof is certainly bent or cut as well. Furthermore, if a side panel is bent in, then there must be some side posts bent as well.

Continued on next page

C-3.2 C-3.2 Computer Input, Continued

3 QRG Freight Out-Gate

Quick Reference Guide: Intermodal Freight Vehicle Out-Gate Inspection

Unit is driven through Out-Gate Portal. Imaging and OCR is processed by Out-Gate Portal. AGS Technician validates the OCR Processing for unit and or chassis initial/number.

1.0.1	Record vehicle initial & number. **1.0.1.2** Is vehicle on a chassis? If yes go to 1.0.2 or, if no go to 1.0.3
1.0.2	Verify chassis initial and number that appears after the vehicles initial and number are entered.
1.0.3	As the driver for the pick-up number and record in the system.
1.0.4	Ask the driver to provide a physical driver's license, record number in system. Don't ask just for a driver's license number.
1.0.5	Is the vehicle an empty? If yes go to 1.0.6 or, if no go to 1.0.7
1.0.6	Inspect the inside of the empty to ensure merchandise if not placed in the empty unit.
1.0.7	Record the trucker company name and tractor license plate from the tractor. Do not ask the driver for this information.
1.0.8	Record damage ONLY at the driver's request.

4 QRG Handheld Freight Out-Gate

Handheld Quick Reference Guide: Intermodal Freight Vehicle Out-Gate Inspection

1.0.1	Record vehicle initial & number. **1.0.1.1** Is vehicle on a chassis? If yes go to 1.0.2 or, if no go to 1.0.3
1.0.2	Verify chassis initial and number that appears after the vehicles initial and number are entered.
1.0.3	As the driver for the pick-up number and record in the system.
1.0.4	Ask the driver to provide a physical driver's license, record number in system. Don't ask just for a driver's license number.
1.0.5	Is the vehicle an empty? If yes go to 1.0.6 or, if no go to 1.0.7
1.0.6	Inspect the inside of the empty to ensure merchandise if not placed in the empty unit.
1.0.7	Record the trucker company name and tractor license plate from the tractor. Do not ask the driver for this information.
1.0.8	Record damage ONLY at the driver's request.

Continued on next page

C-3.2 C-3.2 Computer Input, Continued

5 QRG Kiosk Freight Out-Gate

Kiosk Quick Reference Guide: Intermodal Freight Vehicle Out-Gate Inspection

1.0.1	Driver enters unit initial & number at Kiosk prompt. **1.0.1.1** Driver is prompted if vehicle on a chassis? If yes go to 1.0.2 or, if no go to 1.0.3
1.0.2	Verify chassis initial and number that appears after the vehicles initial and number are entered.
1.0.3	As the driver for the pick-up number and record in the system.
1.0.4	Ask the driver to provide a physical driver's license, record number in system. Don't ask just for a driver's license number.
1.0.5	Is the vehicle an empty? If yes go to 1.0.6 or, if no go to 1.0.7
1.0.6	Inspect the inside of the empty to ensure merchandise if not placed in the empty unit.
1.0.7	Record the trucker company name and tractor license plate from the tractor. Do not ask the driver for this information.
1.0.8	Record damage ONLY at the driver's request.

6 Kiosk Operation QRG

Quick Reference Guide: Operating the KIOSK System

Log the KIOSK on to Oasis	• Press BLUE key • Press A key • At the prompt requesting login, type in logon id for gait function, i.e. in-gate or out-gate and press the enter key. • At the prompt requesting password, type in the password and press the enter key. The appropriate entry screen will be displayed.
Log the KIOSK off from Oasis	• Press F6 key • Use cursor movement key to select "END OF SHIFT" and press the enter key. • The TCP> prompt will be displayed
Reset the VMU	• If VMU has drivers data input screen displayed, log the device off from Oasis. • Press YELLOW key • Press BLUE key • Press R key • Screen will momentarily darken then turn back on and display TCP> • Follow steps to log device on to Oasis.

Continued on next page

C-3.2 C-3.2 Computer Input, Continued

Kiosk Operation QRG (continued)

Test the Printer	• Turn power to printer off at the printer power supply. • Press the top key on the left side of printer mount and hold in while turning the power on for the printer. • After 3 seconds release the key and the printer should print out a strip with current settings. • If the VMU is logged on to Oasis, you can press F7 to have Oasis send a test print to the printer.

11 Kiosk Troubleshooting

Troubleshooting KIOSK Components

The red light on top of the cabinet is flashing:	
Cause:	The flashing light indicates that inside cabinet temperature has reached the extreme limits. The temperature inside the Kiosk cabinet has reached maximum low or high temperature. Lowest temperature is 36 degrees and the highest is 99. Either the heater or air conditioner is not functioning to maintain constant temperature.
Resolution:	Determine cause of extreme temperature. Perhaps the temperature setting dial has changed and has caused the heater or air conditioner to not operate. Adjust temperature dial. Perhaps the low or high temperature thermo switch is defective. Replace it.
The air conditioner is running during the winter:	
Cause:	The thermo switch has detected internal Kiosk temperature at or above 65 degrees. This switch controls when the heater is to be operative or if the air conditioner is to be operative. During the winter, the blower on the air conditioner must not be running to avoid undue stress on the heater.
Resolution:	The heater temperature control dial has been adjusted above 55 degrees, adjust to 55 or below.
Driver is not getting buck slip print:	
Cause:	Printer is not feeding print due to paper jam.
Resolution:	Remove the paper jam, re-feed the paper in printer and press F1 to reprint the last buck slip

Continued on next page

C-3.2 C-3.2 Computer Input, Continued

Kiosk Troubleshooting (continued)

Driver cannot enter information:	
Cause:	VMU not powered on or not logged on to Oasis.
Resolution:	If red light is flashing, refer to problem above. Check monitor for TCP> prompt, if displayed, log the VMU on. If no characters are displayed when the keys are depressed press the F6 key, if the screen has not changed, then reboot the VMU and logon if necessary. If information still cannot be entered, call the HELP desk at 593-4357 for assistance.

12 Equipment Damage

Equipment damages shall only be verified and recorded if reported by the driver.

13 Seal Compromised

If the **driver reports** the seal is compromised, the inspector shall notify the Resource Protection Operations Center and BNSF Ramp personnel. A new BNSF seal shall be applied and recorded in the system ***(With TSS Command SEALCHG)*** and/or on the J-1/1202 and in the seal logbook. Once the out-gate process is completed the driver is provided an interchange receipt.

Checkpoint

C-4 AGS Operation

Contents

This section contains the following topics:

Topic	See Page
Safety	2
Driver Kiosk Process	3
Trailer/Container Inspection	6
Bare Chassis Inspection	8
OG Process	9

C-4.1 Safety

1 Driver Responsibilities

Observe and adhere to posted rules and responsibilities which include, but are not limited to:

- Speed Limit through Portals (5 MPH)
- Speed Limit Portal to Kiosk (20 MPH)
- Lane Change Rules

C-4.2 Driver Kiosk Process

1 Driver Kiosk Process

The following table describes the driver kiosk process.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Driver passes through portal.
Portal captures images and reads chassis, container, and license plate information.</td></tr>
<tr><td>2</td><td>Damage inspection is created.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>This is a Trailer/Container inspection…</td><td>clerk will complete “Trailer/Container Inspection” after driver check-in at kiosk. Continue to Step 3.</td></tr>
<tr><td>This is a Bare Chassis inspection…</td><td>clerk will complete “Bare Chassis Inspection” after driver check-in at kiosk. Continue to Step 3.</td></tr>
</table></td></tr>
<tr><td>3</td><td>Driver proceeds to in-gate kiosk.</td></tr>
<tr><td>4</td><td>At the kiosk, driver presses Enter key to begin</td></tr>
<tr><td>5</td><td>At the (screen name) screen, driver enters driver’s license number and presses Enter.
The system displays a list of SCAC codes.</td></tr>
<tr><td>6</td><td>Driver looks at list for appropriate SCAC code.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>If code is available…</td><td>Driver selects the code. Continue to Step 7.</td></tr>
<tr><td>If code is not listed…</td><td>Driver presses 9. Go to Step 14.</td></tr>
</table></td></tr>
<tr><td>7</td><td>Driver places finger on biometric scanner.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>If scan is accepted…</td><td>Continue to Step 8</td></tr>
<tr><td>If scan is not accepted…</td><td>Driver is prompted to wait for clerk intervention.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>If clerk determines that scan is correct…</td><td>Continue to Step 8.</td></tr>
<tr><td>If clerk determines that scan is not correct…</td><td>Go to Step 14.</td></tr>
</table></td></tr>
</table></td></tr>
<tr><td>8</td><td>The system prompts the driver to either verify the displayed unit information or to enter unit information.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The displayed unit information is correct…</td><td>Driver presses Yes. Continue to Step 9.</td></tr>
<tr><td>If displayed unit information is not correct…</td><td>Driver is prompted to wait for clerk intervention.
AGS Technician reviews the Equipment Identification Screen, corrects unit information, and captures image of seal if applicable.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>Displayed information is correct…</td><td>Driver presses Yes. Continue to Step 8.</td></tr>
<tr><td>Displayed information is</td><td>Driver will wait for clerk to fix problem. Then,</td></tr>
</table></td></tr>
</table></td></tr>
</table>

	not correct…	continue to Step 8.
If the system requests information…	Driver enters required information (unit initial and number) and presses **Enter**. Continue to Step 9.	
If unit information is shown as Bobtail…	Driver presses **Last Screen** button. Continue to Step 11.	

9 System prompts for load and billing status.

If ...	**Then ...**
If unit is both a load and is billed…	Driver enters seal number and presses **Enter**. Continue to Step 10.
If unit is a load but is not billed OR if unit is empty…	Driver completes these steps in system: 1. Select Shipper. 2. Type destination. 3. Answer question: Is unit Hazardous? 4. Enter seal number and press Enter. *AGS Technician verifies if a seal is present, intact and then captures an image.*

If ...	**Then ...**
If AGS information is correct…	Driver accepts the information. Continue to Step 11.
If AGS information is not correct…	Driver rejects the information. Go to Step 14.

10 Driver answers question: Is seal intact?

If ...	**Then ...**
The answer is **Yes**…	Driver accepts the information. Continue to Step 11.
The answer is **No**…	Go to Step 14.

11 Transaction is submitted to Oasis for approval.

If ...	**Then ...**
If there are no errors…	Continue to Step 12.
If there are errors…	Go to Step 14.

12 Driver completes the out-gate menu.

If ...	**Then ...**
If driver is picking up a unit…	Complete Option 1: 1. Enter **Yes**. 2. Type Unit Initial Number and press **Enter**. 3. Type Pickup number and press **Enter**. Continue to Step 13.
If driver is checking a booking…	Complete Option 2: 1. Enter **Yes**. 2. Type Booking Number and press **Enter**. *Booking Results display.* Continue to Step 13.
If driver is doing neither of the above…	Continue to Step 13.

13	J1 prints with information specific to driver's visit. Gate opens. Driver moves on.
14.	Error J1 prints with driver information. Gate opens. Driver must proceed to Drivers Assistance Building for help resolving issues/errors.

C-4.3 Trailer/Container Inspection Process

1 Trailer/ Container Inspection Process

The following table describes the trailer/container inspection process.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Driver passes through portal.</td></tr>
<tr><td>2</td><td>Damage inspection is created.
AGS Clerk selects trailer/container inspection from the AGS Clerk Console.</td></tr>
<tr><td>3</td><td>Clerk verifies, and if necessary, records the unit initials, numbers and length.</td></tr>
<tr><td>4</td><td>Clerk verifies, and if necessary, records the chassis initials, numbers and length.</td></tr>
<tr><td>5</td><td>Clerk answers question: Is unit a flatrack?
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The answer is Yes…</td><td>Clerk places on LSHOLD “F.” Continue to Step 6..</td></tr>
<tr><td>The answer is No…</td><td>Continue to Step 6.</td></tr>
</table></td></tr>
<tr><td>6</td><td>Clerk answers question: Is unit an open top load?
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The answer is Yes…</td><td>Clerk places change length from (20 to 28 or 40 to 48).
A 28- or 48-foot container alerts coordinator that unit is open top. Continue to Step 7.</td></tr>
<tr><td>The answer is No</td><td>Continue to Step 7.</td></tr>
</table></td></tr>
<tr><td>7</td><td>Clerk answers question: Is unit a reefer?
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The answer is Yes……</td><td>Clerk selects Nose or Belly. Continue to Step 8.</td></tr>
<tr><td>The answer is No…</td><td>Continue to Step 8.</td></tr>
</table></td></tr>
<tr><td>8</td><td>Clerk answers question: Does unit have HazMat placards displayed?
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The answer is Yes…</td><td>Clerk refers to HazMat section. Continue to Step 9.</td></tr>
<tr><td>The answer is No…</td><td>Continue to Step 9.</td></tr>
</table></td></tr>
<tr><td>9</td><td>Clerk answers question: Is unit a bare chassis?
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The answer is Yes……</td><td>Clerk continues to procedure “Bare Chassis Inspection.”</td></tr>
<tr><td>The answer is No…</td><td>Continue to Step 10.</td></tr>
</table></td></tr>
<tr><td>10</td><td>Perform rail ready trailer/container inspection.
1. Select the REAR image and perform vehicle door and component inspection:
Corner posts
Locking bar guides, latches, handles, keepers and cams
Rear door headers
Door moldings
Door hinges
Rear sill

2. Select the RIGHT image and inspect right side of the trailer/container:
Top and bottom side-rails
Side panel
Exterior side posts, stacking posts

3. Select the LEFT image and inspect the left side of the trailer/container:
Top and bottom side-rails</td></tr>
</table>

<table>
<tr><td></td><td>
Side panel
Exterior side posts, stacking posts

4. Select the FRONT image and inspect the front nose of the trailer/container:
Top and bottom nose rails
Nose panels, exterior nose posts
Corner caps
Radius posts
Front chassis bolster

5. Select the TOP image and inspect the roof of the trailer/container:
Roof panel
Top side rails
Stacking posts

6. Select the Bumper image and inspect the bumper of the chassis
Inspect rear bolster and ensure twist lock pins are present and useable
Tail light assembly, marker lights
DOT bumper
Mud flaps and mud flap brackets
Inspect chassis cross braces from rear center
Inspect frame for alignment

7. Select the RIGHT CHASSIS image and inspect the right side of the chassis:
Wheel assembly (wheels and tires)
Main frame rail
Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft)

8. Select the LEFT CHASSIS image and inspect the right side of the chassis:
Wheel assembly (wheels and tires)
Main frame rail
Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft)
</td></tr>
<tr><td>11</td><td>Clerk answers question: Is container rail ready?
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The answer is Yes……</td><td>Continue to Step 12.</td></tr>
<tr><td>The answer is No…</td><td>Go to Step 13.</td></tr>
</table>
</td></tr>
<tr><td>12</td><td>J1 prints with information specific to driver's visit. Gate opens. Driver moves on.</td></tr>
<tr><td>13</td><td>Error J1 prints with driver information. Gate opens. Driver must proceed to Drivers Assistance Building for help resolving issues/errors.</td></tr>
</table>

C-4.4 Bare Chassis Inspection Process

1 Bare Chassis Inspection Process

The following table describes the bare chassis inspection process.

Step	Action
1	Driver passes through portal.
2	Damage inspection is created. *AGS Clerk selects bare chassis inspection from the AGS Clerk Console*.
3	Clerk verifies, and if necessary, records the chassis initials, numbers and length.
4	Clerk performs rail ready chassis component inspection: 1. Select the Bumper image and inspect the bumper of the chassis: • Inspect rear bolster and ensure twist lock pins are present and useable • Tail light assembly, marker lights • DOT bumper • Mud flaps and mud flap brackets • Inspect chassis cross braces from rear center Inspect frame for alignment 2. Select the RIGHT CHASSIS image and inspect the right side of the chassis: • Wheel assembly (wheels and tires) • Main frame rail Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft) 3. Select the LEFT CHASSIS image and inspect the left side of the chassis: • Wheel assembly (wheels and tires) • Main frame rail Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft) 4. Select Front/bolster image and inspect front bolster of chassis • Twist lock present and useable • Marker lights Glad Hands
5	Clerk answers question: Is chassis rail ready? **If ...** / **Then ...** The answer is Yes…… / Continue to Step 6. The answer is No… / Go to Step 7.
6	J1 prints with information specific to driver's visit. Gate opens. Driver moves on.
7	Error J1 prints with driver information. Gate opens. Driver must proceed to Drivers Assistance Building for help resolving issues/errors.

C-4.5 OG Process

1 OG Process

The following table describes the OG process.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Driver passes through portal.</td></tr>
<tr><td>2</td><td>Damage inspection is created.
AGS Clerk selects OG inspection from the AGS Clerk Console.</td></tr>
<tr><td>3</td><td>Clerk verifies, and if necessary, records unit initials, numbers and length.</td></tr>
<tr><td>4</td><td>Driver begins out-gate transaction through kiosk.
1. Driver scans J1.
2. Driver verifies correct out-gate unit matching.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The driver pre-outgated the unit at the in-gate correctly…</td><td>Continue to Step 5.</td></tr>
<tr><td>The driver pre-outgated the unit at the in-gate incorrectly…</td><td>Driver is prompted to enter pick-up number or booking number.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>Information is correct…</td><td>Continue to Step 5.</td></tr>
<tr><td>Information is not correct…</td><td>Clerk is alerted, via work queue, to verify driver information
• If the information is correct, continue to Step 5.
• If the information is not correct, go to Step 8.</td></tr>
</table></td></tr>
</table></td></tr>
<tr><td>5</td><td>Driver is prompted: Do you have damage to report?
• Press Yes to report damage.
Press No if no damage to report.
Note: Record damage ONLY at the driver's request.</td></tr>
<tr><td>6</td><td>Final review of OG transaction is completed by Oasis.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>If there are no errors…</td><td>Continue to Step 7.</td></tr>
<tr><td>If there are errors…</td><td>Clerk intervention is created. Clerk is alerted, via work queue, to verify driver information.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>Information is correct…</td><td>Continue to Step 5.</td></tr>
<tr><td>Information is not correct…</td><td>Go to Step 8.</td></tr>
</table></td></tr>
</table></td></tr>
<tr><td>7</td><td>J1 prints with information specific to driver’s visit. Gate opens. Driver moves on.</td></tr>
<tr><td>8</td><td>Error J1 prints with no information. Gate opens. Driver must proceed to Drivers Assistance Building to resolve errors</td></tr>
</table>

Checkpoint

C-5 Handheld Operation

Contents

This section contains the following topics:

Topic	See Page
Safety	2
Checkpoint Inspector Process	3
Trailer/Container Inspection	8
Bare Chassis Inspection	11
OG Process	12

C-5.1 Safety

1 PPE for Inspectors

Reference Employee Safety Rule S-21.0/Hub Manual Policy Statement 1999 - 01c & 2006 - 01D

- Hard Hat
- Safety Glasses and / or Side Shields
- Safety Vest
- Steel Toed Boots

2 Stop Bars/Safety Zones

Reference Employee Safety Rule S-8.4/Hub Manual Policy Statement 2006 - 01D

- Safety Cones
  - Wheeled
  - Conventional
  - Color (Red or Orange)
- Stop Bars painted on pavement

3 Driver Responsibilities

Reference Employee Safety Rule S-8.3/Hub Manual Specific Categories Section/Yard Rules/Additional Yard Rules For Truckers Only

- Yield to inspectors instructions
- Observe Posted Speed Limit(s) (10 MPH unless otherwise posted)
- Obey All Yard Rules
- Stop and turn engine off at Designated Stop bars/zones marked by:
  - Stop Signs
  - Stop bars painted on Pavement
  - Safety Cones
- If Manual Transmission
  - Place in Neutral gear
  - Apply Emergency Brake
- If Automatic Transmission
  - Place in Parking gear
  - Apply Emergency Brake
- Shut engine off

4 Seals/ Placards

Seals/Placards

- Under no circumstances should the inspector, truck driver, or any other party climb onto equipment (trailers, chassis, tractors) to verify, install, or remove seals or placards.
- Loads without seals should be rejected if seal cannot be installed from ground level.

C-5.2 Checkpoint Inspector Process

1 Checkpoint Inspector Process

The following table describes the checkpoint inspector process using the handheld.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Driver stops at stop sign, stop bar, and/or safety cone.
Places transmission in neutral (Manual Transmission) or Park (Automatic Transmission)
Applies Emergency Brake
Turns engine off</td></tr>
<tr><td>2</td><td>Checkpoint Inspector removes safety cone.</td></tr>
<tr><td>3</td><td>Driver proceeds into inspection zone.
Driver stops at stop sign, stop bar, and/or safety cone.
Places transmission in neutral (Manual Transmission) or Park (Automatic Transmission)
Applies Emergency Brake
Turns engine off</td></tr>
<tr><td>4</td><td>Checkpoint Inspector replaces safety cone.</td></tr>
<tr><td>5</td><td>Inspector inputs Load/Empty/Chassis/Bobtail. (Must be entered prior to any additional info.) Handheld field input and gate scenarios are based on driver feedback.
<table>
<tr><th>Scenario</th><th>Response</th></tr>
<tr><td>Speed bills</td><td>UPS. Never turn away. The system should allow them in the gate</td></tr>
<tr><td>LTL</td><td>Are allowed in the gate without billing for loads. Empties are to be rejected.</td></tr>
<tr><td>Quick Bills</td><td>Trucker provides Shipper, Destination, and Quick Bill Number. If not provided, then it is a no bill. Reject.</td></tr>
<tr><td>CY</td><td>Empty steam ship containers with CY on the property. If the unit passes edits, TSS will allow in the gate. The trucker must convey the proper Shipper spelling.</td></tr>
<tr><td>No Bills</td><td>No billing in the system and not one of the above bypass edits. Reject. In case of TSS Downtime or TSS Gate Edits off, continue to process the unit and let OASIS return a verdict of No Bill. If a valid Waybill hits, it will overwrite the Gate Entry.</td></tr>
<tr><td>HGIU</td><td>Do not accept ingate without billing.
HUBU & HUNU = Allow ingate without billing only for purpose of repair.
Direct HUNU to NS Hub Facility if available in the same city.</td></tr>
<tr><td>Driver License Number</td><td>ABF & Yellow Roadway drivers use employee numbers instead of Driver License Number</td></tr>
<tr><td>Units without Initials</td><td>Use ABF-ABFZ, Dart-DRTZ, Schneider-SNLZ (ignore the TA), UPS (with no initials on trailer)-NONZ, U.S. Express-USXZ, and Yellow Roadway-RDWY)</td></tr>
<tr><td>All Chassis (No exceptions)</td><td>If Not in UMLER, reject. (Call Mgr Equipment Utilization for help at 817.867.6447)</td></tr>
<tr><td>Flat Beds</td><td>Use FLAT for Initials and the last three digits of the trailer license plate number.</td></tr>
<tr><td>Driver</td><td>If driver is not registered see Checkpoint Supervisor for</td></tr>
</table></td></tr>
</table>

	Registration	temporary driver registration. Temporary registration is allowed once per driver and expires after 15 days. Driver must register with UIIA.

6 Clerk answers question: Is unit a load?

If ...	Then ...
The answer is Yes…	Clerk inputs this information: (If unit is an Open Top Load, place on LSHOLD 'F') • Unit Initial/Number • Length (20', 28', 40', 45', 48', 53', or 57') • Chassis Initial/Number (Must match actual stenciling on chassis) • Driver's License • Trucker SCAC code (This field will auto populate if DL# is registered) • Tractor Number • Shipper (This field will auto populate if waybill is present; Type Shippers 6-3-3 if unit is Yard-To-Yard or Quick Bill) • Placard Code • Destination (This field will auto populate if waybill is present; Type your station code if unit is Cy or Yard-to-Yard) • Haz: Y-es or N-o (This field will auto populate if waybill is present) • Seal, Type Number

If ...	Then ...
If no errors…	Go to Step 16.
The there are errors…	Go to Step 18.

The answer is No…	Continue to Step 7.

7 Clerk answers question: Is unit empty?

If ...	Then ...
The answer is Yes…	Clerk inputs this information: • Unit Initial/Number • Length (20', 28', 40', 45', 48', 53', or 57') • Chassis Initial/Number (Must match actual stenciling) • Placard Code (Type two digit code if empty residue ISO Tank) • Destination (Type your station code) • Haz (Type Y-es or N-o if empty ISO residue tank) Go to Step 16.
The answer is No…	Continue to Step 7.

8 Clerk answers question: Is unit ISO tank?

If ...	Then ...
The answer is Yes…	Clerk inputs this information: • Placard Code (Type two digit code if empty residue ISO Tank) • Haz (Type Y-es or N-o if empty ISO residue tank)

		Go to Step 16.
	The answer is No…	Continue to Step 9.
9	Clerk answers question: Is unit bare chassis?	
	If ...	**Then ...**
	The answer is Yes…	Clerk inputs this information: • Unit Initial/Number • Length (20', 28', 40', 45', 48', 53', or 57') • Chassis Initial/Number (Must match actual stenciling on chassis) • Driver's License • Trucker SCAC code (This field will auto populate if DL# is registered) • Tractor Number • Destination (Type your station code) Go to Step 17.
	The answer is No…	Continue to Step 8
10	Clerk answers question: Is unit bobtail?	
	If ...	**Then ...**
	The answer is Yes…	Clerk inputs this information: • Driver's License • Trucker SCAC code (This field will auto po is registered) • Tractor Number Go to Step 18.
	The answer is No…	Continue to Step 11.
11	Clerk answers question: CY?	
	If ...	**Then ...**
	The answer is Yes…	Clerk inputs this information: • Unit Initial/Number • Length (20', 28', 40', 45', 48', 53', or 57') • Chassis Initial/Number • Driver's License • Trucker SCAC code (This field will auto po is registered) • Tractor Number • Shipper (Type Shippers 6-3-3) Go to Step 14.
	The answer is No…	Continue to Step 12.
12	Clerk answers question: Yard-to-yard?	
	If ...	**Then ...**
	The answer is **Yes**…	Clerk inputs this information: • Change gate code from "**I**" to "**Y**" • Enter Origin station • Change Dray code to "**D**" • Unit Initial/Number • Length • Chassis Initial/Number • Driver's License • Trucker SCAC code (This field will auto

		populate if DL# is registered) • Tractor Number • Shipper (Type Shippers 6-3-3) • Destination (Type your station code) • Seal Go to Step 14.
	The answer is **No**…	Continue to Step 13.

13 Clerk answers question: Lot-to-lot?

If ...	**Then ...**
The answer is **Yes**…	Clerk inputs this information: • Unit Initial/Number • Driver's License • Trucker SCAC code (This field will auto populate if DL# is registered) • Tractor Number ○ Use "MOVE UNIT" screen to update location ○ * Hit <F12> (<Orange>+<F2>) on your handheld unit • Hit "Enter" Key for next screen • Enter Lot Destination Code • Hit "Enter" Key to Complete Transaction Go to Step 16.
The answer is **No**…	Continue to Step 14.

14 Clerk answers question: Quick Bill?

If ...	**Then ...**
The answer is **Yes**…	Driver must provide Shipper, Destination, & Quick Bill Number. Clerk inputs this information: • Unit Initial/Number • Length • Chassis Initial/Number • Driver's License • Trucker SCAC code (This field will auto populate if DL# is registered) • Tractor Number • Shipper • Destination • Enter Driver "**Quick Bill**" number in the **CTL#** Field • Seal Go to Step 16.
The answer is **No**…	Continue to Step 15.

15 Clerk answers question: Speed Bill?

If ...	**Then ...**
The answer is **Yes**…	Clerk inputs this information: • Unit Initial/Number • Length • Chassis Initial/Number (Must match actual stenciling on chassis)

<table>
<tr><td></td><td>
<table>
<tr><td></td><td>

Driver's License
Trucker SCAC code (This field will auto populate if DL# is registered)
Tractor License/Tractor Number
Shipper (Type Shippers 6-3-3)
Destination (Type your station code)
Haz
Seal

Go to Step 16.
</td></tr>
<tr><td>The answer is No…</td><td>Continue to Step 16.</td></tr>
</table>
</td></tr>
<tr><td>16</td><td>Perform IG Inspection.

For Loads & Empties, use the procedure “Handheld Operation: Trailer/Container Inspection.). Then, continue to Step 17.
For Chassis, use the procedure “Handheld Operation: Bare Chassis Inspection.” Then, continue to Step 17.

</td></tr>
<tr><td>17</td><td>Obtain inspection results.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>If no errors…</td><td>Continue to Step 16.</td></tr>
<tr><td>If errors…</td><td>Go to Step 17.</td></tr>
</table>
</td></tr>
<tr><td>18</td><td>J1 prints with information specific to driver's visit.</td></tr>
<tr><td>19</td><td>Error J1 prints with Driver's information. At this point the unit is not accepted into inventory. Instruct driver to pull into exception zone (if space is allocated; follow local Hub Procedures) or exit the facility and instruct the driver to contact supervisor.</td></tr>
</table>

C-5.3 Trailer/Container Inspection Process

1 Trailer/ Container Inspection Process

The following table describes the process for performing the trailer/container inspection using the handheld.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Start at rear of the unit (after vehicle is stopped, engine turned off, emergency brake is applied, and the driver meets the inspector at the rear).</td></tr>
<tr><td>2</td><td>Determine if the unit is a Hazmat load or Residue ISO tank.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The unit is a Hazmat load …</td><td>Continue to Step 3.</td></tr>
<tr><td>The unit is a Residue ISO tank …</td><td>If the unit is an ISO Tank, assure Placards and UN numbers are present on all four sides along with the owner name or Lessee displayed on opposing sides. All placards must be present for the unit to proceed in the gate. If the driver needs assistance they may ask the checkpoint supervisor.
ISO Tanks containing Hazmat residue must have the primary material placard displayed (same as loaded).
Continue to Step 3.</td></tr>
<tr><td>The not a Hazmat load or Residue ISO tank …</td><td>Go to Step 7.</td></tr>
</table></td></tr>
<tr><td>3</td><td>Important Note: If a Hazmat shipment is found to be leaking, the unit must be brought into the facility and isolated. The Service Interruption Desk (SID) should be contacted immediately (a safe haven will be offered for leaking shipments, until the shipper can inspect, decontaminate, clean, repair and/or remove the unit).

Is the load billed and/or UPS?
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The unit is not billed…</td><td>Reject the load.</td></tr>
<tr><td>The unit is not billed and is UPS…</td><td>Continue to Step 4</td></tr>
<tr><td>The unit is billed…</td><td>Go to Step 5.</td></tr>
</table></td></tr>
<tr><td>4</td><td>Unbilled UPS loads must have Hazmat Shipping Papers tendered by the driver at the gate.
1. Make sure the papers contain the following information:
Proper shipping name
Hazard Class
UN/NA identification number (when required)
Packing Group (when required)
Total quantity as described in 49 CFR
24-hour emergency response telephone number (when required)
Any additional shipping instructions in accordance with 49 CFR in 172.200 - 172.205 (Papers), 172.300-172.308 (Markings), & 172.500 - 172.60 (Placards)
Note: UPS uses red labels, in lieu of standard shipping papers, to provide all the necessary Hazmat shipment information.

2. Photocopy and fax labels to CWC. Labels should be legible, placed in the same</td></tr>
</table>

<table>
<tr><td></td><td>direction on the page, no more than three per page, and the equipment initials/number must be indicated on each page.</td></tr>
<tr><td>5</td><td>If placards are required, verify placard code in TSS matches the placards affixed to the unit. Reject if there is a discrepancy.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The placard code in TSS matches the affixed placard…</td><td>Continue to Step 6.</td></tr>
<tr><td>The placard code in TSS does not match the affixed placard…</td><td>Reject the load. Instruct driver to contact supervisor.</td></tr>
</table></td></tr>
<tr><td>6</td><td>Check placard placement:

Side-mounted hazardous placards must be positioned no more than 18 inches from the top and no more than 72 inches from the ends.
Front and rear placards must be placed no more than 18 inches from the top.
When placards are not at the appropriate height, draymen should move the placards to the appropriate height; otherwise, the shipment will be rejected at the gate.

<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>Placards are placed correctly…</td><td>Continue to Step 7.</td></tr>
<tr><td>Placards are not placed correctly…</td><td>Draymen will either move to correct position or the shipment will be rejected.</td></tr>
</table></td></tr>
<tr><td>7</td><td>Perform unit door and component inspection:

Corner posts
Locking bar guides, latches, handles, keepers and cams
Rear door headers
Door moldings
Door hinges
Rear sill
Tail light assembly, clearance lights
DOT bumper
Mud flaps and mud flap brackets
</td></tr>
<tr><td>8</td><td>Inspect right side rear to right side middle of unit:

Wheel assembly (wheels, and cap condition)
Top and bottom side-rails
Side panels
Exterior side posts, stacking posts
</td></tr>
<tr><td>9</td><td>Inspect right side middle to right front nose of unit:

Top and bottom side-rails
Side panels
Exterior side posts, stacking posts
Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft)
Radius post, corner cap
</td></tr>
<tr><td>10</td><td>Inspect front nose of unit:

Top and bottom nose rails
Nose panels, exterior nose posts
Corner caps
</td></tr>
</table>

<table>
<tr><td></td><td>

Radius posts
Front chassis bolster

</td></tr>
<tr><td>11</td><td>Inspect left front nose to middle left side of unit:

Top and bottom side-rails
Side panels
Exterior side posts, stacking posts
Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft)
Radius post, corner cap

</td></tr>
<tr><td>12</td><td>Inspect left side middle to rear of unit:

Wheel assembly (wheels, and cap condition)
Top and bottom side-rails
Side panels
Exterior side posts, stacking posts

</td></tr>
<tr><td>13</td><td>If load, ensure rear door seals are properly applied and intact. If seal is missing, a BNSF seal must be applied and recorded in the appropriate reporting locations (i.e. seal book,TSS: SEALCHG).

Important Note: Do not climb onto equipment (trailers, chassis, tractors) to verify, install, or remove seals or placards. Loads without seals should be rejected if seal cannot be installed from ground level.</td></tr>
<tr><td>14</td><td>Record any damages found during inspection and validate whether or not the unit is safe for rail movement.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>Unit is determined to be safe for rail movement…</td><td>Continue to Step 15.</td></tr>
<tr><td>Unit is determined to not be safe for rail movement…</td><td>Go to Step 16.</td></tr>
</table>
</td></tr>
<tr><td>15</td><td>J1 prints with information specific to driver's visit.</td></tr>
<tr><td>16</td><td>Error J1 prints with Driver's information. At this point the unit is not accepted into inventory. Instruct driver to pull into exception zone (if space is allocated; follow local Hub Procedures) or exit the facility and instruct the driver to contact supervisor.</td></tr>
</table>

C-5.4 Bare Chassis Inspection Process

1 Bare Chassis Inspection Process

The following table describes the process for performing the bare chassis inspection using the handheld.

Step	Action
1	Start at rear of the unit: (after vehicle is stopped, engine turned off, and the driver meets the inspector at the rear). • Record 'C' for chassis, initial & number, and chassis length (20', 40', 45', 48', 53'; input longest length if it slides)
2	Perform rear chassis component inspection: • Inspect rear bolster, Twist Lock pins are present and useable • Tail light assembly, marker lights • DOT bumper • Mud flaps and mud flap brackets • Inspect chassis cross braces from rear center • Inspect frame for alignment
3	Inspect right side rear to right side front of chassis: • Wheel assembly (wheels, and cap condition) • Main frame rail • Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft)
4	Inspect front bolster of chassis: • Twist lock present and useable • Marker lights • Glad Hands
5	Inspect left side front to left side rear of chassis: • Wheel assembly (wheels, and cap condition) • Main frame rail • Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft)
6	Rear of chassis: • Verify chassis ownership by stencil markings on chassis
7	Record any damages found during inspection.
8	Clerk answers question: Is unit safe for rail movement? **If ...** / **Then ...** The answer is **Yes**…… Continue to Step 9. The answer is **No**… Go to Step 10.
9	J1 prints with information specific to driver's visit.
10	Error J1 prints with Driver's information. At this point the unit is not accepted into inventory. Instruct driver to pull into exception zone (if space is allocated; follow local Hub Procedures) or exit the facility and instruct the driver to contact supervisor.

C-5.5 OG Process

1 OG Process

The following table describes the OG process using the handheld.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Record unit initial & number.</td></tr>
<tr><td>2</td><td>Clerk answers question: Is the unit on a chassis?
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The answer is Yes……</td><td>Continue to Step 3.</td></tr>
<tr><td>The answer is No…</td><td>Go to Step 6.</td></tr>
</table></td></tr>
<tr><td>3</td><td>Verify Actual Chassis Initial and Number and match the auto populated field in the Handheld. Overwrite if necessary.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>Unit is Yard-to-Yard…</td><td>Continue to Step 4.</td></tr>
<tr><td>Unit is Lot-to-Lot…</td><td>Go to Step 5.</td></tr>
<tr><td>Unit is neither…</td><td>Go to Step 7.</td></tr>
</table></td></tr>
<tr><td>4</td><td>For Yard-To-Yard:
Change Dray code from "N" to "D"
Change Gate code from "O" to "Y"
Enter Destination station, go to Step 7.</td></tr>
<tr><td>5</td><td>For Lot-To-Lot:
Use "MOVE UNIT" screen to update location
Hit <F12> (<Orange>+<F2>) on your handheld unit
Hit "Enter" Key for next screen
Enter Lot Destination Code
Hit "Enter" Key to Complete Transaction, go to Step 7.</td></tr>
<tr><td>6</td><td>Ask the driver for the PICK-UP number (Booking number in the REL# field if CY) and record in the system.</td></tr>
<tr><td>7</td><td>Ask the driver to provide a PHYSICAL DRIVERS LICENSE, record number in system.
Note: ABF & Yellow Roadway Drivers use Employee Numbers instead of Driver's License Numbers.</td></tr>
<tr><td>8</td><td>Record the trucker SCAC & Tractor Number.</td></tr>
<tr><td>9</td><td>Record damage ONLY at the Driver's Request.</td></tr>
<tr><td>10</td><td>Press F5 to send. Transaction complete.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>There are no errors…</td><td>Continue to Step 11.</td></tr>
<tr><td>There are errors…</td><td>Go to Step 12.</td></tr>
</table></td></tr>
<tr><td>11</td><td>J1 prints with information specific to driver’s visit. Gate opens. Driver moves on.</td></tr>
<tr><td>12</td><td>Error J1 prints with Driver's information. Driver must not be allowed to exit the facility with the unit. Instruct driver to contact supervisor.</td></tr>
</table>

Checkpoint

C-6 Kiosk Operation

Contents

This section contains the following topics:

Topic	See Page
Safety	2
Driver Kiosk Process	4
Trailer/Container Inspection	7
Bare Chassis Inspection	10
OG Process	11

C-6.1 Safety

1 Locations without Damage Inspections

For locations which bypass Damage Inspections:

- Observe Posted Speed Limit(s) (10 MPH unless otherwise posted)
- Stop at Stop Bars, Stop Signs, and Cones
- Obey All Yard Rules

2 Locations without Delayed Damaged Inspections

For locations with Delayed Damage Inspections (Billings, Birmingham, Denver, Omaha, Portland, & Spokane):
PPE for Inspectors (Reference Employee Safety Rule S-21.0/Hub Manual Policy Statement 1999 - 01c & 2006 - 01D)

- Hard Hat
- Safety Glasses and / or Side Shields
- Safety Vest
- Steel Toe Boots

3 Stop Bars/Safety Zones

Stop Bars/Safety Zones (Reference Employee Safety Rule S-8.4/Hub Manual Policy Statement 2006 - 01D):

- Safety Cones
  - Wheeled
  - Conventional
  - Color (Red or Orange)
- Stop Bars painted on pavement

4 Driver Responsibilities

Reference Employee Safety Rule S-8.3/Hub Manual Specific Categories Section/Yard Rules/Additional Yard Rules For Truckers Only

- Yield to inspectors instructions
- Observe Posted Speed Limit(s) (10 MPH unless otherwise posted)
- Obey All Yard Rules
- Stop and turn engine off at Designated Stop bars/zones marked by:
  - Stop Signs
  - Stop bars painted on Pavement
  - Safety Cones
- If Manual Transmission
  - Place in Neutral gear
  - Apply Emergency Brake
- If Automatic Transmission
  - Place in Parking gear
  - Apply Emergency Brake
- Shut engine off

Continued on next page

C-6.1 Safety, continued

5 Seals/ Placards

Seals/Placards

- Under no circumstances should the inspector, truck driver, or any other party climb onto equipment (trailers, chassis, tractors) to verify, install, or remove seals or placards.
- Loads without seals should be rejected if seal cannot be installed from ground level.

C-6.2 Driver Kiosk Process

1 Driver Kiosk Process - Common Scenarios

The following table has common scenarios when using the driver kiosk process. This table is not all-inclusive, and further questions should be directed to the manager of hub operations, terminal manager, or director of hub operations.

Scenario	Response
Speed bills	UPS. Never turn away. The system should allow them in the gate
LTL	Are allowed in the gate without billing for loads. Empties are to be rejected.
Quick Bills	Trucker provides Shipper, Destination, and Quick Bill Number. If not provided, then it is a no bill. Reject.
CY	Empty steam ship containers with CY on the property. If the unit passes edits, TSS will allow in the gate. The trucker must convey the proper Shipper spelling.
No Bills	No billing in the system and not one of the above bypass edits. Reject. In case of TSS Downtime or TSS Gate Edits off, continue to process the unit and let OASIS return a verdict of No Bill. If a valid Waybill hits, it will overwrite the Gate Entry.
HGIU	Do not accept ingate without billing. HUBU & HUNU = Allow ingate without billing only for purpose of repair. Direct HUNU to NS Hub Facility if available in the same city.
Driver License Number	ABF & Yellow Roadway drivers use employee numbers instead of Driver License Number
Units without Initials	Use ABF-ABFZ, Dart-DRTZ, Schneider-SNLZ (ignore the TA), UPS (with no initials on trailer)-NONZ, U.S. Express-USXZ, and Yellow Roadway-RDWY)
All Chassis (No exceptions)	If Not in UMLER, reject. (Call Mgr Equipment Utilization for help at 817.867.6447)
Flat Beds	Use FLAT for Initials and the last three digits of the trailer license plate number.
Driver Registration	If driver is not registered see Checkpoint Supervisor for temporary driver registration. Temporary registration is allowed once per driver and expires after 15 days. Driver must register with UIIA.

Continued on next page

2 Driver Kiosk Process

The following table describes the driver kiosk process.

