

# Incident Action Plan

Incident: BNSF Galena Derailment	Prepared By: Ashley Reardon
Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT	Version Name: P008V04

## Approved By

Organization	Name	Signature

## Incident Photo



## Included in Action Plan

	Period Forms		Attachments
<input checked="" type="checkbox"/>	ICS 202 - Incident Objectives	<input checked="" type="checkbox"/>	208 Safety Message/Plan
<input checked="" type="checkbox"/>	ICS 203 - Organization Assignment Lists	<input checked="" type="checkbox"/>	Tank Car Cleaning and Purging Plan
<input checked="" type="checkbox"/>	ICS 204 - Assignment List(s)	<input checked="" type="checkbox"/>	Tank Car Salvage Plan
<input checked="" type="checkbox"/>	ICS 205 - Communication Plan	<input checked="" type="checkbox"/>	Demobilization Checklist
<input checked="" type="checkbox"/>	ICS 206 - Medical Plan	<input checked="" type="checkbox"/>	BNSF Environmental Plan Tracker
<input checked="" type="checkbox"/>	ICS 207 - Organizational Chart	<input checked="" type="checkbox"/>	Site Map 3/10/2015 1730
<input type="checkbox"/>	ICS 208 - Site Safety Plan(s)	<input checked="" type="checkbox"/>	Crude Oil and Fire Air Sampling and Analysis Plan V.1.2
<input type="checkbox"/>	ICS 211P - Check In List	<input checked="" type="checkbox"/>	Proposed Site Layout Plan 2015-03-11
<input type="checkbox"/>	ICS 213 - General Message(s)	<input checked="" type="checkbox"/>	Preliminary Remediation Plan Timeline 2015-03-11 1742
<input type="checkbox"/>	ICS 214 - Activity Logs		
<input type="checkbox"/>	ICS 215 - Operational Planning Worksheet		
<input checked="" type="checkbox"/>	ICS 230 - Meeting Schedule		
<input type="checkbox"/>	Weather Report		
<input type="checkbox"/>	Incident Critique		

## ICS 202: Incident Objectives

Incident: BNSF Galena Derailment	Prepared By: Ashley Reardon
Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT	Version Name: 03/11/2015 18:24 CDT

### Objective(s)

- 1. SAFETY OF RESIDENTS & RESPONDERS**
- 2. PROTECT ENVIRONMENT AND CONTROLLING RUNOFF**
- 3. STABILIZE SITE**
- 4. MONITOR ENVIRONMENTAL CONDITIONS/IMPACTS**
- 5. FACILITATE INVESTIGATIONS & PRODUCT SAMPLING/RECOVERY**
- 6. RESTORE DERAILMENT SITE**
- 7. ENSURE SAFE AND EFFECTIVE TRACK OPERATIONS**
- 8. CLARIFY TANK CAR STATUS**

### Operational Period Command Emphasis

COMMUNICATE HEALTH AND SAFETY PLAN TO ALL RESPONDERS  
 TRAIN RESPONDERS ON-TRACK SAFETY  
 COMMUNICATE CONTINGENCY PLAN TO ALL RESPONDERS  
 CONTINUE COMMUNICATIONS AMONG RESPONDERS AND RESPONSE AGENCIES  
 ESTABLISH TRAFFIC CONTROL PLAN AND COMMUNICATE TO ALL RESPONDERS  
 IMPROVE COMMON OPERATING PICTURE OF SITE AND ICP  
 UPDATE THE CONTAINMENT PLAN

### **LIMITATIONS/CONSTRAINTS**

BEING ABLE TO EGRESS FROM WORK AREA. EVOLVING PLAN WITH SUPERVISORS MAINTAINING SITUATIONAL AWARENESS

### General Situational Awareness

WRECKING AND REMOVAL OPERATIONS CONTINUE/CONCLUDE  
 ENVIRONMENTAL SAMPLING CONTINUES

## ORGANIZATION ASSIGNMENT LIST (ICS 203)

<b>1. Incident Name: BNSF GALENA DERAILMENT</b>		<b>2. Operational Period:</b> Date From: 3/12/15      Date To: 3/13/15 Time From: 0830 HRS      Time To: 0830 HRS		
<b>3. Incident Commander(s) and Command Staff:</b>		<b>7. Operations Section:</b>		
IC/UCs	Jaime Brown, EPA Region 5	Chief	BNSF	Mark Engdahl
IEPA	Dan Bowen	Deputy	US EPA	Brad Benning
BNSF RR	Allen Stegman			
Jo Daviess Cty	Chuck Pederson	Staging Area		
		<b>Branch</b>	Remediation	
		Branch Director	BNSF	Mark Engdahl
Safety Officer	Kurt Merkle, Arcadis	Deputy		
<b>4. Agency/Organization Representatives:</b>		Division/Group		
FRA	Steve Illich	Division/Group		
US F&WS	Russell Engelke	Division/Group		
Illinois IMT	Dennis Bingheim/Steve Shults	Division/Group		
Illinois DNR	Cpt. Laura Petreikis	Division/Group		
OSHA	Eric Christensen	<b>Branch</b>	Recovery	
City of Galena	Mark Moran	Branch Director	BSNF	Mark Engdahl
Jo Daviess Sheriff	Kevin Turner	Deputy		
<b>5. Planning Section:</b>		Division/Group		
Chief	Laura Weems	Division/Group		
Deputy		Division/Group		
Resources Unit	John Pasquier	<b>Branch</b>	Site Security	
Situation Unit		Branch Director	Local Police	
Documentation Unit	Dave Hentrich	Deputy		
Demobilization Unit		Division/Group		
Technical Specialists	Shawn Wnek, PhD (Tox)	Division/Group		
USCG Strike Team	Rich Forte	<b>Branch</b>	Environmental Monitoring	
		Division/Group	Soil	Arcadis
		Division/Group	Air	CTEH
<b>6. Logistics Section:</b>		Division/Group	Water	Pinnacle/TRC
Chief	Leslie Campbell	Division/Group	Oversight	EPA/IEPA
Deputy	Andrew Jones	<b>Air Operations Branch</b>		
<b>Support Branch</b>		Air Ops Branch Dir.		
Director				
Supply Unit				
Facilities Unit		<b>8. Finance/Administration Section:</b>		
Ground Support Unit		Chief	BNSF RR	

## ORGANIZATION ASSIGNMENT LIST (ICS 203)

<b>1. Incident Name: BNSF GALENA DERAILMENT</b>		<b>2. Operational Period:</b> Date From: 3/12/15    Date To: 3/13/15 Time From: 0830 HRS    Time To: 0830 HRS	
<b>Service Branch</b>		Deputy	IL-IMT BOB DOTY (T)
Director		Time Unit	
Communications Unit		Procurement Unit	
Medical Unit		Comp/Claims Unit	
Food Unit		Cost Unit	
<b>9. Prepared by: Name:</b> <u>Ashley Reardon</u>		<b>Position/Title:</b> _____ <b>Signature:</b> _____	
<b>ICS 203</b>	<b>IAP Page</b> _____	<b>Date/Time:</b> <u>3/11/2015 1630 HRS</u>	

## ICS 204 - Assignment List

Incident: BNSF Galena Derailment	Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT
Branch: REMEDIATION	Division / Group: REMEDIATION
Prepared By: Ashley Reardon	Version Name: 03/11/2015 18:24 CDT
Unit:	

### Tactical Objective

Screening site for contamination, removing contaminated soil, and backfilling soil.

### Assignments

- Inspection of possible soil contamination
- Determine re-charge rate and removal schedule. Excavation of contaminated soil and install interceptor trench.
- Backfill and grading of excavated area
- Develop waste water treatment, discharge, and injection plan(s)
- Ensure required permits are obtained. Mobilize waste water treatment system

### Resources Required

Resource Identifier	Leader	# of Units	Contact	Notes
BNSF Contractor	Mark Engdahl		206-465-5976	BNSF

### Assignment Progress and Issues

All workers must read and sign ICS 208 Site Safety Plan and acknowledge worker health and safety briefing prior to work. For information about hospitals and communications, see ICS 205 Communications Plan and ICS 206 Medical Plan.

### Location of Work

In the Exclusion Zone.

## ICS 204 - Assignment List

Incident: BNSF Galena Derailment	Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT
Branch: CONTAINMENT	Division / Group: CONTAINMENT
Prepared By: Ashley Reardon	Version Name: 03/11/2015 18:24 CDT
Unit:	

### Tactical Objective

Put in place engineering controls to contain any spilled crude and protect the environment.

### Assignments

- Mobilize and stage equipment
- Prep sheeting panels
- Driving piling panels
- Demobilize equipment as applicable
- Assess and install additional containment options as needed

### Resources Required

Resource Identifier	Leader	# of Units	Contact	Notes
BNSF Contractors	Mark Engdahl		206-465-5976	BNSF

### Assignment Progress and Issues

All workers must read and sign ICS 208 Site Safety Plan and acknowledge worker health and safety briefing prior to work. For information about hospitals and communications, see ICS 205 Communications Plan and ICS 206 Medical Plan.

### Location of Work

Staging area in the Support Zone

## ICS 204 - Assignment List

Incident: BNSF Galena Derailment	Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT
Branch: RECOVERY	Division / Group: RECOVERY
Prepared By: Ashley Reardon	Version Name: 03/11/2015 18:24 CDT
Unit:	

### Tactical Objective

Conduct vacuum operations and provide/maintain containment.

### Assignments

Utilize vacuum trucks to collect pooled/residual product and containerize in frac tanks staged in the support zone south east of exclusion zone.

Remove all ice from, inspect, and maintain containment/soft boom.

Inspect and maintain earthen berm

Use sorbent material as needed


### Resources Required

Resource Identifier	Leader	# of Units	Contact	Notes
Vac Trucks		1		
Frac Tanks				
BNSF Contractors				
HAZMAT Contractors				

### Assignment Progress and Issues

All workers must read and sign ICS 208 Site Safety Plan and acknowledge worker health and safety briefing prior to work. For information about hospitals and communications, see ICS 205 Communications Plan and ICS 206 Medical Plan.

### Location of Work

In the Exclusion Zone (land and water) and surrounding Support Zone.



## ICS 204 - Assignment List

Incident: BNSF Galena Derailment	Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT
Branch: ENVIRONMENTAL MONITORING	Division / Group: ENVIRONMENTAL MONITORING
Prepared By: Ashley Reardon	Version Name: 03/11/2015 18:24 CDT
Unit:	

### Tactical Objective

Conduct soil, water, and air sampling in support of operations.

### Assignments

- Soil sampling in the Exclusion Zone per Soil Sampling Plan
- Water sampling upstream and downstream per the Water Sampling Plan
- Conduct real-time air monitoring on-site in support of operations per Air Sampling Plan/Worker Exposure Plan
- Submit sampling plans prior to task


### Resources Required

Resource Identifier	Leader	# of Units	Contact	Notes
BNSF Contractors	Arcadis - Jeff Bonsteel	3		
US EPA Contractors	US EPA	2		

### Assignment Progress and Issues

See attached Environmental Plan Tracker and Crude Oil and Fire Air Sampling and Analysis Plan V.1.2.

### Location of Work

In the Exclusion Zone, Support Zone, and surrounding community.

**BNSF Galena Derailment Plans Tracker**

	<b>Plan Name</b>	<b>Version</b>	<b>Activities Covered</b>	<b>Company</b>	<b>Date Drafted</b>	<b>Version Draft Date</b>	<b>Submitted to Unified Command</b>	<b>Approved by Unified Command</b>	<b>Comments</b>
1	Air Sampling Plan		air sampling and Analysis	CTEH	3/6/2015	3/10/015	3/6/2015	3/6/2015	
2	Traffic Control Plan		Map of traffic plan	BNSF	3/6/2015		3/6/2015	3/6/2015	Need to find copy of original plan, prob done 3/6
3	Post Excavation Soil Sampling Plan	2	soil sampling plan for conf. samples	ARCADIS	3/9/2015	3/9/2015	3/9/2015	3/9/2015	
4	Sheet Wall and Drainage Trench Plan		sheet pile wall and Drainage Trench install	ARCADIS	3/9/2015		3/9/2015	3/9/2015	
5	Site Transfer Plan		product transfer	Sunpro	3/7/2015		3/10/2015	3/10/2015	
6	Surface Water Sampling and Monitoring Plan		surface water monitoring	Pinnacle Eng	3/10/2015		3/10/2015	3/10/2015	
7	Tank Car Cleaning and Purging Plan		cleaning and purging Tanks	BNSF	3/10/2015		3/10/2015	3/11/2015	still need Ashley to send scanned copy
8	Approve Surface Water Sampling and Monitoring Amendment		frequency amendment	Pinnacle Eng	3/10/2015		3/11/2015	3/11/2015	
9	Tank Car Salvage Plan		car salvage	BNSF	3/11/2015		3/11/2015	3/11/2015	
10	Waste Management Plan		waste management	ARCADIS	3/10/2015		3/10/2015		
11	Phase Laser Induced Florescence Work Plan	2	LIF activities	ARCADIS	3/9/2015				UC had edits to v1 and returned to AUS for update
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## ICS 204 - Assignment List

Incident: BNSF Galena Derailment	Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT
Branch: RESTORATION	Division / Group: RESTORATION
Prepared By: Ashley Reardon	Version Name: 03/11/2015 18:24 CDT
Unit:	

### Tactical Objective

Conduct wrecking and track restoration operations

### Assignments

Remove identified cars and stage in preparation for scraping

Mark cars with "E" in paint to identify which are empty.

Maintain on-track safety buffer with visual barrier

Install permanent rail crossing


### Resources Required

Resource Identifier	Leader	# of Units	Contact	Notes
BNSF Contractors	Mark Engdahl			

### Assignment Progress and Issues

All workers must read and sign ICS 208 Site Safety Plan and acknowledge worker health and safety briefing prior to work. For information about hospitals and communications, see ICS 205 Communications Plan and ICS 206 Medical Plan.

### Location of Work

On-site

## ICS 204 - Assignment List

Incident: BNSF Galena Derailment	Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT
Branch: CLEAN/PURGE	Division / Group: CLEAN/PURGE
Prepared By: Ashley Reardon	Version Name: 03/11/2015 18:24 CDT
Unit:	

### Tactical Objective

Clean and purge all damaged train cars

### Assignments

- Move car to stage
- Clean inside of car from outside. Assess air quality.
- Re-clean inside of car from outside, assess air quality, and prep for confined space entry if necessary.
- Pressure wash. Mark with "C" in paint to identify cleaned.
- Stage for removal. Mark with "S" in paint to identify scrap.

### Resources Required

Resource Identifier	Leader	# of Units	Contact	Notes
SunPro				

### Assignment Progress and Issues

Confined space, hot work.  
See attached Tank Car Cleaning and Purging Plan.

### Location of Work

In the Exclusion Zone and surrounding staging area.

# BNSF Derailment, Galena, Illinois

Title: Tank Car Cleaning and Purging Plan

Version: 1

Date Submitted: 3/10/15

Plan Submitted by: BNSF

## Unified Command Sign-off

US EPA:

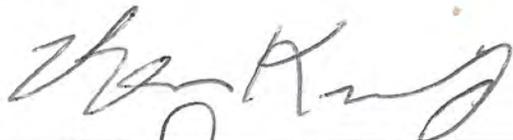


3/10/2015

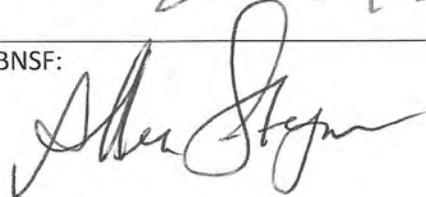
Galena FD:

  
EMA

Illinois EPA:



BNSF:

  
3/10/15

Notes:

## **Tank Car Cleaning and Purging Plan**

**BNSF**

**Galena, Illinois**

**March 10<sup>th</sup>, 2015**

### **Purpose and Scope**

This Plan provides the framework for safely cleaning residual crude oil from the affected tank cars, tank trucks, frac tanks, etc. after they are empty.