Step	Action
1	Enter Driver License number (including letters), then press **Enter**. **Note**: ABF & Yellow Roadway Drivers use Employee Numbers instead of Driver's License Numbers.
2	Enter PIN number (four digit), and then press **Enter**. **Note**: ABF & Yellow Roadway Drivers use Employee Numbers instead of Driver's License Numbers.
3	SCAC code is presented, press **Enter**.
4	Enter tractor number, and then press **Enter**.
5	Enter unit initial and number, and then press **Enter** **Note**: Units without initials use ABF-ABFZ, Dart-DRTZ, Schneider-SNLZ (ignore the TA), UPS (with no initials on trailer)-NONZ, U.S. Express-USXZ, and Yellow Roadway-RDWY
6	Enter chassis initial and number, and then press **Enter.** (Chassis must be registered in UMLER.)
7	Select **Load**, **Empty**, or **Chassis**, and then press **Enter**.
8	The system evaluates information entered thus far. **If ...** / **Then ...** The system asks for unit length… — Go to Step 11. You are prompted for Destination, Shipper Name…. — You have No Waybill or have made a mistake. Go to Step 9.
9	The system asks if you are LTL. **If ...** / **Then ...** The answer is **Yes**…… — Refer to your rail routing destination. Enter the first letter of the RAIL DESTINATION/ROUTING. Use the arrow key to select the correct destination, and then press **Enter**. Go to Step 11. The answer is **No**… — Continue to Step 10.
10	The system asks for additional information. **If ...** / **Then ...** CY … — Can be processed via Handheld or OASIS Emulator. Refer to Handheld Procedure "Checkpoint Inspection Process," Step 9. Then, go to Step 23 in this procedure. Yard-To-Yard … — Can be processed via Handheld or OASIS Emulator. Refer to Handheld Procedure "Checkpoint Inspection Process," Step 10.Then, go to Step 23 in this procedure Lot-To-Lot — Can be processed via Handheld or OASIS Emulator. Refer to Handheld Procedure "Checkpoint Inspection Process," Step 11.Then, go to Step 23 in this procedure Quick Bills — Can be processed via Handheld or OASIS Emulator. Refer to Handheld Procedure "Checkpoint Inspection Process," Step 12.Then, go to Step 23 in this procedure Speed Bills — Can be processed via Handheld or OASIS Emulator. Refer to Handheld Procedure "Checkpoint Inspection Process," Step 13.Then, go to Step 23 in this procedure No Bills — Can be processed via Handheld or OASIS Emulator. Refer to Handheld Procedure, section C-5, in this manual.

<table>
<tr><td></td><td></td></tr>
<tr><td>11</td><td>Enter unit length (20’, 28’, 40’, 45’, 48’, 53’, or 57’), and then press Enter.</td></tr>
<tr><td>12</td><td>Enter seal number (if applicable), and then press Enter.</td></tr>
<tr><td>13</td><td>System requests Hazmat information.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>This is a Hazmat Unit (including Limited Quantities; excluding Other Regulated Material [ORM-D])…</td><td>Use arrow key to select YES.
Note: If unable to use arrow key, press shift key to unlock keys.
Continue to Step 14.</td></tr>
<tr><td>Is not a Hazmat Unit.…</td><td>Use arrow key to select NO.
Note: If unable to use arrow key, press shift key to unlock keys.
Go to Step 14.</td></tr>
</table></td></tr>
<tr><td>14</td><td>The system requests placard information.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>There are placards</td><td>1. Press Enter.
2. Enter first letter of the placard name, press Enter. 3. Select correct placard and press Enter.
Continue to Step 15.</td></tr>
<tr><td>There are no placards.…</td><td>Continue to Step 15.</td></tr>
</table></td></tr>
<tr><td>15</td><td>Are delayed inspections required?
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>Yes…</td><td>Continue to Step 16.</td></tr>
<tr><td>No.…</td><td>Go to Step 21.</td></tr>
</table></td></tr>
<tr><td>16</td><td>Driver stops at stop bar.
Places transmission in neutral (Manual Transmission) or Park (Automatic Transmission)
Applies Safety Brake
Turns engine off</td></tr>
<tr><td>17</td><td>Driver proceeds into inspection zone. Then, Checkpoint Inspector removes safety cone.
Note: In Billings, Birmingham, Denver, Omaha, Portland, & Spokane, driver does not have to move to inspection zone before Checkpoint Inspector removes safety cone.</td></tr>
<tr><td>18</td><td>Driver Meets the Inspector at the rear.
Note: In Billings, Birmingham, Denver, Omaha, Portland, & Spokane, Checkpoint Inspector replaces safety cone.</td></tr>
<tr><td>19</td><td>Inspector performs Ingate Inspection.
For Loads & Empties, use the procedure “Trailer/Container Inspection.). Then, continue to Step 20.
For Chassis, use the procedure “Bare Chassis Inspection.” Then, continue to Step 20.</td></tr>
<tr><td>20</td><td>Inspector instructs the Driver to return to the Cab of the Vehicle and wait for further instructions</td></tr>
<tr><td>21</td><td>Obtain inspection results.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>If no errors…</td><td>Continue to Step 22.</td></tr>
<tr><td>If errors…</td><td>Go to Step 23.</td></tr>
</table></td></tr>
<tr><td>22</td><td>J1 Prints with Driver and Transaction specific information.</td></tr>
</table>

23	**Error J1** Prints with Driver and Transaction specific information, driver is rejected; see checkpoint inspector for help resolving issues.

C-6.3 Trailer/Container Inspection Process

1 Trailer/ Container Inspection Process

The following table describes process for performing the trailer/container inspection using the kiosk.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Start at rear of the unit (after vehicle is stopped, engine turned off, emergency brake is applied, and the driver meets the inspector at the rear).</td></tr>
<tr><td>2</td><td>Determine if the unit is a Hazmat load or Residue ISO tank.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The unit is a Hazmat load …</td><td>Continue to Step 3.</td></tr>
<tr><td>The unit is a Residue ISO tank …</td><td>If the unit is an ISO Tank, assure Placards and UN numbers are present on all four sides along with the owner name or Lessee displayed on opposing sides. All placards must be present for the unit to proceed in the gate. If the driver needs assistance they may ask the checkpoint supervisor.
ISO Tanks containing Hazmat residue must have the primary material placard displayed (same as loaded).
Continue to Step 3.</td></tr>
<tr><td>The not a Hazmat load or Residue ISO tank …</td><td>Go to Step 7.</td></tr>
</table></td></tr>
<tr><td>3</td><td>Important Note: If a Hazmat shipment is found to be leaking, the unit must be brought into the facility and isolated. The Service Interruption Desk (SID) should be contacted immediately (a safe haven will be offered for leaking shipments, until the shipper can inspect, decontaminate, clean, repair and/or remove the unit).

Is the load billed and/or UPS?
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The unit is not billed…</td><td>Reject the load.</td></tr>
<tr><td>The unit is not billed and is UPS…</td><td>Continue to Step 4</td></tr>
<tr><td>The unit is billed…</td><td>Go to Step 5.</td></tr>
</table></td></tr>
<tr><td>4</td><td>Unbilled UPS loads must have Hazmat Shipping Papers tendered by the driver at the gate.
1. Make sure the papers contain the following information:
Proper shipping name
Hazard Class
UN/NA identification number (when required)
Packing Group (when required)
Total quantity as described in 49 CFR
24-hour emergency response telephone number (when required)
Any additional shipping instructions in accordance with 49 CFR in 172.200 - 172.205 (Papers), 172.300-172.308 (Markings), & 172.500 - 172.60 (Placards)

Note: UPS uses red labels, in lieu of standard shipping papers, to provide all the necessary Hazmat shipment information.

2. Photocopy and fax labels to CWC. Labels should be legible, placed in the</td></tr>
</table>

<table>
<tr><td></td><td>same direction on the page, no more than three per page, and the equipment initials/number must be indicated on each page.</td></tr>
<tr><td>5</td><td>If placards are required, verify placard code in TSS matches the placards affixed to the unit. Reject if there is a discrepancy.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>The placard code in TSS matches the affixed placard…</td><td>Continue to Step 6.</td></tr>
<tr><td>The placard code in TSS does not match the affixed placard…</td><td>Reject the load. Instruct driver to contact supervisor.</td></tr>
</table></td></tr>
<tr><td>6</td><td>Check placard placement:

Side-mounted hazardous placards must be positioned no more than 18 inches from the top and no more than 72 inches from the ends.
Front and rear placards must be placed no more than 18 inches from the top.
When placards are not at the appropriate height, draymen should move the placards to the appropriate height; otherwise, the shipment will be rejected at the gate.

<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>Placards are placed correctly…</td><td>Continue to Step 7.</td></tr>
<tr><td>Placards are not placed correctly…</td><td>Draymen will either move to correct position or the shipment will be rejected.</td></tr>
</table></td></tr>
<tr><td>7</td><td>Perform unit door and component inspection:

Corner posts
Locking bar guides, latches, handles, keepers and cams
Rear door headers
Door moldings
Door hinges
Rear sill
Tail light assembly, clearance lights
DOT bumper
Mud flaps and mud flap brackets
</td></tr>
<tr><td>8</td><td>Inspect right side rear to right side middle of unit:

Wheel assembly (wheels, and cap condition)
Top and bottom side-rails
Side panels
Exterior side posts, stacking posts
</td></tr>
<tr><td>9</td><td>Inspect right side middle to right front nose of unit:

Top and bottom side-rails
Side panels
Exterior side posts, stacking posts
Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft)
Radius post, corner cap
</td></tr>
<tr><td>10</td><td>Inspect front nose of unit:

Top and bottom nose rails
Nose panels, exterior nose posts
</td></tr>
</table>

<table>
<tr><td></td><td>

Corner caps
Radius posts
Front chassis bolster

</td></tr>
<tr><td>11</td><td>Inspect left front nose to middle left side of unit:

Top and bottom side-rails
Side panels
Exterior side posts, stacking posts
Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft)
Radius post, corner cap

</td></tr>
<tr><td>12</td><td>Inspect left side middle to rear of unit:

Wheel assembly (wheels, and cap condition)
Top and bottom side-rails
Side panels
Exterior side posts, stacking posts

</td></tr>
<tr><td>13</td><td>If load, ensure rear door seals are properly applied and intact. If seal is missing, a BNSF seal must be applied and recorded in the appropriate reporting locations (i.e. seal book,TSS: SEALCHG).

Important Note: do not climb onto equipment (trailers, chassis, tractors), to verify, install, or remove seals or placards. Loads without seals should be rejected if seal cannot be installed from ground level.</td></tr>
<tr><td>14</td><td>Record any damages found during inspection and validate whether or not the unit is safe for rail movement.
<table>
<tr><th>If ...</th><th>Then ...</th></tr>
<tr><td>Unit is determined to be safe for rail movement…</td><td>Continue to Step 15.</td></tr>
<tr><td>Unit is determined to not be safe for rail movement…</td><td>Go to Step 16.</td></tr>
</table>
</td></tr>
<tr><td>15</td><td>J1 Prints with Driver and Transaction specific information.</td></tr>
<tr><td>16</td><td>Error J1 Prints with Driver and Transaction specific information, driver is rejected; see checkpoint inspector for help resolving issues.</td></tr>
</table>

C-6.4 Bare Chassis Inspection Process

1 Bare Chassis Inspection Process

The following table describes the process for performing the bare chassis inspection using the kiosk.

Step	Action
1	Start at rear of the unit: (after vehicle is stopped, engine turned off, and the driver meets the inspector at the rear). Record 'C' for chassis, initial & number, and chassis length (20', 40', 45', 48', 53'; input longest length if it slides)
2	Perform rear chassis component inspection: • Inspect rear bolster, Twist Lock pins are present and useable • Tail light assembly, marker lights • DOT bumper • Mud flaps and mud flap brackets • Inspect chassis cross braces from rear center • Inspect frame for alignment
3	Inspect right side rear to right side front of chassis: • Wheel assembly (wheels, and cap condition) • Main frame rail • Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft)
4	Inspect front bolster of chassis: • Twist lock present and useable • Marker lights • Glad Hands
5	Inspect left side front to left side rear of chassis: • Wheel assembly (wheels, and cap condition) • Main frame rail • Landing gear inspection (legs, cross/leg braces, sand-shoes, and crankshaft)
6	Rear of chassis: Verify chassis ownership by stencil markings on chassis
7	Record any damages found during inspection.
8	Clerk answers question: Is unit safe for rail movement?

If ...	Then ...
The answer is **Yes**……	Continue to Step 9.
The answer is **No**…	Go to Step 10.

9	J1 Prints with Driver and Transaction specific information.
10	**Error J1** Prints with Driver and Transaction specific information, driver is rejected; see checkpoint inspector for help resolving issues.

C-6.5 OG Process

1 OG Process

The following table describes the OG process using the kiosk.

Step	Action
1	Enter Commercial Driver's License Number (including letters), then press the Enter key. **Note**: ABF & Yellow Roadway Drivers use Employee Numbers instead of Driver's License Numbers.
2	Enter PIN number (four digit), and then press Enter. **Note**: ABF & Yellow Roadway Drivers use Employee Numbers instead of Driver's License Numbers.
3	SCAC code is Presented (if DL# is registered), and then press Enter.
4	Enter unit initial and number, and then press Enter. **Note**: Units without Initials use ABF-ABFZ, Dart-DRTZ, Schneider-SNLZ (ignore the TA), UPS (with no initials on trailer)-NONZ, U.S. Express-USXZ, and Yellow Roadway-RDWY.
5	Enter chassis initial and number, and then press **Enter**.
6	Enter Seal number, and then press **Enter**.
7	Enter Tractor number, and then press **Enter**.
8	Enter Release number, and then press **Enter**.
9	Driver is prompted: Do you have damage to report? • Press **Yes** to report damage • Press No to not record damage. **Note**: Report damage **ONLY** at the driver's request
10	Press **F5** to send. **If ...** / **Then ...** If errors…… / Continue to Step 11. If no errors… / Go to Step 12.
11	**J1** prints with information specific to driver's visit
12	**Error J1** prints with Driver's information. Driver must not be allowed to exit the facility with the unit, see Checkpoint Supervisor for help resolving issues

Equipment/Maintenance

E-1 Loading

Contents

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E-1.1 Introduction

1 Loading Factors

Several factors dictate how trailers and containers are loaded to railcars: weight, trailer/container and railcar characteristics, freight considerations, government regulation, and infrastructure limitations such as tunnel or bridge clearances. To optimize these factors, a variety of intermodal railcars were designed to handle a mix of trailers, containers, or a combination thereof. This guide provides general information useful in understanding railcar loading as well as the BNSF intermodal loading policy which must be adhered to when loading all BNSF intermodal trains. (Other rules may apply when loading trains or railcars for other rail carriers.)

2 Contents

Many of the railcar loading rules contained within consider nose-mounted refrigeration units (reefers) because the additional length of the refrigeration unit must be added to the trailer's length to accurately determine the proper loading length requirement. Kingpin locations (expressed in inches from the head end of the unit) must also be considered. Having a general understanding of railcar hitches (or stanchions) will also assist in understanding loading requirements and is discussed briefly.

Additionally, certain loading conditions restrict train operating speed. Although you may be able to load a railcar in compliance with the intermodal loading policy, it still has to comply with the BNSF operating rules to be able to operate at maximum authorized speed. A quick summary of loading requirements by car classification for maximum train speed has been included. There is also general information provided regarding train make-up rules.

Other sections detail loading rules for J. B. Hunt equipment, special equipment types such as tank containers and flatracks, and hazardous shipments.

3 Other Sources

While this manual covers the main rules and guidelines affecting loading, other sources must be consulted to determine other restrictions which may apply in specific circumstances (i.e., embargoed equipment by location or carrier, General Orders issued by Operating Department personnel, Federal regulations regarding hazardous materials, to name a few).

E-1.2 Definitions and General Information

1 Intermodal Car Kinds and Codes – 1st Position

BNSF car kind codes are a combination of three letters and/or numbers to identify and group cars with similar characteristics. These differ from AAR car kind designations but provide the same type of information.

The first character indicates the type of equipment (i.e., H for hopper or T for tank). Intermodal cars are designated by a first character of either P or Q. Discussion in this guide is limited to car kinds beginning with either of these two letters.

Generally speaking, intermodal cars are described in one of three ways: (1) conventional, (2) drawbar-connected, and (3) articulated.

Conventional cars are single platform cars that have their own wheels or wheel sets (trucks). All car kind codes beginning with a P indicate a conventional railcar, as do some car kind codes beginning with a Q (single-well double stacks, for example).



Drawbar-connected cars are two or more railcar segments or platforms connected by a drawbar. Each railcar segment or platform has its own set of trucks. All drawbar-connected car kind codes begin with a Q.



Articulated cars are created by uniting three or more railcar segments or platforms, with adjacent segments or platforms sharing common trucks. All articulated car kind codes begin with a Q.



2 Intermodal Car Kinds and Codes – 2nd Position

Within these three classifications, the second character of the car kind code further defines the type of car and its capabilities, such as whether the car is all-purpose (usable for either containers, containers with chassis, or trailers), double stack, single platform, two-well, etc.

Continued on next page

E-1.2 Definitions and General Information, Continued

3 Intermodal Car Kinds and Codes – 3rd Position

The third character of an intermodal car kind indicates the type of units the railcar can hold, such as trailers between a certain length range.

4 Intermodal Car Kinds and Codes – Example

For instance, car kind **PAN** means: (**P**) intermodal non-articulated single or double length railcar, (**A**) can carry trailers or containers with 8'6" tandem, (**N**) 2 - 45' long units without nose-mount reefer or various combinations of 20' and 40' units. TTWX cars are an example of car kind PAN. A summary of meanings for each digit comprising a car kind code is provided in the Appendix.

5 Intermodal Car Kinds and Codes in TSS

In TSS, the CARKIND command presents the same information in a slightly different format, whereas the OBS command provides equipment loading options associated with a specific railcar initial and number. OBS is also available for browsing while assigning units to railcars by selecting the PF4 key in any of the RAMP programs. (In fact, various edits in the RAMP programs prohibit assignment of units to a railcar which do not meet its loading characteristics.)

This information is also provided when outbound load list command LLIST is used, again associated with a particular car initial/number and not directly tied to the three-digit car kind code. Both OBS and LLIST indicate various loading restrictions specific to location, customer, or carrier which may or may not be covered within this manual.

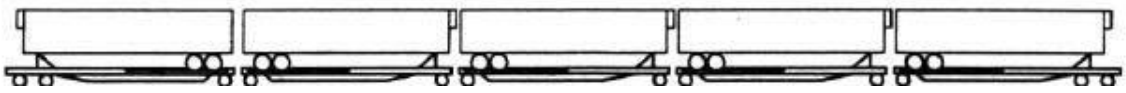
Alternatively, car specifications are written on the side of the railcar. If any discrepancies exist, the specifications written on the side of the car take precedence over any other written instructions, including those in OBS.

6 Railcar Positions

Throughout the manual, reference will be made to railcar platform and well positions. These are defined as follows:

Platform Position

- A: Platform at opposite end of car from brake end
- B: Platform at brake end of car
- C: First platform from position B
- D: Second platform from position B
- E: Third platform from position B



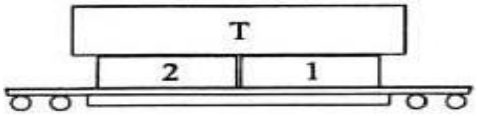
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E-1.2 Definitions and General Information, Continued

Railcar Positions (continued)

Well Position

- T: Top position of the well
- 1: First position from brake end in the well compartment
- 2: Second position from brake end in the well compartment



E-1.3 Car Count

1 Car Count

Car count is a measure used by the Operating Department to determine tons per operative brake (TOB), train make-up rules, and train placement restrictions for cars containing hazardous materials. (The latter also directly impacts railcar loading by intermodal hub personnel.) It is calculated using the number of platforms or wells comprising a given intermodal car.

Conventional cars are counted as one car regardless of the number of trailers and/or containers it can carry.

2 Wells and Platforms of Drawbar-Connected Car Counts

Each well or platform of a drawbar-connected car counts as one car. For example, a four-well double stack, drawbar-connected car equals a car count of four; the two-platform, drawbar-connected RTTX car counts as two cars, despite the number of trailers and/or containers it can carry.

3 Articulated Car Counts

Articulated car counts are calculated the same way only when determining train placement for hazardous shipments: a five-unit articulated car is considered as five cars. Otherwise, articulated cars are counted differently for train make-up and TOB considerations due to their shorter overall platform length.

Articulated car counts for these purposes are determined by: counting the number of platforms, dividing by 2, and rounding up. For example, a 5-unit articulated car equates to a car count of 3 (5 divided by 2 equals 2.5, rounded up to equal 3).

E-1.4 Securement of Trailers and Containers to the Railcar

1 Hitches

Hitches (or stanchions) are used to support and secure trailers or containers-with-chassis to a railcar by engaging the kingpin into a locking mechanism. Hitches are either retractable or non-retractable and further described as either cushioned (with a shock absorbing device) or non-cushioned.

Non-retractable, or fixed, hitches are in fixed upright position and can NOT be lowered.

2 Retractable Hitches

A retractable hitch can be knocked down (lowered) so the platform can alternatively be used for loading a container without chassis or, in the case of intermediate hitches, to allow for longer units to be loaded. (Hitches positioned other than on the coupler ends of the railcar are called intermediate hitches.) Railcars with trailer and container capability are classified as All-Purpose.

3 Clearance Required Between Adjacent Trailers

The gap or clearance required between adjacent trailers on the same railcar is determined by whether a hitch is cushioned or non-cushioned. Non-cushioned hitches (those with no shock absorbing device) are used on cars with end-of-car cushioning; less clearance is required between trailers on railcars with these type hitches. Cushioned hitches allow for some longitudinal travel of the trailer as the diagonal strut compresses and absorbs movement and shock and require greater clearance between units.

4 Containers Transported without Chassis

When containers are transported without chassis, a variety of devices are used to secure them to the railcar. These devices are twist locks, both retractable and non-retractable pedestals with latches, and restraint curbs.

5 Pre-loading Inspections

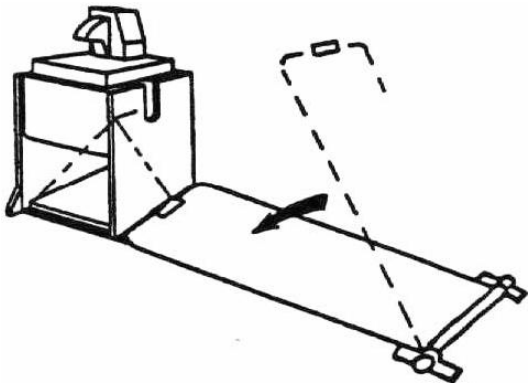
NOTE: When one or more securement devices on a car are inoperative, damaged, or missing, the car must either be removed from service until repair is made or a BNSF-approved positive visual identifier (PVI) must be applied to the defective securement device. On all-purpose cars, this allows alternative loading at that position (i.e., COFC loading over a defective hitch), provided the PVI does not prevent proper loading and securement of a unit to the alternative securement device.

Continued on next page

E-1.4 Securement of Trailers and Containers to the Railcar, Continued

Pre-loading Inspections (continued)

In the case of TTAX cars equipped with collapsible pedestals (shown below), the car must be bad ordered if the plate cover is missing due to the hazard caused by the deck cutout.



Pre-loading inspections identify, in advance, defective or malfunctioning securement devices, which may also become apparent during loading itself. For instance, while performing TOFC loading to a railcar with automatic-locking hitches, lift equipment operators must ensure the kingpin is engaged and locked in the hitch jaw mechanism by **reversing** the motion of the lift equipment to see if the unit is secured in place or pulls out of the hitch. This not only assures proper positioning/securement on the operator's part but could also identify a hitch, which is not functioning properly. In cold-weather months, pre-loading inspections should include an examination of hitches, locks, and double stack wells for snow/ice build-up which could prevent proper seating or locking. Snow and ice buildup must be removed before loading if it prevents proper securement.

6 Post-loading/ Departure Inspection

A post loading/pre-departure inspection of all units (trailers and containers) provides another check that all units are properly seated and locked into position and must be completed before release.

7 Additional Information

Additional information on trailer and container securement is available in:

- AAR Intermodal Trailer and Container Securement Manual (1995)
- Section F of the TTX Company Equipment Guide
- AAR Intermodal Trailer and Container Loading Guide (http://www.aarpublications.com/~/media/AARPublications/FreePubs/AAR%20Loading%20Capabilities%20Guide.ashx)

E-1.5 General Rules Applicable to All Loading

1 Load Limits

Load limits for car or individual platforms/wells must not be exceeded.

Stenciled load restrictions take precedence over all other written load limitations, including those shown in computer systems.

Overweight trailers or containers must not be loaded but instead held at origin for shipper pickup and correction.

2 Securement Devices

All trailer and container securement devices must be in proper working order for use and be locked after loading a unit. If a car is found to have any part of its trailer or container securement devices inoperative, damaged, or missing, the car must either be removed from service until repair is made or if the car must be loaded, the inoperative position must be left unused consistent with partial loading rules and an email sent to the destination hub informing of the condition. However, a TTAX car missing a pedestal plate cover must be bad ordered.

NOTE: When deciding whether to partially load a car, bear in mind that certain cars require at least one unit loaded to each platform to avoid a train speed restrictions.

All chains, binders, straps, tarps, or other load securement apparatus or lading protective products must be secured and not allowed to fall off or drag from the trailer, container, or chassis.

3 Cold Weather Inspections

In cold-weather months, pre-loading and/or loading inspections must include examination of securement devices and double stack wells for snow/ice build-up which could prevent proper seating or locking.

If present, snow and ice must be removed before loading if it prevents proper securement. Examining for snow/ice build-up should be done without exception since cars may have arrived from locations where snow or ice was encountered.

4 Debris

Debris must be removed from wells and deck surfaces.

5 Chains

Chains must **NEVER** be used in conjunction with raising retractable hitches due to risk of injury and damage if they break.

6 Trailer or Chassis Landing Gear

Trailer or chassis landing gear must clear the railcar deck and other fixed obstructions at all times by not less than two inches to prevent damage.

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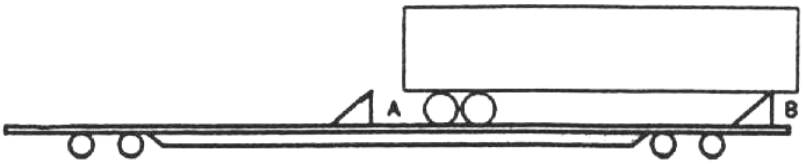
E-1.6 Conventional Car Loading Rules

1 Overview

These rules are specific to conventional single-level railcar loading. Refer to the Double Stack Loading Rules section when loading conventional single-well double stack cars and throughout section E-1 for other rules which may apply.

2 Single Car with Two Hitches

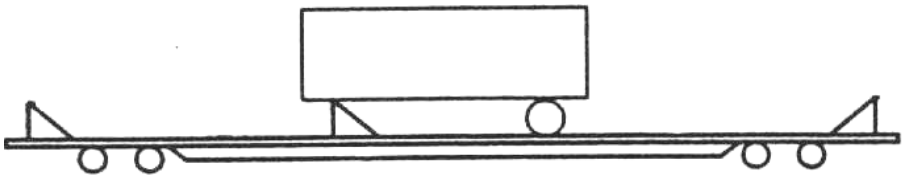
When loading only one TOFC unit on a single car equipped with two hitches, it MUST be loaded on an end hitch to ensure that trailer wheels will be located near the center (inboard) of the car.



(When both hitches are on the ends of the railcar, either hitch may be selected although it is preferable that the hitch facing the direction of travel be chosen.)

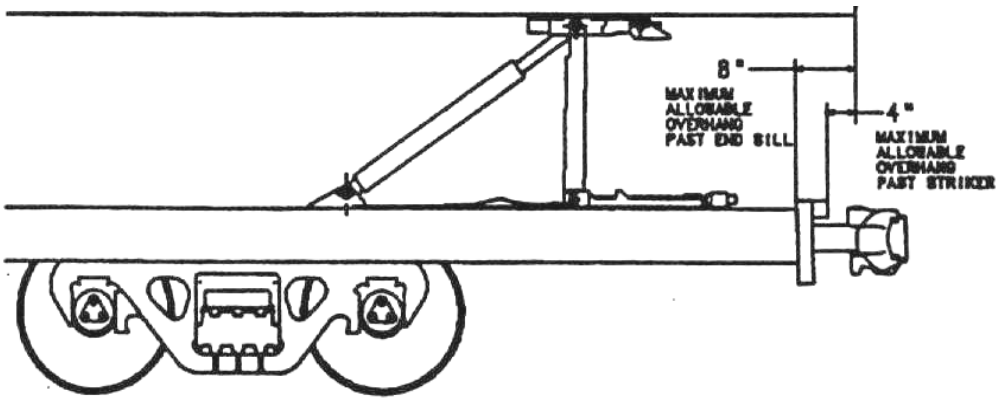
3 More Than Two Hitches

For cars equipped with more than two hitches, a single TOFC unit MAY be loaded on an intermediate hitch PROVIDED the trailer wheels are inboard of the railcar truck centers.



4 Clearance Requirements

Units must NOT overhang the railcar more than 4" beyond the striker or more than 8" beyond the end sill, as measured to the frontmost extension of the unit.



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E-1.6 Conventional Car Loading Rules, Continued

Clearance Requirements (continued)

A minimum gap of 8" MUST exist between adjacent TOFC units loaded on the same railcar if the railcar is equipped with cushioned hitches. This gap (as measured from the shortest distance between the ends of each unit or any object protruding from each unit) can be reduced to 4" for cars equipped with non-cushioned hitches.

5 Trailer or Chassis Wheels

Trailer or chassis wheels must always be fully resting on the platform.

6 Impact By Car Type of TOFC Core Rules on Nose-Mounted Reefers (NMRs) and TOFC Units With Greater Than 36" Kingpin

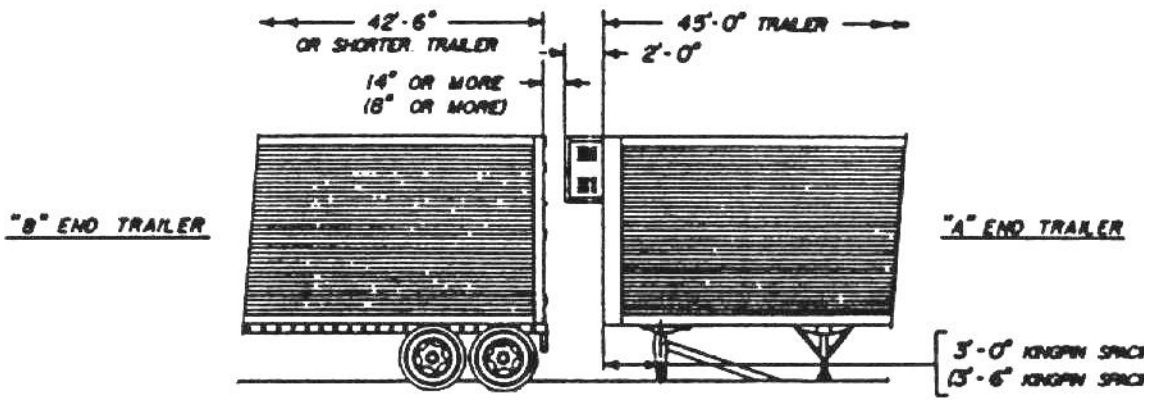
The clearances stipulated above in the core TOFC rules may not be achievable when loading either nose-mounted reefers (due to protrusion of the refrigeration unit) or TOFC units with a kingpin location greater than 36", as measured from the frontmost extension of the unit to the center of the kingpin:

- **KTTX railcars must NOT be used for these units**, due to overhang considerations outlined in E-1.6, section 4.
- RTTX railcars MIDDLE HITCH ONLY can be used for these units, PROVIDED the tandems are inboard of truck centers, due to overhang considerations outlined in E-1.6, section 4.
- STTX, TTWX, and WTTX railcars 'A' HITCH ONLY can be used for these units, PROVIDED the unit does not exceed 45' in length AND PROVIDED the 'B' hitch is loaded with a 42'6" or smaller TOFC unit without NMR and with a 36" kingpin location. These units are prohibited on the 'B' hitch due to overhang considerations outlined in E-1.6, section 4.
  However, before loading these units on the 'A' hitch, the 'B' hitch MUST be occupied since single loading on 'A' would violate E-1.6, section 2. Length of 'B' unit is restricted by clearance requirements in E-1.6, section 4.

Continued on next page

E-1.6 Conventional Car Loading Rules, Continued

Impact By Car Type of TOFC Core Rules on Nose-Mounted Reefers (NMRs) and TOFC Units With Greater Than 36" Kingpin (continued)



- 85-Foot TTX railcars:
- 'A' HITCH ONLY can be used for these units, PROVIDED it does not exceed 40' in length AND PROVIDED the 'B' hitch is loaded with a 28' or smaller TOFC unit without NMR.
- These units are prohibited on the 'B' hitch due to overhang considerations outlined in E-1.6, section 4. However, before loading these units on the 'A' hitch, the 'B' hitch MUST be occupied since single loading on 'A' would violate E-1.6, section 2. Length of 'B' unit is restricted by clearance requirements in E-1.6, section 4.

- 89-Foot TTX railcars:
- Both hitches can accommodate these units, PROVIDED both are 40' or shorter in length.

- or -

- 'B' HITCH ONLY can be used for these units, PROVIDED the unit does not exceed 45' in length, due to clearance requirements stipulated in E-1.6, section 4.

- or -

- Can load one 48-foot or longer container on chassis on the 'B' hitch if the 'A' hitch is retractable and empty.

7 Intermixing

Intermixing empty and loaded containers does not carry any restrictions.

8 Single Container Loading on Single Level Cars

When loading a single container, it must be placed in or as near to the center of the car as possible considering placement of fixed container securement devices.

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E-1.6 Conventional Car Loading Rules, Continued

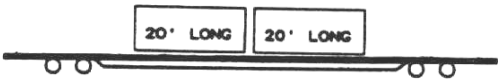
9 Multiple Container Loading on Single Level Cars

When loading two or three containers, ensure both end positions are occupied before loading middle positions.

EXCEPTION: Two 20-foot containers on a railcar capable of handling four 20's can alternatively be loaded in both center positions.



or



10 Denver – Empty Containers

Empty containers in and out of Denver are prohibited from moving on conventional cars.

11 Tank Container Loading on Conventional Single Level Cars

Refer to E-1.10 Intermodal Tank Container Loading Rules for overall loading restrictions governing tank containers.

For hazardous or non-hazardous tank containers moving COFC on conventional single-level cars, only those cars equipped with end-of-car cushioning and offering "positive lock securement" through the use of pedestal hooks or twist locks may be used.

12 Flatrack Loading on Conventional Single-Level Cars

Refer to E-1.12 High/Wide, and Flatrack Loading Rules for overall loading restrictions governing these shipments.

Flatracks carrying coiled metal MUST be loaded on conventional cars (or on single-level drawbar-connected cars, which are discussed in the next section). It is preferred that all other flatracks move on conventional cars (or on single-level drawbar-connected, which are discussed in the next section), but they should not be held if conventional equipment is not available.

With the exception of BNOZ 300001, BNOZ flatracks modified as hitch/pedestal securement training modules cannot be placed on conventional single-level cars due to their 102" width.

E-1.7 Drawbar Connected Loading Rules

1 Rule Applicability

These rules are specific to single-level, drawbar-connected railcars. Refer to the Double Stack Loading Rules section for 2- to 4-well, drawbar-connected double stack cars and throughout section E-1 for other rules which may apply.

2 Clearance Requirements

Units can NOT overhang the coupler ends of the railcar more than 4" beyond the striker or more than 8" beyond the end sill.

A minimum gap of 8" MUST exist between adjacent TOFC units loaded on the same railcar (whether or not separated by the drawbar) if the railcar is equipped with cushioned hitches. This gap (as measured from the shortest distance between the ends of each unit or any object protruding from each unit) can be reduced to 4" for cars equipped with non-cushioned hitches.

3 TOFC Units on Intermediate Hitch of TTEX Cars

TOFC units loaded on the intermediate hitch of TTEX cars must have their landing gear (dolly legs) raised higher than the side sills to avoid damage to the unit or the car when negotiating curves.

4 Partial Loading Sequence

NOTE: Each platform of a drawbar-connected car must have at least one unit loaded to allow train operation at maximum authorized speed; otherwise, train speed is restricted.

Load end platforms first; thereafter, load so that no two adjacent platforms are empty.

This is NOT a restriction to movement; it is only the preferred sequence for partial loading. Every effort must be made to fully and properly utilize each railcar, and every effort must be made to comply with this preferred sequence when unable to completely fill the car. But, a car can operate with just one platform loaded, two adjacent empty platforms, and/or an empty end platform. In the event only one platform will be loaded, it should be the platform over the leading truck based on direction of train movement.

As clarification on TTEX cars operating in 3-hitch configuration, loading over the drawbar on the intermediate hitch is NOT considered as loading an end platform. Load BOTH end hitches first before loading over the drawbar. Single loads over the drawbar are NOT permitted.

When loading a TTEX car in 4-hitch configuration or when loading only one hitch position on a platform of a drawbar-connected RTTX car, observe Rules 2.1 and 2.2 (under Conventional) for loading restrictions to be observed on each platform.

5 Denver Empty Containers

Empty containers in and out of Denver are prohibited from moving on single-level, drawbar-connected cars.

Continued on next page

E-1.7 Drawbar Connected Loading Rules, Continued

6 Impact By Car Type of Clearance on Nose-Mounted Reefers (NMRs) and TOFC Units With Greater Than 36" Kingpin

The clearances stipulated above in E-1.4, section 4, may not be achievable on certain railcars or in certain hitch positions of drawbar-connected cars when loading either nose-mounted reefers (due to protrusion of the refrigeration unit) or TOFC units if their kingpin location is greater than 36", as measured from the frontmost extension of the unit to the center of the kingpin:

- RTTX railcars MIDDLE HITCH ONLY can be used for these units, PROVIDED the tandems are inboard of truck centers, due to overhang considerations outlined in E-1.6, section 4. Loading one of these units prohibits use of the other hitches due to its length.
- For TTEX car series 161 in 3-hitch configuration, ONLY the hitch spanning two platforms can be used for these units, PROVIDED the unit is no less than 48' in length. For TTEX car series 161 in 4-hitch configuration, ONLY the middle hitch(es) can be used for these units, PROVIDED the length of the adjacent end unit does not exceed 42' 6".
- End hitches cannot be used for these units due to overhang considerations outlined in E-1.6, section 4.
- RTTX and TTEX railcars can be used for NMRs ONLY on the 'A' and 'B' hitches, due to clearance requirements outlined in E-1.6, section 4.
- RTTX and TTEX railcars can be used for containers on chassis with greater than 36" kingpin; however, hitch positions 'C' or 'D' can NOT be used for these units when 45-foot trailers are loaded on 'B' or 'A', respectively, due to clearance requirements outlined in E-1.6, section 4.

7 Tank Container Loading on Drawbar Connected Single Level Cars

Refer to E-1.10 Intermodal Tank Container Loading Rules for overall loading restrictions governing tank containers.

Tank containers may be loaded on slackless intermodal equipment without cushioning.

8 Flatrack Loading on Drawbar Connected Single Level Cars

Refer to E-1.12 High/Wide, and Flatrack Loading Rules for overall loading restrictions governing flatracks.

Flatracks carrying coiled metal MUST be loaded on single-level drawbar-connected cars (or on conventional cars, which were discussed in the previous section). It is preferred that all other flatracks move on single-level drawbar-connected cars (or on conventional cars, discussed previously), but they should not be held if this equipment is not available.

With the exception of BNOZ 300001, BNOZ flatracks modified as hitch/pedestal securement training modules cannot be placed on single-level drawbar-connected cars due to their 102" width.

Continued on next page

E-1.7 Drawbar Connected Loading Rules, Continued

9 Hazard-ous Shipment Placement on Drawbar-Connected Single-Level Cars

Refer to E-1.13 Hazardous Shipment Loading Rules for overall loading restrictions governing these shipments.

For purposes of determining hazardous material placement within a train, each platform of a drawbar-connected car shall be considered as one car. **By this definition, any trailer spanning two platforms of a drawbar-connected car does NOT qualify as one car.**

E-1.8 Articulated Spine Car Loading Rules

1 Overview

These rules apply to articulated spine cars. Articulated double stack cars are discussed in the Double Stack Loading Rules section. Refer to section E-1 for other rules which may apply.

2 Partial Loading Sequence

NOTE: There must be at least one unit loaded to an articulated spine car to allow train operation at maximum authorized speed; otherwise, train speed is restricted.

Load end platforms first; thereafter, load so that no two adjacent platforms are empty.

This is NOT a restriction to movement; it is only the preferred sequence for partial loading. Every effort must be made to fully and properly utilize each railcar, and every effort must be made to comply with this preferred sequence when unable to completely fill the car. But, a car can operate with just one platform loaded, with two adjacent empty platforms, and/or an empty end platform.

If only one platform will be loaded, it should be the platform over the leading truck based on direction of train movement.

3 Total Weight

Total weight of adjacent platforms must not exceed the intermediate truck capacity.

4 53-Foot TOFC Units

53-foot TOFC units may be loaded on railcars originally designed to handle maximum 48-foot TOFC units with the following restrictions:

- EXCLUDES TTAX Series 78000-78199 due to insufficient clearance between the car structure and the DOT bumper.
- Bogies MUST be in the most forward position and entirely supported by the platform. Clearance MUST exist between the DOT bumper and the car structure with bogies in this position.
- If only one 53-foot TOFC unit is to be loaded, it should be placed on the 'A' hitch to permit use of all other hitches with the greatest selection of loading options. Doing so allows all other hitches to carry up to 48' TOFC units, including nose-mounted reefers.
- A maximum of three 53-foot TOFC units can be accommodated when loaded on 'A', 'B', and 'D' platforms; however, this affects utilization of 'C' and 'E' platforms due to overhang into these adjacent platforms.
  - When three 53-foot TOFC units are loaded on the 'A', 'B', and 'D' platforms, only 40-foot containers without chassis may be loaded on 'C' and/or 'E' (if an all purpose car); otherwise, loading on 'C' and 'E' is prohibited due to insufficient clearance.

5 Underslung Components

For underslung reefers/other trailers with components slung below, there MUST be a minimum of 4" clearance between the center sill and the slung components.

Continued on next page

E-1.8 Articulated Spine Car Loading Rules, Continued

6 Non-standard TOFC Units

For non-standard TOFC units, such as the drop frame or those equipped with low profile tires, verify that proper clearance will exist (the unit and car structure will not touch) before loading the unit.

NOTE: The concern addressed by clearance rules 2.3 for conventional and 3.1 for drawbar-connected cars is resolved for articulated single-level cars by the length of the platforms and the positioning of hitches, as well as by the specific restrictions outlined above for TOFC loading.

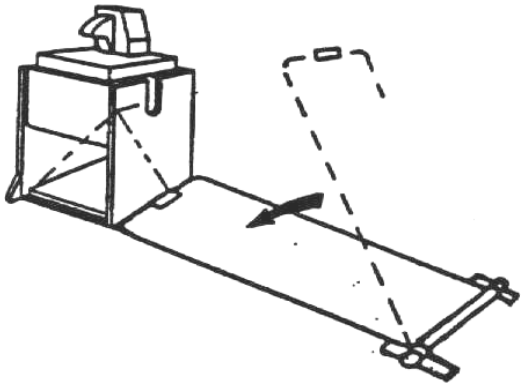
*Articulated spine cars originally designed to handle maximum 48-foot TOFC units, but capable of handling 53-foot TOFC units in accordance with the rules above include:

- TTAX car series:
  - (a) 76000-77504
  - (b) 78200-78869
  - (c) 79000-79124
  - (d) 79500-79876
  - (e) 780000-780399
- TTLX cars
- UTTX cars

7 TTAX Collapsible Pedestals

TTAX collapsible pedestals must have their plate covers against the upright pedestal when loading units COFC to ensure the pedestals do not disengage from the container floor castings.