### **Operational Access Conditions and Our Approach & Access Points:**

Tank car, tank truck, and frac tank cleaning activities will take place at the BNSF Galena, Illinois derailment site.

Cleaning personnel and equipment shall be deployed in various locations to accommodate the vessels being cleaned (i.e. we will set up near each vessel as opposed to bringing vessels to us).

If the need to enter a tank is required, (any body part breaking the plane of the opening) then the Confined Space Entry Permitting & Rescue Contingency, as stated below must be implemented.

Additional mobile light plants will be onsite to provide sufficient lighting for all operations and will be moved as necessary to support operations.

### **Grounding and Bonding:**

At all tank cleaning operating locations (tank cars, tank trucks; frac tanks) a grounding field shall be established at each transfer location. Each transfer shall be grounded and bonded to control static energy to ground and to equalize vessel energies.

Guidelines for Grounding & Bonding Field Operations include:

- Grounding Fields to be located uphill and upwind from transfer equipment to the extent practical.
- Grounding Fields < 25ohms resistance (or best reasonably achievable)
- Each connection shall ensure the clamps get effective bite into container, or container frame, base metal (good contact from clamps to tanks). Paint and rust can be

insulators and will be scraped/removed to clean metal as needed for connections. Connections should prove continuity to less than 5ohms resistance.

- Sequence of connections = Unloading tanks to Ground; then Receiving tanks to Ground; and then Unloading tanks to Receiving tanks for Bonding.

### **Spill Prevention Contingency Measures:**

All connections shall be verified as having new or like new gaskets in good physical condition.

Drip pans shall be placed under all vac truck loading and unloading connections.

Absorbent pads will be inserted firmly into open ends of hoses and pumps in between transfers as equipment is handled around the site.

### **Personal Protective Equipment (PPE) for Tank Cleaning Operations:**

Minimum PPE for tank cleaning will include the following guidelines:

- Nomex/Flame Retardant Clothing worn under Tychem SL (or equivalent) chemical protective suits
- PVC Chemical Resistant Gloves
- PVC Chemical Resistant Boots
- Hard Hat
- Safety Glasses

### **Tank Cleaning Operations:**

The primary mode of operation will include the following basic approach:

- Verify Tank Securement (not going to move, roll-over, slide or roll away, etc.)
- Grounding & Bonding
- Initial air monitoring of the surrounding area and inside vessel
- The cleaning work may include a variety of cleaning techniques, including and not limited to, physical removal of material (i.e. scraping and shoveling), thinning and vacuuming the materials (i.e. adding surfactant to degrade and remove thick oil deposits), hot water pressure washing, vacuuming, and potentially steaming and other options if any "stubborn" cars or tanks are encountered. Then followed by hot washing with a multidirectional nozzle and all materials shall be removed by vacuum truck and added to a frac tank that shall be designated to temporarily contain these tank cleaning waste materials pending disposal.
- The tanks will rest for 1 hour after cleaning operations and then air monitoring readings taken to confirm hazardous atmospheres have been cleared.

- If readings do not provide clearance of hazardous atmospheres then the washing process will commence again. If this does not provide clearance, a proving hole will be established by first purging the car with nitrogen or similar gas. A hot work permit established prior to proving hole installation.
- The proving hole will provide better access with the multi direction nozzle to assisting further cleaning of 'stubborn' areas in tanks.
- Once tank is cleared of hazardous atmosphere it is ready for scraping operations.

#### **Air monitoring during tank cleaning:**

The atmospheric testing required for clearance of tanks will be performed by the Cleaning and Purging contractor (ie, cleaning, hot work permit, and confined space entry permit air monitoring).

In support of tank cleaning operations, air monitoring will be performed in support operations (CTEH) and around the work area to detect combustible vapors, carbon monoxide, hydrogen sulfide, oxygen, and volatile organic compounds.

Levels that require to put on respiratory protection per CTEH air monitoring for specific action levels

During hot work permit operations, fire watches and staged firefighting equipment (ie sand fire extinguishers) will be required

#### **Confined Space Entry Permitting & Rescue Contingency:**

All entry work will performed with a confined space permit in place.

Lock-out/tag-out in these operations will consist of verifying vessel securement (i.e. tank cars and tank trucks chocked/braced to prevent movement, frac tanks not connected to any other containers with common hoses or piping, etc.) and confined space signage will be affixed to the tank car during confined space entry operations. Entrants will be equipped with confined space tank ladders, full body harnesses, and tri-pods with winch set ups. These shall serve to promote safe entry and exit from the tanks. These same resources are assets for the rescue personnel on hand. The confined space rescue personnel will be on hand via the work crew supporting the entrant.

**Personal Protective Equipment (PPE) for Confined Space Entry Tank Cleaning Operations:**

Minimum PPE for tank cleaning will include the following guidelines:

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- Full faced air purifying respirator with cartridges
  - Escape harness and tag line for side entry only
  - Nomex/Flame Retardant Clothing worn under Tychem SL (or equivalent) chemical protective suits
  - PVC Chemical Resistant Gloves
  - PVC Chemical Resistant Boots Hard Hat
  - Safety Glasses
- 
-



# CONFINED SPACE ENTRY PERMIT

DATE PERMIT ISSUED:	TIME PERMIT ISSUED:	EXPIRATION DATE:	TIME OF EXPIRATION:
LOCATION (FAC #):		DESCRIPTION:	
PURPOSE OF ENTRY:			DEPT/DIV/SHOP:
AUTHORIZED ENTRANT(S):		AUTHORIZED ATTENDANT(S):	
TIME OF ACTUAL ENTRY:		TIME OF COMPLETION OF ENTRY:	

### ATMOSPHERIC TEST DATA

TEST	PRE-ENTRY RESULTS	FOLLOW-UP TESTING RESULTS			
O2 (19.5-22%)					
% LEL (<10%)					
CO (<25ppm)					
H2S (<10 ppm)					
TIME					
TOXICS					
1)					
2)					

PRE-ENTRY TESTING BY:				DATE:	TIME:
INSTRUMENT	MODEL	SERIAL#	GAS-CAL DATE/TIME	PASSED GAS-CAL: Y/N	
				<input type="checkbox"/> Yes	<input type="checkbox"/> No
				<input type="checkbox"/> Yes	<input type="checkbox"/> No

ERO CALIBRATION PRIOR TO ENTRY CONDUCTED BY:

### REQUIRED SAFETY CONTROLS/OBSERVED HAZARDS

REQUIREMENT	YES	NO	COMMENTS/CONTROL MEASURES/EQUIPMENT
ATTENDANT	<input type="checkbox"/>	<input type="checkbox"/>	
*Respiratory Protection	<input type="checkbox"/>	<input type="checkbox"/>	
*Protection Clothing	<input type="checkbox"/>	<input type="checkbox"/>	
*PPE	<input type="checkbox"/>	<input type="checkbox"/>	
Fire Extinguisher	<input type="checkbox"/>	<input type="checkbox"/>	
*Non-Entry Rescue Equip	<input type="checkbox"/>	<input type="checkbox"/>	
*Lockout/Tagout	<input type="checkbox"/>	<input type="checkbox"/>	
*Ventilation	<input type="checkbox"/>	<input type="checkbox"/>	
*Follow-up Testing	<input type="checkbox"/>	<input type="checkbox"/>	
*Other Controls	<input type="checkbox"/>	<input type="checkbox"/>	
Are Workers trained?	<input type="checkbox"/>	<input type="checkbox"/>	

\*COMMENTS REQUIRED IF CHECKED "YES"

Communication: (Check)  VISUAL  DIRECT VERBAL  PHONE  RADIO

EMERGENCY CONTACT: BASE FIRE DEPARTMENT (EMS) PHONE 911

IS SPACE LABELED?  YES  NO OTHER COMMENTS:

PERMIT ISSUED - ENTRY SUPERVISOR'S SIGNATURE PERMIT CANCELLED - ENTRY SUPERVISOR'S SIGNATURE:

PRINT NAME HERE: PRINT NAME HERE:

PERMIT REVIEWED BY: SHOP SUPERVISOR: (Initial) DATE: CSPM: (Initial) DATE:

PERMIT MUST REMAIN AT ENTRY POINT(S) UNTIL WORK IS COMPLETE - A COPY MUST BE FORWARDED TO CSPM WITHIN ONE WEEK OF ENTRY - MAINTAIN ONE COPY OF SHOP LOCATION - ONLY AUTHORIZED ENTRANTS LISTED ON PERMIT MAY ENTER PRCS - PERMIT MUST BE FILLED OUT COMPLETELY - NOTIFY CSPM OF ANY UNEXPECTED HAZARDS OR EMERGENCIES ENCOUNTERED - FOR ASSISTANCE CALL CSPM - (910) 451-7449

## Hot Work Permit

### Section One - Application

Rig:		Operator:		Location:		Number:	
Applicant		Position		Company			
Person in Charge of Work		1st		2nd			
(Area) Supervisor's Name		1st		2nd			
Work Description _____							

Location		Equipment										
Validity Period	From	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <th style="width: 10%;">Hrs.</th> <th style="width: 10%;">Date</th> </tr> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> </table>	Hrs.	Date			Authorized By: _____ <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <th style="width: 10%;">Hrs.</th> <th style="width: 10%;">Date</th> </tr> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> </table>	Hrs.	Date			
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Extended Validity Period	From	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <th style="width: 10%;">Hrs.</th> <th style="width: 10%;">Date</th> </tr> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> </table>	Hrs.	Date			To	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <th style="width: 10%;">Hrs.</th> <th style="width: 10%;">Date</th> </tr> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> </table>	Hrs.	Date		
Hrs.	Date											
Hrs.	Date											

### Section Two - Preparation

**Check Each Item As Appropriate**

<input type="checkbox"/> JSA	<input type="checkbox"/> Warning Signs	<input type="checkbox"/> Radio Silence
<input type="checkbox"/> Risk Assessment	<input type="checkbox"/> Scaffold	<input type="checkbox"/> Purge Lines/Pipes/Systems
<input type="checkbox"/> Isolation	<input type="checkbox"/> Wind Break	<input type="checkbox"/> Drain Pipes/Lines/Systems
<input type="checkbox"/> Safety Harness/Safety Line	<input type="checkbox"/> Visor /Goggles	<input type="checkbox"/> Venting Confined Spaces
<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Special Hand Protection	<input type="checkbox"/> Cleaning
<input type="checkbox"/> Fire Watch	<input type="checkbox"/> Chemical PPE	<input type="checkbox"/> Atmospheric Testing
<input type="checkbox"/> Fire Blanket	<input type="checkbox"/> Gas Detector	<input type="checkbox"/> Artificial Lighting
<input type="checkbox"/> Fire Retardent Clothing	<input type="checkbox"/> Portable Radio	<input type="checkbox"/> Respiratory Protection
<input type="checkbox"/> Barriers/Tape	<input type="checkbox"/> P.A. Announcements	<input type="checkbox"/> High Voltage

Special Precautions \_\_\_\_\_

Person in Charge (signature)		Date/Time	
(Area) Supervisor's Approval (signature)		Date/Time	

**The above named person declares responsibilities and precautions to be used are understood and approved.**

### Section Three - Isolation / Atmospheric Testing / De-Isolation

Authorizing Person Signature		Print Name		Position	
Equipment to be Isolated _____					

Type of Isolation requested  Electrical  Mechanical

Authorized Employee Verifying Isolation Print Name  Signature  Position

The persons names on the SSF and signing above confirms equipment has been effectively isolated and verified.

### Atmospheric Testing Results / Verification

Name of Person Testing  Position

Area Tested  Date/Time

Results Oxygen %  (20% Min) LEL %  (10% Max) H2S ppm  (35 ppm max)

Signature of Person Testing  Date/Time

The above named person certifies this equipment/area is safe to enter.

Retest Oxygen %  (20% min) LEL %  (10% max) H2S ppm  (35 ppm max)

Retest must be completed if conditions change. If further retest required, new Permit must be obtained

### De-Isolation

Authorizing Person Signature  Print Name  Position

Equipment to be De-Isolated

Type of De-Isolation requested  Electrical  Mechanical

Authorized Employee Verifying De-Isolation Print Name  Signature  Position

The person named on the SSF, by signing above, confirms equipment De-isolation and system function returned.

### Section Four - Authorization

The above detailed work/preparations and precautions are authorized to commence at stated validity period.

(Area)Supervisor Signature  Date/Time

Authorized Person Signature  Date/Time

OIM Signature  Date/Time

### Section Five - Completion

Work is only considered complete when all the appropriate signatures have been obtained and the permit returned to the PCP

Work Complete

Suspended Work:

PIC Initials Stop Work

Start Work

New Permit Issued

Supv. Initials Stop Work

Start Work

## ICS 204 - Assignment List

Incident: BNSF Galena Derailment	Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT
Branch: SALVAGE	Division / Group: SALVAGE
Prepared By: Brad Benning	Version Name: 03/11/2015 18:24 CDT
Unit:	

### Tactical Objective

Right size tank cars to manageable sizes through torch cutting/mechanical shears.

### Assignments

- Mobilize salvage equipment
- Move clean cars to salvage area
- Dismantle cars by shearing /torch cutting in salvage area ("parking lot")
- Ensure contractors have appropriate safety SOPs and follow BNSF HASP
- Load out scrap metal
- Demobilize salvage equipment

### Resources Required

Resource Identifier	Leader	# of Units	Contact	Notes
Salvage Contractor	Progress Rail	1		
Wrecking Contractor	Hulcher	3		Sidebooms/track hoe

### Assignment Progress and Issues

See attached **Tank Car Salvage Plan**.

### Location of Work

Salvage Area ("Parking Lot") on-site.

# BNSF Derailment, Galena, Illinois

Title: Tank Car Salvage Plan

Version: 1

Date Submitted: 3/11/15

Plan Submitted by: BNSF

## Unified Command Sign-off

US EPA:

 3/11/15

County EMA:

  
EMA

Illinois EPA:

 3/11/15

BNSF:

 3/11/15

Notes:

**Tank Car Salvage Plan**  
**BNSF**  
**Galena, Illinois**  
**March 11<sup>th</sup>, 2015**

**Purpose and Scope**

This Plan provides the framework for safely salvaging the tank cars and components after the cleaning and purging process.

**Spill Prevention Contingency Measures:**

If any remaining liquids are encountered, salvage activities would cease and a Hazmat representative will lead the removal of such liquids.

**Personal Protective Equipment (PPE) for Tank Salvage Operations:**

Minimum PPE for tank salvage will include the following guidelines:

General Site workers

- Fluorescent orange safety vest
- Work Type Gloves
- Hard Hat
- Safety Glasses
- Safety toe work boots

Torch Cutting Workers

- Above quoted PPE
- Leather burn clothing
- Respirators with cartridges with P100
- Custom cutting tinted safety eyewear
- Hearing Protection

Compressed gas tanks storage/securement (liquid oxygen)

- All compressed gas cylinders/tanks will be secured upright and protected against movement.
- No smoking area will be designated around compressed gas cylinders.

### **Tank Salvage Operation:**

Salvage area will delineated with visual barriers and only for access of salvage operation workers.

#### Hot work permit procedure

- Complete blanket hot work permit for the salvage operation area
- Clear all combustibles from area prior to work start
- Have fire suppression equipment readily available with fire watch
- Turn in all completed hot work permits to Site Safety

The primary mode of operation will include the following basic approach:

- Remove any gross soils deposits or debris from tank car
- Receiving of tank cleansing certificate
- Verify tank car information (i.e. tank car number)
- Re-verify clear atmosphere in the tank car
- Don PPE and begin tank salvage/cutting operations
- *Tank car components (trucks, wheels, etc.) that are visually impacted with crude oil, will have to be decontaminated per the Equipment Decon Work Plan requirements.*

#### Salvage/Cutting Sequence

- Cutting of the longitudinal axis of the tank car
- Split the shell apart
- Quarter the shell again on the long axis (like a banana peel)
- Then cut on the mid points creating 8 sections of tank shell
- Then nest(one shell inside the other) the pieces into the load out truck for removal from the site

### **Air monitoring during tank salvage operations:**

CTEH will provide air monitoring activities on the exterior in support of tank salvage operations, air monitoring will be performed in support operations and around the work area to detect combustible vapors, hydrogen sulfide, oxygen, and volatile organic compounds.

If any air monitoring action levels are reached by CTEH, the salvage operation will stop and site safety will investigate with CTEH.

## ICS 205: Communication Plan

Incident: BNSF Galena Derailment	Prepared By: Ashley Reardon
Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT	Version Name: 03/11/2015 18:24 CDT

### Radio Listings

Zone Grp.	Ch #	Function	Channel Name / Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone / NAC	TX Freq N or W	TX Tone / NAC	Mode (A, D or M)	Remarks
	66			OPERATIONS						

### Phone Listings

Name	Title	Phone	Radio	Email	Other
Allen Stegman	Incident Commander - BNSF	817-692-8235	<input type="checkbox"/>	allen.stegman@bnsf.com	
Andrew Jones	Deputy Logistics Section Chief	501-516-7780	<input type="checkbox"/>	ajones@cteh.com	
Ashley Reardon	IAP Development	501-247-6691	<input type="checkbox"/>	areardon@cteh.com	
Brad Benning	Operations Section Chief	312-919-0090	<input type="checkbox"/>		
Brian Brackmeyer	Liaison Officer		<input type="checkbox"/>		
Chris Thessing	GIS/Aerial Imagery	501-515-1228	<input type="checkbox"/>	cthessing@cteh.com	
Chuck Pedersen	Incident Commander - Jo Daviees Cty	815-990-6702	<input type="checkbox"/>	ema@jodaviees.org	
Clay Reid	Manager, Hazardous Materials Safety	817-313-0592	<input type="checkbox"/>	clay.reid@bnsf.com	Day
Dan Bowen	Incident Commander - IEPA	217-306-5262	<input type="checkbox"/>	dan.bowen@illinois.gov	
Dave Estep	Manager, Sunpro	708-653-2559	<input type="checkbox"/>		
Dave Hentrich	Documentation Unit Leader	630-452-9910	<input type="checkbox"/>	dhentrich@responsegroupinc.com	
Derek Lampkin	Director, Hazardous Materials Safety	612-760-1365	<input type="checkbox"/>	Derek.Lampkin@BNSF.com	Night
Don Warren	CTEH PM (Onsite air monitoring)	601-278-7814	<input type="checkbox"/>	dwarren@cteh.com	
Dr. Shawn Wnek	Toxicologist, CTEH Project Technical Director	501-258-7132	<input type="checkbox"/>	swnek@cteh.com	
Eric Callahan	Data Management - CTEH	501-366-1525	<input type="checkbox"/>	ecallahan@cteh.com	
Heriberto Leon	Liaison Officer		<input type="checkbox"/>		
Jaime Brown	Incident Commander - EPA	312-802-0682	<input type="checkbox"/>	brown.jaime@epa.gov	
Jason Braun	Vac Team One	651-398-0415	<input type="checkbox"/>		
John Pasquier	Situation Unit Leader	281-728-2004	<input type="checkbox"/>	jpasquier@responsegroupinc.com	
Kurt Merkle	Safety Officer	215-534-0435	<input type="checkbox"/>		
Kyle Bennett	CTEH PM (Community Air)	501-747-6787	<input type="checkbox"/>	kbennett@cteh.com	
Laura Weems	Planning Section Chief	832-470-5557	<input type="checkbox"/>	lweems@cteh.com	
Leslie Campbell	Logistics Section Chief		<input type="checkbox"/>		
Mark Engdahl	Operations Section Chief	206-465-5976	<input type="checkbox"/>	mark.engdahl@bnsf.com	
Nic Winslow	Deputy Incident Commander - BNSF	406-202-8051	<input type="checkbox"/>	dominic.winslow@bnsf.com	Hazmat Planning
Ramon Mendoza	Operations Section	312-802-1409	<input type="checkbox"/>	mendoza.ramon@epa.gov	Night
Rich Forte	Assistant Safety Officer	609-439-3220	<input type="checkbox"/>	richard.e.forte@uscg.mil	
Steve Faryan	Environmental Monitoring	312-802-0507	<input type="checkbox"/>		US EPA
Steve Pierson	Vac Team Two	651-785-6074	<input type="checkbox"/>		

### Additional Comments

All communications from the field to the Command Post will be made using cellular phones.

## ICS 206: Medical Plan

Incident: BNSF Galena Derailment	Prepared By: Ashley Reardon
Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT	Version Name: 03/11/2015 18:24 CDT

### First Aid Stations

Name	Location	EMT On Site	Phone	Radio
Incident Command Post Trailer #1	IL 84, US 20 Bridge. Near 200 Spring Street, Galena, IL			
Hulcher Staging Area (South/East end of derailment)	Near rail crossing at 1500 South River Road, Galena, IL			

### Transportation (Ground and/or Air Ambulance Services)

Name	Location	Paramedics	Phone	Radio
Mt Carroll Ambulance	206 E Seminary St Mt Carroll, IL	No		

### Hospitals

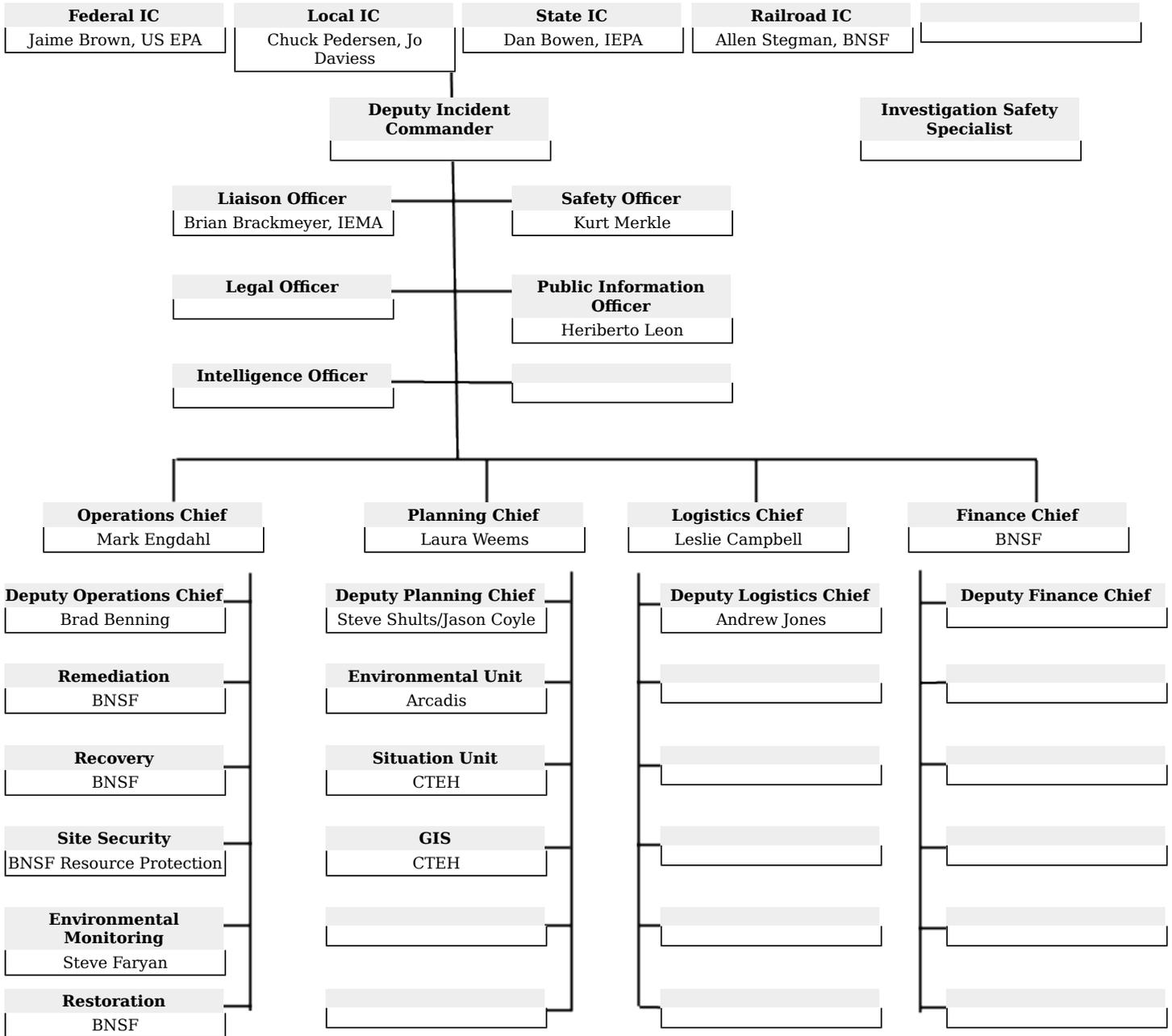
Name	Location	Burn Center	Helipad	Phone	Radio
Midwest Medical Center	1 Medical Center Drive, Galena, IL	No	Yes	815-777-1340	
OSF Saint Anthony Medical Center	5666 East State St, Rockford, IL	Yes	Yes	815-226-2000	
Mercy Medical Center	250 Mercy Drive, Dubuque, IA	No	Yes	563-589-8000	