If any plate cover is missing, the car must be bad ordered.



8 COFC Loading on 48-Foot Spine Cars

Loading 53-ft COFC units on single-level 48-ft spine cars is prohibited.

Loading any size JBHU or WTP COFC unit is prohibited on single-level articulated 48-foot Spine Car or COFC all-purpose equipment. This is due to railcar twistlocks and pedestal latches, which cannot fully engage the low profile corner castings used with these containers.

Continued on next page

E-1.8 Articulated Spine Car Loading Rules, Continued

9 Denver Empty Containers

Empty containers in and out of Denver are prohibited from moving on articulated spine cars.

10 TTRX 3-Platform Articulated Cars

When loading any 53-foot TOFC unit with low hanging ICC bumper onto either a TTRX 360 or 370 Series car, you MUST drop the rear (opposing) hitch on the same platform to avoid contact between the diagonal strut of that hitch and the bumper.

Do not load two UPS 28-foot containers-on-chassis on the same platform of a TTRX; the rubber pads on the ICC bumpers come in contact with each other, violating General Loading Rule in E-1.6, section 4.

This affects UPS pup containers stenciled UPSU or FSTU, moving TOFC.

11 10-20 Ft Containers

Loaded or empty 20-ft containers may **ONLY** move on those platforms having 20-foot container capabilities.

All 20-foot containers moving on articulated cars **MUST** be loaded in pairs. Exception to the rule: A single 20-foot Tank Container will be permitted to move on an articulated car **ONLY** if it is a **LOAD**, and if the adjacent platform is loaded with a **LOADED** container or trailer. If these conditions are not met, all 20-foot tank containers **MUST** be loaded in pairs.

12 Tank Container Loading

Refer to E-1.10 Intermodal Tank Container Loading Rules for overall loading restrictions governing tank containers.

Tank containers may be loaded on multi-unit spine cars without cushioning.

13 Flatrack Loading

Refer to E-1.12 High/Wide, and Flatrack Loading Rules for overall loading restrictions governing these shipments.

Flatracks which are not carrying coiled metal may be loaded on articulated single-level cars, although these cars are not the first preference for flatrack loading.

Because of their 102" width, BNOZ flatracks modified as hitch/pedestal securement training modules (excluding BNOZ 300001) must utilize articulated single-level cars (or well cars, which are discussed in the next section).

14 Hazardous Shipment Placement

Refer to E-1.13 Hazardous Shipment Loading Rules for overall loading restrictions governing these shipments.

For purposes of determining hazardous material shipment placement within a train, each platform of an articulated car is considered as one car.

E-1.9 Double Stack Loading Rules

1 Partial Loading Sequence

NOTE: Each well of a drawbar-connected double stack car must have at least one unit loaded to allow train operation at maximum authorized speed; otherwise, train speed is restricted. There are no resulting speed restrictions from any loading configuration, including empty, on articulated double stack cars (QVQ 3-wells and all 5-wells).

Load end wells first; thereafter, load so that no two adjacent wells are empty.

This is NOT a restriction to movement; it is only the preferred sequence for partial loading. Every effort must be made to fully utilize each railcar, and every effort must be made to comply with this preferred sequence when unable to completely fill the car. But, the car can operate with just one well loaded (preferably over the leading truck based on direction of train movement), with two adjacent empty wells, and/or with empty end wells (i.e., when the only cars available for loading are double stack cars with end wells restricted to 20' and 40' units while units to be loaded are 45' and 48' long).

There is no requirement that ALL bottom well positions be occupied in order to stack containers in a well.

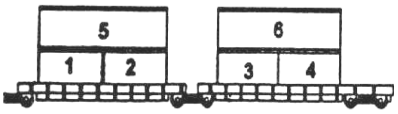
2 Weight Restrictions

The combined weight of adjacent wells must NOT exceed the intermediate truck capacity. To prevent exceeding the intermediate truck capacity when loading 20-ft containers (which have the greatest potential to exceed intermediate truck capacity without exceeding the individual well weight limit), the following calculation MUST be performed for the proposed loading configuration:

Step	Action
1	CALCULATE WEIGHT ON INTERMEDIATE TRUCK: Y = UNIT 2 WT + UNIT 3 WT + (UNIT 5 WT ÷ 2) + (UNIT 6 WT ÷ 2)
2	COMPARE Y TO THE INTERMEDIATE TRUCK CAPACITY For purposes of this calculation: if intermediate truck capacity is unknown, assume it to be equal to well capacity.

For example:

Unit 1 = 20,000 lbs Unit 2 = 40,000 lbs Intermediate Truck Cap = 120,000 lbs
Unit 3 = 40,000 lbs Unit 4 = 20,000 lbs
Unit 5 = 50,000 lbs Unit 6 = 50,000 lbs



Y = 40,000 lbs + 40,000 lbs + (50,000 ÷ 2) + (50,000 ÷ 2)
Y = 40,000 lbs + 40,000 lbs + 25,000 lbs + 25,000 lbs
Y = 130,000 lbs

'Y' exceeds the intermediate truck capacity of 120,000 lbs, so this loading configuration is NOT allowable. Swapping the loading location of Unit 1 with Unit 2 results in a new value for 'Y' of 110,000 lbs. This would be an acceptable loading configuration in terms of intermediate truck capacity.

Continued on next page

E-1.9 Double Stack Loading Rules, Continued

3 53-foot TOFC Units

53-foot TOFC units must be loaded so that the TOFC tandems are toward the center of the car over the drawbar or articulated connection rather than the coupling connecting two cars.

4 Container Width Restrictions

There are no restrictions to stacking a 102" wide container on top of a 96" wide container.

A 96" wide container may be placed in a 102" wide well PROVIDED that container width guides (wings) are properly positioned to effectively reduce the width of the well to 96".

5 Interbox Connectors (IBCs):

Conditions for Use:

- IBCs MUST be in proper working order.
- IBCs MUST be locked prior to releasing for outbound movement.
- Manual IBCs MUST be left-locking.

Placement:

- IBCs MUST be placed for 20 – 28 foot containers at all 20-foot stacking post positions of any unit being stacked on, and for 40 – 53 foot containers at all 40-foot stacking post positions of any unit being stacked on.
- IBCs must NEVER be placed on a bottom container unless a container will be loaded on top of it.

Storage:

- IBCs must NOT be left on the car platform; they must be placed in the steel boxes provided on each car.

6 20 Foot Containers

20-foot containers can ONLY be placed in well cars having 20-foot container capability regardless of whether the container is loaded or empty.

20-foot containers can NOT be stacked on top of any container because four-point securement cannot be achieved with containers larger than 20 feet.

7 28-Foot UPS Containers

28-foot UPS containers are to be loaded only in DTTX series 560 cars (56-foot well cars).

28-foot UPS containers must be loaded in pairs with their doors facing inward toward each other at the center of the well. The IBCs must be placed at all 20-foot stacking post positions of any unit being stacked on.

Continued on next page

E-1.9 Double Stack Loading Rules, Continued

8 Loaded Reefer Moving Under Protected Service

Loaded reefer container moving under protected service MUST NOT be loaded in the bottom well of double-stack cars.

9 Reefer Rules

PURPOSE: Establish proper handling of refrigerated trailers and containers to prevent damages

STATEMENT:

Ramp / Deramp and Spotting processes for Nose mount refrigerated trailers and containers:

Nose mount reefer trailers and containers are more susceptible to accidental contact during hostling and ramp deramp operations because of the extension of the refrigerated unit at the front of the trailer or container. This extension results in less clearance to adjacent units at the front of the nose mount reefer. Some of the refrigeration units can extend up to 18 inches forward of the front wall of the trailer or container body. Repairs to mechanical refrigerated units are very expensive. For these reasons, special processes must be followed to minimize the potential for damages to reefer units.

Hostling and ramping reefer trailers to railcars:

Whenever possible, nose mount reefer trailers should be loaded on TTRX cars or to the end platforms of TTAX articulated railcars, as these platforms provide the most clearance space for damage free handling of reefer units. Interior platforms of TTAX cars should be avoided whenever possible. However; if interior platforms are utilized, reefer trailers should be loaded in following order: E platform first, D platform second, C platform third, and B platform last. Hostler drivers must also be aware of the location of reefer trailers trackside, and avoid contacting the reefer units while backing trailers in front of reefer trailers.

Deramping Reefer trailers on Interior platforms of TTAX cars:

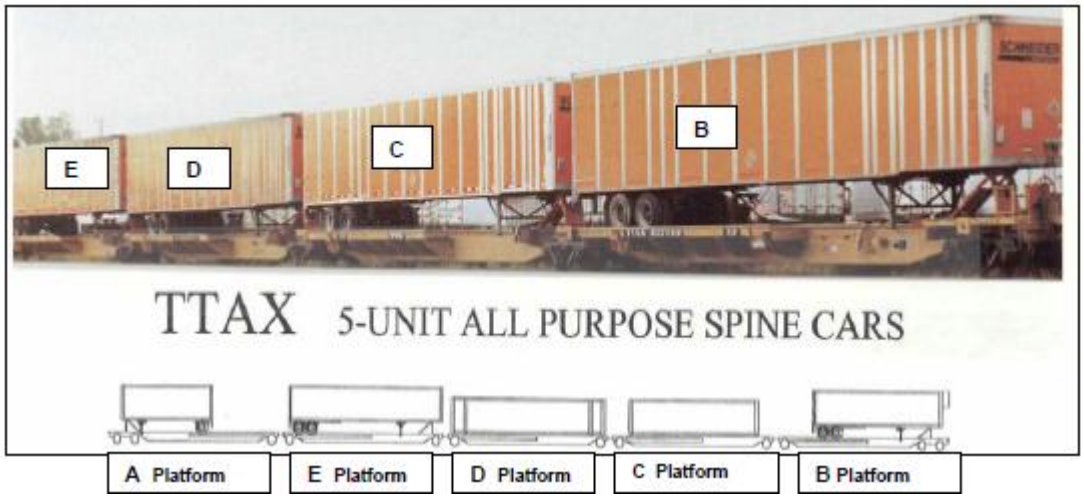
Nose mount reefers loaded on interior platforms of TTAX articulated railcars can often be in very close clearance to rear end of trailers on adjacent platforms. Consequently, there can be inadvertent contact of the reefer unit to the adjacent trailer as the reefer trailer releases from the automatic hitch lock. Therefore; the unit in front of a nose mount reefer must be deramped before the reefer trailer to allow clearance to safely remove the reefer trailer from the hitch.

When deramping multiple nose mount reefers on TTAX five platform articulated cars, the B end platform should be deramped first, the C platform second, the D platform third, and the E platform last. Trailers on the A end platform can be deramped whenever it is convenient as this position does not affect damages to nose mount reeders. (See diagram and photo below.)

Continued on next page

E-1.9 Double Stack Loading Rules, Continued

Reefer Rules (continued)



Containers with Nose-mount reefers:

All rules which apply to trailers will also apply to containers with nose-mounted reefers moving as TOFC (Containers on chassis).

Additionally, containers moving COFC with nose mount reefer units should not be loaded in the bottom position of well cars. This rule will prevent reefer units contacting the front walls of bottom wells and other obstacles such as walkways on Double stack railcars. Nose-mount reefer containers can be loaded in top position of double stack cars provided there is sufficient clearance between the reefer unit and containers in top position of adjacent well. This required clearance is a minimum of 24 inches.

Exception: 20 foot containers with nose-mount reefers obviously cannot be loaded in the top position of Double-Stack railcars, and it is unlikely that these units will safely fit into bottom well positions of 40 foot double-stack railcars. Therefore; all 20 ft. containers with nose mount reefers must be loaded in 48 or 53 foot well cars or moved as TOFC unit res.

10 Mix of ISO and Domestic Containers

It is recommended that when loading a mix of ISO and domestic containers in a double stack car that the ISO container be loaded in the bottom position with the domestic container on top.

This is not a restriction to movement, but only a recommended practice to avoid contributing to domestic container corner casting failures.

Continued on next page

E-1.9 Double Stack Loading Rules, Continued

11 Two-hole Floor Casting Containers

Any container with two-hole floor castings **can be stacked on top** of any other container EXCEPT on top of 53-foot J.B. Hunt (series JBHU 200000 to 215226, Pin Lift Orange castings) containers, which **must always be in the top position** (SEE RULES 9.2.3.1 and 9.2.3.2).

Examples of two-hole floor casting containers, which may be stacked on top of any other container, are:

- containers stenciled with HUNU, EMHU, NSXU,
- containers with 'WTP' stenciled next to the lift casting (Blue castings), and
- J.B. Hunt 48-foot containers and 53-foot JBHU (series JBHU 215500 to 221499, Blue castings)

Containers with two-hole floor castings can be stacked below any other two-hole floor casting container. EXCEPT for (JBHU 200000 to 215226, Pin Lift Orange castings) which must always be in the top position (SEE RULES 9.2.3.1 and 9.2.3.2

12 Double Stack Cars with 53-Foot Well Capability

53-foot containers with nose-mounted refrigeration and heater units may be loaded in the **top position** of 53-foot double stack well cars except for the following four prototype cars:

- DTTX 110088
- DTTX 110092
- DTTX 110094
- DDTX 110098

13 Double Stack 40-foot Well Car Top Position-Loading Restriction

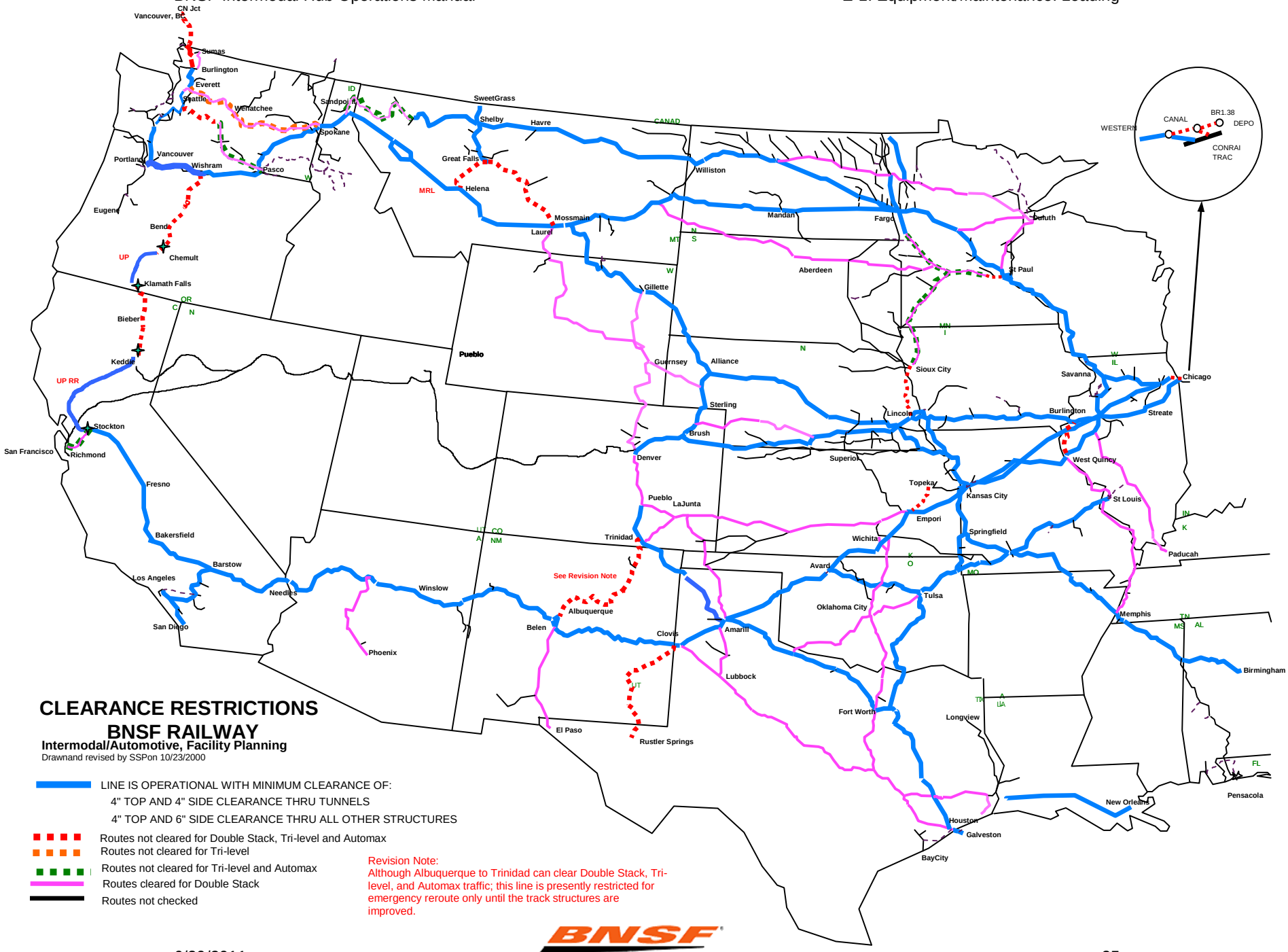
For Double stack 40- foot well car top position- loading restrictions please refer to the AAR loading manual at the following link: http://www.aarpublications.com

14 Double Stack Clearance Restrictions

Cars carrying double stacked units may only operate on routes depicted in the attached map as cleared for double stacked units (map updated 10/23/00). Any exceptions to operate double stack on other lines MUST be approved by the Network Operations Center (NOC).

Trains to be operated over detour routes must receive permission to do so by IBU Operations to ensure maximum permissible clearance limits are not exceeded.

Trains or railcars which will be interchanged to another carrier must be built observing any double stack clearance restrictions which will be confronted on their lines.



CLEARANCE RESTRICTIONS
BNSF RAILWAY

Intermodal/Automotive, Facility Planning

Drawnand revised by SSPon 10/23/2000

LINE IS OPERATIONAL WITH MINIMUM CLEARANCE OF:
4" TOP AND 4" SIDE CLEARANCE THRU TUNNELS
4" TOP AND 6" SIDE CLEARANCE THRU ALL OTHER STRUCTURES

Routes not cleared for Double Stack, Tri-level and Automax
Routes not cleared for Tri-level
Routes not cleared for Tri-level and Automax
Routes cleared for Double Stack
Routes not checked

Revision Note:
Although Albuquerque to Trinidad can clear Double Stack, Tri-level, and Automax traffic; this line is presently restricted for emergency reroute only until the track structures are improved.

E-1.9 Double Stack Loading Rules, Continued

15 Impact of Double Stack Clearance Restrictions

Double stack loading is NOT approved between/via:

- Albuquerque, NM to Trinidad, CO
- Denver, CO and Salt Lake City, UT
- Great Falls, MT and Helena, MT
- Stampede Pass
- Wishram, WA and Bend, OR
- Chicago, IL Canal Street and Depot
- Dockside via Chicago*

* (However, NS can handle interchange of 20' 2" high double stacks from their Ashland Avenue facility via the Western Avenue connection only.)

The following routes are restricted to less than 20' 2" ATR (above top of rail) and are generally NOT approved for double stack loading; however, they may be utilized for rerouting traffic for certain unit combinations when needed, but first must be approved by the NOC and IBU Operations as stated in rule 5.13.

- Vancouver, B.C. and Burlington, WA 19' 3" ATR
- Bieber, CA and Keddie, CA 19' 5" ATR
- Sioux City, IA and Ashland, NE 19' 4" ATR
- Burlington, IA and West Quincy, MO 18' 10" ATR
- Emporia, KS and Topeka, KS 19' 0" ATR
- Clovis, NM and Rustler Springs, TX 18' 8" ATR
- Great Falls, MT and Mossmain, MT 18' 8" ATR
- St. Paul, MN and Terry, MT** 19’ 4" ATR

** (Route includes Lyndale Jct to Minneapolis Jct.)

16 Clarification of Double Stack Restrictions

Traffic between St. Paul, MN, and Terry, MT, which includes the Lyndale Jct to Minneapolis Jct segment, cannot accommodate double stack containers due to height restrictions on several bridges. This restriction predominately affects Billings traffic when utilizing the St. Paul, MN, to Terry, MT, route.

Containers moving to and from Shelby, MT, cannot be double stacked when traveling the Great Falls, MT, to Mossmain, MT, route due to restriction noted above.

Traffic between Albuquerque, NM, and Trinidad, CO, cannot accommodate double stacks due to the Lamy, NM, and Las Vegas, NM, route which can clear 20’ 2" double stacks but is not structurally capable of carrying double stack traffic.

Traffic moving between the PNW and Northern California on the Wishram to Bend route is restricted to single-stacking only due to the restriction noted above.

Continued on next page

E-1.9 Double Stack Loading Rules, Continued

17 Tank Container Loading on Double Stack Cars

Refer to E-1.10 Intermodal Tank Container Loading Rules for overall loading restrictions governing tank containers.

18 Flatrack Loading on Double Stack Cars

Refer to E-1.12 High/Wide, and Flatrack Loading Rules for overall restrictions governing these shipments.

Flatracks which are not carrying coiled metal may be loaded in double stack cars, although these cars are not the first preference for flatrack loading. Double stack cars may not be usable if the flatrack is carrying an over-dimensional load.

Loaded flatracks in double stack equipment MUST be in a bottom well position and may not be stacked on.

Articulated car kinds are preferred.

Empty collapsible flatracks must be collapsed for transportation. Collapsed flatracks may be stacked up to four high and loaded in either a bottom well position or on top of any stackable continer.

Non-bulkhead flatracks may be stacked up to five high for transportation.

19 Hazardous Shipment Loading in Double Stack Cars

Refer to E-1.13 Hazardous Shipment Loading Rules for overall loading rules governing these shipments.

Use of double stack equipment is allowed for hazardous material shipments without restriction to stacking containers, except for the following:

- Tank containers, UPCU containers, and hazardous load open tops are prohibited from double stack cars.

Hazardous placards **MUST** be present on all four sides and MUST always be visible in any position of a well car.

The BNSF Rules & Policies Guide attempts to ensure placard visibility in bottom well positions by requiring consignors to position hazardous placards at least four (4) feet from the bottom of a container and at least five (5) feet from the ends of a container prior to tendering the shipment to BNSF.

E-1.10 Intermodal Tank Container Loading Rules

1 Intermodal Tank Container Loading Rules

Use of conventional single-level cars for tank containers is restricted to only those equipped with end-of-car cushioning AND positive lock securement devices.

2 Federal Hazardous Material Regulations and Procedures

Tank containers (hazardous or non-hazardous) may be loaded in the wells of appropriate double stack cars in single-level configuration only, in accordance with the Federal Hazardous Material Regulations and Procedures, Chapter I Subchapter C, Part 174.63 (not double-stacked).

3 Outlet Valve

Tank Container must be loaded with its outlet value facing outward away from any adjacent tank or container.

E-1.11 Flatrack Loading

1 Overview

Flatrack loading at BNSF intermodal facilities shall be conducted in accordance with the guidelines that follow. Flatracks received in interchange which do not conform to BNSF's flatrack loading policy may be accepted and forwarded on without reloading, provided they meet all applicable AAR rules. Be alert to any embargoed flatrack series in force at any given time, as well as any interim additional inspection requirements.

2 General Rules

The following are general rules for all flatrack loading:

Prior to loading, all flatracks (both loaded and empty) must receive Mechanical Department sign-off that the flatrack is safe for transportation. Systems clearance bureau approval must also be secured if the flatrack is carrying an over-dimensional load.

Loaded flatracks must NOT be placed next to a locomotive

TOFC movement of flatracks is prohibited.

Collapsible-bulkhead LOADED flatracks MUST have both bulkheads in the up and locked position, otherwise loading is prohibited.

Collapsible-bulkhead EMPTY flatracks MUST be collapsed for transportation.

Stacking flatracks is prohibited except for empty flatracks no more than four empty collapsed bulkhead flatracks or five empty non-bulkhead flatracks may be stacked on top of each other. Depending on their length and height, these stacked empty flatracks may be loaded in a double stack car, either in the well with a standard container on top or loaded on top of any stackable container.

3 Car Restrictions

Appropriate conventional, articulated, or double stack equipment can be used with the following restrictions and/or considerations:

1. For flatracks carrying coiled metal, conventional or single-level drawbar-connected cars MUST be used. If a coiled metal flatrack does not fit on these cars, or if the approved car type is not available, the flatrack is prohibited from moving.
2. For flatracks not carrying coiled metal, use of conventional or single-level drawbar-connected cars is PREFERRED, but the flatrack should not be held if this equipment is not available.
3. Use of double stack equipment may not be possible with certain overdimensional loads due to obvious physical restrictions.
4. 102”-wide flatracks cannot be placed on conventional cars due to their width.

Continued on next page

E-1.11 Flatrack Loading, Continued

4 Modified Flatracks

Flatracks modified as BNSF hitch/pedestal securement training modules are stenciled with initials BNOZ. Stenciling appears only on the front and rear of the flatracks.

5 Dimensions

With the exception of BNOZ 300001, these flatracks are 102" wide, 45' long, and 9'6" high; their collapsible bulkheads have been welded in the upright position. Their width prohibits loading on conventional cars.

6 Risk Reduction

Specialized rules are required for handling flatracks because of the higher risk associated with their design and the commodities they typically carry. Prohibiting stacking of loaded flatracks keeps the center of gravity closer to ground level, reducing the chance for load shifts caused by heavy concentrations of weight on top and maintaining the flatcar's ability to effectively ride the track.

E-1.12 High/Wide, and Flatrack Loading Rules

1 Open Loads without Sides or Ends

All open loads without sides or ends must be placed on LSHOLD “F” upon in-gate computer entry.

2 High/Wides, Flatracks, and Stacked Chassis Inspection

All high/wides, flatracks, and stacked chassis MUST be inspected by the Mechanical Department PRIOR TO LOADING for any unsafe condition. For locations where Mechanical Department forces are not on duty, these loads must be inspected by an authorized representative of the Mechanical Department.

Signature of the mechanical officer inspecting and releasing the load for movement must appear on the 1202 (J1) gate inspection form or other suitable log.

3 Over-dimensional Loads or Equipment

Any over-dimensional load and/or equipment (defined as greater than 8'6" wide and/or 18’8”" high above top of rail when loaded on a railcar) **MUST** receive systems clearance bureau approval from the Manager, Clearances prior to train departure.

4 Loaded Flatracks or Shiftable Loads

Loaded flatracks, or any other shiftable load must **NOT** be placed next to a locomotive.

5 UPCU Containers

UPCU (U.S. Pollution Control) containers and hazardous load open tops must NOT be loaded in double stack equipment.

6 Approved Open Tops

Approved open tops in double stack cars MUST be placed in a bottom position whether loaded or empty. Do **NOT** stack on top of loaded open tops.

7 High/Wides Loaded in Double Stack Equipment

High/wides loaded in double stack equipment MUST be in a bottom position.

Double stack equipment may not be usable for wide loads due to physical protrusion of the commodity being carried.

8 TOFC Movement of Flatracks

TOFC movement of flatracks is prohibited.

Continued on next page

E-1.12 High/Wide, and Flatrack Loading Rules, Continued

9 Collapsible-Bulkhead Flatracks

Collapsible-bulkhead **LOADED** flatracks **MUST** have both bulkheads in the up and locked position, otherwise loading is prohibited.

Collapsible-bulkhead **EMPTY** flatracks **MUST** be collapsed for transportation.

10 Stacking Flatracks

Stacking flatracks is prohibited except for empty flatracks as follows:

- No more than four empty collapsed bulkhead flatracks or five empty non-bulkhead flatracks may be stacked on top of each other.
- Depending on their length and height, these stacked empty flatracks may be loaded in a double stack car, either in the well with a standard container on top or loaded on top of any stackable container.

11 Equipment Usage Restrictions

Appropriate conventional, articulated, or double stack equipment can be used for flatracks with the following restrictions and/or considerations:

- Flatracks carrying coiled metal MUST be loaded on conventional or single-level drawbar-connected cars. If a coiled metal flatrack does not fit on these cars, or if the approved car type is not available, the flatrack is prohibited from moving.
- For flatracks not carrying coiled metal, use of conventional or single-level drawbar-connected cars is PREFERRED, but the flatrack should not be held if this equipment is not available.
- Use of double stack equipment may not be possible with certain overdimensional loads due to obvious physical restrictions.
- 102"-wide flatracks cannot be placed on conventional cars due to their width.
- With the exception of BNOZ 300001, BNOZ flatracks (flatracks modified as BNSF hitch/pedestal securement training modules) cannot be placed on conventional cars due to their 102" width.

12 Flatracks Received in Interchange

Flatracks received in interchange which do not conform to BNSF's flatrack policy may be accepted and forwarded on without reloading, provided they meet all applicable AAR rules.

E-1.13 Hazardous Shipment Loading Rules

1 WARNING!

WARNING! Current TSS editing capability is limited in regard to prohibiting assignment of hazardous loads in violation of guidelines shown below.

2 Placement Determination

For purposes of transporting hazardous material shipments, each platform or well of a drawbar-connected or articulated car shall be considered as one car when determining placement.

By this definition, any trailer spanning two platforms of a drawbar-connected flatcar does NOT qualify as a car.

3 Use of Double Stack Equipment

Use of double stack equipment is allowed for hazardous material shipments without restriction to stacking, except for the following:

- Empty or loaded hazardous tank containers, UPCU [U.S. Pollution Control] containers, and hazardous open top loads are prohibited from double stack equipment.
- Tank containers are allowed only in single-level configuration loading.

4 Hazard Placards

Hazard placards, if required, **MUST** be placed on all four sides of a container or trailer and be visible after loading.

5 Cross Reference

Refer to E-1.16, which supports definition of car for hazardous material placement purposes.

Refer to A-3.1, section 4, for placard visibility requirements.

6 Guidance on Commodity Handling as Required by 49 CFR 174.85

Following is guidance on loading (or placement within the train) of hazardous material units relative to other units. The two-digit alphanumeric codes shown below in parentheses indicate the special condition codes in TSS which correspond to how a hazardous unit is placarded, based on entry of placards observed on the unit at ingate.

Continued on next page

E-1.13 Hazardous Shipment Loading Rules, Continued

7 Explosives

Shipments Placarded Explosives, 1.1 (N1) or Explosives, 1.2 (N2):

PLACEMENT RESTRICTIONS FROM ENGINES

- When train length permits, the car may NOT be nearer than the sixth car from an engine.
- When train length does NOT permit, the car MUST be placed near the middle of the train, but not nearer than the second car from an engine.

PLACEMENT RESTRICTIONS NEXT TO OTHER LOADS

There MUST be at least one car separating the placarded car from the following:

- An open top load
- A running refrigerated unit
- Any unit placarded with Poison Gas, 2.3 (PA)
- Any unit placarded with Poison Gas, 6.1 (PL)
- Any unit placarded Radioactive, 7
- Any other placarded hazardous load EXCEPT:
  - Another Explosives, 1.1 (N1) or Explosives, 1.2 (N2) unit
  - A unit placarded Combustible (CL)
  - A unit placarded Keep Away From Food (NF)
  - A unit placarded Class 9 (N9)
  - A unit only marked (MA) with an identification number on an orange panel or white square-on-point configuration

8 Radioactive

Shipments Placarded Radioactive, 7:

PLACEMENT RESTRICTIONS FROM ENGINES

- The placarded car must be separated from a locomotive by at least one non-placarded car.

PLACEMENT RESTRICTIONS NEXT TO OTHER LOADS

There MUST be at least one car separating the placarded car from the following:

- Any unit placarded with Poison Gas, 2.3 (PA)
- Any unit placarded with Poison Gas, 6.1 (PL)
- Any unit placarded Explosives, 1.1 (N1)
- Any unit placarded Explosives, 1.2 (N2)
- Any other placarded hazardous load EXCEPT:
  - Another Radioactive, 7 unit
  - A unit placarded Combustible (CL)
  - A unit placarded Keep Away From Food (NF)
  - A unit placarded Class 9 (N9)
  - A unit only marked (MA) with an identification number on an orange panel or white square-on-point configuration

Continued on next page

E-1.13 Hazardous Shipment Loading Rules, Continued

Radioactive (continued)

The placarded car must be separated by at least one non-placarded car from any carload of undeveloped film.

9 Poison Gas

Shipments Placarded Poison Gas, 2.3 (PA) or Poison Gas, 6.1 (PL):

PLACEMENT RESTRICTIONS FROM ENGINES

- None

PLACEMENT RESTRICTIONS NEXT TO OTHER LOADS

There MUST be at least one car separating the placarded car from the following:

- Any unit placarded with Explosives, 1.1 (N1)
- Any unit placarded with Explosives, 1.2 (N2)
- Any unit placarded Radioactive, 7
- Any other placarded hazardous load EXCEPT:
  - Another Poison Gas, 2.1 (PA) or Poison Gas, 6.1 (PL)
  - A unit placarded Combustible (CL)
  - A unit placarded Keep Away From Food (NF)
  - A unit placarded Class 9 (N9)
  - A unit only marked (MA) with an identification number on an orange panel or white square-on-point configuration

Hazardous Material Train Placement Chart

HOW TO USE THIS CHART:
To determine where a placarded car or marked car can be placed in a train, follow these steps:
- Determine the car kind.
- Determine the type of placard applied or use the SCHI code beside each placard or marking.
- Follow vertically down the chart and note which lines apply.
- The symbol X indicates that the wording at the left side applies. See footnotes for explanation.

NOTES:
- **Placards displaying blank center rectangles must also display 4-digit UN or NA identification numbers within rectangle corresponding to train documents.**
- **Restrictions for intermodal vehicles (trailers, containers and tank containers) are found in the "OTHER THAN TANK CARS" and "ANY CARS" charts.**
- **Cars and intermodal vehicles with the same placards, or with placards from the same column, may be placed next to each other.**
- **A placarded rail car, tank car, transport vehicle or freight container may not be transported in a passenger train.**
- **The words "TOXIC" and "POISON" can be used interchangeably on Hazard Class 2 and Hazard Class 6 placards.**
- **Each unit of an articulated or multi-platform intermodal car will be equal to one car.**

RESTRICTIONS: MUST NOT BE NEXT TO	ANY CARS				OTHER THAN TANK CARS		TANK CARS		
	Loaded cars placarded:	Loaded cars placarded:	Any cars placarded:	Any cars marked:	Loaded cars other than tank cars placarded:	Loaded cars other than tank cars placarded:	Loaded tank cars placarded:	Loaded tank cars placarded:	Residue tank cars (as noted on shipping papers or by Canadian Residue(e) placard) listed under the "Tank Cars" columns must not be placed next to an engine or occupied caboose.
A. Must not be nearer than the sixth car from an engine or occupied caboose. If total number of cars in train does not permit: • must be placed as near the middle of train as possible, and • must not be nearer than the second car from an engine or occupied caboose.	X		NO TRAIN PLACEMENT RESTRICTIONS FOR LOADS OR RESIDUES				X	X	
B. Engine or occupied caboose	X	X					X	X	X
C. Car occupied by guard or escort	X (1)				X (1)		X (1)		
D. Loaded plain flat car or loaded system wheel car	X						X	X	
E. Loaded bulkhead flat car	X (2)						X (2)	X (2)	
F. Open top car with shiftable load	X (2)						X (2)	X (2)	
G. Loaded TOFC/COFC flat car	X (3) (4)						X (4)	X (4)	
H. Flat car loaded with vehicles	X (5)						X (5)	X (5)	
I. Any rail car, transport vehicle or freight container with an internal combustion engine or an open-flame device in operation	X						X	X	
J. Car with white square background displaying EXPLOSIVES 1.1 (N1) or 1.2 (N2) placards		X			X	X	X	X	
K. Car with white square background displaying POISON GAS 2.3 (PA) or POISON 6.1 (PL) placards	X	X				X		X	
L. Car placarded RADIOACTIVE (RM)	X				X	X	X	X	
M. Any loaded placarded car UNLESS THE OTHER CAR IS: • placarded with the same placard • placarded with a placard from the same column • placarded with COMBUSTIBLE (CL), KEEP AWAY FROM FOOD (NF), CLASS 9 (N9) or EXPLOSIVES 1.6 (N6) • only marked (MA) with marine pollutant, hot, or with an identification number on an orange panel or white square-on-point configuration	X (3)	X			X		X		

Hazardous Material SCHI Codes
(Special Car Handling Instructions)

SCHI Code	Description (Hazardous)
CL	Combustible Liquid
CM	Corrosive
DA	Dangerous
DW	Dangerous When Wet
FG	Flammable Gas
FL	Flammable
FS	Flammable Solid
MA	Marked
NF	Keep Away From Food
NG	Non-Flammable Gas
NS	Spontaneously Combustible
N1	Explosives 1.1 (Placard on SQ)
N2	Explosives 1.2 (Placard on SQ)
N3	Explosives 1.3
N4	Explosives 1.4
N5	Explosives 1.5
N6	Explosives 1.6
N9	Class 9 Material
OM	Oxidizer
OP	Organic Peroxide
OX	Oxygen
PA	Poison Gas (Placard on SQ)
PB	Poison
PL	Poison (Placard on SQ)
PO	Poison Gas
RM	Radioactive Material
NP	No Placards Required

Footnotes:

(1) The placarded rail car must be next to and ahead of any occupied escort car. If the occupied escort car has temperature control equipment in operation, it must be the fourth car behind any car placarded EXPLOSIVES 1.1 or 1.2.

(2) Restriction applies to an open top car when any lading protrudes beyond the car ends, or if shifted, would protrude beyond the car ends. This does not apply to cradle cars for steel coils.

(3) Cars placarded EXPLOSIVES 1.1 or 1.2 may be placed next to each other.

(4) Restriction applies only to loaded flat bed or open top trucks and trailers and to loaded trucks and trailers without securely closed doors.

(5) This restriction does not apply to auto carriers (enclosed or open).

(6) Must not be placed next to car of undeveloped film.

E-1.14 Inspection and Acceptance Procedures for Coiled Metal Products

1 Overview

Coiled Metal is one of the most concentrated weight commodities shipped on BNSF. Coiled Metal products are shipped in both flatrack and enclosed units. Because of the concentrated weight characteristic, it is important that all coiled metal loads be identified and inspected before being loaded onto railcar.

2 Coiled Metal Products in Flatrack Equipment

Coiled Metal Products in Flatrack Equipment:

- All open loads must be placed on LSHOLD "F" upon in-gate computer entry.
- **PRIOR TO LOADING** onto railcar all open loads must be inspected and approved by the Mechanical Department as outlined in E-1.12 High/Wide, and Flattrack Loading Rules.

3 Coiled Metal Products in Enclosed Unit

Coiled Metal Products in Enclosed Unit:

- All units billed with coiled metal quotes will automatically be placed on LSHOLD "K" upon in-gate computer entry.
- **PRIOR TO LOADING** onto railcar, Damage Prevention Services (DPS) must approve all enclosed coiled metal product units on "K" hold. Upon approval of the load, DPS will release the unit from LSHOLD "K" hold back to the load sheet.
- If unit is not approved for movement DPS must update the LSHOLD "K" to LSHOLD "B", which indicates further blocking, bracing, or transfer is required.
- **UNITS MUST NOT BE ASSIGNED WHILE ON LSHOLD "K" OR "B"**. Only a DPS representative can release units from LSHOLD "K" or "B" status.
- Enclosed units approved by DPS may be loaded to double stack cars in accordance with the Hub Operations Manual, Railcar Loading Rules.

E-1.15 Speed Restriction Impact on Loading

1 Overview

Although several factors encountered enroute can impact (reduce) train speed, certain loading conditions/configurations automatically will restrict train speed even before train departure and should be considered when building/loading intermodal trains. These include hazardous materials and car utlization considerations.

2 Hazardous Materials

Trains containing 20 or more car loads or intermodal portable tank loads of a combination of the following hazardous materials are restricted to 50 mph:

- Zone* A or Zone B PIH (Poisonous Inhalation) material *Zone indicates inhalation toxicity; defined in BOE 6000, Section 173.116
- Flammable Gas
  - Explosives, 1.1
  - Explosives, 1.2
- Environmentally sensitive chemicals (defined in AAR Circular OT-55-B appendix)

3 Car Utilization

Speed restrictions are published in Timetable System Special Instructions No. 3 effective April 1, 1998. Trains are allowed to operate at speeds IN EXCESS OF 55 mph if certain loading conditions have been met, which are outlined below.