### Special Medical Emergency Procedures

Nearest burn center is in Rockford, IL at St. Anthony's. There are helipads at both Midwest Medical Center in Galena and at St. Anthony's in Rockford. Announce location and number of injured. Report nature of injuries. Treat injured to your level of training. Request EMS if required. All injuries will be documented and reported through proper chain of command. All transported injured should bring copy of SDS (copies available in ambulance staged in work area). First report of injury forms will be completed as soon as practicable and will be turned into Safety Officer. Safety Officer will work with Operations to conduct investigation.

# ICS 207: Organizational Chart

Incident: BNSF Galena Derailment	Prepared By: Ashley Reardon
Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT	Version Name: 03/11/2015 18:24 CDT



## SAFETY MESSAGE/PLAN (ICS 208)

<b>1. Incident Name:</b> BNSF GALENA DERAILMENT	<b>2. Operational Period:</b> Date From: 3/12/2015 Time From: 0830	Date To: 3/13/2015 Time To: 0830
--	---	-------------------------------------

**3. Safety Message/Expanded Safety Message, Safety Plan, Site Safety Plan:**

**-Notification Procedures for trains transiting the incident site:**

- EIC will notify the ASO of inbound train.
- ASO will ensure the work area is cleared.
- ASO will notify EIC once work area is cleared.
- EIC will notify ASO when clear to continue operations.

**EIC Points of contact:**

**Primary-Dan Rankin: 817-308-6900**  
**Secondary-Brian Ferencak: 817-701-8181**

**ASO Point of contact:**

**SOFR Kurt Merkle: 215-534-0435**  
**Day On-site ASO contact: John Bafia 609-351-8522**  
**Night On-site ASO contact: Eric Tomaszewski 609-351-8521**  
**IC ASO Rich Forte: 609-439-3220**

**-ASO's will utilize a whistle as an audible notification of an inbound train.**

**-Anyone working within the 4' fouling zone is required to be listed on the Form B. The EIC will notify the supervisors of those working in the 4' fouling zone of an inbound train.**

**-The 4' fouling zone will be identified by the use of orange snow fencing.**

**-If a slow moving operation is going to be conducted on or near the rails, the operation must be cleared with the EIC prior to the start of the operation.**

**-An updated HASP is available. All site workers must review and sign.**

**-All required PPE must be worn by all members entering through the checkpoints.**

**-All personnel are reminded to ensure personal decon is conducted prior to eating, drinking, smoking, and departing the site.**

**4. Site Safety Plan Required? Yes  No**

**Approved Site Safety Plan(s) Located At:**

**5. Prepared by:** Name: Rich Forte                      Position/Title: ASO                      Signature:

**ICS 208**

**IAP Page \_\_\_\_\_**

**Date/Time: 3/11/2015 1522**

<b>1. Incident Name</b> Galena Derailment		<b>2. Operational Period (Date/Time)</b> From: 03/12/15 08:30 To: 03/14/15 08:30		<b>Time of Report</b> 20150311 18:00		<b>INCIDENT STATUS SUMMARY ICS 209-OS</b>	
<b>3. Spill Status (Estimated, in Barrels)</b> [Ops & EUL/SSC] Source Status: Remaining Potential (gal): _____ X Secured Rate of Spillage (bb/hr): _____ <input type="checkbox"/> Unsecured Since Last Report Total				<b>8. Equipment Resources</b> [RUL]			
Volume Spilled				Description Ordered Available/Staged Assigned Out of Service			
<b>Mass Balance/Oil Budget</b>				Airboats 6			
Recovered from cars		17,780 gal		217,625 gal		Excavators 2	
Recovered from ground		2,132 gal		7,790 gal		Sidebooms 4	
Evaporation				Track Loaders 2			
Natural Dispersion				Rubber Tire Loaders 2			
Burned				Bulldozer 1			
Floating, Contained				Boom (ft.) 3650 ft 700 ft			
Floating, Uncontained				Vacuum Trucks 2			
Onshore				Frac Tanks 17			
Total recovered product accounted for: 225,415 gal				Helicopters			
<b>4. Waste Management (Estimated)</b> [Ops/Disposal]				Fixed Wing			
		Recovered from cars		Recovered from ground		Stored	
		Disposed					
Oil (gal)		217,625 gal		217,625 gal			
Oily Liquids (gal)		7,790 gal		7,790 gal			
Liquids (gal)							
Oily Solids (gal)							
Solids (tons)							
<b>5. Shoreline Impacts (Estimated, in miles)</b> [PSC/EUL/SSC]				<b>9. Personnel</b> [RUL]			
Degree of Oiling		Affected		Cleaned		To Be Cleaned	
Light							
Medium							
Heavy							
Total							
<b>6. Wildlife Impacts</b> [Ops/Wildlife Br.]				Description People in Cmd. Post People in the Field Total People On Scene			
Numbers in ( ) indicate subtotal that are threatened/endangered species.				Federal 7 7 14			
		Captured		Cleaned		Released	
		DOA		Euth.		Other	
Died in Facility							
Birds		0		0		0	
Mammals		0		0		0	
Reptiles		0		0		0	
Fish		0		0		0	
Total		0		0		0	
<b>7. Safety Status</b> [Safety Officer]				Contract Personnel 30 104 135			
		Since Last Report		Total		Volunteers 0 0 0	
Responder Injury		0		0		Total Response Personnel from all Organizations: 165	
Public Injury		0		0		<b>10. Special Notes</b>	
Volunteer Injury						Zero (0) wildlife impacts reported.	
						Zero (0) illness total since incident occurred.	
						Mass Balance amounts are as of 06:30 03/11/15: 217,625 gal recovered from Cars. 7,790 gal recovered from ground.	
						Total product recovered is 225,415 gal	
<b>11. Prepared by: (Situation Unit Leader)</b>							
INCIDENT STATUS SUMMARY							
ICS 209-OS							

## ICS 230: Daily Meeting Schedule

Incident: BNSF Galena Derailment	Prepared By: Ashley Reardon
Period: #8: 03/12/2015 08:30 CDT - 03/14/2015 08:30 CDT	Version Name: 03/11/2015 18:25 CDT

### Meetings

Meeting Name	Date / Time	Purpose	Attendees	Location
Safety & Operations Briefing	03/12/2015 13:00 CDT	Safety & Ops to Ops personnel. Deploy next OP	ICP Personnel	Incident Command Post, Trailer #2
BNSF Contractor Supervisors Meeting	03/12/2015 18:30 CDT	Operational update/brief & assignments	Operations, Safety, Planning, Field Supervisors	Incident Command Post, Trailer #2
Situational Update <b>**Tentative**</b>	03/12/2015 19:00 CDT	Provide update on day operations & changes for night shift	Site personnel, supervisors	Incident Command Post, Trailer #2
Command & General Staff Meeting	03/13/2015 08:00 CDT	Define objectives	Command and General Staff (USEPA, IEPA, BNSF, FRA, Galena FD)	Incident Command Post, Trailer #3
Tactics Meeting	03/13/2015 10:00 CDT	Operation tactics planning, develop ICS 204s/215s	Operations Section Chief, Safety Officer, Logistics Section Chief, and Planning Section Chief.	Incident Command Post, Trailer #3
Planning Meeting	03/13/2015 13:00 CDT	IAP development	Command and General Staff	Incident Command Post, Trailer #3
IAP & SITREP Approval	03/13/2015 17:00 CDT	PSC delivers plan to UC to review and sign.		
BNSF Contractor Supervisors Meeting	03/13/2015 18:30 CDT	Operational update/brief & assignments	Operations, Safety, Planning, Field Supervisors	Incident Command Post, Trailer #2
Situational Update	03/13/2015 19:00 CDT	Provide update on day operations & changes for night shift	Site personnel, supervisors	Incident Command Post, Trailer #2
<b>**FIELD MEETINGS**</b>				
Derailment Site Safety Briefing & OPS Briefing	03/12/2015 07:00 CDT	Safety & Ops to field personnel.	Field personnel	At the north entrance to the work area from the bike path.
Derailment Site Safety Briefing & OPS Briefing	03/12/2015 19:00 CDT	Safety & Ops to field personnel.	Field personnel	At the north entrance to the work area from the bike path.
Derailment Site Safety Briefing & OPS Briefing	03/13/2015 07:00 CDT	Safety & Ops to field personnel.	Field personnel	At the north entrance to the work area from the bike path.
Derailment Site Safety Briefing & OPS Briefing	03/13/2015 19:00 CDT	Safety & Ops to field personnel.	Field personnel	At the north entrance to the work area from the bike path.

Person in Charge Signature

Date/Time

(Area) Supervisor Signature

Date/Time

Authorized Person Signature

Date/Time

**Work detailed in Sect.1 is complete, worksite/equipment has been left in a safe condition & systems normal (PTW-R Rev. 2 10-Mar-03)**

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# BNSF Galena Derailment Incident Demobilization Plan

**Approval:**

**Operations Section Chief** \_\_\_\_\_

**Planning Section Chief** \_\_\_\_\_

**Logistics Section Chief** \_\_\_\_\_

**PLEASE NOTE UNIFIED COMMAND APPROVALS WHICH ARE REQUIRED:**

- Approved By FOSC:** \_\_\_\_\_
- Approved By SOSC:** \_\_\_\_\_
- Approved By LOSC:** \_\_\_\_\_
- Approved By RPIC:** \_\_\_\_\_

**Prepared By:** Laura Weems, Planning Section Chief

# DEMOBILIZATION PLAN

## Document Contents:

- GENERAL INTRODUCTION
- PRIORITIES
- PERSONNEL
- EQUIPMENT
  
- DEMOBILIZATION RESPONSIBILITIES
  - Incident Commander and Staff
  - Operations Section Chief
  - Planning Section Chief
  - Logistics Section Chief
  - Finance Section Chief
  
- RELEASE PROCEDURES

## GENERAL INSTRUCTION

Personnel and Equipment will be demobilized from the incident in accordance with this plan. Demobilization is an orderly and cost effective process for the release and return of all response resources and personnel to their respective home destinations. The demobilization of the resources and personnel is a team effort involving all personnel working on the incident. It is the responsibility of the Planning Section Chief to ensure that a systematic plan is established and implemented. This demobilization plan will be implemented upon approval of the Unified Command.

## PRIORITY

Resources no longer required for the response to the incident will be demobilized as rapidly as is feasible. No resources are to leave the incident until authorized to do so. Resources will be released in the following general priority:

- Priority I** – Resources required to be returned to emergency services.
- Priority II** – Resources needed for government or federal services.
- Priority III** – Resources mobilized from off-site
- Priority IV** – High cost resources that can be safely and effectively replaced with lower cost items
- Priority V** – Local resources

## **Demobilizing:**

A Demobilization Check-Out Form (ICS 221), will be used to facilitate the process of demobilizing equipment/personnel and to provide resource accountability. As resources are identified as available for demobilization, the demobilization form will be initiated by the Section Chief responsible for the resource. The Check-Out Form will then be reviewed by the Operations Section Chief and the Planning Section Chief (and Demobilization Unit Leader) to verify that the resource is not planned for another task. Personnel identified for demobilization must also complete the Demobilization Check-Out Form (ICS 221).

After their approval, and after consultation with the Unified Command regarding the intended reduction in resources, the resource will be demobilized from the incident. The Planning Section Chief (or Demobilization Unit Leader) will be responsible for distributing information regarding released resources to other sections. Flow charts to assist in demobilizing personnel and equipment are provided as Attachments A and B respectively.

## **Demobilizing Personnel:**

- All demobilizing personnel must complete the Demobilization Check-Out Form (ICS 221). Upon completion, the Check-Out Form (ICS 221) should be returned to the local Check-In/Check-Out recorder (in ICP or at each Staging Area).
- As appropriate, personnel demobilizing from the incident should check with their OSRO, Contract Company, RP or Agency logistics contact for return of the radios, vehicles, materials, etc., that have been issued to them for use on the incident.
- Personnel requiring transport from the incident to other locations will be coordinated through Logistics. Personnel will normally be transported via the most cost effective means, as appropriate.
- All non-local personnel will have an appropriate amount of rest prior to being released from the incident, when applicable.
- All personnel will meet any agency specific requirements on hours of travel per day, or other restrictions concerned with travel with respect to safety.
- Personnel who have demobilized from the incident will contact the Check In/Out Recorder or the Resource Unit Leader upon their safe return to home base, or subsequent assignment.

## **Equipment:**

- Rental Vehicles – Clean out and refuel. Return to contractor, agency, or appropriate rental company if individually rented. Ensure appropriate paperwork requirements are met.
- Contractor equipment, as required, will be decontaminated. Upon completion of decontamination, inspect the equipment for any mechanical defects or service issues and address, if possible and permissible. Once decontamination and service is completed, the equipment will be returned to the contractor/owner with documentation of any remaining service issues. Local equipment will be the responsibility of the RP or contractor to remove from the site upon signing the ICS 221 (Demobilization Check-Out form).
- Resources requiring transport from the incident to other locations will be coordinated through Operations and Logistics. Resources will normally be transported via the most cost effective means, as appropriate.
- Any agency equipment will be decontaminated at the appropriate decontamination facility and according to the Decontamination Plan. Upon completion of decontamination, inspect the equipment for any mechanical defects or service issues and address, if possible and permissible. Agency equipment will then be returned to the appropriate agency with documentation of any remaining service issues, and transportation support will be provided

by Logistics as necessary.

- Any heavy or oversized equipment MUST have appropriate permits and follow any limitations on the movement of their equipment on public highways.
- All resources will meet any agency specific requirements on hours of travel per day or other restrictions concerned with travel.

## **RESPONSIBILITIES:**

### **All Sections:**

- Notify Planning Section Chief (Demob Unit Leader) of surplus personnel and equipment resources ready for demobilization 12 - 24 hours prior to the estimated release date and time.
- Provide required paperwork and information to Documentation Unit for inclusion in the final incident documentation.
- Oversee and finalize Section demobilization when appropriate.
- Prior to demobilizing any individual whose organizational position will be filled by a replacement individual, ensure the incoming individual works alongside the outgoing individual for one operational prior to demobilizing the outgoing individual.

### **Incident Commander and Staff:**

- Establish and review overall release priorities.
- Approve overall Demobilization Plan.
- Approve release of resources.
- Identify any special safety considerations for the Demobilization Plan.

### **Operations Section Chief:**

- Identifies resources for demobilization based on operational requirements to complete approved tactics, strategies, and objectives.
- Compare all demobilization requests with Planning Section Chief (Demob Unit Leader) against overall response plan to ensure appropriateness for release from incident.