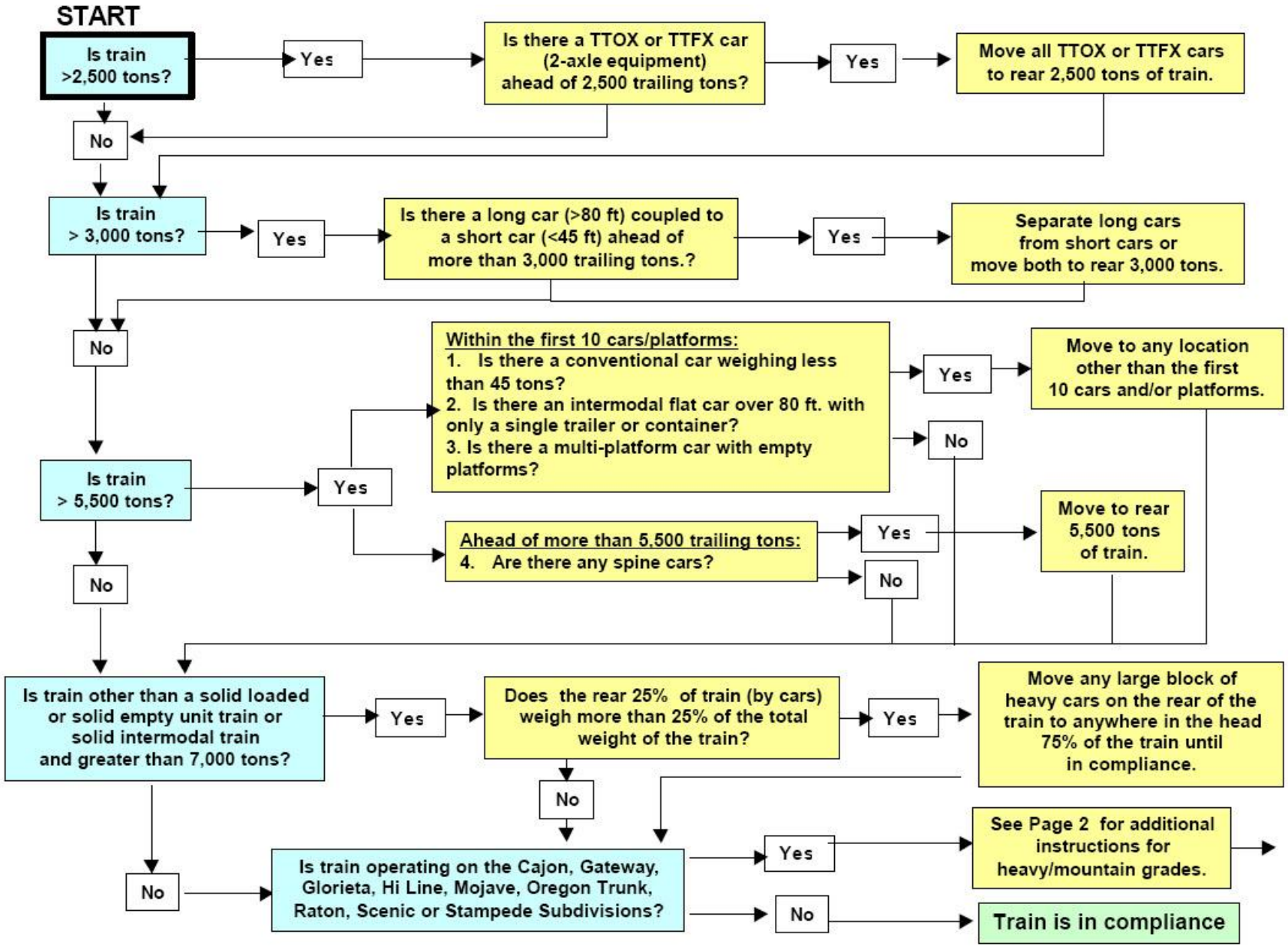
- Any train eligible to operate in excess of 55 mph but carrying a car which does not meet the loading conditions will be restricted to 55 mph or will require the "speed restricting car" to be set out, thus causing delays.
- Following are the loading conditions which should be met to avoid train operating speed restrictions:
  - CONVENTIONAL CARS Car kind codes: beginning with P Covers: KTTX, some RTTX, STTX, TTCX, TTWX, TTX, VTTX, WTTX, single-well double stacks
  - Must Have At Least One Empty or Loaded Trailer or Container
  - Car kind codes: QAF Covers
  - Must Have At Least One Loaded Trailer or Container
- DRAWBAR-CONNECTED CARS Car kind codes: QW, QX, QD, QB, and QDE Covers: some RTTX, TTEX, TTFX, 2-well double stacks, some 3-well double stacks (car kind QVQ 3-wells are articulated and covered below), 4-well double stacks
  Must Have At Least One Empty or Loaded Trailer or Container On Each Unit
- ARTICULATED SPINE CARS Car kind codes: QM, QC, QO, Q5, and QE Covers: NTTX, TTAX, TTLX, TTRX, UTTX
  Must Have At Least One Empty or Loaded Trailer or Container
- ARTICULATED DOUBLE-STACK CARS
  Car kind codes: QY, QVQ Covers: some three-well double stacks, five-well double stacks
- No Resulting Speed Restrictions From Any Loading Configuration, Including Empty

E-1.16 BNSF Train Make Up Rule

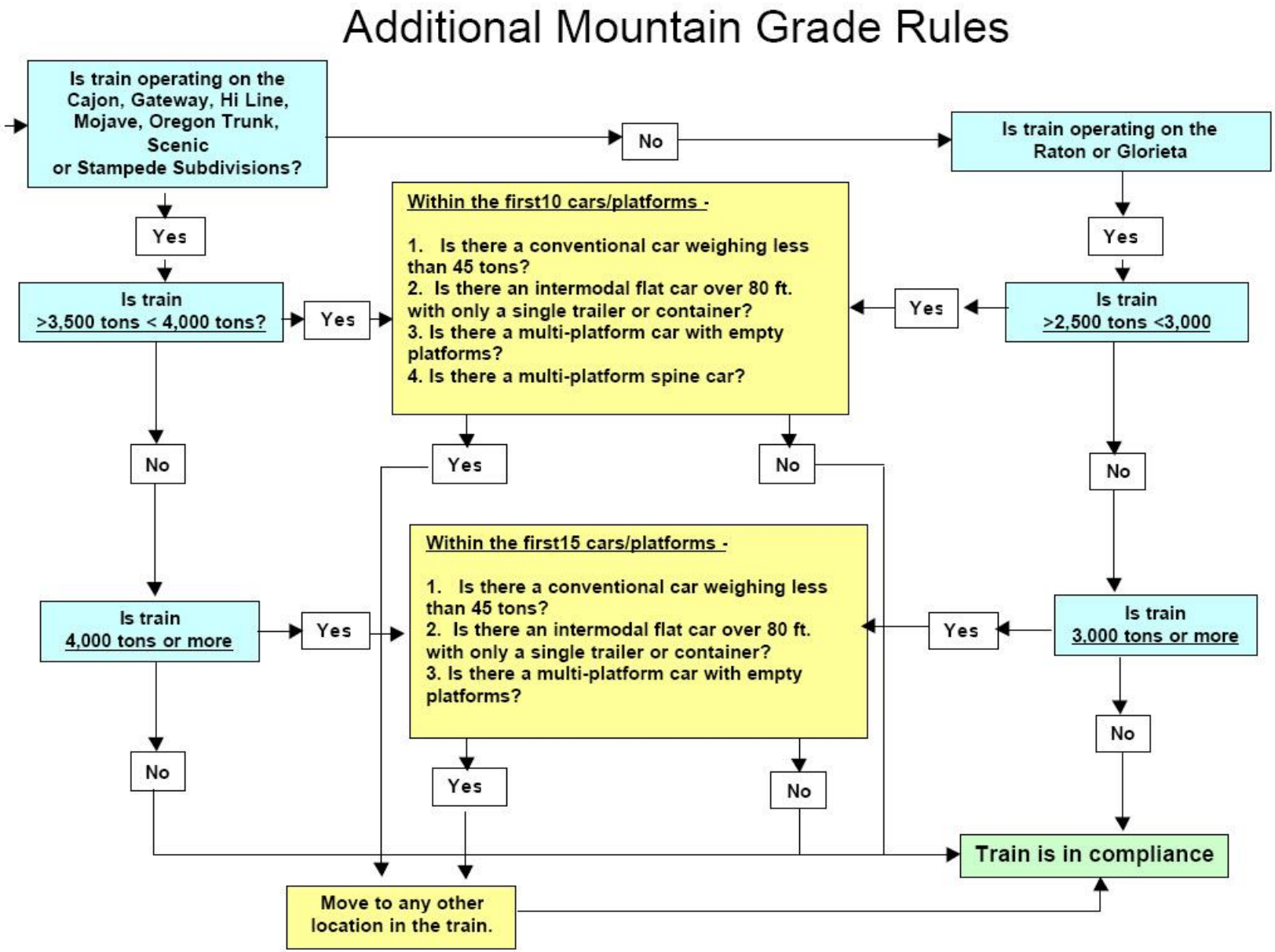
1 Detailed Rules

Rule	Description
1	Must not be ahead of 2,500 trailing tons All loaded or empty 2-axle cars (series RTTX and TTEX)
2	Must not be ahead of 3,000 trailing tons (long car/short car) Any car **80 ft** or longer coupled to any car **45 ft** or shorter. **Exception**: Next to locomotive crane **45 ft** or less if coupled to boom car **80 ft** or longer. **Note**: Item 2 does not apply to multi-platform spine cars or double stack cars.
3	Train Size > 5,500 tons – must not be within the first **10** cars/platforms: • Any conventional car (non-multi-platform) weighing less than 45 tons. • Any 80 ft or longer flat car with a single trailer/container, regardless of total weight. **Note**: This includes twin flat cars (solid-drawbar connected flat cars TTEX & RTTX series) with a single trailer/container on either segment/platform. • Multi-platform cars with any empty platforms. **Exceptions to Item 3 above**: On the Glorieta and Raton Subdivisions, restrictions above apply as follows: • Train size **>2,500** tons and <3,000 tons, the first **10** cars/platforms • Train size **3,000** tons or greater, the first **15** cars/platforms (excluding empty unit bulk commodity trains) On the Cajon, Gateway, Hi Line, Mojave, Scenic and Stampede Subdivisions, restrictions above apply as follows: • Train size **>3,500** tons and <4,000 tons, the first **10** cars/platforms • Train size **4,000** tons or greater, the first **15** cars/platforms
4	Must not be ahead of 5,500 trailing tons – Multi-platform spine cars, regardless of how loaded
5	Train Size > 7,000 tons Rear **25%** of the train must not weigh more than **25%** of the total weight. **Exception**: Does not apply to solid loaded or solid empty unit bulk commodity trains or trains made up entirely of intermodal equipment.

Attachment A (Page 1 of 2)



Attachment A (Page 2 of 2)



E-1.17 Loading Capabilities by Railcar Initials and Series (If Applicable)

1 Loading Capabilities

Refer to the following AAR Publication for loading capabilities:

http://www.aarpublications.com/~/media/AARPublications/FreePubs/AAR%20Loading%20Capabilities%20Guide%20Feb%202010.ashx

E-1.18 Intermodal Car Kind Codes by Definition of Each Digit

1 Car Kind Codes

Use TSS commands "CARKIND", "OBS", "HITCH"

2 P – Flatcar, Intermodal (Conventional)

	Type		Kind		Length of Units Flat Car Can Handle
P	Intermodal Flatcar (tare of 33M or grtr)	A	Both trlrs or cntrs, 8 ½' tandem	A	Any combination of 20-40' cntrs
		B	Both trlrs or cntrs, 8' tandem	B	2-20' cntrs only
		C	Cntrs only	C	Unused
		D	Double-stack cntrs	D	2-35', 2-40', or 2-45' cntrs only
		O	Other	E	2-40' trlrs w/or without nose mount reefers
		R	Trlrs only (lift on/off only), 8 ½' tandem	F	2-40' trlrs without nose mount reefers
		S	Trlrs only (lift on/off only), 8' tandem	G	1-40' trlr without & 1-45' or 2-40' trlrs w/nose mount reefers
		T	Trlrs only (lift or circus loading), 8' tandem	H	2-42' trlrs w/nose mount reefers
		U	Trlrs only (lift or circus loading), 8 ½' tandem	I	2-45' trlrs without nose mount reefers or 1-40' or 45' trlr w/nose mount reefer at A position (middle) hitch providing the B position (leading) hitch is carrying a 40' or shorter trlr. The B position hitch will in no case handle trlrs w/nose mount reefers regardless of trlr length.
				J	1-40' trlr without & 1-45' trlr w/nose mount reefer or 3-28' pups or 2-40' trlrs w/nose mount reefers
				K	2-40' or 4-20' cntrs and various combinations
				L	2-40' or 45' cntrs
				M	1-40' trlr without & 1-45' trlr w/nose mount reefer or 2-40' trlrs w/nose mount reefers or various combinations of 20' & 40' cntrs and/or trlrs
				N	2-45' trlrs without nose mount reefers or various combinations of 20' & 40' cntrs and/or trlrs
				O	Other – contact owner for specific loading instructions
		1	Cntrs only	1	Trlrs up to 45'
		2	Double-stack cntrs	2	Trlrs up to 48'
		3	Trlrs only (lift or circus loading), 8' tandem	3	Trlrs up to 50'
		4	Trlrs only (lift or circus loading), 8 ½' tandem	4	Trlrs up to 45' w/nose mount reefer
		5	Both trlrs & cntrs, 8' tandem	5	Trlrs up to 48' w/nose mount reefer
		6	Both trlrs & cntrs, 8 ½' tandem	6	Trlrs up to 50' w/nose mount reefer
		7	Trlrs only (lift on/off only), 8' tandem	7	Cntrs up to 40'
		8	Trlrs only (lift on/off only), 8 ½' tandem	8	Cntrs up to 45'
				9	All purpose – trlrs or cntrs of varying sizes
				0	Other – contact owner for specific loading instructions

cntr = Container	M = Thousand	w/ = With
grtr = Greater	Trlr = Trailer	' = Feet

Continued on next page

E-1.18 Intermodal Car Kind Codes by Definition of Each Digit, Continued

3 Q – Flatcar, Intermodal (All Other)

	Type		Kind and No. of Platforms		Length of Units Flat Can Handle
Q	Intermodal Flatcar	A	Ltwt, trlrs only, 1 platform	0	Units 40’ DBL STK cntrs
		B	Trlrs only, 2 platforms	3	Units 53’ DBL STK cntrs
		C	Trlrs only, 3 platforms	5	Units 45’ DBL STK cntrs
	Lightweight	D	Trlrs only, 4 platforms	6	Units, 56’ well DBL STK cntrs
	cars – low profile,	E	Trlrs only, 5 platforms	8	Units, 48’ well DBL STK cntrs
	less than 33M lbs.	F	Trlrs only, 6 platforms	9	Other
		G	Trlrs only, 7 platforms	A	Units 40’ to 45’, 8 ½’ wide tandem or cntrs
	Articulated and	H	Trlrs only, 8 platforms	B	Units 40’ to 48’, 8 ½’ wide tandem or cntrs
	multi-platform	I	Trlrs only, 9 platforms	C	Units 40’ to 50’, 8 ½’ wide tandem or cntrs
	cars(lift on/off	J	Trlrs only, 10 platforms	D	Units 40’ to 45’, 8 ½’ wide tandem or cntrs
	only)	K	Trlrs or cntrs, 1 platform		(w/nose mount reefers)
		L	Trlrs or cntrs, 2 platforms	E	Units 40’ to 45’, 8 ½’ wide tandem or cntrs
		M	Trlrs or cntrs, 3 platforms		(w/nose mount reefers at certain positions onl
		N	Trlrs or cntrs, 4 platforms	F	Units 40’ to 48’, 8 ½’ wide tandem or cntrs
		O	Trlrs or cntrs, 5 platforms		(w/nose mount reefers)
		P	Trlrs or cntrs, 6 platforms	G	Units 40’ to 50’, 8 ½’ wide tandem or cntrs
		Q	Trlrs or cntrs, 7 platforms		(w/nose mount reefers)
		R	Trlrs or cntrs, 8 platforms	H	Units 20’ or 40’ only
		S	Trlrs or cntrs, 9 platforms	I	Other
		T	Trlrs or cntrs, 10 platforms	W	Mark V
		U	Dbl-stk cntrs, 1 platform	X	Rail Trailer
		V	Dbl-stk cntrs, 2 platforms	Y	Fast Track
		W	Dbl-stk cntrs, 3 platforms	Z	Trailer-Railer
		X	Dbl-stk cntrs, 4 platforms		
		Y	Dbl-stk cntrs, 5 platforms		
		Z	Steel wheel rail sets		

cntr	= Container	Trlr	= trlr
dbl-stk	= Double-stack	w/	= With
ltwt	= Lightweight	‘	= Feet
M	= Thousand		

Continued on next page

E-1.19 Correct Assignment and Loading of Containers in Double-Stack Railcars

1 Incorrect Assignment: Recent Incidents

Correct assignment and loading of containers in double-stack railcars is vitally important to ensure safe transportation.

Two recent incidents of incorrect assignment and loading of containers in double-stack railcars have resulted in serious incidents adversely affecting BNSF. In the first incident, an eastbound double-stack train derailed when a 20Ft. container fell through the bottom of a double-stack well onto the track. This derailment **cost over $4 million**, **caused significant customer delays**, and created a **serious safety hazard**.

The second incident occurred when an eastbound stack train set off a dragging equipment detector on the Transcon mainline. The cause of the dragging equipment was an overloaded double-stack well with three containers totaling 127,923 lbs. loaded in a well with a weight capacity of 102,000 lbs. This condition required that the car be set out of the train and the overloaded condition corrected. However, this serious condition could have caused another derailment.

2 Root Cause and Contributing Factors

Incident 1: Two 20Ft. containers were assigned and loaded into a Double-Stack well which was not capable to transport twenty foot containers.

- 20Ft. containers were assigned in error to a railcar not capable of carrying twenty foot containers.
- Loading crews placed the 20Ft. containers in the railcar, even though the side of car was clearly stenciled, "DO NOT LOAD 20 FOOT CONTAINERS".
- Securement Verifiers and Ramp Supervisors failed to observe the mis-loaded containers during Post-Loading Inspections.

Incident 2: A 102,000 lbs. capacity well was overloaded by placing three containers into the single well which totaled 127,923 lbs.

- Containers were being "Live-Lifted" direct from the Trucker's chassis and not Pre-Assigned by the coordinator. The loading crew was not aware of the weight being loaded into the well.
- Process was not in place to observe the Oasis Computer Edits for overloading of wells for containers "Live-Lifted" by Loading Crews.

Continued on next page

E-1.19 Correct Assignment and Loading of Containers in Double-Stack Railcars, Continued

3 Lessons Learned

The following lessons were learned as a result of these incidents:

1. Ensure that all containers assigned to railcars are in compliance with car capabilities. Use computer capability inquiries, and if unsure, look at railcars for restrictions stenciled on sides of car.

2. Process for Train Loading Close-Out must include a check of Overload Edits in either OASIS or TSS.

3. Containers loaded in well-cars must meet both the Configuration and Weight Capacity requirements of the well car. Any deviation from the prescribed requirements can result in catastrophic failures.



(Illustration from an I-STOP poster)

E-1.20 Trailer Securement Failure

1 Trailer Securement Accident

TRAILER SECUREMENT FAILURE RESULTS IN SERIOUS ACCIDENT

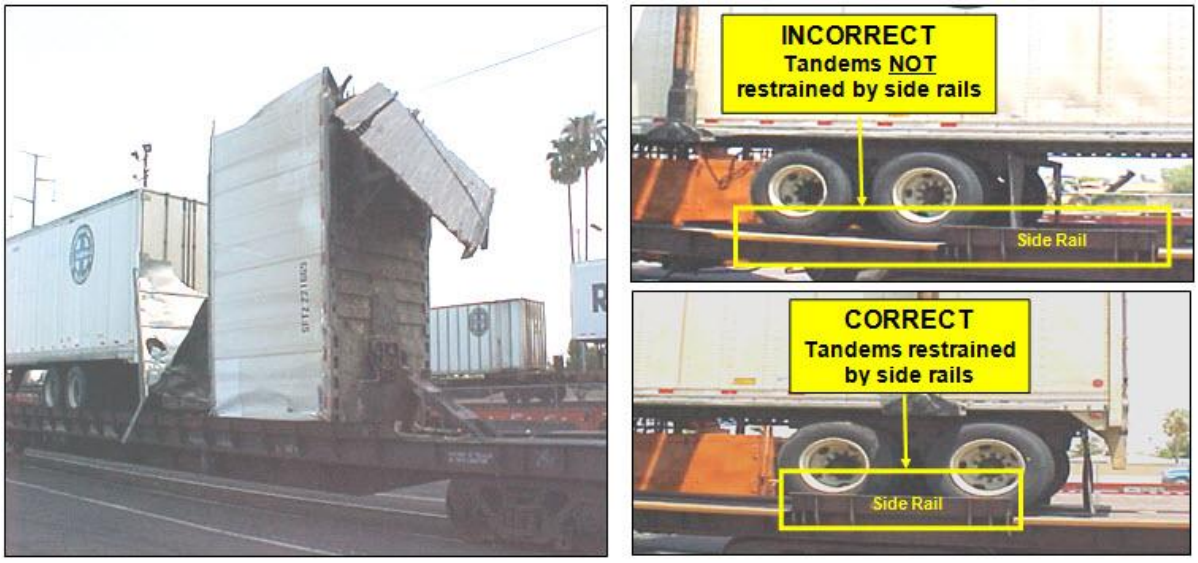
A trailer securement failure resulted in a serious accident that occurred at Castle Rock, AZ when a trailer slid off the side of a two platform draw-bar connected railcar. The investigation revealed that the trailer tandems slid off the side of the railcar and struck a bridge structure. The trailer tandems slid upward on the diagonal upright of the trestle and then collided with the top beam of the trestle, severing the trailer in two. The trailer remained locked in the hitch and arrived at the Phoenix Hub with the front end of the trailer resting on the car deck and the hitch support struts broken. Debris from the collision impact was scattered on the train and along the track right of way. Fortunately, there was no derailment, and no one was injured.

2 Root Cause & Contributing Factors

Trailer tandems were not properly aligned adjacent to center rub rail and side rails, thus allowing tandems to slide off side of car.

3 Lessons Learned

All trailers must be loaded with the trailer tandems resting on car deck and aligned adjacent to center or side rails to prevent tandems from sliding off side of railcar.



(Illustration from an I-STOP poster)

E-1.20 Trailer Securement Failure, continued

4 Loading Procedure for Single Superwide Tires for Trailer







E-1.21 Intermodal Leaning Loads Procedures

1 Purpose

Establish policy for handling Intermodal leaning loads.

2 Statements

Once a unit has been identified as a leaning load:

The employee must not move the load and notify their supervisor and / or Terminal Manager.

1. If the unit is leaning on the railcar – Do Not Unload
2. If the unit is unloaded as TOFC do not move the unit.
3. If the unit is unloaded as COFC set it on the ground not on a chassis
4. Stay with the unit until the manager or supervisor arrives to take charge of the unit.
5. All workers at the facility should be immediately notified of the leaning unit. Suggest this be accomplished via direct verbal communication, via radio, and at Oasis locations an Alert should be sent to all users.

3 Manager or Supervisor Responsibility

The Manager or Supervisor must immediately:

1. Notify the BNSF Hub Manger or designated representative
2. Secure the unit with appropriate LOCK-OUT / TAG-OUT procedures:
   - For units on wheels, apply “glad hand locks” to glad hands if available. If glad hand locks are not available; remove both glad hands. (see photos below)
   - Place sign on front of the unit stating: DANGER: LEANING LOAD DO NOT MOVE (see exhibit 1 below) by inserting sign in electrical receptacle on trailer.
   - For containers: Position LEANING LOAD sign in upper lift casting in the most visible casting location on the container. This device will prevent twistlock from entering the casting to lift container.

Place orange safety cones on all sides of the unit

Continued on next page

E-1.21 Intermodal Leaning Loads Procedures, Continued

4 Photo Examples



Gladhand lock placed in service side gladhand as lock-out device to prevent movement of trailer. Used in conjunction with Leaning load sign.



Leaning load sign in Lock-out / Tag–out position inserted into electrical receptacle at front of trailer.



Leaning Load sign in lock-out / tag-out position in container top casting. Sign prevents twistlocks from entering casting.

(Illustrations from I-STOP posters)

5 Rationale

RATIONALE: Leaning load policy clearly provides guidelines to address safe process and ensure the safety of BNSF employees and service providers.

E-1.22 Heavy Load Lifting: Ramp/Deramp Operations Guidelines

1 Purpose

The purpose of these guidelines is to direct actions when a trailer/container is suspected as overweight.

2 Statement

During ramping, if a piece of lift equipment exhibits difficulties in picking up a unit, loading of the unit MUST be discontinued and the unit set back down trackside. Under no circumstances shall loading to the flatcar be continued or completed. Do NOT make repeated attempts to lift the unit again with the same equipment. Supervisory personnel shall take the following actions to determine if the unit is overweight before considering another attempt with a second piece of equipment:

1. Determine if the first piece of lift equipment is functioning properly; ONLY attempt to lift the unit with a second piece of equipment if indications are that the first piece of equipment is malfunctioning. If the second piece of lift equipment also cannot pick up the unit, make no more attempts.

2. Ensure the scaled weight, if available, is not above maximum allowable.

3. Notify the shipper for pickup of the unit if:

    a) No scaled weight is available and lift equipment does not appear to be malfunctioning;
    b) Scaled weight indicates over maximum allowable; or
    c) Attempts to lift the unit with two different pieces of lift equipment (when warranted by Item 1 above) were both unsuccessful.

To avoid discovery of overweight units at trackside, utilize checkpoint scales whenever possible on ingate to identify these units in advance for rejection.

3 Rationale

Used in concert with scaled weights (where installed), the likelihood of loading an overweight unit is reduced, as is the potential for associated derailment and subsequent damage, injury, and service disruptions. These actions further avoid overstressing the lift equipment by discontinuing a lift before exceeding its limitations.

E-1.23 Intermodal Securement

1 General Information

A critical component of intermodal operations is proper loading and securement of TOFC/COFC units to railcars. Any unit improperly secured poses serious risk of injury or death, damage or derailment.

Industry-wide standard operating procedures (SOP) for intermodal securement have been developed in cooperation with the AAR to contribute to the safety of both rail personnel/equipment and affected communities. These procedures provide definitions and standards for securement practices, inspections, failures, reporting, and corrective action applicable to rail intermodal personnel at intermodal terminals, including private intermodal terminals and port facilities. In addition, training standards are specified to assure that an appropriate level of knowledge and experience is possessed by those performing securement inspections.

BNSF's securement SOP mirrors that of the railroad industry but contains some additional and some more restrictive items than the industry SOP. This subsection of the Intermodal Hub Operations Manual presents BNSF's SOP with explanation and must be complied with at BNSF intermodal facilities, private intermodal facilities leased by BNSF to an outside party, and port facilities loading on behalf of BNSF.

It's important to recognize that this subsection of the manual covers only items related to proper securement and is not a comprehensive list of all things that ramp personnel must verify or validate before releasing a train for safe movement.

2 Securement SOP Goals

1. The main goal of the SOP is to proactively prevent securement failures through:

   a) Proper loading and securement by the lift crew (defined as the lift equipment operator and groundperson).
   This is the first line of defense against improper securement and the risks associated with movement of an unsecured unit. Individuals must work toward achievement of zero securement failures by focusing on proper performance of loading and securing units to cars.

   b) Discovery and correction of any improper securement condition before train movement occurs.
   This is a secondary line of defense against securement failures (defined as any unit discovered to be improperly secured to a railcar after completion of two post loading/pre-departure inspections and sign-offs).

2. The second goal of the SOP is to identify and correct deficiencies which become apparent from actual securement failures for the purpose of preventing future securement failures (reactive prevention).

3 Proactive Prevention

To meet the first goal (proactive prevention) through proper loading and securement as a first defense, the SOP does several things. First, it outlines loading practices that impact securement. Only those loading conditions which have a direct impact on securement are noted in the SOP, whereas all other railcar and specific equipment/commodity loading rules are covered in this manual.

Continued on next page

E-1.23 Intermodal Securement, Continued

Proactive Prevention (continued)

Secondly, the SOP outlines training standards that foster a consistent, acceptable level of knowledge in all employees involved in loading and securement. These standards are intended to impress on these individuals that they are a vital link to safe and efficient transportation of traffic.

Thirdly, the SOP supports compliance to the standard operating procedures by mandating the conduct of Intermodal Securement Safety Audits and the use of knowledge questionnaires. These safety audits are in addition to the monthly periodic proficiency audits, which also cover securement issues in lesser detail. Using all these tools helps assure that proper loading and securement processes and activities are the normal mode of operation on a daily basis.

The other half of the proactive prevention goal (prevention through discovery and correction of any improper securement condition before train movement) is accomplished through conduct of two mandatory securement inspections. These visual inspections are conducted independently of each other: one by the lift crew during the loading process, and the other by a securement verifier(s) after loading of a track or segment is complete. In some cases, other parties may also perform securement inspections for the same purpose, such as TTX or BNSF mechanical forces.

These, however, are in addition to the two independent inspections conducted by BNSF or service partner intermodal personnel.

4 Reactive Prevention

Obviously, proactive prevention is the most desirable and effective means to eliminate securement failures. Once a securement failure occurs, employees, customers, the public, and the environment are exposed to unnecessary risk and potential danger. For this reason, actions taken following any failure are important in correcting a deficiency and preventing future recurrences.

In support of this, the SOP details mandatory reporting requirements. Reporting plays a crucial role in the effort to correct deficiencies and, in some cases (those involving extensive damage), is mandated by law. The reporting requirements ensure that standard information is collected on an industry-approved form for each securement failure, the appropriate parties are notified in every instance, and the investigation yields information useful in preventing future securement failures.

This extends beyond internal reporting (between two BNSF locations) to include units loaded by port and private facilities and interchanged to BNSF from other railroads.

As part of this reactive prevention effort, a database of internal failures shall be maintained by BNSF headquarters management to flag negative trends for correction. In addition, corrective action through retraining and requalification of parties involved in the failure helps redirect their attention to proactive prevention.

Continued on next page

E-1.23 Intermodal Securement, Continued

5 SOP Definitions

For purposes of this document, several terms have been defined to ensure common ground when referring to securement issues. These terms are as follows:

Term	Definition
CONTAINER	Unit moving COFC (without wheels) using container locking devices as securement onto railcar
IBC (APPROVED)	Semi-automatic interbox connectors used for securing stacked containers to each other on certain double stack cars. Manual interbox connectors used for securing stacked containers to each other on certain double stack cars and which are locked by fully moving the locking handle to the left position. **NOTE**: Only IBCs indicating locked in the left position are approved for rail use.
INSPECTIONS	Loading Process: Visual inspection by the lift crew during the loading process that all units are properly secured to cars and to other containers if double stacked and that loading conditions impacting securement have been met/satisfied Post loading/Pre-departure Visual inspection by a securement verifier(s) after loading of a track or segment is complete that all units are properly secured to cars and to other containers if double stacked and that loading conditions impacting securement have been met/satisfied Unloading: Visual examination by lift crew for proper securement of units to railcars before the unit is physically lifted off of the railcar **Port Loading** Visual inspection of same elements as required by post loading/pre-departure and unloading inspections for port facilities handling intermodal traffic **Private Facility Loading** Visual inspection of same elements as required by post loading/pre-departure and unloading inspections for private intermodal facilities
LIFT CREW	Groundperson and/or operator function performed relative to loading/unloading a train, track, track segment, or unit
LIFT EQUIPMENT	Overhead crane or sideloader

Continued on next page

E-1.23 Intermodal Securement, Continued

6 Securement Defect

An equipment condition or problem which prevents proper securement of a trailer or container to an intermodal railcar, or which poses a risk that proper securement may be compromised, and which influences the decision to use that equipment for loading or securement:

1. Trailer Hitches
    a. Top Plates
        i. Cracked, broken, or missing
        ii. Locking mechanism inoperative, broken, or missing
        iii. Auxiliary lock inoperative, broken, or missing
    b. Struts
        i. Cracked, broken, or missing
        ii. Pins/retainers broken or missing
        iii. Diagonal strut lock hook or lock inoperative, broken, or missing
        iv. Diagonal strut pivot mount cracked or broken
    c. Miscellaneous
        i. Hold down hooks broken or missing (i.e., the heavy steel hooks welded to the car deck that engage the vertical strut of a screw hitch when raised and hold it in the upright position)
        ii. Elevating screw inoperative, broken, or missing
        iii. Elevating screw nut inoperative, broken, or missing
2. Interbox Connectors
    a. Cone broken or missing
    b. Locking handle inoperative, broken, or bent so as to contact the container above or below it when installed
3. Container Pedestals
    a. Pedestal latch broken, missing, out of vertical orientation
    b. Latch compresses into the lock housing by hand
    c. Twist-lock cracked, broken, missing, or can be turned by hand more than 45 degrees
    d. Pedestal body cracked, broken, or missing
4. Flatcar Rub Rails
    a. Broken or missing at tandem
5. Chassis (When Loaded on Flatcars With a Container Attached)
    a. Chassis twist lock inoperative, broken, or missing
    b. Frame cracked or broken

Equipment/Maintenance

E-2 Lifting Equipment

Contents

This section contains the following topics:

Topic	See Page
Overhead Crane Hit by Railcars	2
Improper Hitch Raising Process	4
Policy: Lift Equipment Container Alignment Accessories	6
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E-2.1 Overhead Crane Hit by Railcars

1 Photos: Overhead Crane Hit by Railcars

These photos are of an overhead crane hit by railcars at a major BNSF intermodal hub.





(Illustrations from an I-STOP poster)

2 Root Cause

The root cause of these accidents was a failure to comply with track protection requirements.

3 Contributing Factors

The following factors led to the accidents:

- The crane operator fouled the unprotected ramp track (no derail or blue flag were up protecting track).
- The crane operator was not informed that the track was live.
- The crane operator did not see the cars approaching. Other workers did not warn the operator of the live track.
- The crane operator did not comply with BNSF Hub Policies and Procedures.

4 Impacts

There were no injuries; but damage costs of the equipment is estimated at $350,000.

Continued on next page

E-2.1 Overhead Crane Hit by Railcars, Continued

5 Lessons Learned

The following lessons were learned from these accidents:

- Never foul an unprotected track with lift equipment
- Confirm the track is protected before moving lift equipment
- Do not move lift equipment unless the intended route is clear
- Conduct job briefings to ensure clear understanding of intended work
- Know and understand BNSF policies and procedures

E-2.2 Improper Hitch Raising Process

1 Accident Description: Improper Hitch Raising

A groundman was severely injured while participating in an improper hitch raising process with a trailer suspended overhead. The groundman was on the railcar attempting to attach a chain to the trailer in order to raise the hitch.

Because two overhead cranes were operating adjacent to each other on the same track, the spreader supporting the suspended load unknowingly became entangled with the spreader of the adjacent crane and would not lower. When the crane performing loading moved away, the spreader holding the suspended load was "freed," causing the spreader and suspended trailer to drop with substantial downward force.

The groundman was crushed between the trailer and the railcar. Roughly two months later, another improper hitch raising process resulted in substantial damage to a UPS trailer (pictured below).



(Illustration from an I_STOP poster)

Continued on next page

E-2.2 Improper Hitch Raising Process, Continued

2 Root Causes

In the first event, the groundman was under a suspended load. Two pieces of lift equipment were being operated adjacent to each other on the same track.

In the second event, improper technique was used to raise the hitch. Even though the spreader was equipped with a Kevlar strap for raising hitches (an approved method), the loading crew used a trailer and chain to raise the hitch. This was also a contributing factor in the first accident.

3 Impacts

In the first event, severe injuries including several broken bones and internal injuries were sustained. In the second event no injuries occurred, but equipment damage was estimated at $5,000.

4 Lessons Learned

The following lessons were learned from these accidents:

- Groundmen should never be under a suspended load during the hitch raising and loading processes.
- Only approved methods should be used when raising hitches. The approved methods are:
  - Lift equipment with a Kevlar strap secured to the spreader
  - Stanchion pull-up device (SPUD)
  - Chassis mounted with a hitch lifting frame, or
  - Electric hitch
- Chains must NEVER be used in conjunction with raising retractable hitches due to risk of injury and damage if they break
- Lift equipment must not be operated within 200 feet of any other lift equipment on the same track

These guidelines are covered in the *BNSF Intermodal Hub Operations Manual*.

E-2.3 Policy: Lift Equipment Container Alignment Accessories

1 Purpose

This policy addresses mandated lift equipment features that exceed manufacturer's systems. It establishes company-mandated lift equipment container alignment accessories.

2 Statement

The following container alignment accessories are mandatory on all existing and future pieces of lift equipment utilized at any BNSF intermodal facility, whether owned or leased, with the exceptions as noted below.

3 Chain Guides or Similar Hang-down Alignment Devices

These devices shall be installed and maintained on all overhead cranes to indicate proper horizontal position and spreader width over the container. They should be positioned so that they rest flush against the side of the container, at or near the stacking posts, when the spreader is positioned 102 inches wide.

This includes devices such as fiberglass rods.

4 Conspicuity (High Reflectivity) Tape

This accessory shall be installed and maintained on all lift equipment outfitted with side pin lift devices to highlight pin apertures and assist operators in lining up the pin with the corner castings.

A minimum of two (2) pieces of tape shall be applied to each of the spreader end beam clamping head corners which face the operator: one on the front face of the clamping head in line with the twistlock and pin and one on the inboard side of the clamping head facing the operator. For dual-cab cranes, tape shall be applied on all four clamping heads. (Additional tape may be required depending on the position of packer/crane lights or if needed to assist operators.)

Conspicuity tape shall be checked and cleaned with a rag at the weekly (50 hour) PM service.

Orders for conspicuity tape should be placed with manager, Lift Equipment at 817-352-1174.

Optionally, this tape can be used to highlight the legs of packers for nighttime visibility to avoid collision with this type of equipment.

5 Rationale

Providing visual assistance for the alignment process offers potential reductions in time required to lift containers and in damage while engaging containers and lift equipment. This ultimately reduces claims and equipment downtime, while increasing customer satisfaction and improving service goal achievement.

Continued on next page

E-2.4 Chassis Rotators

1 Proper Use of Chassis Rotators

Chassis rotators must not be used to load or unload bare chassis on railcars. ELME engineering has informed BNSF that the chassis rotator is not designed to sustain the impact associated with locking chassis kingpin into hitches. Also, the rotator side clamp is not designed for the friction associated with the lateral movement incurred while locking the kingpin into the hitch.

This procedure must be followed by all Intermodal facilities.

2 Operational Warnings for Hydraulic Chassis Rotator

The following operational warnings:

1. Only persons properly trained in the safe and proper operation of the forklift and the chassis rotator should operate the unit.
2. Do not push or pull one or more chassis using any part of the rotator frame.
3. When handling or moving a chassis make sure the tires and landing gear are hoisted clear of the ground and the heads are **fully clamped** onto the chassis before moving.
4. Do not lift or transport more than one chassis at any time.
5. Do not drive or move machine while rotating a chassis.
6. Always transport chassis with the rotator frame underneath the chassis frame and with the rotator heads in the **fully clamped** position.
7. Do not transport chassis with rotator frame inverted (heads down) and the chassis hanging below the rotating frame.
8. Only side-shift while chassis is **fully clamped** and lifted clear of the stack or ground level. Do not use side-shifting to position the chassis while stacked.

Continued on next page

E-2.4 Chassis Rotators, Continued

3 Taylor GT300 Chassis Rotator



Located at: Cicero, Corwith, Houston, Los Angeles, Memphis, Portland, Richmond, San Bernardino, So. Seattle, St. Louis, St. Paul

4 Taylor THD 300 Chassis Rotator



Located at: Alliance, Corwith, Los Angeles, San Bernardino, Stockton

Continued on next page

5 Chassis
System Top Pick



Located at Cicero, IL

E-2.5 Chassis Stackers

6 Taylor TS90 Chassis Stacker



Located at: Los Angeles, San Bernardino, Logistics Park

E-2.6 Cranes

1 Kone - 50LT - 70-foot Stacking Crane



Located at: Los Angeles

2 Mi-Jack 750R Overhead Crane



Located at: Albuquerque, Amarillo, El Paso

Continued on next page

E-2.6 Cranes, Continued

3 Mi-Jack – 850P Rail Travel Lift



Located at: Logistics Park

4 Mi-Jack – 850R



Located at: Birmingham, Harvard, Houston, Los Angeles, Oklahoma City, Phoenix, St. Louis, Stockton

Continued on next page

E-2.6 Cranes, Continued

5 Mi-Jack – 900R Overhead Crane



Located at: Los Angeles, Phoenix, Stockton

6 Mi-Jack – 1000RC Rail Guidance Overhead Crane



Located at: Logistics Park

Continued on next page

E-2.6 Cranes, Continued

7 Mi - Jack --- 1000RC 40' - 45' Overhead Crane



Located at: Cicero and Corwith

8 Mi - Jack -- 1000RC 60' Overhead Crane



Located at: Alliance and Willow Springs

Continued on next page

E-2.6 Cranes, Continued

9 Shuttlelift - 40CTS Overhead Crane



Located at: Barstow and Belen

10 Taylor - 9040 Overhead Crane



Located at: San Bernadino

Continued on next page

E-2.6 Cranes, Continued

11 Taylor -- 9040M Overhead Crane



Located at: San Bernadino

12 Taylor - 9040N Overhead Crane



Located at: Los Angeles

Continued on next page

E-2.6 Cranes, Continued

13 Taylor 9040 NRG - Rail Guidance Overhead Crane



Located at: Commerce and Memphis

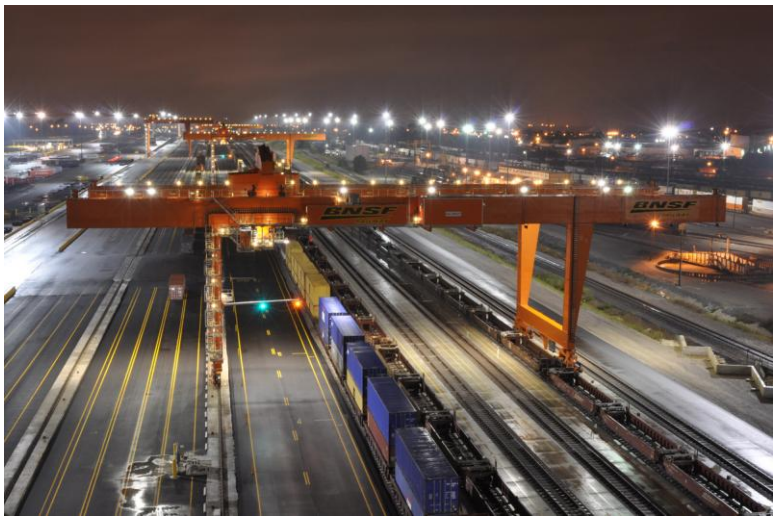
14 Taylor – 9040S Overhead Crane



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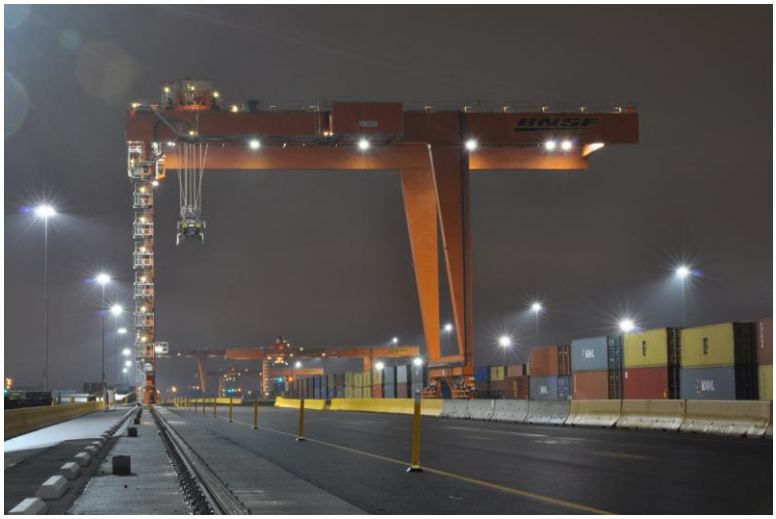
E-2.6 Cranes, Continued

15 Kone Wide Span Production Crane



Located at: Memphis

16 Kone Wide Span Stacking Crane



Located at: Memphis

Continued on next page

E-2.6 Cranes, Continued

17 Kone 40T RMG Crane



Located at: Seattle

E-2.7 Empty Handlers

1 Mi - Jack / Fantuzzi 18H56 Empty Handler



Located at: Corwith

2 Taylor -- T150H Empty Handler



Located at: Corwith and San Bernadino

Continued on next page

E-2.7 Empty Handlers, Continued

3 Taylor - T150L Empty Handler



Located at: Amarillo, Corwith, and Kansas City

E-2.8 Reachstackers

1 Taylor - T994L



Located at: S I G

2 Mi-Jack / Fantuzzi - 50RS



Located at: Corwith

E-2.9 Sideloaders

1 Le Tourneau - 2682S Sideloader



Located at: Billings and Birmingham

2 Taylor - 954



Located at: Los Angeles

Continued on next page

E-2.9 Sideloaders, Continued

3 Taylor - T1100 Sideloader



Located at: Cicero, Corwith, Houston, Kansas City, Los Angeles, Portland, San Bernardino, St. Paul, S I G, So. Seattle

Continued on next page

E-2.9 Sideloaders, Continued

4 Mi - Jack / Fantuzzi - 450H4 Sideloader



Located at: Oakland JIT

5 Mi – Jack - PC90 Sideloader



Located at: Denver, Dilworth, Havre, Kansas City, New Orleans, Omaha, Richmond, Shelby, Spokane, St. Louis, St. Paul, Wenatchee

Continued on next page

E-2.9 Sideloaders, Continued

6 Mi - Jack - MJ 9090 Sideloader



Located at: Kansas City, Portland, St. Paul, So. Seattle, Spokane

E-2.10 Double Bullet™ Pin Lift System Characteristics

1 Overview

The Double Bullet™ pin lift system lifts containers using sidewall lift castings (see Photo 5). The system uses a circular pin (7/8" depth with 1-3/4" diameter) which inserts into the casting's "bullet-tip" shaped (triangular) aperture to perform the lift. The pin inserts near the bottom of the casting and self-aligns into the top of the casting, guided by the angled sides of the aperture. Secondary locking of the engaged pins ensures they remain fully in place during all phases of lifting without creating unnecessary pressures on the container or its castings.



Photo 5: JBHU Container being raised from sidewall using Double Bullet™ pin lift system.

Continued on next page

E-2.10 Double Bullet™ Pin Lift System Characteristics, Continued

2 Lessons Learned

Lift equipment spreader end beams combine the twist locks and side pins on movable clamping heads, which extend and retract horizontally along the end beams to either insert the pins into sidewall lift castings or to position the end beams at the correct width for top (twist lock) lifting. The twist locks are mounted outboard of and below the side pins (see Photo 6). This allows lift equipment to alternate between either lift device as required by the mix of Hunt containers with standard containers for train loading/unloading.



Photo6: Front view of twist lock and Double Bullet™ pin arrangement on lift equipment end beam movable clamping heads.

Clearance heights between the end beam and trailer roofs for bottom lift are NOT affected. (In fact, with the end beam in the fully extended position, the clearance between the end beam and the trailer roof is increased by about 8 inches. This additional clearance allows lifting of certain drop frame trailers, which were not accessible with the previous design.

BNSF modified most of its lift equipment to take advantage of this dual lift-method feature and operates Double Bullet™ pin lift systems manufactured by Elme and Taylor, who followed detailed design specifications to ensure maximum continuity.

Table I summarizes the pin lift system characteristics by manufacturer.

Continued on next page

E-2.10 Double Bullet™ Pin Lift System Characteristics, Continued

3 Soft Landing Feature

Each manufacturer's Double Bullet™ pin lift system incorporates a "soft landing" feature. This is an automatic control over the lift equipment's hoist function to reduce the downward speed and weight applied to the container roof as the end beam is lowered. Lift equipment operators should allow these automatic stops to work as the spreader is lowered onto a container roof since it is intended to aid ease of operations as well as prevent damage to containers and BNSF lift equipment.

The device controlling the pin system soft-landing feature differs from that controlling twist lock soft-landing.

4 ELME Soft Landing

The Elme soft-landing feature uses a mechanical spring-mounted lever arm on the underside of the end beam. As this lever makes contact with the top of the container, it depresses and activates a switch to stop the hydraulics in the hoist system. Sideloaders utilize a one-point contact to cut out hoist lowering. Cranes are cut out after the second contact is made on the individual end beam, and there is cut out for each (front/rear) hoist system.

Continued on next page

E-2.10 Double Bullet™ Pin Lift System Characteristics, Continued

5 Table I: Double Bullet™ Pin Lift System Characteristics by Manufacturer

BNSF Lift Equipment Installation	Elme	Taylor
1000R	X	X
1000RC	X	X
1000R	X	X
2682C	X	X
2682S	X	X
2682SS	X	X
450H	X	X
50RS	X	X
750R	X	X
800AC	X	X
850R	X	X
900R	X	X
9040		X
9040M		X
9040MN		X
9040N		X
9040S		X
954	X	X
ISL40CTS	X	X
MJM90RT	X	X
MJM90W	X	X
P90	X	X
P9090	X	X
T1100		X
T920L		X
T950L		X
Combination Twist Lock/Side Pin Arrangement	X	X
Soft Landing Feature	X	X
Locking Mechanisms Hydraulic Actuator Screw	X	X
Position Indicator Lights	X	X
Other Features Pin retracts into end beam Alignment sensors Corner sensors	X X X	

Continued on next page

E-2.10 Double Bullet™ Pin Lift System Characteristics, Continued

6 ELME Override Feature

Elme sideloader soft-landing systems have an override feature to return full manual control of the hoist function, but this override feature is basically reserved for maintenance personnel when the soft-landing system is malfunctioning.

7 Taylor Soft-Landing

Taylor's soft-landing feature is controlled by four proximity switches located above the side pins in the support structure connecting the end beams with the spreader. As the spreader is lowered to the container, these switches are energized and stop the hydraulic hoist. Up to four inches of leveling adjustment is possible at each end of the spreader.

8 Locking Mechanisms

Different designs have been employed by the manufacturers for ensuring the pins remain fully engaged during lifting and movement. The locking mechanisms in use are hydraulic accumulators and screw mechanisms.

9 Hydraulic Accumlators - ELME

Side locking and unlocking are performed by hydraulic cylinders located at each pin position. Hydraulic accumulators exert a constant pressure on the pins to ensure full engagement is maintained when in the clamped position, while spring-actuated taper locks mechanically maintain the locked mode. Furthermore, the "unlock" circuit is disengaged while a container is suspended.

10 Screw Mechanism - Taylor

A horizontally-mounted screw extends or retracts the pin in or out of the lift casting aperture. When the pin is fully inserted, the screw continues to retract inward against a series of fixed coiled springs until they are compressed with 3,000 pounds of force; then the screw stops. Even though the springs are compressed, they are able to flex outward to conform to width variations up to 1/4" on each side caused by container wall deflections, thus ensuring the pin remains fully engaged at all times.

11 Position Indicator Lights

Both Double Bullet™ pin lift systems utilize the standard three light colors in the lift equipment cab to indicate spreader and pin positions:

- The RED light indicates the pins locks are in the unlocked position.
- The AMBER light indicates the spreader is resting on the container roof (landed).
- The GREEN light indicates the pins locks are engaged and locked in the lift casting.

Continued on next page

E-2.10 Double Bullet™ Pin Lift System Characteristics, Continued

Position Indicator Lights (continued)

Depending on the lift equipment modified, these lights may also appear on an exterior light bank located on the lift attachment. Some Taylor installations have such a light bank, which includes a blue REAR CLAMP light along with the red, amber, and green lights (see Photo 7). This blue light indicates when the two pins closest to the operator (truck side) are in position and remains illuminated as long as the CLAMP switch is depressed for engaging the other two pins farthest from the operator.

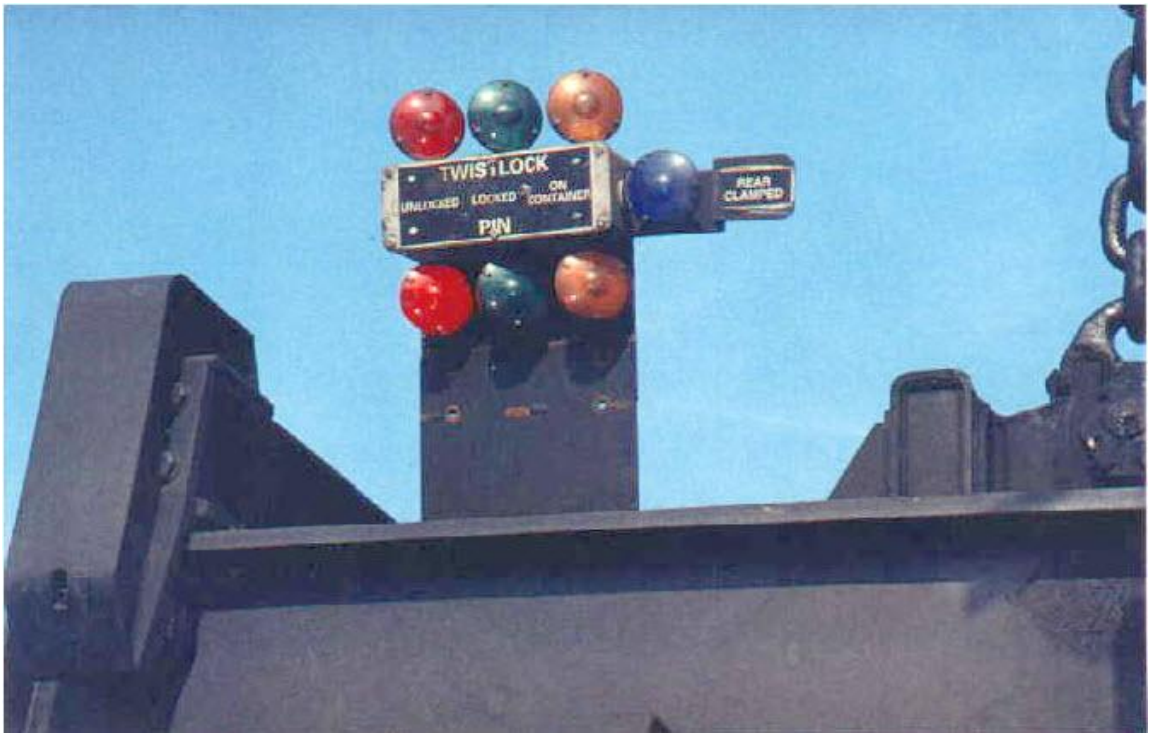


Photo 7: Taylor Exterior Light Bank

12 Lift Equipment Cab Modifications

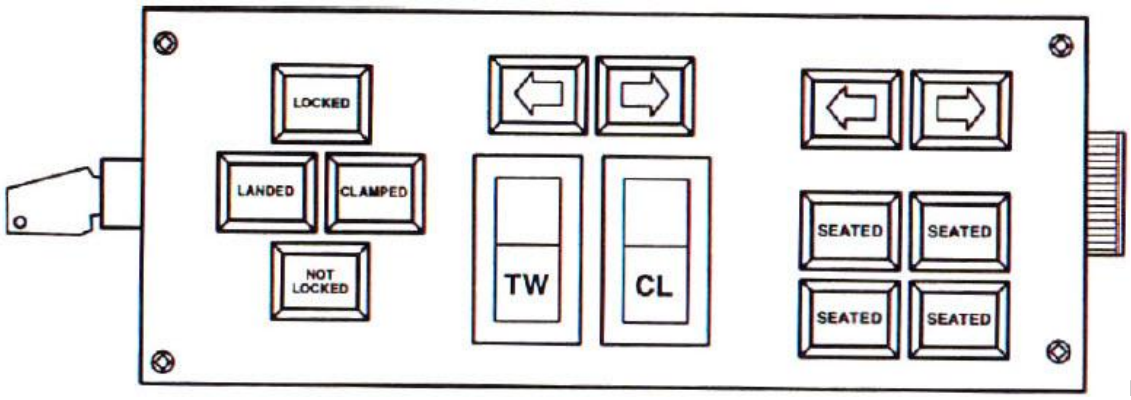
Lift equipment cab modifications necessary to operate the Double Bullet™ pin lift system vary with each manufacturer.

Continued on next page

E-2.10 Double Bullet™ Pin Lift System Characteristics, Continued

13 Elme Installations

ELME - See Figure 1 and Photo 8. Elme installations use one rocker switch to adjust the width of the end beam movable heads for selection of either twist lock or pin lifting; another dual-system rocker switch engages and locks either the pins or twist locks.



F

Figure 1: Typical cab panel modification for Elme Double Bullett™ pin lift installations



Photo 8: Typical Elme position indicator light dashboard installation

Both twist lock and pin lifting systems use the same red and green lights, but different amber lights. The LANDED light on the control panel is the only amber light associated with the twist lock system, whereas the four amber SEATED lights and the one amber CLAMPED light are associated with the pin lift system.

When illuminated, the SEATED lights indicate which corners of the end beams have contacted the container roof. The CLAMPED light illuminates after four clamped sensors in the heads are against the castings and at least 1500 pounds of force is exerted against the castings.

Continued on next page

E-2.10 Double Bullet™ Pin Lift System Characteristics, Continued

Elme Installations (continued)

When operating in pin mode, alignment contact sensors tell the lift operator which direction (left or right) the pin should be adjusted so it aligns with the lift casting. This information is relayed to the operator by illuminating arrow-shaped lights on the cab panel. If all alignment sensors are on, the operator should unclamp and realign. If only one sensor per side is lit, the pin is about one-half of a hole off, and only a minor adjustment in the arrow's direction is required. The best (proper) position for pin insertion is all seated lights on with the CLAMPED light on while no alignment sensors are lit.

The sideloader pin lift soft-landing override feature for use by maintenance personnel is controlled by a spring-loaded key switch.

14 Taylor Installations

TAYLOR - See Photos 9 and 10. In Taylor installations, a rocker switch allows selection of either pin or twist lock operation.

The pin lift system has a separate set of exterior position lights on the lift attachment but uses the same interior (dashboard) lights as the twist lock system (see Photo 9).

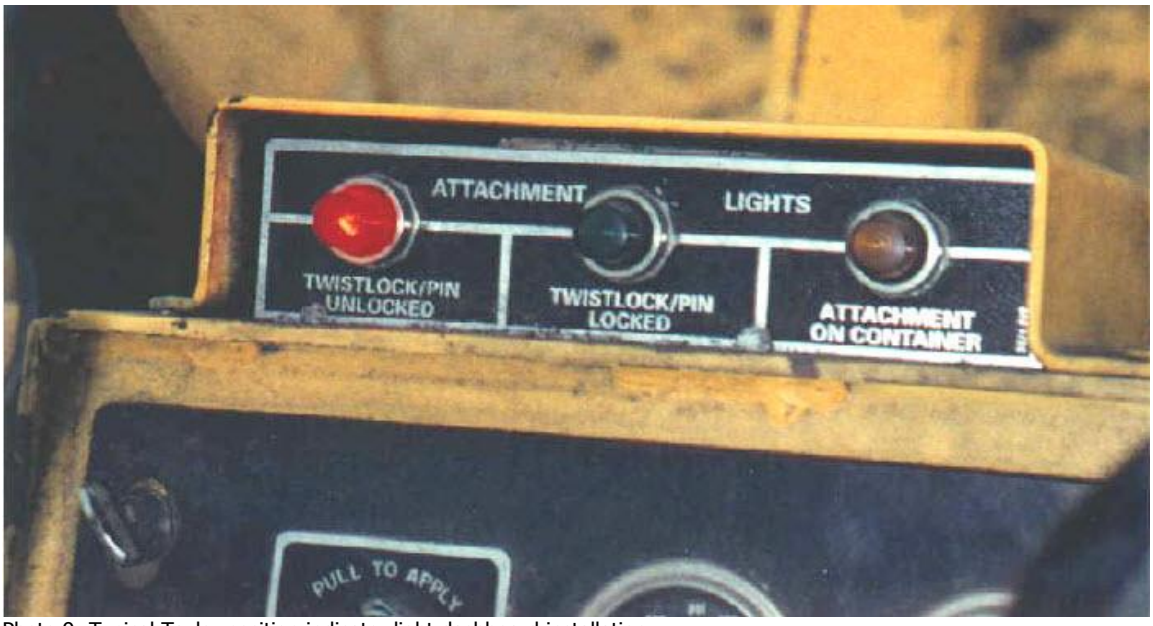


Photo 9: Typical Taylor position indicator light dashboard installation

Otherwise, pin lift operation uses the same controls and switches in the same manner as the twist lock system (see Photo 10).

Continued on next page

E-2.10 Double Bullet™ Pin Lift System Characteristics, Continued

Taylor Installations (continued)



Photo 10: Typical cab with Taylor manufactured Double Bullet™ pin lift modifications

E-2.11 Double Bullet™ Pin Lift System Suggested Operating Procedures

1 Overview

Damage during pin lift operations often occurs when lift operators are attempting to engage the pin into the lift casting. Damage can likely be avoided by understanding the pin lift system and its suggested operating procedures and by making use of all available indicators to properly and safely conduct the operation (i.e., position lights, visual references, etc.).

The following are suggested operating procedures for using the Elme manufactured Double Bullet™ pin lift system and the Taylor manufactured Double Bullet™ pin lift system. In the event of an inconsistency between the information contained herein and information contained in any service partner or manufacturer instructions regarding operation of the Double Bullet™ pin lift system, the service partner or manufacturer instructions prevail.

2 Lifting Containers with Elme/Taylor Manufactured Double Bullet™ Pin Lift Installations

If lifting a Hunt container (Orange casting) from its chassis, first ensure that the chassis side latches are unlatched before attempting separation.

1 Spreader must be fully extended to the 40-foot twist lock position, extend to stops, lengthwise over the container

2 Ensure clamping ends are fully open in unclamped position.

3 Align spreader over the container with clamping ends aligned with top sidewall castings, which are at the same point lengthwise as twist lock holes.

4 Lower the Spreader onto top of the container until the down position indicator light is on. When all four corners are seated, the pin is now at the correct vertical alignment for engaging into casting opening.

5 Ensure the pin alignment is correct lengthwise on the container for pin insertion into the casting hole. If not aligned, use spreader side shift control to correct position.

Guide chains suspended from the spreaders of overhead cranes indicate whether the container is “square” or if lift assemblies need to be skewed. Use standard lift equipment controls to make adjustments. Other visual aids help determine if the pins are horizontally aligned with the lift castings, such as high reflectivity (conspicuity) tape applied to each of the spreader end beam clamping head corners facing the operator.

1 When the pin is aligned, engage the clamp control until the pin enters casting hole and clamp light indicator is on.

2 When the clamp light is on, lift container in the normal manner.

Continued on next page

E-2.11 Double Bullet™ Pin Lift System Suggested Operating Procedures, Continued

3 Lowering Containers with Elme/Taylor Manufactured Double BulletTM Pin Lift Installations

If lowering a Hunt container (Orange casting) to chassis, first ensure the side chassis latch and handle are down and clear to avoid breaking the handle and/or poking a hole in the container.

1 Position the container over the chassis or railcar and lower the spreader.

2 Lower container into proper position, continue to lower spreader hoist mechanism until down light indicator is on.

3 When the down light indicator is on, engage unclamp control lever until the unclamp light indicator is on and pin is clear of casting. Hoist spreader from container roof in normal manner.

4 Returning to Twist Lock Operation with Elme/Taylor Manufactured Double BulletTM Pin Lift Installations

1 When twist lock operation is required, push “twist lock button” and clamping mechanism will fully retract to the normal twist lock position for lifting containers with roof castings.

2 Extend or retract spreader to proper container length and follow twist lock operations.

E-2.12 Lifting Procedures for Trailers

1 Overview

BNSF is experiencing ongoing complaints from customers regarding damages to trailers. The types of damages which are being sustained are primarily related to improper work processes during lifting operations. In many cases, the root causes of severe damages to trailers and containers is impact to the units as result of crane and sideloaders not having sufficient vertical clearance as machines approach units to be lifted.

2 Damage-Free Lift (DFL)

BNSF has installed DFL (Damage-Free Lift) on many machines to protect against inadvertent twist lock contact during trailer lifting, but this system is only effective when proper procedures are employed by operators. For these reasons, the following are several key work processes which are being implemented to prevent damages during the lifting process.

3 Trailer Lifting Processes

1. Crane spreader and stabilizer beams must be completely clear of all units on railcars before any directional travel is begun. To ensure vertical clearance is achieved spreader twistlocks must be 24 feet above ground and spreader must be positioned over track pad before any travel movement is made.

2. Spreader will be maintained over the track pad during movement, and operators will move the spreader towards the unit to be lifted. Guide chains (see photos on next page) located at each end of the spreader will be used to align spreader longitudinally on the unit. The spreader should stop prior to contact with the top of the unit. Chains must be against sidewall at both ends of the unit, and spreader must be centered on unit equidistant from ends. When guide chains and spreader are correctly positioned, spreader is lowered into position for lifting trailer. If guide chains are broken or missing they must be repaired/replaced soon as possible.

3. After guide chains are aligned, lifting arms are rotated down with spreader approximately 12 inches above trailer roof. After lifting arms are fully rotated down, final vertical alignment should be achieved so that lifting shoes are no more than four inches below trailer bottom rail at all four positions. At this point, operators must ensure that lifting shoes are positioned onto lift pads. This should be accomplished with side shift functions as first option. When lifting shoes are on lift pads, arm camp function should be made. Ground person must observe that all lift shoes are correctly positioned and have a firm grip on trailer before directing operator to lift trailer.

4. When lifting trailers, keep the trailer as level as possible and ensure that trailer tandems and landing legs are free and clear of obstructions on railcars (hitches, side rails, ladders, bolsters, etc). The trailer should be moved to/from railcar in a smooth level manner and always lowered to track pads outside of PUC (Public Utility Clearance) line limits.

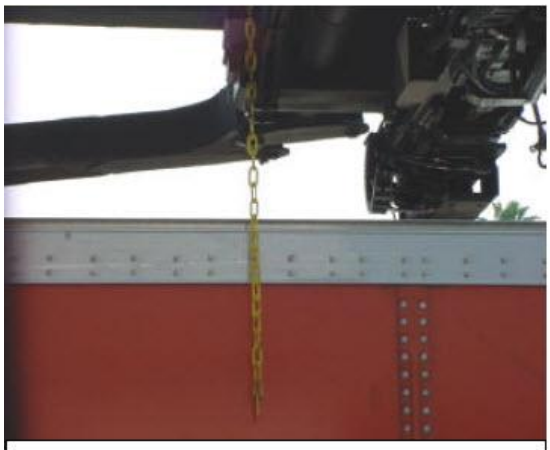
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E-2.12 Lifting Procedures for Trailers, Continued

Trailer Lifting Processes (continued)

5. When setting a trailer down, the trailer tandems should be set down first, followed by trailer blanding legs. Setting trailer tandems down first will prevent damage to landing legs. Once trailer is on ground, lifting arms should be lowered a maximum of four inches below bottom rails and then un-clamped. Once lifting shoes are unclamped, the spreader should be hoisted so that lifting shoes are above the bottom rail to ensure that there is sufficient clearance to rotate the arms up. If lifting shoes are not clear of trailer sidewall, spreader position should be adjusted to achieve clearance. Guide chain alignment will indicate correct clearance. When appropriate clearance is achieved, the arms can be rotated up. Once it is evident that lifting shoes are not hung under trailer, the operator can begin raising the spreader; NO OTHER MOVEMENT (Travel, traverse) IS ALLOWED UNTIL ARMS ARE IN FULL ROTATED UP POSITION.

6. For lifting trailers onto railcars, the same rules apply regarding alignment and vertical clearance. However, since Rule 5 is slightly different, in that when lifting trailers from the track pad to the railcar, the landing legs should be lifted first followed by the trailer tandems. The entire weight of the trailer should never be placed entirely on the landing legs. After achieving proper clearance to traverse trailer over railcar, the trailer tandems should be placed against center rub rails or within car side rails. The trailer kingpins should be lowered into the hitch (for automatic hitches, no more than 6 inches in front of hitch opening, with rear end of trailer no more than six inches above front end). When properly aligned, the trailer is moved into the hitch locking mechanism, either by side shift or straight travel. This movement must be at low speed to prevent damage to trailer, railcar, or crane. Once the automatic lock engages, a reverse move against the locking jaw must be made to ensure that jaw is fully locked. Trailer tandems are then lowered onto railcar properly aligned against rubrails.



Note: Spreader is stopped prior to contact with the top of the unit. Chains are against sidewall at both ends of the unit



Note: After guide chains are aligned, lifting arms are rotated down with spreader approximately 12 inches above trailer roof

E-2.13 Quick Reference Guide Trailer Lifting Procedures

1 Trailer Lifting Procedures

1. Use guide chains to align against trailer to ensure proper longitudinal alignment (see photos above). If guide chains are broken or missing they must be repaired/replaced soon as possible.
2. Spreader twistlocks must be 24 feet above ground and spreader must be positioned over track pad before any travel movement is made.
3. No two functions can be made at the same time, except raising spreader while rotating arms up.
4. Always set trailers down on tandems first, followed by the landing legs.

E-2.14 Handling 28-Foot UPS Containers

1 Purpose

Communicate mandatory handling procedures for 28-foot UPS containers.

2 Statement

All 28-foot UPS containers must be handled in accordance with the following:

POSITIONING CHASSIS
Hostler drivers positioning bare UPS 28-foot chassis must ensure that the landing gear legs are in contact with the ground (lowered completely) before pulling out from under the chassis or before commencing live loading/offloading.

In addition, the fifth wheel must be in the down position to avoid any unnecessary stress on the chassis gooseneck for live loading/off-loading operations.

LIFTING METHOD
UPS 28-foot containers shall be TOP LIFTED ONLY, even if the container is moving TOFC. Either sideloaders equipped with tilt mechanisms or overhead cranes may be used for lifting and may lift the container at either the 20-foot or 28-foot position.

Only when lift equipment twist locks are inoperative and the unit is in jeopardy of failing may UPS 28-foot TOFC containers be bottom lifted to meet service.

LIFTING CONTAINER FROM CHASSIS
With both the front pins and rear twist locks disengaged, the front end of a UPS 28-foot container must be raised first and be clear of the chassis by several inches (i.e., 2-3 inches) before raising the rear of the container off the chassis.

The container should then be raised in a level horizontal position.

LOADING CONTAINERS ONTO CHASSIS
After ensuring that both front pins and rear twistlocks are disengaged, the container must be lowered onto a level chassis tandems first. In accordance with Intermodal Hub Policy Statement 96-07A "Container Lock Down", for the safety of ground personnel ONLY THE FRONT PINS SHALL BE LOCKED PRIOR TO MOVEMENT FROM TRACKSIDE. Under no circumstances should hostler drivers or ground forces lock the rear twist locks on units to be pulled from trackside.

RAILCAR LOADING RESTRICTIONS
UPS 28-foot containers shall ONLY be loaded in DTTX series 560 cars (56-foot well cars) and must be loaded in pairs with their doors facing inward toward each other at the center of the well.

3 Rationale

Prevents damage to chassis goosenecks and landing gear. Provides a satisfactory degree of container securement for ground movement, while enhancing ground personnel safety by eliminating unnecessary exposure outside the hostler cab in high density operational areas where visibility may be obstructed.

E-2.15 Empty Containers in Bulkhead Double Stack Cars

1 Purpose

Prohibit the loading of empty containers in Bulkhead double stack cars not equipped with interbox connectors

2 Double Stack Cars with Bulkheads

Empty containers must only be loaded in cars equipped with Interbox connectors locking empty containers to each other.

The following series of equipment are double stack cars with bulkheads. The BN and SFLC cars are being re-stenciled to BNSF as they develop on mechanical tracks.

BN 63910-63924
BN 63927-63930
BN 63933-63977
BN 63978-63989
BN 63994-64002
BNSF 236000-236019
BNSF 236020-236034
BNSF 236037-236040
BNSF 236043-236087
BNSF 236088-236099
BNSF 236104-236112
CSXT 620000-620294
DTTX 63000-63342
DTTX 110070-110079
MCER 5100-5125
NOKL 250100-250103
SFLC 254000-254019
SP 2101, 2106, 2202, 2206, 2209, 2210, 2212, 2214
SP 2344-2417
SP 2420-2429
TFM 79000-79060
WC 36600-36610

3 Rationale

Provides greater assurance that empty containers are secured properly and reduces the potential for loss of container in train movement.

E-2.16 Procedures for Handling Lift Equipment Damages

4 Overview

Following are the procedures established for handling lift equipment damages that are found. All lift equipment damages must be reported immediately on form HUB00001 and submitted via Outlook mail to: IABU DL Lift Equipment Damage. On the e-mail subject line indicate the name of the facility, the BNSF machine number, and incident date (i.e., Cicero - M8808 - 5/2/02). This form does not replace Form HUB00012; all facilities must continue to report all accidents and incidents on BNSF Form HUB00012 as outlined in the accident section of the Hub Operations Manual.

BNSF Form HUB00001 Lift Equipment Damage Report must be used to report lift equipment damages that are found (see sample. You may access Form HUB00001 from the Corporate Forms folder by using Microsoft Word. The maintenance service partner or designated ramp personnel must complete the following sections of the Lift Equipment Damage Report.

5 Required Information

The following information is required when completing form HUB00001:

- **Location of Incident:** Facility location where the incident occurred
- **BNSF Accident Report Filed: Yes or No:** Indicate if the incident was reported on BNSF accident form HUB00012
- **Date Filed:** If the incident was reported on BNSF accident form HUB00012 indicate date reported
- **Date of Incident:** Indicate the actual date the incident occurred
- **Time of Incident:** Indicate the actual time of the incident
- **Date Incident Reported:** Indicate the date the incident was reported
- **Time Incident Reported:** Indicate the time the incident was reported
- **Name of Reporting Mechanic:** Indicate the name of the mechanic if reported by mechanic
- **Reporting Mechanic Number:** Indicate mechanic number if used by mechanic reporting damage
- **Related Work Order Number:** Indicate BNSF work order number if available
- **Incident Reported By:** Indicate name of individual reporting incident
- **Form Completed By:** Indicate name of individual completing this form
- **Date:** Indicate date this form was completed
- **Company Operating Equipment:** Indicate the name of the company operating the machine

6 Equipment Information

- **BNSF Machine Number:** Indicate the BNSF mark of the unit
- **Machine Hours:** Indicate the number of operating hours on machine
- **Machine Model:** Indicate the machine model
- **Machine Serial Number:** Indicate the machine serial number

Continued on next page

E-2.16 Procedures for Handling Lift Equipment Damages, Continued

7 Equipment Damage Information

- **When Was Damage Found:** Mark the appropriate box to indicate when the machine was found to be damaged
- **Where Was Damage Found:** Mark the appropriate box to indicate the location of the equipment when the damage was found
- **Description of Damage:** describe in detail the damages that were found
- **Probable Cause:** Indicate what was the apparent cause for the damage
- **Estimated Repairs Required:** Describe in detail the repairs that are required
- **Responsible Party Accepting Damages:** The responsible party for the damage must sign, indicate title and date report

8 Form Submission

After the form is completed, send it via Outlook mail to: ***IABU DL Lift Equipment Damage***

Be sure to indicate on the e-mail subject line the name of the facility, the BNSF machine number, and the incident date ***(i.e.* Cicero -- M8808 -- 05/15/02)**.

9 Lift Pads on Trailers - Definition

Lift Pads are 90 degree “angle iron” steel pads, which are installed on the bottom rail of trailers to protect the trailer during the lifting process. (Refer to AAR document M 931 or M 9931 for suggested specifications for lift pads).

Lift Pads provide protection for the trailer in three important ways:

1. Lift Pads indicate the most appropriate structural location to lift trailers.

2. Lift Pads provide the means to unitize multiple floor crossmembers, which provides additional strength at the lifting point.

3. Lift pads provide protection for rivet heads / fasteners on the exterior of the trailer bottom rails and sidewalls

10 Lift Pads on Positioning

Lifting shoes on cranes and sideloaders MUST always be positioned on the trailer lift pads installed on trailers. Normally lift pads will be at least 4 feet in length, and will be located at points where shoes will not contact other components on the sides or under the trailer, such as landing legs, turn signals, etc.

Continued on next page

E-2.16 Procedures for Handling Lift Equipment Damages, Continued

Lift Pads on Positioning







11 Lifting Trailers Without Lift Pads

If a trailer does not have lift pads installed, lifting shoes should be positioned about one foot in front of the landing legs and at the rear tandem mounting brackets. On trailers 48 ft. or longer, the spreader should be extended to the 40 ft. lift position. Never position lift points behind the landing legs and in front of the rear tandem rails, as this is not a structurally sound location for lifting on most trailers.



Wooden lift pads preventing full insertion of lift shoes under trailer bottom rail. DO NOT LIFT TRAILERS AT WOODEN PADS

Continued on next page

E-2.16 Procedures for Handling Lift Equipment Damages, Continued

12 Lifting Trailers with Wooden Pads

Some trailers have wooden planks affixed to the trailer bottom rails. Do Not Lift Trailers using any wooden materials as the lift point. Often these "wooden pads" are positioned to prevent shoes from contacting the trailer, thus the wood protrudes beyond the width of trailer bottom rails. Such wooden pads prevent the lift shoe from getting fully under the trailer bottom rail and the wooden pads can break if lifting is attempted on them. This creates a potential safety hazard.

Lifting of trailers with wooden pads should be done at lift points away from the wood following the guidelines in previous section, "Lifting trailers without lift pads."

E-2.17 Lift Equipment Damage Report Form

1 Lift Equipment Damager Report Form

To access a copy of the Lift Equipment Damager Report Form, go to http://bnsfweb.bnsf.com/departments/marketing/hubfacility/pdffiles/ibufiles/Forms/HUB00100.doc

E-2.18 Procedures for Reporting Lift Equipment Downtime and Uptime

1 Select Facility Procedures

At the following locations **(Albuquerque, Amarillo, Barstow, Belen, Billings, Birmingham, Dilworth, El Paso, Fresno, Harvard, Havre, Kansas City Murray, New Orleans, North Bay, Omaha, Spokane, and St. Louis)** all lift equipment downtimes that will exceed ½ hour must be reported as soon as possible after the machine goes down to the BNSF phone distribution list 917-0036, as well as to any local or regional requirements.

The initial downtime information must be input in the lift equipment access database and when the machine returns to service the record must be closed in the access database.

2 All Other Facilities

All of the other Intermodal facilities will need to provide a written summary report as indicated below, and input the downtime/uptime information in the access database as indicated above.

Use the following guidelines for the Lift equipment downtime and uptime e-mail messages using the IABU DL Lift Equipment outlook distribution list: Example:

- **Name of location**: "…at the Fort Worth intermodal facility…"
- **BNSF machine number**: "…with a lift equipment downtime report, Machine M9411."
- **Downtime and uptime**: "It went down at 11:30 a.m., November 18, with a broken hydraulic hose to the clamp cylinder, estimated back in service at 12:45 PM, November 18."
- **Indicate whether downtime will impact trains or service**: "There will not be any late trains or service disruptions due to this downtime."
- **Phone number to call for questions**: "If you have any question call me at 817-867-6174."

When the machine is placed in service use the same message formats as above, indicating reason the machine was down, date and time the machine was returned to service.

3 Lift Equipment Voicemail Summary Report

1. Los Angeles must provide summary report (each shift);

2. Alliance, Cicero, Corwith, Logistics Park, San Bernardino, St. Paul, and Willow Springs must provide summary reports twice daily prior to 4:00 a.m. and 4:00 p.m. Central time;

3. Kansas City Argentine, Denver, Houston, Memphis, Oakland, Phoenix, Portland, Richmond, SIG, South Seattle, and Stockton must provide a summary report once daily prior to 4:00 a.m. Central time, to the BNSF phone distribution list 917-0036 (as well as to any local or regional requirements) of all lift equipment out of service for breakdown, damage, scheduled services and call outs in excess of ½ hour.

Continued on next page

E-2.18 Procedures for Reporting Lift Equipment Downtime and Uptime, Continued

4 Voicemail Summary Report Example

The following example shall be followed, by using the BNSF machine numbers:

- **Name of individual reporting: "**This is Lorrel Penalber…"
- **Name of location:** "…at the Fort Worth Intermodal facility."
- **Indicate whether you have train delays or service disruptions**: "This is the 4:00 a.m. equipment status report for July 15, 2009. There are no late trains or any other service disruptions caused by lift equipment failures
- **Equipment**: "equipment on the crane pad are:
  - Crane M8604, 1000R down on 7/14 at 8:00 a.m. for 250-hour service, parked in up status
  - Crane M0302, 850P down on 7/12 at 5:00 a.m. still down due to installation of damage free lift. Estimated back in service July 19 at 3:00 p.m.
- **Call outs:** there were five call outs during the hours of 16:00 to 04:00, one was over half hour. Crane T0203, on track 112 down at 22:00 due to bad drive motor, replaced and released unit at 22:50 – down for 50 minutes.
- **GPS systems:** Crane T9807 no power to monitor Crane M0003 needs reprogramming, all others in good working order. All other machines are up at this time. This concludes the downtime report for 4:00 a.m. July 15.
- **Contact phone number:** If you have any questions please contact BNSF maintenance at 817-867-6174.

If you do not have any downtime information to report you will still need to issue this voicemail indicating you name, location, equipment status report time and date, and indicated **"there is no downtime information to report."**

5 Lift Equipment Downtime Access Database

All lift equipment removed from service due to mechanical breakdown, preventive maintenance, scheduled repairs, enhancements, and any unexpected events must be reported as soon as possible by using the lift equipment database, option "new downtime report." All lift equipment uptimes must be reported when the machine is placed back in service by using the same database, option "update in service information."

6 Lift Equipment Downtime/ Uptime Access Data Base Requirements

The following information is required when reporting lift equipment downtime/uptime in the access database:

- **Location:** Facility location where machine is located
- **Date:** Report date will be completed by system
- **Time:** Report time will be completed by system
- **Person Filing Report:** Indicate the name of the individual completing report
- **Phone Number:** Indicate the phone number to call for any questions about the equipment
- **Mechanic:** Mechanic performing work on machine
- **Machine Number:** Input the BNSF machine number; from this number the model, type, and serial numbers will be populated by the system
- **Hour Meter:** Report Hour Meter Reading

Continued on next page

E-2.18 Procedures for Reporting Lift Equipment Downtime and Uptime, Continued

Lift Equipment Downtime/ Uptime Access Data Base Requirements (continued)

- **Date Down:** Indicate the actual date the machine went down
- **Time Down:** Indicate in military time the actual time the machine went down
- **Day of Week:** Populated by system
- **Estimated back in service date/time:** Indicate when you expect the machine back in service
- **Reason Machine is down:** Select downtime reason, Mechanical Breakdown, Preventive Maintenance, Scheduled Repair, Enhancement, or Unexpected Incidents.
- **Components involved in downtime:** Select from the list of components why the machine is down, if not listed select other
- **Describe reason for the equipment downtime:** Provide brief comment the reason for downtime
- **Actual in service date and time:** Indicate the actual in service date and time
- **Out of Service:** Populated by system
- **Did downtime cause late train release:** Select “yes” or “no.” If “yes,” describe below traffic affected
- **Did downtime cause goal failure:** Select “yes” or “no.”
- **Traffic and Trains Affected:** Complete if any traffic or trains affected
- **Length of time for service delay:** Complete as necessary

Equipment/Maintenance

E-3 Other Yard Equipment

Contents

This section contains the following topics:

Topic	See Page
Improper Operation of Forklifts with Chassis Rotators	2

E-3.1 Improper Operation of Forklifts with Chassis Rotators

1 Serious Accidents

Improper operation of forklifts with chassis rotators has caused two serious accidents at two different BNSF Hubs.

Chassis rotators have turned over, due to improper forklift operation. In each case the accidents were the result of forklift drivers not following manufacturer's operating instructions. The operators violated the following manufacturer's instructions:

- Moving the forklift with the chassis rotator arm in the extended position.
- Moving the forklift with the mast tilted forward.
- Moving the forklift with the chassis raised higher than necessary. Chassis should be lifted only high enough to provide unobstructed visibility for operator.

The result of these errors was that the forklift's center of gravity was adversely affected causing the forklift to flip over onto its left side. Unfortunately, there were personal injuries and significant damage to the rotators and chassis as result of these accidents.

2 Root Cause & Contributing Factors

Forklift operators were not aware of or failed to follow proper forklift operating instructions and procedures.

3 Lessons Learned

All equipment operators must be familiar with and follow all manufacturer's operating instructions as provided in equipment manuals.

Specifically addressing the forklifts with rotators, the following rules from the manufacturer's manual must be followed to avoid overturning forklifts:

- Never lift a chassis exceeding10,000 lbs. in tare weight
- Only transport a chassis with the chassis rotator frame below the chassis. This means the chassis is above the rotator fork frame
- Only transport a chassis with the forks at the lowest possible position to assure adequate ground clearance and maximum forward visibility

Never transport a chassis with the forklift mast tilted forward. In addition, common sense rules prevail when transporting any load with a forklift. Never "carry" or "transport" a chassis any longer distance than is necessary to place or remove the chassis to or from the stack. When moving with a chassis on the rotator, avoid making sharp turns and abrupt starts and stops.

Continued on next page

E-3.1 Improper Operation of Forklifts with Chassis Rotators, Continued

Lessons Learned (continued)





(Illustrations from an I-STOP poster)

Equipment/Maintenance

E-4 Trailers, Containers, Chassis

Contents

This section contains the following topics:

Topic	See Page
Confirm Kingpin in Hitch	1
Failure to Secure Trailer to Car	2
Container Ground Stacking	4
Container Lock Down Policy	5
Con joined Containers Policy (Containers with Doors at Both Ends)	7
Procedures for Handling Trailer and Container Registration	12
JB Hunt Containers	15
JB Hunt Chassis Characteristics	19
Domestic Container and Chassis Operations and Driver Safety Instructions	21
Bare Chassis	29

E-4.1 Confirm Kingpin in Hitch

1 Purpose

Confirm Kingpin in Hitch best practices establish actions required to ensure kingpins are engaged and locked in hitch locking jaws or rotors.

2 Flatcar Securement

After loading a trailer to a flatcar equipped with either a screw-type or semi-automatic locking hitch, the lift equipment operator must ensure that the trailer is properly seated on the hitch top plate and its kingpin engaged and locked in the jaw or rotor mechanism by reversing the motion of the lift equipment as if pulling the unit out of the hitch. Any trailer that is not properly secured to the hitch will be apparent by some play or larger-scale movement of the trailer.

3 Visual Confirmation

These maneuvers do not negate the importance of the groundperson visually confirming that the kingpin is engaged and locked in the jaw or rotor opening before proceeding to the next loading. Although this includes viewing the hitch locking indicators (yellow pins, flags, or handles) for a locked indication, it is important to remember that the jaw or rotor mechanism can be in a locked position but not necessarily with the kingpin engaged within it.

4 Rationale

Incorporating this securement check into the original loading process reduces the incidence of delay when units are found unsecured on an outbound inspection. It also provides greater assurance that the kingpin is truly locked in place than can be achieved with visual indicators and outbound inspections alone. Furthermore, this action eliminates a potential cause for derailment, death, injury, and/or loss of lading when an unsecured trailer is displaced from its hitch.

E-4.2 Failure to Secure Trailer to Car

5 Failure to Secure Trailer to Car

Pictured below is a UPS trailer which fell off of an 89-foot conventional car into the Little Blue River near Atherton, MO. Contents and equipment were completely destroyed by both impact and water damage. The event also posed great risk of causing a derailment, damage to other equipment or structures, and injury.





(Illustration from an I-STOP poster)

6 Root Cause

The root cause of this accident is a failure to properly load and secure this trailer to the car. The jaw of the screw-type hitch was locked, but the trailer kingpin was behind the top plate. The loading crew failed to visually confirm the kingpin was engaged in the jaw before screwing the jaw closed and did not perform a reverse pull.

7 Contributing Factors

Contributing factors included:

- Post loading/pre-departure inspection failed to identify deficiency
- Ramped at 0202 hours and inspected shortly after – visibility may have been a factor
- Rear hitch position
  - The car involved has two hitches facing the same direction; one on the end and one at the center of the car, which is typically screw-type. If a unit is loaded on the end hitch first, it may impair ability to visually guide the rear-loaded trailer's kingpin into the jaw.
  - In addition, it is difficult to reach these hitches to lock them due to their position on the car.

8 Impacts

The impacts of the accident were:

- No injuries
- Total loss of the trailer/contents and clean-up estimated at $125,000
- UPS service failure

Continued on next page

E-4.2 Failure to Secure Trailer to Car, Continued

9 Lessons Learned

The lessons learned from this accident include:

- Reverse pulls are required anytime a TOFC unit is loaded, regardless of whether the hitch is screw-type or semi-automatic
- Supplemental lighting must be used during post loading/pre-departure when lighting or visibility is inadequate
- TOFC units must be locked before commencing loading of next unit
- Whenever possible, load trailers on the center (rear) hitch first of 89-ft conventional cars with hitches facing the same direction

E-4.3 Container Ground Stacking

1 Purpose

Container Ground Stacking best practices minimize space required for inventory and facility management, and reduce the risk of stacked containers being displaced or blown over from high winds, prevent damage to equipment not suitable for stacking, and increase awareness of ground stacking in relation to overhead power lines.

2 Safety Responsibility

Container stacking must only be conducted in areas approved for stacking using sideloaders without arms, reachstackers, empty handlers, or stacking cranes. Those hub locations which do not have this type of lift equipment are prohibited from stacking containers.

Before commencing any stacking activities, observe the lot/area for the condition of any overhead power lines, warning signs, and physical barriers. If overhead lines are sagging or damaged, power line poles are damaged, or barriers positioned to restrict proximity to power lines are shifted/moved, do not conduct any stacking operation nor maneuver lift equipment in the area. Report the condition immediately to a supervisor.

3 Stack Proximity

Containers shall be stacked so that rows abut each other, with no appreciable gap or open area between them. Containers marked as “Do Not Stack” should never be placed under another container.

4 Stack Height

Domestic containers may be stacked a maximum of three high with stacking posts aligned, while international containers may be stacked a maximum of four high. (Stacking heights will be contingent on required minimum distances from power lines.) Whenever possible, rows should be stacked to equal heights or within one container height of each other.

5 Rationale

Incorporating information relative to power lines increases awareness of both BNSF/OSHA minimum distance requirements and the need to maintain vigilance while operating in their vicinity.

Eliminating the use of sideloaders with arms for stacking containers permits the operator to butt the rows against each other and should increase the degree of resistance the containers pose to shifting from high winds. Limiting the stacking height and stacking rows to equal heights should decrease the magnitude of damage suffered if shifting does occur. Guidance on J.B. Hunt equipment reduces the incidence of damage to this equipment caused by the stacking process itself.

E-4.4 Container Lock Down Policy

1 Purpose

The purpose of this policy is to establish container securement guidelines for the various types of chassis /containers for movement of containers on chassis within the facility.

2 Types of Containers

There are several different types of containers and chassis that are mated at trackside upon deramp from railcars. The method and process for securing containers to chassis will vary based on the type of equipment.

However, in all cases, the locking of front and rear chassis locks at trackside by the groundman is prohibited. Because of the close proximity of chassis parked trackside, the potential for movement of chassis by trucks at anytime, and the limited visibility for both groundman and truck drivers when containers are mounted on chassis, it is not safe for groundmen to walk between chassis to lock chassis locks.

3 Twistlocks

Twistlocks are cone-shaped locking mechanisms that are engaged manually by moving an activation handle which rotates the locking cone a minimum of 50 degrees from the unlock position to the lock position. Twistlocks can only be activated after the container has been mounted onto the chassis. The twistlock is inserted into the container floor casting through the bottom hole and the twistlock engages over the casting floor (see photos). Twistlocks are used on all road chassis to secure the rear end (tandem end) of chassis to containers. Additionally, twistlocks are the locking mechanism at the both rear and front end of all 20-footroad chassis and all positions on 12-pin road chassis.

	
Twistlock in unlocked position	Twistlock in locked position with handle in retainer

(Illustration from an I-STOP poster)

Continued on next page

E-4.4 Container Lock Down Policy, Continued

4 Push Pin Locks

Push pin locks are cylinder shaped locks that slide into the front end of container floor castings. The pin can be inserted in two different ways:

- Manually being inserted by being pushed into the casting opening.
- If left in the extended position, the pin can be inserted into the casting hole as the container is positioned onto the chassis by the lift equipment.

	
Front push pin in extended position	Push pin handle locked behind handle retainer

(Illustration from an I-STOP poster)

5 20 Foot Containers

The 20-foot chassis will have four twistlocks, two at front end, and two at rear end. These twistlocks should not be engaged by the groundman trackside. It is acceptable to move the container / chassis unit within the facility with all twistlocks in the unlocked position. The 20-footcontainers should be set down to the rear (tandem) end first.

6 JBHU Containers

BNSF's policy to mount JBHU containers to JBHZ chassis is to set the rear end of the container down on the rear or tandem end first. To accommodate this loading method, the front chassis pins must be in the unlocked (retracted) position to allow the nose of the container to be lowered onto the front end of the chassis. Hostler driver must ensure that the front pins are in the retracted position before spotting JBHZ chassis trackside.

7 All Other Containers

All other containers should be set onto chassis to the front (nose) end first.

Since most chassis are stored with the front pins in the extended or locked position, nose- first loading will require no additional securement action of the hostler driver.

E-4.5 Conjoined Containers Policy (Containers with Doors at Both Ends)

1 Purpose

The purpose of this policy is to provide specific guidelines for accepting and handling conjoined containers, and containers with doors at both ends of containers. The policy will also provide a list of container unit numbers which are approved for movement via BNSF Intermodal. Any other conjoined containers cannot be accepted.

2 Definition

Conjoined containers are two or more ISO steel containers that have been permanently conjoined into one unit by being welded together in an approved manner to allow the conjoined containers to be handled and shipped via rail intermodal as a single unit.

3 Background

Conjoined containers with permanent weldments have been handled without issue for several years on BNSF. However; in 2006 one company attempted to use mechanical connectors instead of weldments to conjoin the containers. The mechanical connectors failed during movement on railcar. This resulted in the individual containers collapsing onto the railcar and created a potential safety issue. (See photos 1 and 2 below of conjoined containers, where mechanical connectors failed.)

Continued on next page

E-4.5 Conjoined Containers Policy (Containers with Doors at Both Ends), Continued

Background (continued)

Photo #1: Conjoined containers using mechanical connectors are PROHIBITED. Do not accept.



View of top corner castings with hardware used to connect. Top connection loose.

Photo #2: PROHIBITED: Conjoined containers using connectors



Photo taken after attempted deramp. Bottom hardware is missing.

Continued on next page

E-4.5 Conjoined Containers Policy (Containers with Doors at Both Ends), Continued

4 Guidelines for Acceptance of Conjoined Containers

Guidelines for Acceptance of Conjoined Containers: Conjoined containers that utilize weldments between the corner castings with tubular steel rods are acceptable for intermodal transportation. (See Photo 3 below of the approved conjoinment weldments.) The intent of this policy to provide a list of conjoined container numbers that are approved for acceptance and transportation. No other conjoined units can be accepted.

Photo # 3: Welded connections between conjoined containers. This is the only "approved" method



Approved Conjoined Containers: Only one number will be visible on conjoined containers.

5 Shipper Flex Box

Unit Initial / Numbers:

MSGU 810001 to 820000

FBXU 810001 to 820000

Description: Two 10-foot long containers conjoined to form one 20-foot container. Doors always face outward.

Unit Initial / Numbers:

MSGU 910001 to 920000

FBXU 910001 to 920000

Continued on next page

E-4.5 Conjoined Containers Policy (Containers with Doors at Both Ends), Continued

Shipper Flex Box (continued)

Description: Two 20-foot long containers conjoined to form one 40-foot container. Doors always face outward. Containers will have tunnel section to fit on standard 40-foot chassis.

Unit Initial / Numbers:

MSGU 600001 to 650000

FBXU 290000 to 299000

Description: Single 40-foot containers (not conjoined) with doors at both ends of containers

MSGU 300001 to 320000

FBXU 300001 to 320000

Description: Single 20-foot containers with doors at both ends of container.

These containers can be shipped either empty or loaded. Capacity will be stenciled on each unit.

6 Additional Flex Box Unit Numbers

20-foot LVNU 810001 to 820000

40-foot LVNU 910001 to 920000

Above LVNU containers can only be shipped EMPTY.

Shipper: One-Way Lease

Unit Initial / Numbers:

ANYU 300001 to 309999

Description: These are 24-foot and 16-foot containers which are conjoined into 40-foot containers. These containers will have doors at both ends of containers, and in some cases will have side doors. These units can be moved as loads or empties, but if loaded cannot exceed the weight capacity listed on manufacturer's plate.

ANYU 101001 to 109999

Description: These are 10-foot long containers which are conjoined into 20-foot units, (2 10-foot containers) and 40-foot units (4 10-foot containers). These containers will have doors at both ends, and possibly side doors. These units can be moved as **EMPTIES ONLY**.

Continued on next page

E-4.5 Conjoined Containers Policy (Containers with Doors at Both Ends), Continued

Additional Flex Box Unit Numbers (continued)

All doors must be closed and locked with locking handles properly in place in door hasp.

Photo # 4: Two 10ft. containers conjoined into a 20 ft. unit. Note the second container number has been blocked out.



E-4.6 Procedures for Handling Trailer and Container Registration

1 Overview

Following are the procedures established for handling trailer and container registration. Every trailer and chassis must have an effective registration present before it can go on the street. These procedures must be consistently followed by all Hubs to insure this equipment has an effective registration before it departs the facility.

2 Requesting Registration

During the hours of 06:00 – 17:00 CST contact the Equipment Maintenance group at 800-446-6554 select option 2 twice. Request the registration from the agent answering the phone.

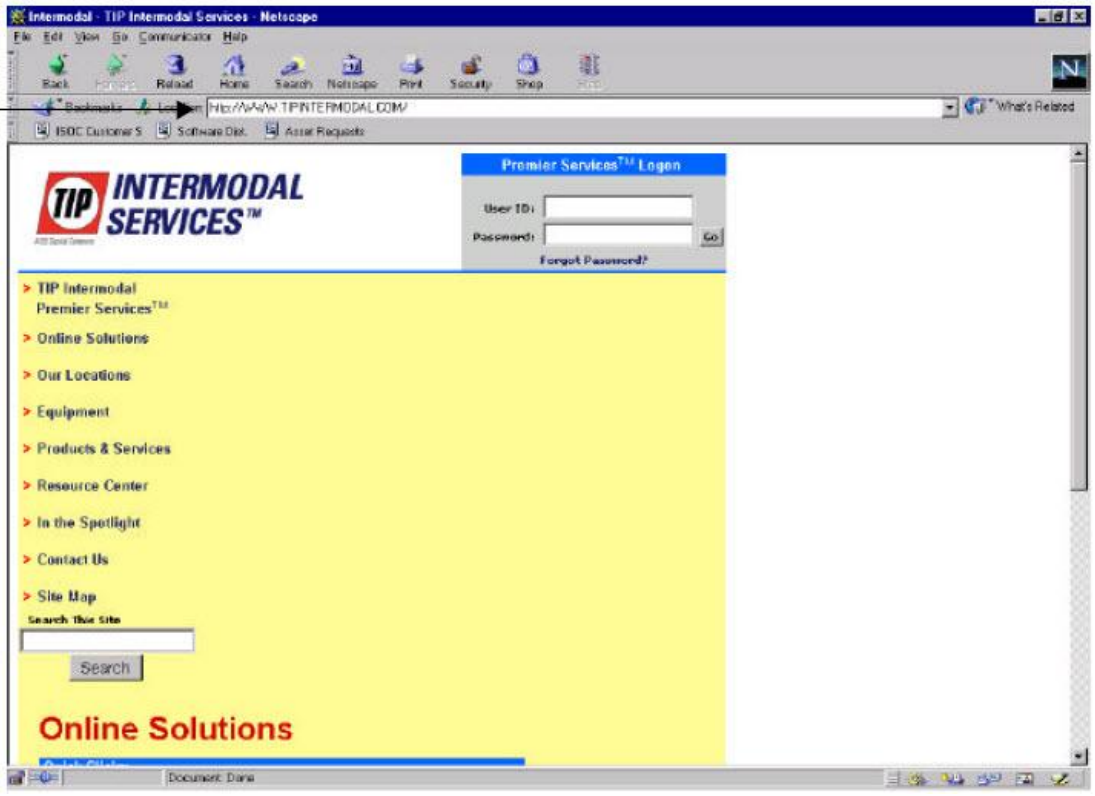
During off-hours, i.e., after 17:00 and on weekends, dial the same number and select option 2 twice. Registrations that are immediately available are:

- SFTZ 220000 – 223699
- BNZ 129000 – 129249
- BNZ 138102 – 138609

3 Off-hours TIP Registrations

Registrations for TIP owned equipment during off-hours can be obtained at the above number or can be retrieved from the Internet using the following procedure. Log onto the Internet.

Location: http://www.tipintermodal.com/

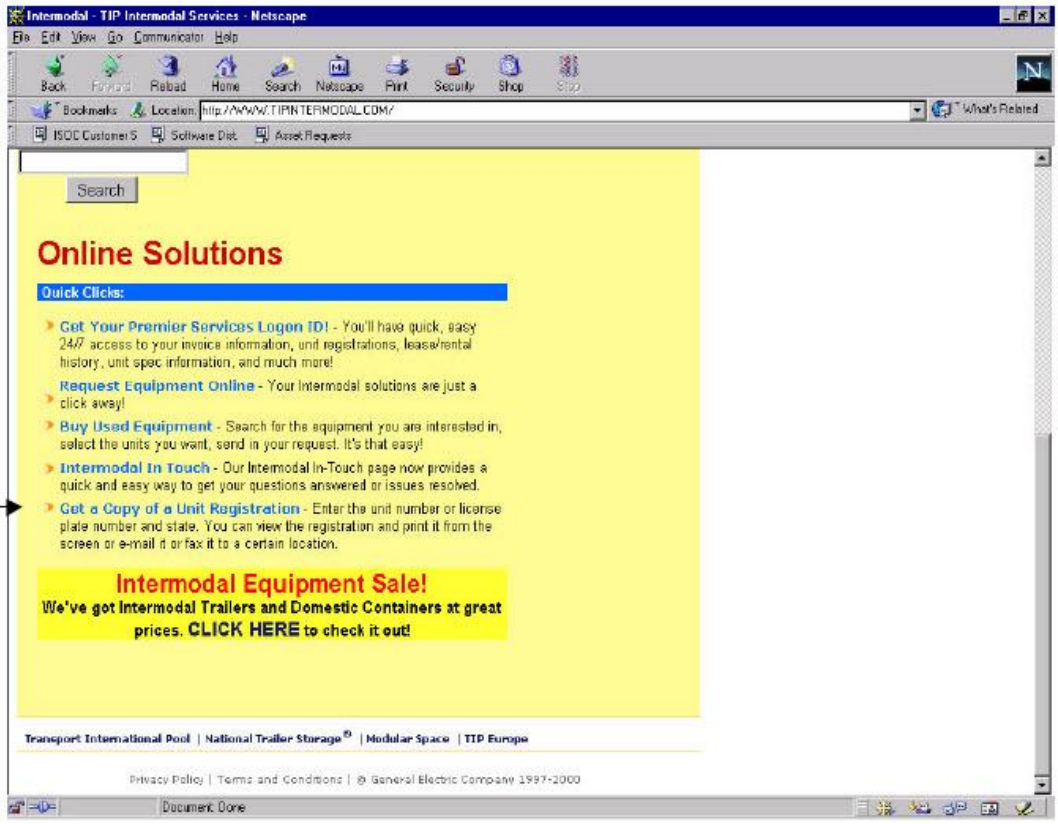


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E-4.6 Procedures for Handling Trailer and Container Registration, Continued

4 Get Copy of Unit Registration

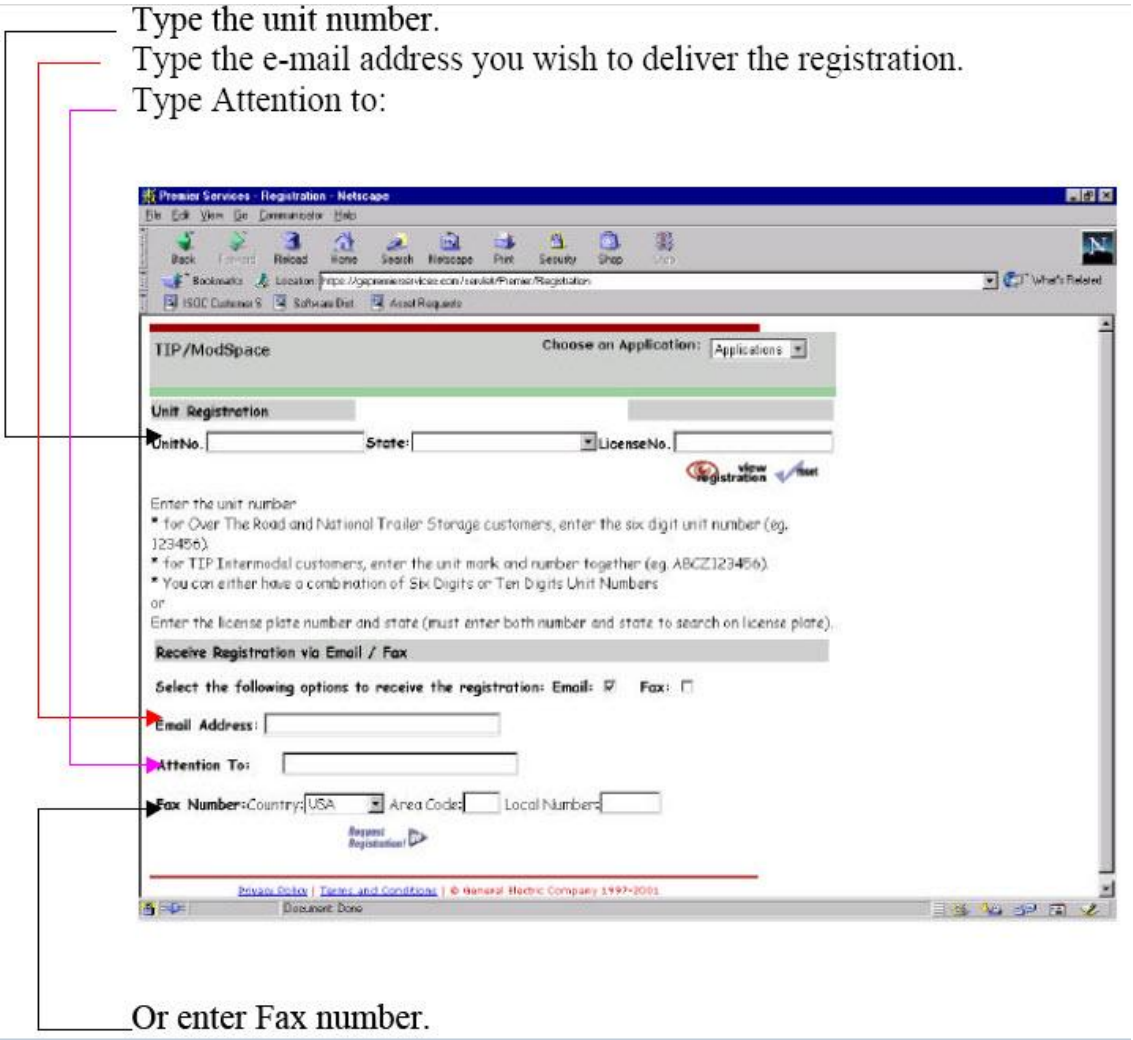
Scroll down to "Get a copy of a Unit Registration". Click on the selection.



Continued on next page

E-4.6 Procedures for Handling Trailer and Container Registration, Continued

5 Type Details



Finally, press Enter.

If this is a valid number the registration will be sent to the address or fax number you entered into the system.

If this is not a valid number, there is no other avenue but to make a new request at the Equipment Maintenance Group during regular business hours.

E-4.7 JB Hunt Containers

1 Overview

Several characteristics distinguish Hunt containers from conventional equipment. These design differences combine to permit greater lading volume (cubic and weight) than that offered by standard containers, but not without some impact on railcar loading options.

2 Hunt Containers with Pin Lift (Orange Castings)

Hunt Orange Castings Pin Lift containers stenciled with the initials JBHU are substantially different than standard containers. Their characteristics are:

- sidewall (as opposed to roof) lift castings with little or no protrusion into the container interior, offering full 110" floor-to-ceiling usable height (slightly less in a 48-foot container)
- two-hole floor castings which allow stacking any Hunt container on top of domestic/steamship containers or on another 48-foot Hunt container (see Photo 1 below); but
- top castings incapable of accommodating non-Hunt containers, which prevents stacking a domestic or steamship container on top of a Hunt container
- floor thickness less than standard containers to increase interior dimension
- a triangular lift casting aperture with rounded vertices, designed to accept a circular-shaped pin which inserts near the bottom of the Orange casting and self-aligns into the top of the *Orange* casting (see Photo 2 on next page). This method of lifting is accomplished with the Double Bullet™ pin lift system.
- reinforcing lift pads installed on the underside to prevent damage when bottom lifting is required only at those locations where the Double Bullet™ pin lift system is not available



Photo 1: Two-hole floor casting on underside of JBHU container: outboard hole for connecting two JBHU containers; inboard hole for connecting JBHU to ISO container top casting.

Continued on next page

E-4.7 JB Hunt Containers, Continued

Hunt Containers with Pin Lift (Orange Castings) (continued)

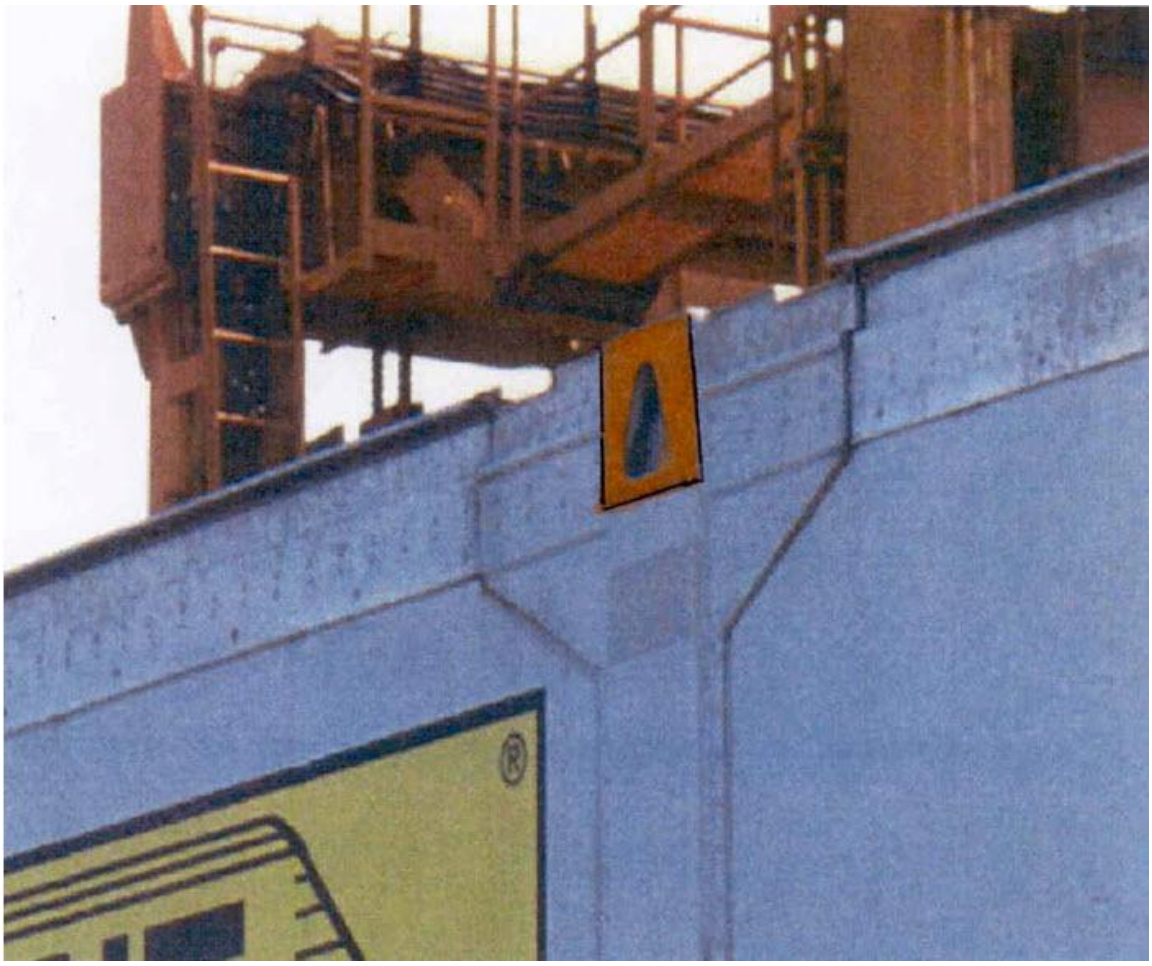


Photo 2: Triangular-shaped side lift casting at top of JBHU container. Double BulletTM pin inserts near bottom of casting and self aligns into top of casting.

3 Hunt Containers With Wide Top Pick (Wide TwistLock Position) – Blue Castings

Hunt 53-foot Wide Twistlock Position (WTP) stackable dura-plate container (series JBHU 215500-221449) will be added to the Hunt fleet in 2002 (see Photo 3 on next page). Their characteristics are:

- increased inside cubic capacity, offers full 110” floor-to-ceiling usable height
- compatible with existing railcars, containers and IBCs
- utilizes existing interbox connectors, with modified twistlock position from 89 inches to 96 3/8 inches which increased stability of container for stacking and lifting (see Photo 4 on next page.)
- can be stacked on top of any standard International/Rail Domestic Containers, JBHU 48-foot container, or any other WTP container

Continued on next page

E-4.7 JB Hunt Containers, Continued

Hunt Containers With Wide Top Pick (Wide TwistLock Position) – Blue Castings (continued)

- only containers with Floor Castings having two holes, inboard at 89 inches and outboard 96 3/8-inches can be stacked on top of JBHU WTP container. This includes all WTP containers and JBHU 48-foot containers.



Photo 3: Hunt 53-foot "Wide Twistlock Position" (WTP) stackable dura-plate container (Series JBHU 215500 to 221499)



Photo 4: Top View of WTP Casting of Hunt 53-foot WTP stackable dura-plate container (Blue Casting)

Continued on next page

E-4.7 JB Hunt Containers, Continued

4 Mandatory Operational Considerations

Hunt containers utilizing the Double Bullet™ pin lift system as their primary means for lifting. Lift operators must recognize JBHU containers to ensure the proper lift system is used.

1. JBHU containers with Orange Castings CANNOT be lifted with twistlocks. The single opening in the top casting of these containers is both too shallow for, and positioned outside the reach of, the twistlocks. *Attempting to lift JBHU Orange Casting containers with twistlocks will cause roof damage.*

2. Any BNSF ramp location where the Double BulletTM pin lift system is available MUST lift Hunt Orange Castings containers from the side using the pin lift method. This applies to Hunt containers whether moving with or without chassis.

Most Hunt ***Orange Casting*** containers have these lift pads, but a few do not. ***If the Double Bullet™ pin lift system is not available and a Hunt container does not have lift pads for bottom lifting, it CANNOT be lifted. Notify your supervisor or the BNSF hub manager immediately.*** The Hunt ***53-foot WTP Stackable Container*** (series JBHU 215500 to 221499) is similar to other domestic containers except for two distinct identifying characteristics. All WTP containers have their lift casting painted a ***royal blue*** color, and each will have the designation of "WTP" or Wide Twistlock Position on container sides near the top of each casting. ***Whenever possible, twistlocks should be used in the WTP position to lift JBHU WTP containers. If WTP Lifting is not possible, it is acceptable to use pin lift.***

E-4.8 JB Hunt Chassis Characteristics

1 Physical Characteristics

Several physical and design characteristics distinguish Hunt chassis from conventional equipment. Hunt chassis physical characteristics include:

- JBHZ series 100 initials
- a slimmer gooseneck width and reduced gooseneck beam height from roughly 5" to 3" due to container design differences
- lighter weight than conventional chassis due to design differences
- 48-inch kingpin depth from front of bolster to center of kingpin
- a side chassis latch for enhanced container/chassis stabilization

2 Design Characteristics

The chassis design differences are significant for several reasons:

- J. B. Hunt containers (JBHU) will only fit on J. B. Hunt chassis (JBHZ).
- J. B. Hunt chassis (JBHZ) can ONLY be used under J. B. Hunt containers (JBHU).
- JBHZ chassis should not be stacked, flipped, or racked like conventional chassis due to design and support characteristics. Special racks for transporting JBHZ chassis are available.
- Center side chassis latches (see Photo 1 below). must not be latched, if latches are in the locked position, they should be unlatched and left in that position. All of the other four corner locks must be in place and locked.
- JBHZ chassis design impacts railcar loading (see LOADING GUIDE section of the Intermodal Hub Operations Manual).

Continued on next page

E-4.8 JB Hunt Chassis Characteristics, Continued

3 Photo Chassis Side Latch

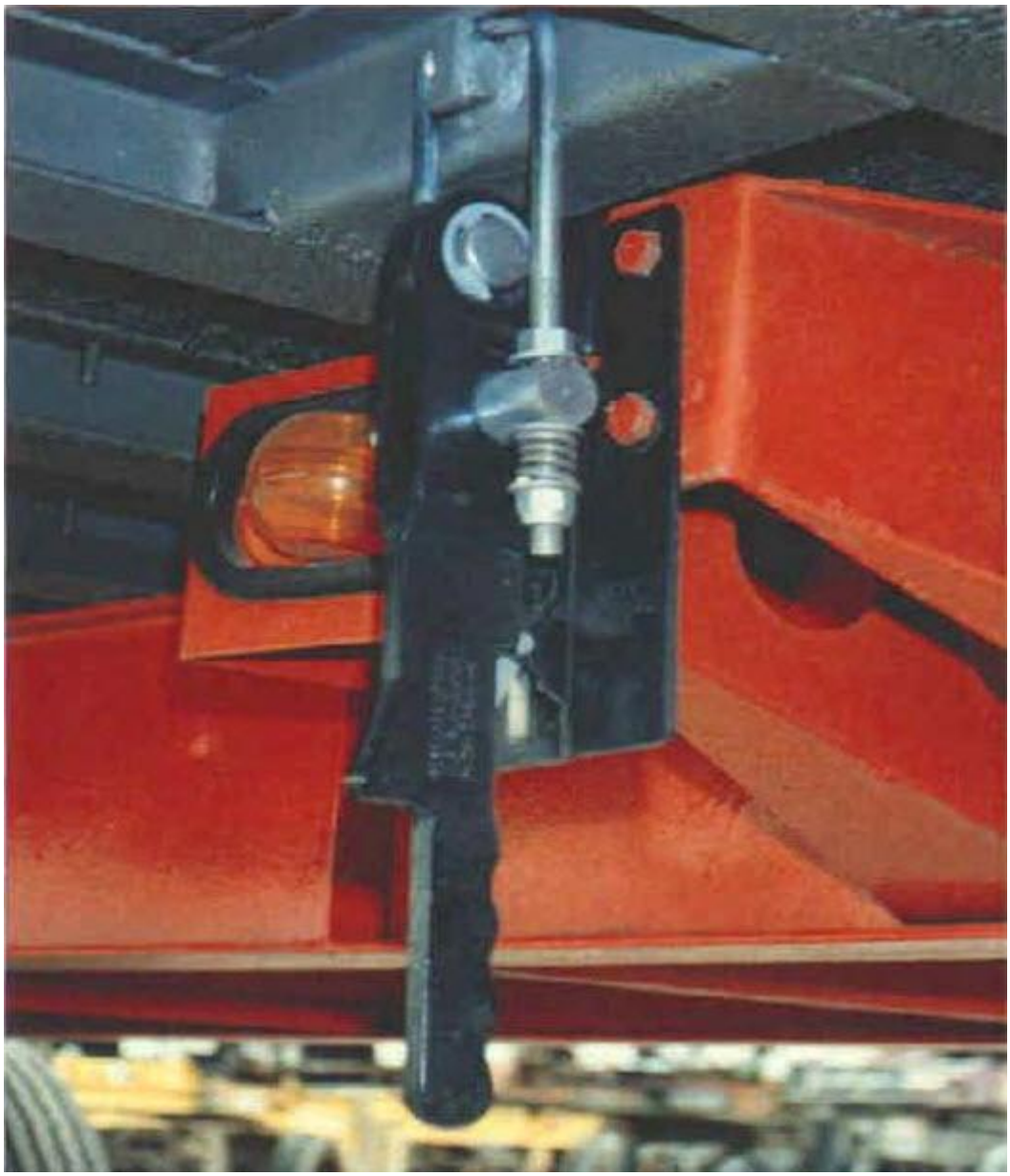


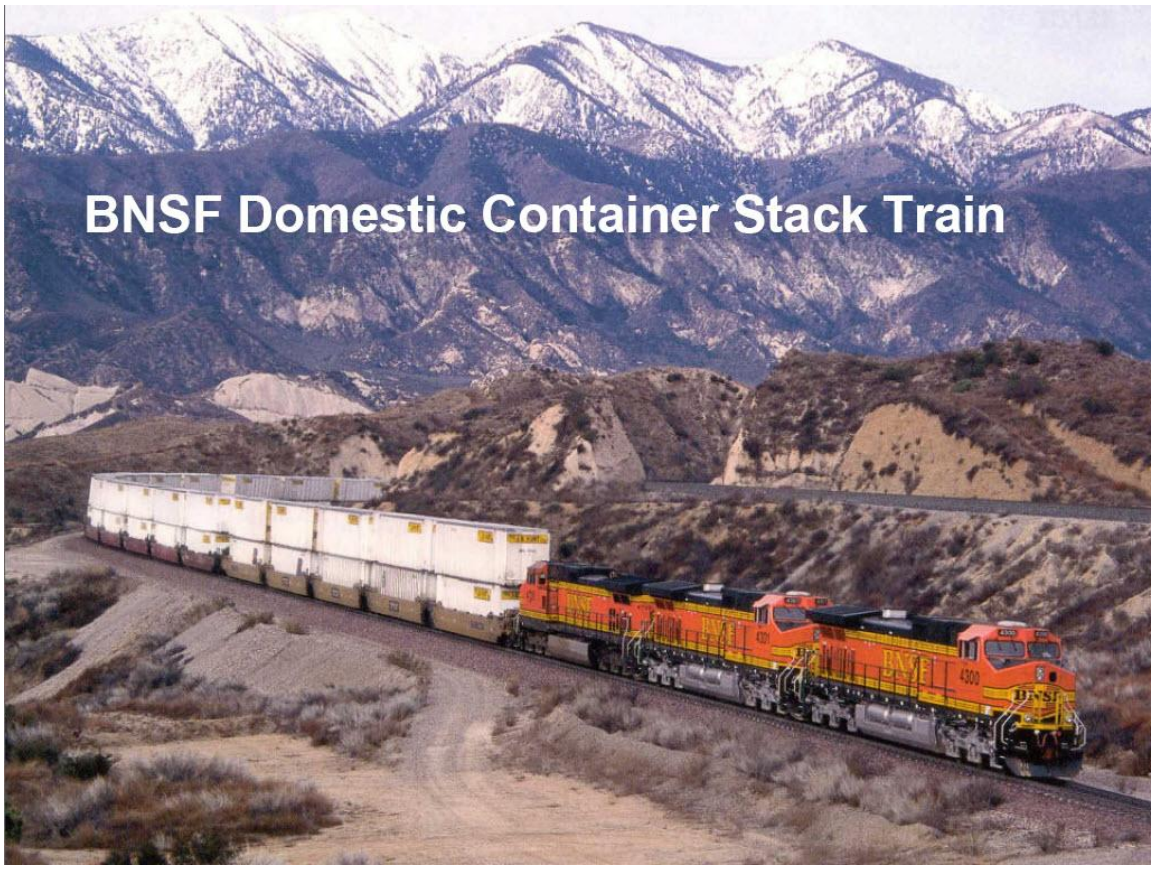
Photo 1: Chassis side latch in locked position connecting JBHZ chassis to JBHU container.

E-4.9 Domestic Container and Chassis Operations and Driver Safety Instructions

1 Purpose

The purpose of this section is as follows:

- To help our trucking partners better understand domestic containers operations
- To help our trucking partners understand why BNSF likes domestic containers
- To provide drivers with information on how containers differ from trailers
- To provide drivers with basic Safety Instructions for Containers and Chassis



2 Advantages of Containers

BNSF likes containers because of their flexibility and efficiency.

- Containers do not have wheels, so they can be double-stacked on railcars
- Containers can be stacked up to six high for stowage
- Containers provide same space and weight capacity as most trailers
- Containers are generally more damage-resistant and easier to lift on and off railcar

Continued on next page

E-4.9 Domestic Container and Chassis Operations and Driver Safety Instructions, Continued

3 Container Lift



Container Being Lifted off Double-Stack Railcar

4 Containers Stacked for Stowage



Containers Stacked for stowage at Intermodal Terminal

Continued on next page

E-4.9 Domestic Container and Chassis Operations and Driver Safety Instructions, Continued

5 BNSF Domestic Containers and Chassis

BNSF domestic containers and chassis have the following characteristics:

- BNSF containers are normally 48- to 53-feet long and 102 inches wide
- BNSF containers are designed to accept most loads that are moved in trailers
- BNSF containers use a patented design, WTP or Wide Top Pick that provides interior space similar to trailers
- BNSF provides excellent, roadworthy chassis

53′ Wide-Lift Stackable Container - Aluminum

Features include: improved container handling capability, safer operations, better structural integrity, longer asset life, increased availability for customers with reduced out of service time.



E-4.9 Domestic Container and Chassis Operations and Driver Safety Instructions, Continued

6 Differences between Containers and Trailers

Here are a few differences between containers and trailers:

- Containers always move on chassis for highway transportation
- Containers and chassis must be mated and properly locked to one another for highway transportation
- Chassis incorporate many of same features as trailers
  - Sliding Tandems
  - Automatic Tire Inflation systems
  - Radial tires

7 What to Look for When Pulling Container / Chassis

Here are some key things to look for when pulling a container or chassis:

- Container must be locked to chassis at all four corners
- Driver should not pull container on chassis until all chassis locks are locked
- Sliding tandems must be locked
- Gate transactions same for containers and trailers **except** driver needs to provide both container and chassis numbers for both in and out gate

8 Container Mounted on Chassis

When hostling open-top loads, oversized flatracks, and tank containers on conventional chassis, the following handling rules must be observed:

1. Do not raise hostling tractor fifth wheel
2. Raise dolly legs to avoid scraping ground surfaces
3. Drive no faster than 5 mph, despite any posted higher speed limit, to allow negotiation of turns and less aggressive speed adjustments.

Hostling of any enclosed trailer or container which is leaning from possible load shift should also be conducted in the same manner.

RATIONALE: Specialized equipment is often short in length and offers less containment or securement than fully enclosed equipment. The commodities carried tend to be heavy, bulky, and susceptible to shifting with directional and momentum changes due to high centers of gravity inherent with loading options and/or the liquid state of tank container commodities. With the fifth wheel lowered during hostling, the concentration of weight is kept closer to the ground and more evenly distributed. This reduces the potential for overturning the unit, and possibly the hostler as well, during turns or speed changes.



Container Mounted on Chassis

Continued on next page

E-4.9 Domestic Container and Chassis Operations and Driver Safety Instructions, Continued

9 BNSF Bare Chassis

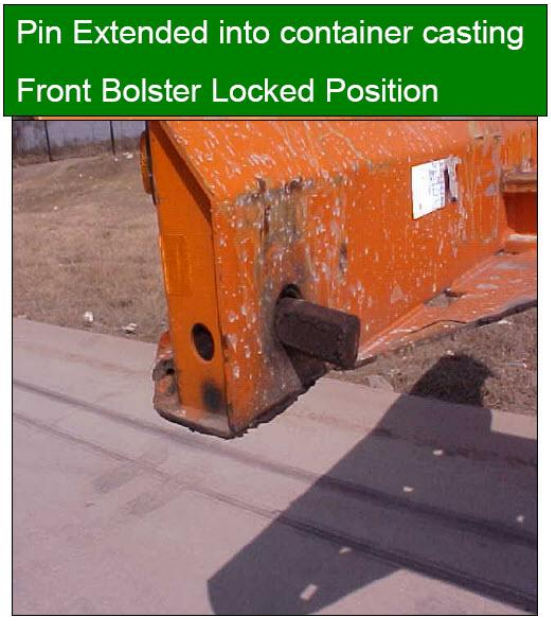


BNSF Bare Chassis



BNSF Bare Chassis (front view)

10 Front Corner Locks Slide Pins





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E-4.9 Domestic Container and Chassis Operations and Driver Safety Instructions, Continued

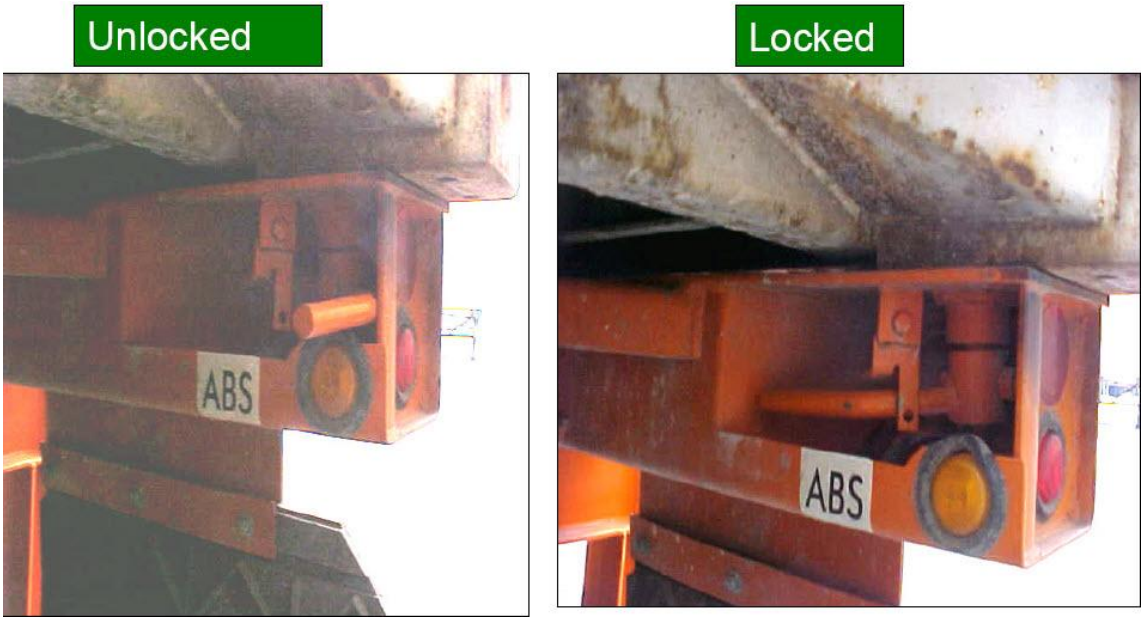
11 Turn Rear Corner Twistlocks

The driver must manually turn rear corner twistlocks 90 degrees to locked position and place handle in retainer.



12 Locking Handles

See the rear chassis twistlocks with container mounted on chassis. Note the position of locking handles.



Continued on next page

E-4.9 Domestic Container and Chassis Operations and Driver Safety Instructions, Continued

13 Lock Retainer Pins

Sliding tandem assembly retainer pins must be locked.





14 Automatic Tire Inflation System and Radial Tires



Automatic Tire inflation system and Radial tires

E-4.10 Bare Chassis

1 Overview

Requiring placement of bare chassis by trailers or containers helps cordon them off and enhance their visibility to avoid being struck. Creating right-of-way rules within a safe zone around packed parking area operations reduces the risk of injury and damage.

2 Parking and Staging

Single bare chassis shall not be parked in short term parking areas (i.e., outbound load lines, inbound lots, etc.) UNLESS they are occupying designated parking spaces AND are located next to a trailer or container to aide in identifying their presence.

Staging bare chassis trackside is permitted within the painted boundaries or, at locations where no boundaries are marked, no closer than 8-1/2 feet from centerline of track and within operating boundaries.

3 Packed Parking

Packed parking is defined as any area where units are parked for the purpose of storage with minimal or negligible space between adjacent units (i.e., no side-to-side spacing and/or no clearance between the nose of one chassis and the ICC bumper of another chassis). Whenever possible, chassis shall be segregated by ownership and size within the packed parking area.

4 Parking Rules

Packed Parking rules include:

1. Speed within packed parking areas is restricted to no more than 10 mph.
2. Vigilance for the presence of other individuals or moving vehicles must be maintained at all times
3. Yield to operations already in progress in the adjacent three (3) rows on either side of the spot selected for parking or pulling a chassis. Do NOT position the hostler until operations already underway within this zone are completed and the zone cleared.
4. Prior to hooking up to a chassis, visually ensure that proper clearance exists ahead, along the sides, and to the rear of the chassis while remaining in the holster cab. If ability to park or pull the chassis is questionable, do NOT attempt to park at that location or to pull the chassis.
5. Remain in the holster cab unless hook-up or release can only be accomplished by exiting the cab. Minimize the time spent outside the cab by performing either activity as quickly yet safely as possible.
6. Prior to departing, once again visually clear (from within the cab) the adjacent three (3) rows on either side. Do NOT move until the area is clear of people or hostling equipment/tractors.
7. If at any time while parking in or pulling out of the spot it becomes apparent that insufficient clearance exists, stop immediately and take any necessary corrective action.

Equipment/Maintenance

E-5 Special Equipment

Contents

This section contains the following topics:

Topic	See Page
Special Freight Vehicles	2
JB Hunt Chassis Shipping Units	5
BNUC Chassis Specifications and Configurations	13

E-5.1 Special Freight Vehicles

1 20' ISO Tank Mounted on Lowboy Chassis



2 Chassis Shipping Unit Instructions (Empty CSU Unit)

1. All CSU Spring-counterbalanced legs must be collapsed in downward position.
2. Stacked up to four high for transport.
3. Front strap chains must be connected to outer I-beam flange on opposite side of CSU and straps pulled snug. (***Do not pull straps tight*** - this can damage I-beams.)
4. Rear straps must be connected to Outer I-beam flange on opposite side of CSU and straps pulled snug. (***Do not pull straps tight*** – this can damage I-beams.)

These old CSU's (900000 – 900019) will still be able to collapse and stack to be shipped. The only difference is in the loading. They will be able to load two chassis into them instead of five.

ONLY use the CSU-equipped straps and chains to secure the equipment; additional banding, bracing or strapping **MUST NOT** be used. However, the condition of the CSU straps and chains must be inspected to ensure they are in good condition and properly secured.

The Mechanical Department **MUST** inspect and sign-off all stacked CSU and chassis **PRIOR TO LOADING** railcar.

For railcar loading rules, refer to E-1.12 High/Wide, and Flatrack Loading Rules.

E-5.2 JB Hunt Chassis Shipping Units

1 Overview

A CSU (Chassis Shipping Unit) is a specially designed open top container, which facilitates the movement of multiple chassis in stacked configuration acceptable for intermodal rail transportation.

Chassis Shipping Units or CSU's must be approved by BNSF Hub management. Because a CSU is very different than standard open top or flat rack containers, specific guidelines will be included which differ from the existing flatrack / open top rules. Certain CSU's have been approved by the AAR for the chassis restraint systems built into the CSU. All CSU's must be approved by the BNSF Mechanical Department before being loaded to railcars.

Outlined in this section are all the Chassis Shipping Units currently approved for movement on BNSF.

JB Hunt has developed three new types of Chassis Shipping Units (CSU's) which are approved for movement on BNSF. The two types of CSU's differ significantly in design, capabilities, and approved loading configurations. The CSU's are designed to carry JBHZ chassis only. Outlined below are the new polices for proper handling of the J B Hunt CSU's

2 JBHU 900020 to JBHU 900029: Two chassis Upright, Fixed Bulkheads

These JBHU CSU's can stack up to two 53 ft. chassis upright. This CSU is specifically designed to handle only JBHZ 53 ft. chassis. No other type chassis can be loaded in these CSU's. These CSU's have fixed uprights which provide the means for securement of the chassis and are also the lifting point utilizing the ISO twistlock position.

JBHU 900020 to 900029 can be loaded in the following configurations:

1. As a TOFC unit mounted on a JBHZ chassis in a conventional or hitch-capable well car.
2. As a COFC unit in the TOP Position ONLY of appropriate length Double stack well.
3. As top position container, JBHU is compatible with ISO or WTP container in bottom position.
4. JBHU CSU's CANNOT be loaded in Bottom Position of a Double stack with-out the chassis or with a container in the top position.
5. All lifting must be done using twistlocks in the upright lifting posts (bulkheads)

Continued on next page

E-5.2 JB Hunt Chassis Shipping Units, Continued

JBHU 900020 to JBHU 900029: Two chassis Upright, Fixed Bulkheads (continued)



3 JBSU 900200, 900250 through 900299 (Three 53 ft. JBHZ Chassis upright, collapsible bulkheads)

These Chassis Shipping Units (CSU's) are designed to transport three 53 ft. JBHZ chassis in an upright configuration. (See photos and diagrams below) The bulkheads are collapsible allowing the empty CSU's to be stacked four high.



There are several unique characteristics of these CSUs that affect handling processes at BNSF Hubs. These items are outlined below along with pertinent safety rules.

Continued on next page

E-5.2 JB Hunt Chassis Shipping Units, Continued

4 How It Works

1. The CSU's have bulkheads at each end of the CSU that provide the means for stacking JBHU chassis three high upright. The bulkheads have unique characteristics which support and restrain the chassis within the CSU for rail transportation, and provide the means to use twistlocks to lift the CSU.

2. The front bulkhead has cross brackets which support the chassis underneath the front gooseneck of chassis.

3. The rear bulkhead is designed to provide longitudinal restraint of the chassis. Each chassis is loaded onto the CSU so that the rear bulkhead is positioned between the front and rear tires. With this configuration, the chassis tires fit snugly against the rear bulkhead prohibiting chassis movement fore and aft.

4. When the bulkheads are in upright chassis stacking position, the extreme height of the CSU is 12 ft. 6 inches.

5. When the CSU is mounted on chassis, the extreme height is 16 ft. 3 inches. With a hostling tractor fifth wheel raised, the extreme height of the CSU is estimated at 17 feet. Highway legal vehicles cannot exceed 13 feet 6 inches, so the Hunt CSU could be 3feet 6 inches above normal height trailers and containers.

6. Because of the extreme height of the JBSU CSU's, operators and Hostling Truck drivers must ensure that the CSU does not contact any overhead obstructions within the Hub. Additionally, the JBSU CSU CANNOT be allowed to depart the facility with the bulkheads in the upright position, as the CSU's exceed legal highway clearance. These units can be allowed out the gate as long as JBH has an over height permit secured by JBH. This usually happens at the LA facility.



7. There are four nylon straps with winches permanently attached to the CSU unit which are used over the three high chassis stack for additional securement to the CSU.

8. All CSU's must be inspected and approved by the mechanical department prior to being loaded on railcars.

Continued on next page

E-5.2 JB Hunt Chassis Shipping Units, Continued

5 Loading Configurations for JBSU CSU's with *BULKHEADS UPRIGHT* and three CHASSIS loaded in CSU 9

JBSU CSU's with *BULKHEADS UPRIGHT* and three CHASSIS loaded in CSU::

1. JBSU CSU's 900200, 900250 to 900299 CAN ONLY be loaded to railcar as TOFC units with a JBHZ chassis under the CSU. (Can be loaded TOFC in 53 ft. well cars with hitches.)

2. JBSU 900200, 900250 to JBSU 900299 CSU's CANNOT be loaded COFC in either top or bottom position of Double Stack railcars with bulkheads in upright position.

If a JBSU CSU is loaded in top position of Double stack railcar by mistake with bulkheads upright it will exceed railway height clearances



To ensure that JBSU CSU's move as TOFC when bulkheads are in up position, following processes have been implemented:

1. Bulkheads on all JBSU CSU's have been labeled with warning signs:

"Must move TOFC when UP "

Continued on next page

E-5 5.2 JB Hunt Chassis Shipping Units, Continued

5 Loading Configurations for JBSU CSU's with *BULKHEADS UPRIGHT* and three CHASSIS loaded in CSU 9 (continued)

JBSU CSU's MUST move TOFC with bulkheads up





Continued on next page

E-5.2 JB Hunt Chassis Shipping Units, Continued

6 Stacked JBSU CSU's

1. JBSU CSU's can be stacked four high with the bulkheads in the collapsed and locked position. Special IBC's attached to each CSU are used to connect the two CSU's together. The IBC's are locked with the handles to the far ***RIGHT*** position, and are rated to lift three stacked CSU's. The CSU's in the stacked configuration are top lifted using the ISO twistlock position. (see photo below)



Continued on next page

E-5.2 JB Hunt Chassis Shipping Units, Continued

7 Acceptable Loading Configurations

JBSU CSU's in the four high stacked CSU configuration (BULKHEADS IN DOWN POSITION) MUST be moved as COFC units in the TOP POSITION ONLY of 53 ft. Double-Stack well car.

Do not load CSU's in 40 or 48 ft. well cars.

There are two sets of floor castings on the CSU's . When loading stacked CSU'S in the TOP Position of 53 ft. double stack:

THE BLUE FLOOR CASTINGS MUST BE USED to connect to IBC's in bottom container



Do Not Use other set of floor castings to connect CSU to bottom container as the CSU will be off-center in this incorrect position

See In-correct position below

Continued on next page

E-5.2 JB Hunt Chassis Shipping Units, Continued

7 Acceptable Loading Configurations (continued)





Incorrect position!

MUST BE CONNECTED AT BLUE FLOOR CASTING!

E-5.3 BNUC Chassis Specifications and Configurations

1 BNSF Universal Bomb Chassis

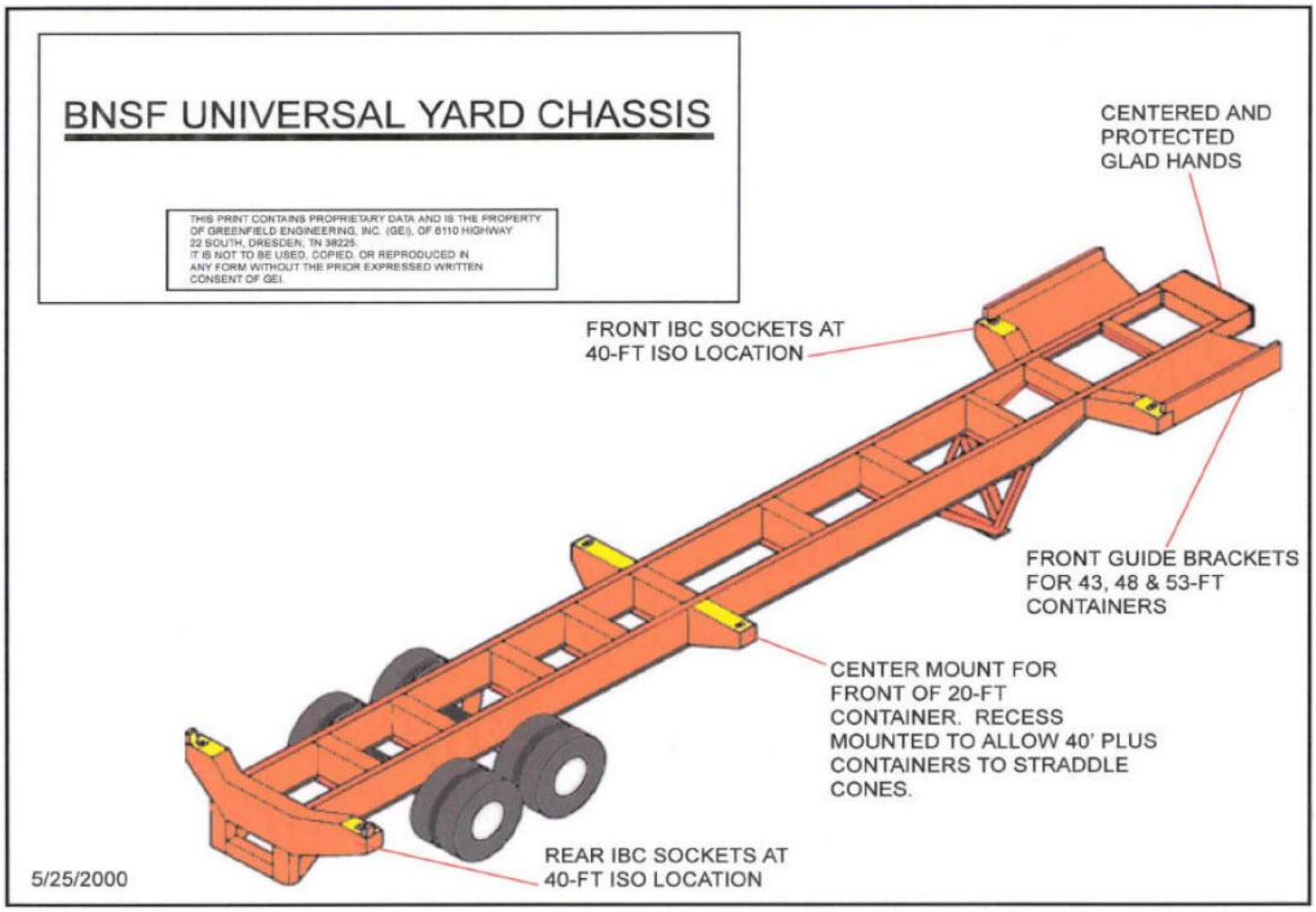
The BNSF Universal Bomb Chassis or "The Burke Bomber" is an all-purpose yard conveyance chassis with capability to move any size container.

2 Usage and Specifications

Chassis are used for conveyance of containers within the Hub. The specifications are as follows:

- Chassis are designed to accept all common size containers; from two 20-foot units up to 53-foot units with either 96- or 102-inch width.
- Weight Capacity 20-foot = 52,000 lbs. each / 40-foot+ = 67,500 lbs.
- Quick, easy alignment and loading for operator speed and convenience
- Containers secured with "cones" at 40-foot position

3 BNSF Universal Yard Chassis



Continued on next page

BNUC Chassis Specifications and Configurations, Continued

4 Two 20 Ft. Containers Being Loaded onto "UBC"

Holds up to 104,000 lbs. / 52,000 per 20-foot container



Ramp Vehicles – Universal Bomb Chassis Two 20ft. Containers Being Loaded

5 Two 20 ft. Containers loaded on "UBC"

Capacity: Two 20-foot @ 52,000 lbs. each



Ramp Vehicles – Universal Bomb Chassis Two 20 ft. Containers Loaded

Continued on next page

E-5.3 BNUC Chassis Specifications and Configurations, Continued

6 40 ft. / 96 in. Container on "UBC"

40- to 53-foot containers capacity: 67,500 lbs.



Ramp Vehicles – Universal Bomb Chassis 40 ft. / 96 in. Container

7 45 ft. / 96 in. wide Container

- Containers longer than 40-foot overhang at rear of chassis
- Fixed, Sturdy, Landing Legs
- 36-inch Kingpin



Ramp Vehicles – Universal Bomb Chassis 45 ft. / 96 in. Wide Container

Continued on next page

E-5.3 BNUC Chassis Specifications and Configurations, Continued

45 ft. / 96 in. wide Container (continued)



Ramp Vehicles – Universal Bomb Chassis 45 ft. / 96 in. Wide Container

8 48 ft. / 102 in. Wide Domestic Container on "UBC"

- 4-foot Overhang at Rear
- Securement Cones at 40-foot position
- Flush-Mount front bolster



Ramp Vehicles – Universal Bomb Chassis 48 ft. / 102 in. Wide Domestic Container

Continued on next page

E-5.3 BNUC Chassis Specifications and Configurations, Continued

9 53 ft. / 102 in. wide JBHU on "UBC"

6 1/2-foot overhang at rear



Ramp Vehicles – Universal Bomb Chassis 53 ft. / 102 in. Wide JBHU Container

10 Flipover Width Guides

Flipover width guides self-align 96-inch wide containers.





Ramp Vehicles – Universal Bomb Chassis Flipover Width Guides

Equipment/Maintenance

E-6 Laid Up Good Order

Contents

This section contains the following topic:

Topic	See Page
Laid Up Good Order	2

E-6.1 Laid Up Good Order

1 Guidelines for Handling Idle Equipment Requests

All requests should follow this process

- Senior Hub Manager and Regional Director will determine the need to designate a machine to Laid Up Good Order (LUGO) status.
- Senior Hub Manager will send the request to place a machine in or bring a machine out of LUGO status to IABUDLLiftEquipment@bnsf.com.
- Requests should be made no later than the 25th of the month.
- Machines should not be placed in LUGO status for a period exceeding 90 days without AVP approval.
- Director of Intermodal Equipment and Technology and the AVP of Intermodal Operations will have the final decision for LUGO status.

Upon approval the following processes will be followed to ensure accurate reporting and payments

- Upon receiving the request and approval the Lift Equipment Database will be updated prior to the posted Month End Close.
- The "Active Lift Equipment" List will be posted to the BNSF intranet at Active Lift Equipment before Month End Close.
- The Manager of Intermodal Service Contracts will ensure that the proper contracts are updated for payment processing.

Questions, concerns, or requests should be addressed to IABUDLLiftEquipment@bnsf.com.

Hub Operations Safety

H-1 Safety Overview

Contents

This section contains the following topics:

Topic	See Page
Overview of BNSF Safety Rules	2
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Closed Loop Safety Process	7
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H-1.1 Overview of BNSF Safety Rules

1 Purpose

The BNSF safety rules were established for a variety of reasons:

- To ensure safety and well-being
- To ensure operational consistency
- To ensure consistent, fair, and unthreatening treatment of all employees
- To communicate the Company's expectations of employees

2 Safety Responsibility

BNSF employees and service partner employees, where applicable, are personally responsible for knowing and complying with the rules and regulations which apply to their own and related-job functions; service partner employers are responsible for ensuring the same from their employees. If in doubt as to the meaning or application of any rule or instruction, individuals should request an explanation from their supervisor or manager.

All BNSF Intermodal employees, Service partners and Vendors are subject to the *Employee Safety Rules* publication. In addition lift equipment operators, groundmen, hostlers, and maintenance/repair personnel are subject to the *Mechanical Safety Rules and Policies* publication, TY&E employees and service partner switchers are subject to the *TYE Safety Rules*, and the *General Code of Operating Rules (GCOR)* could apply to any work group, if applicable.

3 Scope of Rules

These rules cover such issues as

- core safety rules
- fire prevention, response, and hazards
- intermodal facility safety
- work environment
- personal protective equipment and clothing (PPE)
- policies
- programs
- general responsibilities

Other sections must be reviewed for additional application to specific locations or job functions (i.e., Environmental Safety; On or Near Tracks, Locomotives, and Rail Cars; Railroad Radio Rules; etc.)

4 Obtain Safety Rules Publications

NEED A COPY OF BNSF'S SAFETY RULES PUBLICATIONS?

The safety rules publications are all available online under the BNSF Intranet, at http://bnsfweb.bnsf.com/departments/ttc/ttmainmenu.html , or you may request a copy via the appropriate regional director.

H-1.2 Safety in Practice

1 Safety Foundational

While safety is one of the basis for the Company rules discussed under the GENERAL section, it is also the basis for much of what is presented overall in this manual. For example, safety is the basis for many of the Intermodal Hub Policy Statements, the LOADING MANUAL section outlines safe loading practices, and many of the SPECIFIC CATEGORY PROCEDURES are safety based (such as "Hazardous Materials," "Accidents," "Track Protection," "Yard Rules," "Proficiency Audits," "Emergency Preparedness Plans," and "Distressed Loads/Derailments").

2 Safety as a Value

Among the components of BNSF's Safety Vision statement is a culture that makes **safety a value** for an empowered work force that takes responsibility for personal safety. Safety is an area all too often taken for granted, but simple awareness of the surrounding environment can mean the difference between well-being and catastrophe.

3 Prevention First

The foundation of any successful safety effort is PREVENTION. Although safety encompasses how to respond to emergencies and catastrophes, its real function is served if it **prevents** emergencies and catastrophes in the first place. It's a proactive approach to ensuring that lives and property are safe and secure even though risk is present.

BNSF does not require its employees to incur risks and directs them to exercise proper care and judgment to protect themselves. The Company provides resources and leadership to prevent injuries, such as job training and explanation of rules. It observes operations to ensure adherence to safe work practices and procedures and investigates injuries to determine and eliminate causes. In addition, BNSF establishes meaningful safety goals and consistently monitors performance in support of those goals.

4 Individual Responsibility

Each employee has the right and obligation to work safely: safety is of first and foremost importance in the performance of duties. Individual responsibility for safety cannot be transferred; all employees are responsible for prevention of injuries and compliance with rules/procedures in a conscientious and reliable manner.

How well safety is applied in the conduct of business or pleasure affects others...families and friends, other employees, the communities BNSF serves, and the Company as a whole.

5 Follow Rules and Work Procedures

To ensure a safe environment for BNSF employees and these communities, operations and activities must be conducted on the basis of carefully designed work rules and procedures. Violating these rules and procedures may result in death, injury and/or substantial financial loss and, therefore, are treated in a most serious manner.

Continued on next page

H-1.2 Safety in Practice, Continued

6 Universal Safety Principles

In addition to knowing and applying the specific safety rules and procedures relevant to a function, these universal principles should be kept in mind as well:

Principle	Description
1	Safety in any operation or endeavor is only achieved when it is applied consistently.
2	If uncertain how to proceed, take the safest course of action.
3	Know and apply the rules that govern you, and be familiar with rules that govern those you interact with. Understand their purpose (why something is done a particular way or not done at all).
4	At all times, be aware of your surroundings. For example: • Identify hazards and correct, if possible, or report; avoid the hazard until corrected or removed • Know emergency escape routes and procedures • Ensure exits are not obstructed • Ensure proper ventilation • Avoid overexposure to chemicals, fumes, extreme heat or cold, etc. • Watch for spills which pose a safety (slip-and-fall) or environmental threat
5	Know the location of safety and emergency equipment (i.e., first aid kits, emergency showers, eye wash stations, fire extinguishers, fire escape routes) and how to utilize them.
6	Communication is essential to the safety effort: • Always know who's in charge or assigned to monitor the safety of an operation and who to notify in the event of an emergency. • Report all accidents immediately to the proper authority; supply as much information as possible. • Ask questions if you're unsure about a safety-related item. • Make suggestions for new or revised rules if you feel existing rules don't adequately address an issue.
7	Know the differences in how various emergencies should be dealt with (i.e., how to extinguish an electrical fire; what to do with a leaking hazardous unit).
8	Conduct all business with care, attention to detail, and a serious and positive attitude. Work as a team.
9	Observe all hazardous materials regulations and precautions. As appropriate, read all warning labels or instructions for proper handling and emergency response.
10	Use personal protective equipment as required. Wear suitable clothing conducive to performing your work safely and avoid clothing, accessories, etc. which may obstruct vision, hearing, or use of hands and feet.
11	Know the equipment you work with and follow its operating instructions. Inspect equipment prior to use. DON'T OVERRIDE SAFETY FEATURES. Only persons authorized to operate certain types of machinery or equipment should do so.
12	Check for defective tools; replace or put in a safe condition before using; report defective tools to your supervisor.

Continued on next page

H-1.2 Safety in Practice, Continued

Universal Safety Principles (continued)

Principle	Description
13	Return all tools, materials, and emergency equipment/supplies to their proper location after use. Notify the appropriate individual if their supply must be replenished.
14	Be aware of yourself and those around you for stress, fatigue, and illness as contributors to poor performance, reduced alertness and attention span, slower reaction, and impaired motor skills.
15	Employ good lifting technique or "body mechanics" essential to preventing personal injury.

The information above is of a general, high-level nature with positive benefits both at work and at home. Refer to the various sections of this manual for specific safety policies and procedures relative to intermodal hub operations.

H-1.3 People-based/Behavior-based Safety

1 Key Factors: Environment & Behavior

Two key factors drive employee safety: environment and behavior. Our safety program addresses both. We continue to address environmental factors as they arise through weekly observations. Diligence in this area will proactively identify environmental issues before they become "incidents."

As an organization, we feel that the most dramatic results can come from addressing behaviors and ensuring consistently safe work practices; however, we must not overlook the value of maintaining a safe work environment.

2 Safety Briefings and Audits

Work teams are expected to conduct job safety briefings at the beginning of every work task, including a review of associated rules and best practices. Job safety briefings must continue throughout the day, especially when conditions or work changes. In addition, each field supervisor conducts periodic audits on shift to measure employee adherence to key safety rules and procedures. BNSF sees these audit findings as an essential tool to reinforce safe behaviors and work practices.

3 Each Employee Responsible

All employees are empowered to take responsibility for their own safety and the safety of their colleagues and our communities. They are expected to take the initiative to stop work processes when they feel safety is compromised.

4 Safe Workplace and Practices

Our Plans define requirements for a safe workplace and safe work practices, will focus on the following six "safety basics":

- Regular meetings with service partners, labor and BNSF leadership to discuss safety and operational issues.
- Participation in regional or local safety teams to offer a forum for employees and supervisors to discuss and resolve safety issues.
- A management oversight process that ensures the integrity and quality of BNSF's audit program to identify and reduce risks associated with work practices.
- An Employee and Service Partner Review Process, which provides assistance to employees whose work records indicate a need for focused attention.
- A procedure for handling accidents and injuries that ensures employees get prompt medical attention, as needed, and that we identify preventive measures to reduce risk.
- A Safety Issue Resolution Process (SIRP) for reporting and resolving local safety concerns.

H-1.4 Closed Loop Safety Process

1 Overview

BNSF has implemented a system wide "Closed Loop Safety Process," a systematic process for identifying and eliminating at-risk work behaviors and environmental concerns at each BNSF location by using work practice observations and strategic interventions.

2 Key Elements

The key elements of the process are:

1. Risk Identification
2. Problem Solving and Risk Solutions
3. Implement Solutions
4. Measure Results
5. Performance Feedback
6. Reintroduce solutions if needed and evaluate again.

3 Documentation and Observations

The process begins with documenting work practices as well as facility observations. Findings range from employees working without personal protective equipment to potholes at the facilities. The identified risks are presented to the appropriate groups for solving and implementing solutions.

Further observations and audit provide feedback in order to evaluate if more action is needed or the level of risk is mitigated. When combined with the Safety Issue Resolution Process (SIRP), the employee whom identified a risk via a report or hotline call, will get feedback that the issue is resolved closing the loop to issue.

H-1.5 Safety Action Plans

1 Goals

Each year Corporate Safety updates its System Safety Action Plan to reflect safety goals and strategies for the coming year and the availability of new safety programs to support those goals. It also serves as a template by which division and facility Safety Action Plans (SAPs) are developed, all having common elements.

2 Annual Requirement

Each intermodal facility is required to annually develop and publish its own SAP in conjunction with the corporate SAP. The SAP shall be developed through a combined effort between BNSF and service partner employees.

3 Purpose

Developing a formal SAP is crucial in supporting corporate safety goals and in achieving tangible local safety results. Through all-around participation and buy-in, SAP goals are attained due to the assignment of the responsible party and timeframe, an identified method of measurement, and a better identification of root cause. The knowledge obtained from previous accident experience also factors into the development of a SAP. This section covers rules and guidelines in preparing an annual SAP at each intermodal facility.

4 Submission Timeline

Safety Action Plans must:

- be submitted by each hub for the upcoming year to the corresponding regional director by November 1 of the current year be reviewed by the respective regional director and any changes made by November 30 of current year
- be submitted to Dir. Hub & Facility System Safety and Project Manager Hub & Facility by December 15 of current year
- be presented for review for each hub by the regional directors at the January staff meeting
- be summarized quarterly to include new issues and the status of past issues and be provided to the respective Regional

5 Components

Each year, safety issues affecting systemwide hub operations will be identified for development of goals to address these “critical elements” within each facility SAP. Examples of critical elements for a particular year might be:

- Accidents/Injuries
- Track Protection
- Housekeeping
- Securement
- Knowledge of hub operations manual
- I-STOP teams

Continued on next page

H-1.5 Safety Action Plans, Continued

6 Safety Issue Identification

These critical elements, along with known corporate safety goals for the upcoming year, will be provided by Project Manager Hub & Facility by October 1 of each year to provide sufficient time to create the SAP in accordance with the timeline specified above. In addition to these "critical elements," each facility will identify safety issues unique to itself for which goals are required to achieve improvements. A key area in which to focus should be prior year incidents with high frequencies of occurrence and/or severity levels.

7 SAP Components

Following are the components required in the facility SAPs. Each component should be adapted as necessary to address the specific needs of the individual intermodal facility.

8 Safety Team Members

In order to promote and achieve a safe work environment, involvement from all work groups is crucial. It is critical that this be communicated to all personnel. Included in the SAP should be the list of personnel that represent the safety action or ISTOP (Intermodal Safe Terminal Operations Process) team. Regardless of whether specific names are used, all representatives must be identified by title, department, and company.

9 I-STOP Team Role

I-STOP team members are charged with addressing facility safety issues, developing the facility SAP, and communicating, achieving, and reporting progress on formal safety goals outlined in the SAP for tangible safety improvements. Therefore, careful selection of I-STOP team members should be made to ensure both the ability and interest in performing these responsibilities.

10 Mission Statement

The mission statement is a summary of specific tasks and an overall direction or purpose that all activities should support or lead to. It should include a statement of empowerment which enables employees to report unsafe work practices without threat of recrimination and communicates management support of this philosophy. An example of a mission statement is as follows:

Our Mission Statement

- *The intermodal Hub and Facility Team and its service partners will strive to achieve a Total Safety Culture that enables our vision of an accident and injury-free work environment.*
- *This will be realized through commitment, dedication to on-going training, education, observation, implementation of action plans, and corrective measures when at-risk behaviors or obstacles have been identified.*
- *We believe in an empowered and educated workforce. Our commitment is to communicate and drive the belief and behavior of a Total Safety Culture to every employee and person that works or enters our facility.*

Continued on next page

H-1.5 Safety Action Plans, Continued

11 Example Safety Goals

The goal is the desired end result to which actions are directed and must be quantifiable and specific. Although the ultimate goal for all BNSF facilities is zero accidents, zero injuries, and zero securement failures, the goal should be realistic and attainable within a given year. Following are examples of safety goals:

- 100% reporting of all accidents and incidents for improved tracking and correction of undesirable trends
- Reduce injuries by 25%
- Reduce lost work days by 25%
- Reduce on track incidents within the intermodal facility by 25%
- Reduce group 2 and group 3 securement failures by 100%
- 100% compliance to track protection rules as specified in the Track Protection subsection of the BNSF Intermodal Hub Operations Manual

At least one goal, with supporting objectives and measures, must be developed for each "critical element" communicated.

12 Objectives

Objectives are actions to be accomplished in order to obtain the goal. The objectives should be specific as to how they support the goal, who is responsible for accomplishing the objectives and by what date. The objectives should appear in the SAP directly below each goal that they support.

Be sure to establish objectives which build on an existing foundation of policies, procedures, or processes or which create such a foundation. In other words, in order to have an objective of conducting an appropriate investigation after each accident, one must have a defined process for what that investigation will encompass. If no such process exists, then creation of such a process should be an objective. If such a process exists but is superseded by a system-published policy, procedure, or process, then the objective might be to ensure modification to the existing process to conform with the system policy.

13 Success Measures

Measures of success must be specified with each objective and must be directly related to the objective so that a clear relationship between the two is obvious and is a likely indicator of progress toward achieving the goal. These measures can be either tool-based (such as reports or report results) or specific levels of achievement (i.e., zero group 2 and 3 chargeable securement failures).

Continued on next page

H-1.5 Safety Action Plans, Continued

14 Detailed Examples

Examples of objectives and measures to support the goal of reducing injuries by 25% would be:

Example	Example Detail
1	OBJECTIVE: Schedule and consistently hold I-STOP meetings at least once a month to discuss safety based issues MEASURE OF SUCCESS: All scheduled meetings are held or at least one meeting is held each month. Ad hoc meetings are conducted after each serious event (whether it occurred locally or elsewhere)
2	OBJECTIVE: Review previous month's accident reports systemwide for discussion of causes, consequences, local application, and any resulting recommendations MEASURE OF SUCCESS: Implementation of recommendations locally, no occurrence or recurrence of the same or similar event
3	OBJECTIVE: Perform monthly checks of all vehicle safety equipment such as headlights, taillights, strobes, and flashers to ensure proper operation for improved visibility; maintain record of conduct and items replaced MEASURE OF SUCCESS: No vehicles observed with inoperative safety equipment; log maintained indicating monthly check
4	OBJECTIVE: Audit compliance to yard rules to ensure such things as proper speed through the facility, equipment is not fouling the tracks, and trucks are not driving on crane pads MEASURE OF SUCCESS: No speed related accidents
5	OBJECTIVE: Conduct an appropriate investigation after each accident to collect accurate details for hazard identification, root cause analysis, and development of appropriate corrective action MEASURE OF SUCCESS: Each accident has been investigated and results disseminated to all interested parties; investigation results are reviewed at next monthly I-STOP meeting; there are no repeats of the event or similar event

15 Documentation

The means by which safety-related information is communicated to employees in all work groups on the facility must be described. This must include the following:

- A description of typical documentation available for communicating safety issues (i.e., I-STOP posters, AAR posters, accident reports, emergency contacts list)
- The means by which progress on achieving SAP goals and objectives will be communicated to all work groups (bulletins, graphs, etc.) as well as to headquarters personnel
- The process for reviewing recently released policies or procedures published via electronic mail or updates/revisions to the BNSF Intermodal Hub Operations Manual
- Who is responsible for posting or communicating safety information to all or individual work groups by category of the information (items above)
- Where specifically safety information will be posted, when it will be posted (i.e., within 24 hours of receipt), and the minimum amount of time to be posted by category of the information (items above)

Continued on next page

Safety Action Plans, Continued

16 Job Safety Briefings

Job safety briefings are mandatory before beginning work and when work or job conditions change to ensure that the job meets BNSF standards and is done right the first time without injury or damage. Briefings should include a discussion of the general work plan, existing or potential hazards, and ways to eliminate or protect against hazards. Outside parties involved in the work or who are in the work area must also be included in the job safety briefing.

17 Job Safety Briefing

Communication via job safety briefing is critical to advancing safety because they:

- are conducted repeatedly each day, so that critical information is released in a timely fashion.
- offer two-way communications on safety issues to ensure thorough understanding of the task at hand and any hazards which must be dealt with.
- are designed to include everyone involved in a task, as opposed to safety meetings comprised only of work group representatives.

H-1.6 Service Partner Safety Action Plan

1 Purpose

Each year BNSF's Corporate Safety department issues its Safety Action Plan (SAP) outlining corporate safety goals, safety strategies for the coming year, standard elements to be included in the SAP, corporate safety teams and support programs, and training recommendations.

2 Goal Setting

In response to that corporate document, each Intermodal facility is required to annually develop its own Safety Action Plan to address both systemwide intermodal hub operations and individual facility issues and concerns. These action plans set specific goals in support of an overall mission and identify the objectives or projects which will accomplish those goals.

3 Resources

In terms of dealing with day-to-day issues and events, this Intermodal Hub Operations Manual is one tool used to communicate guidance and instructions for safely handling, responding to, or correcting situations or conditions. (Compliance to BNSF requirements are checked via monthly periodic safety/proficiency audits using BNSF's form and guidelines.)

4 Partner Requirements

BNSF service partners at the corporate level are required to develop and maintain their own Safety Action Plans which detail their own internal requirements for handling and reporting situations, conditions, or occurrences involving their employees at a BNSF facility (i.e., how they learn of accidents involving one of their employees) and the audit process which assures their employees are complying with their standards. In addition, service partners are required to provide BNSF with a copy of their SAP and to provide updates or revisions as they are made from time to time. The SAPs and any updates must be provided to the hub management at the local hub .

5 Components

Listed below are the components that BNSF requires in any of its service partner SAPs. Some of these components are already stipulated in the Services Agreement between BNSF and the service partner; the SAP should be the tool which communicates how the service partner will achieve adherence to these contract stipulations, as well as to the other components shown.

Standard required components of a Safety Action Plan acceptable to BNSF are as follows, but may encompass much more as deemed appropriate by the service partner:

6 Designate Individual

Written designation of the corporate individual charged with maintaining the SAP and who BNSF can contact for information on SAP issues and SAP field compliance audit results. Identification of this individual should include name, title, telephone number, and address at which this individual may be reached.

Continued on next page

H-1.6 Service Partner Safety Action Plan, Continued

7 General Schedule

A general schedule (i.e., number of times per year) of audits for field compliance to the SAP; method of notifying local facilities of pending visits; audit participants; corrective action plan; and length of time audit results will be maintained on file for review by BNSF, if so requested (minimum one year).

8 Safety Coverage

Coverage of service partner employees' safety, such as:

- Safety Orientation - when orientation is required (i.e., new hire, position change); the time frame within which orientation shall be provided; materials used, subjects covered, and methods employed to orient employees to safety within their position and at an intermodal facility; and how successful orientation and understanding of material is measured.
- Job Safety Briefings - Who is responsible for conducting them at the local level; when they are required; components of the briefing, including special information bulletins generated locally or by your corporate headquarters
- Personal Protective Equipment - Service partner policy for usage; securing replacement PPE when current issue is worn, lost or broken.
- Track Protection - Track protection requirements; individual charged with ensuring track protection (i.e., leadman), forms of track protection which may be encountered and any associated limitations; communications and job safety briefings.
- Employee Training - identification of all required training programs by job classification; initial training and recurrent training requirements; measures of successful training completion; remedial training situations; maintenance of training records.
- Personal Injury Reporting - Immediate notification requirements; availability of emergency numbers; methods for communicating injuries; time frame for filing reports; application to your employees, your service partners, or your invitees; safety resolution process and communication of findings.
- Accident Investigation and Analysis - accidents qualifying for investigation; collection of required information; use of diagrams; communication of facts; investigation equipment requirements (i.e., photo or video camera); handling and reporting involvement by outside agencies; determination of root cause and contributing factors; dissemination of recommendations to avoid future occurrences.

9 High Risk Areas

High Risk Work Areas/Situations

- Identification of Hazards - Sources for communicating hazards (i.e., employee suggestion boxes); classification of hazards to identify those needing immediate notification; hazard review and investigation process (including feedback and response time frame); hazard resolution/elimination process and communication.
- Notification of Damage - same requirement as the Personal Injury Reporting listed in section 8 - Safety Coverage.
- Machines, Equipment, and Vehicles - Care and maintenance of machines, equipment, and vehicles belonging to your company or provided to your company for its use; storage or handling of same when not in use.

Continued on next page

H-1.6 Service Partner Safety Action Plan, Continued

10 High Risk Employees

High Risk Employees

- Alcohol/Drug Use or Possession - Process for reporting violators or suspected violators (who to notify, information required, documentation and investigation); removal from property and suspension of duties pending investigation; employment status determination.
- Firearms or Deadly Weapons - same as above on Alcohol/Drug Use or Possession.

11 Storage and Disposal

Approved methods and locations for storing materials; end-of-shift clean-up responsibilities; proper disposal of certain materials; protective measures.

12 Planning

Emergency Preparedness Planning, such as:

- Hazardous Substances and Materials - required notifications of discharges, releases, and spills; availability of emergency numbers; safe handling or avoidance practices; required hazardous materials knowledge by job classification; responsibilities and awareness of fines/penalties which can be assessed; fulfillment of duties to avoid classification of local facility as either a storage or treatment facility.
- Weather - recommended actions to protect service partner employees; notification process of disrupted operations and critical details.
- Riots, Trespassers, Criminal Activities - same as above on Weather.
- Medical Emergencies - availability of training for common medical emergencies; intervention in medical emergencies; reporting requirements
- Fire - recommended actions to protect service partner employees; availability of emergency notification numbers; notification process of disrupted operations
- Bomb Threats - collection of key information and notification of individual in charge
- Personal responsibility for safety - familiarization with first aid and emergency equipment and where located; knowledge of where emergency notification information is posted; knowledge of evacuation routes.

13 Compliance

Compliance with Laws - outline of federal, state, and local laws and regulations impacting terminal operations by job classification in such areas as (but not limited to) environmental, health, and safety; process for keeping abreast of current and new laws, rules, regulations, and ordinances applicable to terminal operations; notification process when not in compliance; process for correcting non-compliance; handling violators.

14 Local Hub Manager

Service Partner Safety Action Plans and Updates are to be forwarded to the Local Hub Manager of the facility.

H-1.7 Service Partner Local Safety Officer

1 Overview

In support of joint safety efforts by both BNSF and its service partners, it is recommended that service partners designate an onsite safety officer at each BNSF facility it services. The individual selected to serve as local safety officer may perform other duties or functions at the facility; they do not have to be solely employed for handling safety issues.

2 Role

The safety officer shall be the official liaison on safety-related issues between the service partner's corporate headquarters and their field personnel, as well as the designated individual to receive safety-related information from BNSF that impacts personnel working at that facility. In addition, the safety officer shall convey safety concerns of local employees to onsite service partner management (i.e., the terminal manager, if different from the safety officer) and to BNSF management (either the onsite BNSF hub manager or the BNSF regional director over that facility) as required. These functions may be augmented by additional safety responsibilities as designated by the service partner's corporate or regional management.

3 Qualifications

Preferably, the safety officer would be someone who has been employed in intermodal operations for at least a year and has demonstrated organizational and leadership skills and knowledge of intermodal operations..

4 Partner Responsibility

All service partners are empowered to work safely, and are responsible for ensuring their employees know and comply with all the rules and regulations which apply to their own and related job functions. If in doubt as to the meaning or applications of any rule or instructions, individuals should request an explanation from their supervisor or manager.

5 Follow Rules and Work Procedures

The following rules have been identified as central in creating and maintaining a safe work environment. These rules should not be viewed as a comprehensive list of safety issues, nor emphasized to the exclusion of other safety issues. These rules should be viewed as areas where extra precaution shall be placed.

1. Establish proper track protection before performing work
2. Vehicles must not STOP, PARK, or FOUL tracks
3. Do not drive or park in lift equipment lanes, under lift equipment, or impede lift equipment movement
4. Obey all posted safety signs, signals and painted markings
5. All vehicles must turn on headlights and use turn signal
6. Never put any part of your body in a pinch position or walk under equipment being lifted
7. Maintain three point contact when getting on and off equipment

Hub Operations Safety

H-2 Employee Protection

Contents

This section contains the following topics:

Topic	See Page
Employee Protection	2
Employee Protection While Repairing Railcar	4
Ground Personnel	6

H-2.1 Employee Protection

1 S-8.6 High Visibility and Protective Clothing

BNSF intermodal hub personnel and service partners must comply with the following retro-reflective and enhanced visibility wear policy.

Individuals must wear clean garments that meet the function they are performing at any given time.

Enhanced visibility garments may be visibly worn over other clothing and must be of standard orange color and meet or exceed ANSI Class II reflective standards as indicated in Rule S-21.0 through S-21.5.

H-2.2 Employee Protection While Repairing Railcar

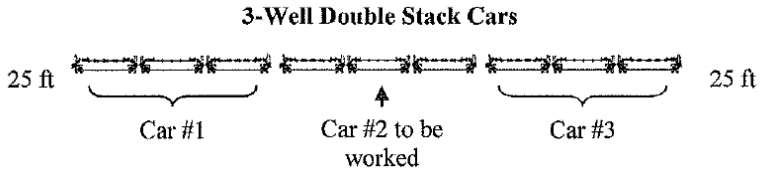
1 Purpose

This best practice supports the safe course by ensuring proper protection for employees performing repair work under railcars on loading/unloading ramp tracks.

2 Employee Protection

When required to perform repair work under railcars on an intermodal ramp track while trailers, container/chassis are being loaded/unloaded, employees must be governed by all of the current GCOR blue signal rules, Hub Policies, and the following employee protection procedures:

1. Employee working under railcar must ensure that all prescribed Blue Signal Protection is in place.
2. Employee must notify the Hub Coordinator of the track number, railcar number and platforms affected.
3. The Hub Coordinator will advise the ramp loading/unloading crews of the railcars and platforms to be protected while employees are working.
4. Employee will install barricades and flashing amber lights (see example below) on the crane path, or 25 feet from the railcar at the ends of the platforms which fall within the "Work Zone" (The "work zone" will include the car number where the work is being performed plus one additional car number on either side). The barricade and flashing amber light are awareness devices for the protection of the employee.



5. The barricades and flashing amber lights must not be installed until all trailers; container/chassis are removed from the railcars in the work zone.
6. After repairs are completed, employee will remove the barricades and flashing amber lights and notify the Hub Coordinator they are done and in the clear.

After the barricades and flashing amber lights are installed, the ramp loading crew will adhere to the following rules:

1. No equipment (trucks, trailers, container/chassis, or lift equipment) can enter into the "Work Zone" while the "barricades and flashing amber lights are in place.

2. On the tracks with two sides, equipment can be spotted to the opposite side of the railcar from the "Work Zone".

3. Normal loading activities may continue on all other railcars in the same track or adjacent tracks.

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H-2.2 Employee Protection While Repairing Railcar, Continued

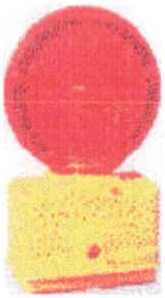
Grainger helps you get the job done.



Plastic Barricade

No. 5ZM63 Molded Plastic Barricade with 2 stripped panels (Warning lights sold separately

Description	Overall Height	Services & Materials Model	Stock No.	Each	Lots Each	Lots Qty
Folding w/ Two Striped Panels	42 in.	2092552	5ZM63	$78.05	$74.12	4



No. 1A123

Flashing Amber Barricade Lights

7" Lexan Polycarbonate lens in Fresnel design with advanced optics offers increased visibility and conserves battery power. Barricade light tray accommodates one additional 6V battery for extended life. Lights can be mounted on any barricade by use of a 3 ¾" bolt

Stock Number 1A123	Services & Materials Model	Each	Lots Each	Lots Qty
	2004828	$18.05	$17.20	10

H-2.3 Ground Personnel

1 Ground Personnel Accident

Ground personnel must follow proper procedures to avoid serious injury.

A very serious accident with injury occurred recently when a groundman was hanging from the side of a railcar cranking landing legs down. The groundman was on the opposite side of the trailer from the operator, and the operator lowered the travelift arms. The groundman was hit by the arm and knocked off the railcar. Groundman suffered a concussion and minor scrapes and bruises. This incident could have resulted in a far more serious injury.

2 Root Cause

Improper working procedures were being employed by the loading crew:

1. Groundman was hanging off side of railcar to crank landing legs. There is no reason for the groundman to perform this function while trailer is on the railcar Lowering arms before spreader is in the correct position.
2. Groundman and operator were not cognizant of each other's position or intentions before the arms were lowered. Lifting trailer with the lift shoes improperly placed under the trailer.
3. Groundman was in an unsafe location and exposing himself to great risk of injury from either falling or being hit by the spreader arms. Groundman should never be positioned between container being lifted and the railcar.
4. Groundman was on the opposite side of trailer from the operator, so operator's ability to see the groundman was impaired.

3 Lessons Learned

The following lessons were learned as a result fo the recent accident:

1. Never stand on the side of railcars without an approved walking platform.
2. Never assume that the crane operator can see you.
3. Never hang from a railcar to crank landing legs.

Continued on next page

H-2.3 Ground Personnel (continued)

Lessons Learned (continued)

Never position yourself in harm's way of moving spreader parts, or between unit being lifted and the railcar or chassis.

4 Recommended Method

The recommended way to raise and lower the landing legs is:

- Lift trailer with tandems on the ground and landing legs 8 inches from the ground
- Establish communication between groundman and operator
- Raise dolly legs 4 inches for loading or lower 4 inches to place on the ground
- Complete the lift when groundman is clear





(Illustration from an I-STOP poster)

Hub Operations

H-3: Track Safety

Contents

This section contains the following topics:

Topic	See Page
Track Protection	2
Intermodal Track Protection	8
Track Protection at Train Release	10
Trackside Doublespotting	11

H-3.1 Track Protection

1 Purpose

Following are the rules and procedures governing intermodal track protection established to ensure proper protection for intermodal employees and equipment on or in the vicinity of intermodal loading and storage tracks. These procedures are to be used in conjunction with Intermodal Hub Policy Statements 1997-02B "Intermodal Track Protection" and 1997-03B "Track Protection at Train Release."

2 Goal

In developing rules and procedures specific to intermodal facilities, the goal was to achieve as much consistency as possible with Operating Department track protection. The General Code of Operating Rules (GCOR) was used as a base to identify acceptable forms of protection which would match the facility design constraints of many intermodal facilities.

Since applicability of GCOR 5.13 ("Blue Signal Protection of Workmen") is explicitly limited to other employee groups, it was necessary to adopt a modified application of Rule 5.13 to recognize the unique situation of intermodal facilities while disregarding portions of the Rule which have no application to intermodal operations.

Other GCOR rules referenced in this subsection do not explicitly limit application to any employee group and, therefore, are assumed to naturally govern Intermodal operations.

3 Individual Responsibility

In conjunction with the protection actions of representatives for other BNSF employee groups, the intermodal ramp coordinator is responsible for ensuring that each shift has a lead man or one designated person responsible, on behalf of intermodal ramp personnel performing functions on or in the vicinity of intermodal tracks, for properly locking out any track(s) to be worked on, and for properly removing track protection.

4 Derail

Regardless of whether cars are on a track:

Each intermodal ramp track will be protected with derail (red flagged) capable of restricting access to the track where work will occur. The derail must be locked in the derailing position with an effective locking device and position at least 150 feet from the rolling equipment or area to be protected. For those INTERMODAL facilities that may not meet the 150-foot distance requirement due to facility constraints, positioning of the derail should be at the greatest distance as possible but not less than **25 feet* in advance of the direction of rolling equipment or area to be protected in the INTERMODAL facility. In addition, any facing point crossover switches must be lined against movement and secured by an effective locking device. Refer to BNSF Intermodal Track Protection 1997-02B, section H-3.1.14, page 5.

Red signals or flags must always be displayed at each derail or switch.

**25 feet is the minimum allowable advance distance for positioning track protection.*

Continued on next page

H-3.1 Track Protection, Continued

5 Locking

Each work group shall use its own red/blue flag protection device, and that group shall be solely responsible for locking the device to protect against railcar movement and removing the device to allow railcar movement within or out of the track.

"Each company with employees working on intermodal ramp and/or storage tracks (Lift Equipment, Fueling Lift Equipment Companies, Facility Maintenance, Transfer Companies, Etc.) will provide its own red/blue flag protection lock to be affixed to the flag protection device. Each company's lock will be identifiable and coordinators will have a list containing company name and a 24 hour 7 day a week contact telephone number for these locks. No workers of individual company shall commence work on tracks until its company lock is locked onto the appropriate red or blue flag protection device. Before an individual company lock can be installed on the red flag protection device, a representative of the company must contact the operations manager of the ramp/ deramp service company to get permission to install a company lock. The ramp/ deramp service company will have the ultimate responsibility to ensure that all equipment and personnel is clear of the track before railcar movement is allowed to proceed. Only the ramp / deramp company can open or close the red flag track protection device. Only the car inspection company representative can open or close the blue flag protection device."

6 Requirements

No work by intermodal facility personnel may begin on any track until the designated work group track protection lead man or other designated track protection person has:

- locked out the track to secure it from car movement by an engine, **AND**
- advised all work group members that red flag protection is in place, OR workers have visually observed that red flag protection is in place for their employee group.

7 Access Protection

The red flag will remain locked in the protect position at all times except during required railcar movement within or out of the track, regardless of whether cars are on the track they are protecting. Railcar movement cannot occur until the red/blue flag is removed from the protect position. Do **NOT** remove track access protection until all personnel and equipment are clear. Do **NOT** remove track protection placed by another group.

8 Removing Protection

Removing Track Protection

The red flag can only be removed to allow railcar movement when the following actions have all been completed:

- all work group members protected by device are clear of the track where railcar movement will occur; AND
- all equipment protected by device is clear of track where railcar movement will occur; equipment includes cranes, sideloaders, forklifts, trucks, and any other equipment; AND

Continued on next page

H-3.1 Track Protection, Continued

Removing Protection (continued)

- track is clear of all obstructions on both sides of track within 8 feet 6 inches of track center (at some locations, this clearance zone is indicated by a red/yellow stripe on trackside pavement); AND
- track vertical clearance from top of rail to crane must be a minimum of 25 feet. Lift Equipment must be raised to their highest position, and clear of the unprotected track. Operators shall turn off all strobe/mars lights, engine, stand clear of tracks; while locomotive occupies single track operation; AND
- all work group members protected by the red flag are notified and acknowledge their understanding of the track number where railcar movement will occur. This notification and acknowledgement can be done via radio.

For example: [leadman] "Leadman to ABC employees: Request railcar movement into east end of ramp track 7203. Please acknowledge receipt and that you are clear of track 7203." [supervisor OR each employee] "Acknowledge railcar movement into east end of ramp track 7203, and all ABC employees are clear of track 7203." [leadman] "Acknowledge all ABC workers are clear of 7203. Dropping red flag for railcar movement. Out."

9 Railcar Movement

Track protection should not be removed until railcar or engine movement toward the specific track is visible and communication among employees (see #1 above) confirms the track is ready for removal of protection. After disengaging or realigning the derail or switch, the red flag may be removed or the light signal changed to allow passage.

10 15 Minute Rule

Flags and derails must remain up and not open for more than fifteen minutes unless:

- Released to Transportation and occupied by a locomotive for railcar movement
- Facility is closed and no intermodal workers are present
- Prior to closing and re-applying the pole gates and derails, notify Transportation in advance of closing the gates and prior to all intermodal workers returning to work

11 Blue Signal

Anytime workmen are on, under, or between an engine or rolling equipment coupled to an engine, on an intermodal track within a protected area, hanging out onto a lead or main track, in addition to providing protection as required in **"On a Main Track"** and **"On Other than a Main Track"**, must attach a **blue signal** to the controlling engine, a **blue signal** must also be visible to the engineer or employee **(installed on control panel**) controlling the engine, the **reverse lever** must be removed from the control panel, and the engine **must not** be moved. Refer to CGOR rule 5.13, pages 8 - 10 of the Intermodal Track Protection section of the Intermodal Hub Ops Manual. ***All persons handling track protection must be retrained yearly.***

Continued on next page

H-3.1 Track Protection, Continued

12 Train Release

Track protection **MUST** remain in place even after train release notification to the Operating department. Any train released in accordance with the guidelines of these Intermodal Track Protection Rules & Procedures and Intermodal Hub Policy Statements 1997-02B and 1997-03B is considered on time if released before or at scheduled release time.

13 Limited Hours Facilities

Facilities that have limited hours of operation may leave their track protection flags and derails in the open position when the facility is closed and no intermodal workers are present.

14 Intermodal Loading / Storage

INTERMODAL TRACK PROTECTION 1997-02B

Operational safety considerations

PURPOSE: Establish and maintain proper protection for intermodal employees and equipment on or in the vicinity of intermodal loading and storage tracks.

STATEMENT: Prevent access to the intermodal loading tracks using positive protection, where installed, in the form of a derail or switch lined away from the track and locked out. At locations where positive protection is not available, use approved systems and procedures to provide an indication of restricted access to loading tracks. Permanent fixed derails should be utilized in conjunction with permanent fixed red/blue flag installations or be interlocked so that both forms of protection can be placed and removed simultaneously (optional at center crossings).

Applicable track protection rules and procedures as outlined in General Code of Operating Rules (GCOR), the various BNSF safety rules publications, and those published by the Intermodal Business Unit ("Intermodal Track Protection Rules & Procedures" must be known and complied with.

Although GCOR 5.13 (Blue Signal Protection of Workmen) outlines the requirements for protection of railroad workmen who are inspecting, testing, repairing, and servicing rolling equipment, certain portions are also applicable to protection of intermodal employees who are loading/unloading units to a railcar or spotting units trackside.

Continued on next page

H-3.1 Track Protection, Continued

15 Key Differences

The key differences for intermodal facilities from the requirements shown in Rule 5.13 include:

Principle	Description
1	(1) Flag or light signals Blue signal protection is defined in Rule 5.13 as a clearly distinguishable blue flag or light during the day and a blue light at night. Intermodal facilities utilize stop signs or red/green/yellow lights in lieu of blue signals to provide the same type of information as blue signals. Their placement may also vary from that specified throughout Rule 5.13.
2	(2) Forms of protection Rule 5.13 specifies three acceptable methods of protection which must be used singularly or in combination with each other: manually operated switches (providing direct access) which are lined against movement onto the track and secured by an effective locking device; derails locked in derailing position with an effective locking device and positioned at least 150 feet [see #3 below for Intermodal] from the rolling equipment or area to be protected; and remote control switches (providing direct access) which are lined against movement onto the track by the switch operator with switch-controlling devices secured. There are presently some intermodal facilities which do not provide at least one of these three forms of positive protection. At locations where positive protection is not available, approved systems (blue flags/lights, stop signs, red/green lights, etc.) and procedures must be used to provide an indication of restricted access to loading tracks. Whenever possible, the red/blue flag will be a permanent, fixed installation.
3	(3) Derail positioning in relation to the equipment and area to be protected Item (2) above references positioning derails at least 150 feet from the rolling equipment or area to be protected. For those intermodal locations which do have derail protection, positioning of the derails may not meet the 150-foot distance requirement due to facility constraints. In these cases, positioning of the derails should be at as great a distance as possible but no less than 25 feet in advance of entry into/in advance of the area to be protected in the intermodal facility. **RATIONALE:** Supports consistent application of intermodal track protection by identifying acceptable forms of protection and directing application of published rules and procedures to intermodal facilities and their operations.

Continued on next page

H-3.1 Track Protection, Continued

16 Train Release

TRACK PROTECTION AT TRAIN RELEASE 1997-03B

Operational safety considerations

PURPOSE: Define track protection status following train release

STATEMENT: Intermodal track protection must remain in place after train release notification to the Operating Department.

Intermodal Hub Policy Statement 96-03A LATE TRAIN RELEASE AND LATE TRAIN DEPARTURE REPORTING defines train release "as the time when the track or track segment designated for an intermodal train is physically loaded, assignment and ramp processes complete, and Intermodal has communicated this information to the Operating Department."

17 Protection Removal

Track protection should not be removed until railcar or engine movement toward the specific track is visible and communication among employees confirms the track is ready for removal of protection. After disengaging or realigning the derail or switch, the red flag may be removed or the light signal changed to allow passage. In addition, the procedures state under Other General Rules, item 1: No red flag should remain in the open position for more than 15 minutes under any circumstances except when railcar movement is actually occurring on the track.

18 Track Protection and Derails

GCOR 8.20 DERAIL LOCATION AND POSITION, incorporated into the Intermodal Track Protection Rules & Procedures by reference, indicates the following: Except when derails are placed in non-derailing position to permit movement, make sure they are always in derailing position regardless of whether cars are on the track they are protecting. All of these procedures used in conjunction indicate that track protection **MUST** remain in place even after train release notification to the Operating Department. The track protection must not be removed until engine movement toward the specific track is visible and communication among employees confirms the track is ready for removal of protection. Any train released in accordance with these guidelines is considered on time if released before or at the scheduled release time.

RATIONALE: This policy supports the safe course and clearly establishes the validity of Intermodal train release reporting times independent of maintained track protection.

H-3.2 Intermodal Track Protection

1 Goal

Intermodal track protection best practices ensure protection for employees and equipment on or in the vicinity of intermodal loading and storage tracks.

2 Derail and Locks

Prevent access to the intermodal loading tracks using positive protection, where installed, in the form of a derail or switch lined away from the track and locked out. At locations where positive protection is not available, use approved systems and procedures to provide an indication of restricted access to loading tracks.

3 Fixed Derails

Permanent fixed derails should be utilized in conjunction with permanent fixed red/blue flag installations or be interlocked so that both forms of protection can be placed and removed simultaneously (optional at center crossings).

4 Other Resources

Applicable track protection rules and procedures as outlined in General Code of Operating Rules (GCOR), the various BNSF safety rules publications, and those published by the Intermodal Business Unit ("Intermodal Track Protection Rules & Procedures" must be known and complied with.

5 GCOR

Although GCOR 5.13 (Blue Signal Protection of Workmen) outlines the requirements for protection of railroad workmen who are inspecting, testing, repairing, and servicing rolling equipment, certain portions are also applicable to protection of intermodal employees who are loading/unloading units to a railcar or spotting units trackside.

6 Key Differences

The key differences for intermodal facilities from the requirements shown in Rule 5.13 include:

1. Flag or light signals

Blue signal protection is defined in Rule 5.13 as a clearly distinguishable blue flag or light during the day and a blue light at night.

Intermodal facilities utilize stop signs or red/green/yellow lights in lieu of blue signals to provide the same type of information as blue signals. Their placement may also vary from that specified throughout Rule 5.13.

Continued on next page

H-3.2 Intermodal Track Protection, Continued

Key Differences (continued)

2. Forms of protection

Rule 5.13 specifies three acceptable methods of protection which must be used singularly or in combination with each other: manually operated switches (providing direct access) which are lined against movement onto the track and secured by an effective locking device; derails locked in derailing position with an effective locking device and positioned at least 150 feet [see #3 below for Intermodal] from the rolling equipment or area to be protected; and remote control switches (providing direct access) which are lined against movement onto the track by the switch operator with switch-controlling devices secured.

There are presently some intermodal facilities which do not provide at least one of these three forms of positive protection. At locations where positive protection is not available, approved systems (blue flags/lights, stop signs, red/green lights, etc.) and procedures must be used to provide an indication of restricted access to loading tracks. Whenever possible, the red/blue flag will be a permanent, fixed installation.

3. Derail positioning in relation to the equipment and area to be protected

Item (2) above references positioning derails at least 150 feet from the rolling equipment or area to be protected. For those intermodal locations which do have derail protection, positioning of the derails may not meet the 150-foot distance requirement due to facility constraints. In these cases, positioning of the derails should be at as great a distance as possible but no less than 25 feet in advance of entry into/in advance of the area to be protected in the intermodal facility.

H-3.3 Track Protection at Train Release

1 Overview

This policy supports the safe course and clearly establishes the validity of Intermodal train release reporting times independent of maintained track protection.

All of these procedures used in conjunction indicate that track protection MUST remain in place even after train release notification to the Operating Department. The track protection must not be removed until engine movement toward the specific track is visible and communication among employees confirms the track is ready for removal of protection. Any train released in accordance with these guidelines is considered on time if released before or at the scheduled release time.

2 Train Release

Train release is the time when the track or track segment designated for an intermodal train is physically loaded, assignment and ramp processes complete, and Intermodal has communicated this information to the Operating Department.

3 Protection Removal

Track protection should not be removed until railcar or engine movement toward the specific track is visible and communication among employees confirms the track is ready for removal of protection. After disengaging or realigning the derail or switch, the red flag may be removed or the light signal changed to allow passage.

4 Open Position

No red flag should remain in the open position for more than 15 minutes under any circumstances unless there are no workers in the intermodal facility AND railcar movement is actually occurring on the track.

5 Exception

Except when derails are placed in non-derailing position to permit movement, make sure they are always in derailing position regardless of whether cars are on the track they are protecting.

H-3.4 Trackside Doublespotting

1 Goal

Establish trackside spotting guidelines which promote safety and reduce the potential for equipment damage

2 Dangers

Double spotting chassis or containers trackside for ramp or deramp operations is prohibited since safe, acceptable clearances cannot be achieved between double spotted units and often results in

- container damage caused by contact with the crane or with the container being spotted to its side, and
- encroachments into the "protected" area within the clearance lines bordering the tracks.

This policy applies to all facilities (regardless of track spacing, crane size or high-cab features, facility configuration, etc.), with the exception of Track 602 at Cicero and Track 7210 at Alliance, TX .

3 Advantage

Ensures a safer environment for rail crews riding cars spotted to ramp tracks by reducing the chance that a chassis or container might infringe into the clearance line "protected" area.

Reduces the potential for damage to container roofs, sides, and top rails and to lift equipment be eliminating a practice which forces cranes to maneuver containers within close proximity to each other. Reduces the incidence of dolly leg damage by allowing angled spotting, thus eliminating the need to approach a unit from the side to pull it from spot.

More accurately portrays unit availability since inside units are not truly available until the outside unit is pulled away.

Hub Operations Safety

H-4 Equipment Safety

Contents

This section contains the following topics:

Topic	See Page
Operating Lift Equipment Near Overhead Utility Lines	2
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Strobe Warning Lights – Mandated Yard Vehicle Features	6
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Raising and Lowering Hitches	9
Pinch Points	11
Removal of Defective IBCs	13
Backing Trailers	14
Hostling Tractor Seat Belt Policy	15

H-4.1 Operating Lift Equipment Near Overhead Utility Lines

1 Safety Facts

Did you know that:

- OSHA and BNSF have mandatory distance requirements that must be adhered to when operating lift equipment in the vicinity of overhead lines
- Electrical current flows from the power source to the ground in gradients and the voltage differential between gradients, not the voltage itself, can kill
- According to the Bureau of Labor Statistics, 19% of all crane fatalities involve contact with power lines

2 Rules to Be Followed

Follow these rules before operating lift equipment near overhead lines:

- Familiarize yourself with facility maps depicting no lift/no stack zones, no lift equipment access, and power line voltages
- Be aware of the presence of power lines in the vicinity of your work
- Visually ensure that power lines are not damaged or sagging; report any damaged power lines or poles immediately to your supervisor
- Do not rely on any proximity warning devices to protect you
- The following minimum distances must be maintained:
  - Power Line Voltage *Distance from Power Line 50kV or below 10 feet
  - *Where power line voltage is over 50 – 200 kV 15 feet unknown you must maintain over 200 – 350 kV 20 feet a 45 foot minimum clearance
  - Over 350 – 500 kV 25 feet over 500 – 750 kV 35 feet over 750 – 1000 kV 45 feet
  - If the required clearances cannot be maintained, the power line owner should be contacted to de-energize the line or operations cannot be conducted.

3 What You Should Do if the Equipment Contacts a Power Line

If the equipment contacts a power line, ensure the following happens:

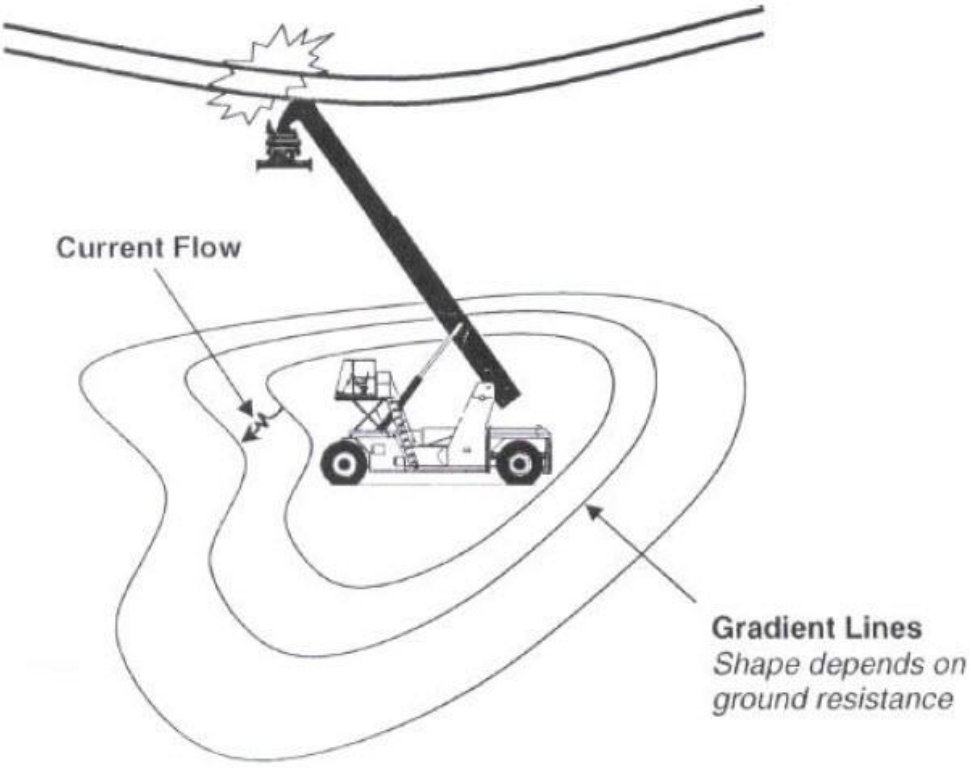
- Ground personnel must stay away from the equipment, since the ground around the equipment may be energized.
- Lift equipment operator should attempt to break the point of contact by moving the equipment at least 10-15 feet away from the power lines. If this is not possible, wait for power company officials to de-energize the line.

Continued on next page

H-4.1 Operating Lift Equipment Near Overhead Utility Lines, Continued

What You Should Do if the Equipment Contacts a Power Line (continued)

- Stay in the cab. Do NOT climb down unless absolutely necessary. You could be electrocuted if you touch the equipment and the ground at the same time, so do NOT maintain 3 points of contact.
- If you are threatened by fire and must leave the equipment, jump completely clear of the equipment landing with both feet together **(DO NOT TOUCH THE EQUIPMENT!)**, maintain balance, and hop out of the area with both feet tightly together.
- Walking or running places your feet across more than 1 gradient line and your body becomes a conduit for current to flow from the higher to lower voltage gradient -- and could kill you.



(Illustration from an I-STOP poster)

H-4.2 Chassis Deflectors Operational Safety Policy

1 Purpose

Provide safety requirements for vehicles operating within the hub in the event a vehicle strikes a chassis head-on; establish guidelines in developing and installing chassis deflectors.

2 Statement

BNSF personnel operating within an intermodal facility and service partners must comply with the following chassis deflector policy. All vans and trucks permanently assigned to the facility which may operate trackside (i.e. ramp supervisor, yard check, and mechanical vehicles, etc.), whether BNSF or service partner owned, must be equipped with chassis deflectors (see sample photos on next page).

Permanently assigned vehicles are those which predominantly operate within the intermodal facility but may leave the facility and travel short distances on public roadways for reasons such as vehicle maintenance and fueling. **Operating trackside** is defined as operating on those roadways adjacent to tracks where loading and/or unloading of trailers/containers occur.

3 Construction and Design

It is suggested that Chassis deflectors be constructed of a minimum schedule 40 piping and designed to deflect a chassis in the event of a head-on collision. The deflectors should also be designed so as not to create mechanical or structural problems with the vehicle nor considerable blind spots that may prohibit the driver from operating the vehicle in a safe manner.

4 Installation

Chassis deflectors should be installed diagonally from the top of the cab to the front of the vehicle along both sides at a height higher than the vehicle windshield; if necessary, the bars may be detachable in order to access the hood. The center bar should be mounted flush or below the front bumper guard to insure that it does not get “caught” by the edge of the chassis during an under-ride. The bed mounted rack that supports the frame bars should be braced with rear sloping bracing to increase the resistance to rearward bending.

5 Rationale

Requiring installation of chassis deflectors on vehicles may prevent serious injury to individuals in the event of a collision with a chassis by forcing the chassis up over the cab and inhibiting direct contact with the windshield and truck cab.

Continued on next page

H-4.2 Chassis Deflectors Operational Safety Policy, Continued

6 Sample Photos











H-4.3 Strobe Warning Lights – Mandated Yard Vehicle Features

1 Purpose

Provide standards in selecting strobe warning lights to be placed on vehicles and equipment at BNSF intermodal hubs; provides enhanced safety by providing a positive visible warning of approaching vehicle/equipment to intermodal employees who may or may not be in direct line of sight of vehicle/equipment.

2 Policy Statement

Intermodal hub personnel must comply with the following policy statement regarding the requirements and specifications for strobe warning lights. This statement includes all equipment such as forklifts, chassis stackers, and chassis rotators, as well as pick-up trucks, vans, hostlers, and repair vehicles.

REQUIREMENTS BY VEHICLE/EQUIPMENT

Regardless of whether BNSF or service partner owned, all permanently assigned moving vehicles including outside vehicles performing regular routine business at BNSF intermodal hubs MUST be equipped with strobe warning lights. For heightened visibility, passenger vans must have strobe warning lights mounted on the front and back center of the top of the vehicle; a total of two (2) per vehicle. Mounting two (2) strobe lights on vehicles such as repair trucks or bread trucks is optional.

Forklifts, chassis stackers, chassis rotators, pick-up trucks, vans, hostlers, and repair vehicles must have a light affixed to cab or occupant area of machinery, or mounted near the cab at a height no lower than the highest point of the cab.

LIGHT SPECIFICATIONS

The following specifications must be complied with when selecting strobe warning lights. The lights must:

- be 5.25"-7.5" in height including the base
- be 5.5"-7" in diameter
- have a double flash-pause flash sequence
- have a flash rate of 65-85 flashes per minute
- have a light intensity of 11 joules –17 joules, if constant light intensity is chosen
- have a minimum light intensity of 8 joules at night and be automatically controlled, if dual light intensity is chosen. In other words, if dual light intensity is chosen, the intensity must be controlled automatically by sensing the amount of ambient light, and must be no less than 8 joules at night.
- have an amber colored dome
- must operate within the range of temperatures experienced at facility currently assigned
- turn on and off automatically with ignition

3 Rationale

This policy standardizes the selection of strobe warning lights while remaining flexible enough to allow selection of a product from various manufacturers. Providing strobe light standards considers the safety of personnel operating during the day and night time and encompasses those employees operating on foot, in a company vehicle, or a piece of equipment.

H-4.4 Proper Lift Operation

1 Accidents Due to Improper Lift Operation

There have been several incidents where trailers have been damaged due to improper loading and/or unloading by Lift Operator, resulting in expensive repairs and the potential loss of business.

2 Root Cause

Improper procedures being employed by Lift Operator:

1. Not properly using guide chains.
2. Lowering arms before spreader is in the correct position.
3. Performing multiple functions at once, raising arms while driving.
4. Lifting trailer with the lift shoes improperly placed under the trailer.

3 Lessons Learned

The following lessons have been learned from improper lift operations:

1. Use the guide chains at each end of the spreader to stop the spreader before contact with top of unit, and to make sure you have proper alignment before rotating the arms down.
2. Adjust the spreader arms as necessary so that the shoes are under the trailer lift pads or lift points. If the trailer is not equipped with lift pads/points, position one arm approximately 1- to 2-foot in front of the crank handle and the other just ahead of the tandems.
3. Do not begin to travel until the arms have rotated up above the trailer's top rail to clear the top of the trailer, and the stabilizer beams are in top utmost position. Sideloader must not back-up until the arms have rotated fully up. Look behind you for clearance, and then check arms again before backing.
4. The Lift operator must apply the proper lifting procedures versus perceived speed it does not take longer to lift correctly.
5. Lift maintenance employee must understand the importance that all safety and damage prevention functions are kept in proper working order.
6. Ground person must observe that all lift shoes are correctly positioned and have a firm grip on the trailer before directing operator to lift trailer.

Continued on next page

H-4.5 Proper Lift Operation, Continued

4 Lift Damage





Trailer damage due to improper lifting procedures being employed by operator	The operator is improperly lifting trailer, the lifting shoes are not properly position under trailer, the trailer lifting pads are not being used.

H-4.6 Raising and Lowering Hitches

1 Purpose

Specifying the methods approved for raising hitches reduces the risk of injury by prohibiting the "groundman-suspended load" scenario. Controlling the proximity of two or more pieces of operating equipment avoids both inadvertent contact (with the potential for injury or damage) and diversion of the groundman's attention from the operation at hand to clearance between equipment. Pre-planning activities contribute to a more organized operation and reduce the likelihood of damage or injury.

2 Raising Hitches

The only approved methods of raising hitches are:

1. Stanchion pull-up Device (SPUD) ;
2. Chassis mounted with an approved hitch lifting device; or
3. Electric hitch gun.

1 Chains or Straps

Under no circumstances should chains be utilized in the hitch-raising process (as stated in Section III, 1. General Rules Applicable to All Loading in the BNSF Intermodal Loading Guide) nor should a strap or other similar item be attached to any trailer, container, or chassis as a means to raise a hitch.

3 Kevlar Straps

Kevlar straps used in conjunction with sideloaders should be attached to the lift equipment at the rear of the machine, and the sideloader driven forward parallel to the car to pull the hitch upright. Kevlar straps must be inspected by each groundman before daily use and must not be used if there are any signs of deterioration, damage, or cuts to the strap.

4 Hitch Guns

Electric hitch guns, their electrical cords, and any extension cords used in conjunction with them must also be inspected by each groundman before daily use. Do not use hitch guns or extension cords that are malfunctioning or have frayed electrical wires. SPUDs, chassis mounted with a hitch lifting device, and lift equipment strap attachment points must be checked frequently but not less than once per month.

5 Screw-Type Hitches

Screw-type hitches with broken, missing, or inoperative elevating screws or associated components must not be raised (nor utilized until repaired).

Continued on next page

H-4.6 Raising and Lowering Hitches, Continued

6 Suspended Load During Hitchraising

Groundmen must never be under a suspended load during the hitch raising process. Each of the approved hitch raising methods precludes creating a situation that places a groundman in proximity to a suspended load. With this intent in mind, as well as avoidance of any equipment damage, there should be no ramp/deramp nor hitch raising/lowering activities performed within 200 feet of any other ramp/deramp or hitch raising/lowering activities on the same track. In addition, groundmen should maintain a safe distance from the hitch being raised in the event the strap breaks or debris is thrown from a falling hitch.

H-4.7 Pinch Points

1 Avoiding Pinch Points

Ground personnel must be aware of "pinch points" and avoid placing any part of their body in positions where "pinch points" injuries occur.

There have been three incidents where Ground Personnel working directly with Lift Equipment placed themselves in dangerous "Pinch-Point" situations, and as result sustained serious injuries. Two of the injuries occurred when the Groundman was standing on a walking platform of a double-stack car while the top container was being loaded. In both cases, the groundman had his hand pinned between the top and bottom container. In the third accident, the Groundman positioned his body adjacent to the front pedestal and end platform of a TTAX car, and was holding a pry bar to unlock a hitch.

As the trailer released from the hitch, the Groundman was struck by the trailer landing leg, and then pinned between the car platform and landing leg. All of these very serious injuries were caused by the groundmen placing their bodies in precarious, unsafe, "Pinch-Point" positions.

2 Root Cause

Ground Personnel working with lift equipment placed themselves in positions where their body parts were pinched between a stationary object and a container or trailer being lifted and moved:

1. Never put your hands, arms, or other body parts between a stationary container and a container suspended by lift equipment.
2. Never place any part of your body in a "Pinch-Point" position.
3. Never assume that the lift operator knows where you are. It is strictly the Goundperson's responsibility to stay clear of lift equipment, all suspended loads, and yard vehicles.
4. Groundperson must ensure that the lift operator is aware of his presence in situations where the operator's visibility is impeded.
5. Whenever possible, groundperson should work one to two wells away from lift equipment when installing, removing, locking, or unlocking IBCs.
6. When required to lock an IBC with the lift machine attached to the container, never use your hand to lock the IBC handle. Instead use a bar or T-hook to lock handle.

Continued on next page

H-4.7 Pinch Points, Continued

Root Cause (continued)





Never position yourself into a pinch-point position. Groundman was struck in back by landing leg when trailer released from hitch.	Never place hands between containers or under a suspended load. *(Reenactment done with artificial hand)*

(Illustrations from an I-STOP poster)

H-4.8 Removal of Defective IBCs

1 Purpose

The removal of defective Interbox Connectors (IBCs) best practice provides a standard procedure for Lift Operator and Groundperson, which promotes a safer environment for the removal of defective IBCs and communication between Lift Operator and Groundperson.

2 General

When required to move or adjust an IBC all four IBCs **MUST BE** unlocked, and the container must be completely removed off of the railcar. The container must be placed onto a chassis if possible, or ground before Ground Personnel remove or install IBCs.

3 Safety

Ground Personnel must not position self between railcar and container. Unless the container is on a chassis or ground, and the lift equipment is either shutdown while attached to the container, or the lift equipment is not attached to container.

4 Bar and T-Hook

When required to lock or unlock an IBC with the lift machine attached to the container, the proper bar or T-hook must be used. **NEVER** use your hand to lock the IBC or place any part of your body in a “pinch-point” position.

5 Communication

Whenever the Groundperson and Lift Operator are working on the same platform but cannot see each other due to their line of sight being obstructed (i.e., opposite side of container) so that the Lift Operator cannot see the Groundperson, another means of communication to provide lifting instructions must be used. This additional means of communication can be a third person who is positioned to see both the Lift Operator and Groundperson to relay lifting instructions, or by using a two-way radio. If a third person is used, this individual **MUST** be a fully trained Groundperson.

H-4.9 Backing Trailers

1 Recommended Practices for Backing Trailers

Recommended Practices for Backing Trailers

When backing trailers within the facility:

- Ensure the area is clear before you begin your backing maneuver.
- Position your hostler and trailer so as to block the entire roadway and aisle way.
- Avoid jack-knifing in an unsafe manner.
- Ensure there is enough clearance on both sides of the trailer/container to accommodate the unit.
- Do not keep 5th wheel all the way up. Lower your 5th wheel to ensure adequate spacing between the landing legs and the ground, or landing legs rolled up if required.
- Before dropping the trailer/container, ensure landing legs are on solid and even surface
- Set parking brakes before exiting the hostler cab.
- Be sure to disconnect air lines from both glad-hands before pulling out from beneath the unit.
- DON'T DROP THE UNIT
- Pull away slowly and watch for traffic, both vehicular and pedestrian.





(Illustrations from an I-STOP poster)

H-4.10 Hostling Tractor Seat Belt Policy

1 Purpose

This policy is intended to clarify existing policy on use of seat belts for Hostling tractors.

2 Safety Responsibility

Effective January 31, 2008 All Hostling Tractors domiciled at BNSF Intermodal Hubs must have a three point seat belt installed. The seat belt must be a retractable design which secures driver across lap and shoulders / upper body. Seat belt material must meet all requirements of the manufacturer and should also be made of a high visibility, orange, reflective material. This material will provide a clear indication to other workers and supervisors that the driver has his / her sear belt properly buckled. All hostling truck drivers must have their seat belts buckled whenever the tractor is moving.

Appendix

Appendix-1 Appendix

Contents

This section contains the following topics:

Topic	See Page
Policy Statements	2
I-Stop Posters	3

Appendix-1.1 Policy Statements

1 Reporting Requirements

Following is a list of links to Intermodal Hub Policy Statements found in the BNSF Intermodal Hub Operations Manual.

1995-01B Coiled Steel Shipments
1996-01B Container Ground Stacking
1996-02A Deramp Reporting
1996-03B Late Train Release/Departure Reporting
1996-06C Trackside Double Spotting
1996-08A Lift Equipment Container Alignment Accessories
1996-09A Confirm Kingpin Locked in Hitch
1996-10 Heavy Load Lifting
1996-11A Flatrack Loading
1996-12 Hostling Specialized Equipment
1996-13 Bare Chassis Parking and Positioning
1997-02B Intermodal Track Protection
1997-03B Track Protection at Train Release
1997-04A Handling 28' UPS Containers
1997-05B Verification of Proper Handling and Securement
1999-01C Proper Reflectivity and Visibility Wear
1999-02 Raising and Lowering Hitches
1999-03 Strobe Warning Lights
1999-04B Chassis Deflectors
1999-05 Cars Raised Off-Center
2000-01 Stationary Objects
2001-01 Empty Containers in Bulkhead Double Stack Cars
2003-01A Employee Protection While Repairing Railcar on Intermodal Ramp Track
2007-2 End of Month Validation Process
2007-3 Leaning Loads Policy
2007-04 Reefer Rules
2007-05 Seat Belt Policy
2007-06 Container Lock Down Policy
2007-07A Conjoined Containers Policy
2008-02 Lifting Pads on Trailers

Appendix-1.2 I-Stop Posters

1 I-Stop Posters

Following is a list of links to I-Stop posters found in the BNSF Intermodal Hub Operations Manual.

Poster 98-01 - Overhead Crane Hit by Railcars

Poster 98-2 - UPS Trailer Fell Off 89-foot Conventional Car

Poster 99-01 - Improper Hitch Raising Accident

Poster 99-02 - Yard Vehicle Hits Bare Chassis

Poster 99-04 - Operating Lift Equipment Near Overhead Utility Lines

Poster 99-05 - Car is Suspected or Raised Off-Center

Poster 00-02 - Correct Assignment and Ldg. Container in Double-Stack cars

Poster 01-01 - Improper Operation of Forklift With Chassis Rotators

Poster 01-02 - Ground Personnel Must Follow Proper Procedures

Poster 01-03 - Ground Personnel Must be Aware of Pinch-Points

Poster 02-02 - Trailer Securement Failure Results in Serious Accident

Poster 04-01 - Lift Equipment Struck Vehicle Parked in Crane Path

Poster 04-02 - The Safest Course of Action Must Always be Taken

Poster 07-01 - Recommended Practice for Backing Trailers

Poster 08-01 Intermodal Leaning Loads Procedures

Poster 09-01 Container Lock Down Policy, Twistlocks

Poster 09-02 E-4.4 Container Lock Down Policy, Push Pin Locks