### **Planning Section Chief (Demob Unit Leader):**

- Prepare, initiate and implement the Demobilization Plan.
- Compare all demobilization requests with Operations Section Chief against overall response plan to ensure appropriateness for release from incident.
- Identify adequate section personnel and resources required to implement Demobilization Plan.
- Verify all signatures are obtained on the Demob Checkout form (ICS 221).
- Monitor the Demob process and make any necessary adjustments.
- Request/Receive approval from Unified Command for release of resources.
- Ensure outgoing individuals whose positions will be filled by incoming replacements work for one operational period alongside their replacements prior to being demobilized.

### **Logistics Section Chief:**

- Identify adequate section personnel and equipment resources required to implement demobilization plan.
- Ensure that all non-expendable property items are returned or accounted for prior to release.

- Ensure that there will be adequate ground transportation during the release process; that all vehicles receive a safety inspection prior to leaving the incident; and that any safety deficiencies are corrected prior to release.
- Provide transportation for personnel and resources being demobilized as necessary.
- Coordinate ETA's of released personnel and equipment resources with owners.
- Complete all time and equipment reports for released resources.
- Work with BNSF so they may contract equipment payments.
- May assist in prioritization of demobilizing resources based on their associated costs and economically viable replacement options.

### **RELEASE PROCEDURES:**

The Planning Section Chief (Demob Unit Leader) will collaborate with the Operations Section Chief and combine lists to form a "Tentative Release" list to be submitted to the IC for review and approval. This is primarily for operational personnel and equipment.

The Planning Section Chief (Demob Unit Leader) will also give Logistics Section Chief lead-time to arrange for ground transportation for crews and individuals.

When final approval for releases is obtained, the Planning Section Chief (Demob Unit Leader) will:

- Prepare transportation manifests, if necessary.
- Notify Resource Unit to update resource status.
- Give crew leader or individual the final release form (ICS 221) and briefing.

The crew leader or individual will take the Demob Checkout form (ICS 221) to:

- Logistics
  - for transportation
  - return supplies and equipment that belong to site RP, agency or other response agency
- Planning Section Chief
  - All personnel will complete and turn in the Personnel Demobilization Check-Out Form (ICS 221).
  - Turn in Security ID Badge

**UPON ARRIVAL TO HOME BASE ALL PERSONNEL SHALL NOTIFY THEIR DIRECT SUPERVISOR OR SECTION CHIEF OF SAFE ARRIVAL.**

## ICS Form 221 Demobilization Checklist

<b>DEMOBILIZATION CHECKOUT</b>		ICS-221
1. INCIDENT NAME/NUMBER	2. DATE/TIME	3. DEMOB NO.
4. UNIT/PERSONNEL RELEASED		
5. TRANSPORTATION TYPE/NO.		
6. ACTUAL RELEASE DATE/TIME		7. MANIFEST YES NO NUMBER _____
8. DESTINATION _____		9. AREA/AGENCY/REGION NOTIFIED NAME _____ DATE _____
10. UNIT LEADER RESPONSIBLE FOR COLLECTING PERFORMANCE RATING		
11. UNIT/PERSONNEL      YOU AND YOUR RESOURCES HAVE BEEN RELEASED SUBJECT TO SIGNOFF FROM THE FOLLOWING: (DEMOB. UNIT LEADER CHECK <input checked="" type="checkbox"/> APPROPRIATE BOX)		
<u>LOGISTICS SECTION</u>		
<input type="checkbox"/> SUPPLY UNIT _____		
<input type="checkbox"/> COMMUNICATIONS UNIT _____		
<input type="checkbox"/> FACILITIES UNIT _____		
<input type="checkbox"/> GROUND SUPPORT UNIT LEADER _____		
<u>PLANNING SECTION</u>		
<input type="checkbox"/> DOCUMENTATION UNIT _____		
<u>FINANCE/ADMINISTRATION SECTION</u>		
<input type="checkbox"/> TIME UNIT _____		
<u>OTHER</u>		
<input type="checkbox"/> _____		
<input type="checkbox"/> _____		
12. REMARKS  _____  _____		
221 ICS 1/83		

NFES 1353

INSTRUCTIONS ON BACK



0 50 100 200 Feet



TILX  
352023

TILX  
352176

TILX  
352040

TILX  
352052

TILX  
352012

TILX  
352032

TILX  
352048

TILX  
352034

TILX  
352036

TILX  
352005

TILX  
352017

TILX  
352024

# Galena IL Derailment

Galena, IL

## Air Sampling and Analysis Plan

Version 1.2

Prepared on Behalf of:

**BNSF**

Prepared by:

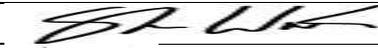
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3/11/2015

Version 1.2			
	Name/Organization	Signature	Date Signed
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Reviewed by:	Kyle Bennett, Project Manager		3/11/2015
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### **Air Monitoring and Sampling Strategy Version 1.2**

As project transitions from emergency response to remediation, the Air Sampling and Analysis Plan Version 1.2 is submitted to cease air monitoring activities in the associated community.

CTEH® will remain focused on the mixtures, chemicals, and indicators of flammability chosen below because they are among the most important and readily monitored hazards of spilled crude oil. The possible hazards of crude oil vary by the source and type of the crude as well as with the environmental conditions associated with the spill. Monitoring and sampling for some chemicals or indicators of the presence of crude oil may be conducted less frequently or even discontinued as product-specific information becomes available or as initial monitoring and sampling results indicate that these chemicals and indicators do not pose a health concern.

The strategy is to continue utilizing two broadly defined monitoring plans: 1) Worker Exposure Monitoring; 2) Site Characterization. Community air monitoring may be reinitiated if on-site activities warrant.

### **CTEH® Site-Specific Action Levels**

**CTEH® site-specific action levels may be employed in all exposure sampling plans to provide information for corrective action to limit exposure. These values do not replace occupational or community exposure standards or guidelines, but are intended to be a concentration limit that triggers a course of action to better address worker and public safety. Action level exceedances will be communicated to Site Management and the CTEH® Project Technical Director by the CTEH® Project Manager (PM). Work practice may be assessed and then altered if necessary. Site-Specific Action Levels are not utilized for Site Characterization monitoring.**

**Plan 1: Worker Exposure Monitoring**

Objective: Report air levels before they reach those requiring respiratory protection or triggers course of action.

Analyte	Action Level	Action to be Taken	Basis	Instrument	Detection Limit	Notes	Correction Factor
Total VOCs	30 ppm	Assess for the presence of benzene/toluene/hexane, Report reading to PM	To avoid over exposure to benzene/toluene/hexane - Reading sustained for 5 minutes	MultiRAE PID AreaRAE PID	0.1 ppm	Measuring range: 1 – 200 ppm	NA
Benzene	0.5 ppm	Confirm reading with secondary instrument, Exit Area or don air purifying respirator; report reading to PM	OSHA PEL Action level (benzene) – Reading sustained for 5 minutes	UltraRAE	0.05 ppm	UltraRAE - Change SEP tube frequently	NA
				Gastec tube #121L	0.05 ppm	Range: 0.1 to 65 ppm Volume: Variable	Var.
Benzene	2.5 ppm	Exit Area or don air purifying respirator; report reading to PM	ACGIH STEL Action level (benzene) – Reading sustained for 5 minutes	UltraRAE	0.05 ppm	UltraRAE - Change SEP tube frequently	NA
				Gastec tube #121L	0.05 ppm	Range: 0.1 to 65 ppm Volume: Variable	Var.
Toluene	20 ppm	Sample only as requested, Report reading to PM	ACGIH® TLV (toluene)	Gastec tube #122L	0.5 ppm	Range: 1 to 100 ppm Volume: Var.	Var.
Hexane	50 ppm	Sample only as requested, Report reading to PM	ACGIH® TLV (n-hexane)	Gastec tube #102L	1 ppm	Range: 4 to 1,200 ppm Volume: Variable	Var.
Hydrogen Sulfide	1 ppm	Exit Area, report reading to PM	ACGIH® TLV (hydrogen sulfide) – Reading sustained for 5 minutes	MR Sensor	1 ppm	MultiRAE - Measuring range: 0 – 100 ppm	NA
				MR Pro Sensor	0.1 ppm	MR Pro - Measuring range: 0 – 100 ppm	NA
				Gastec tube #4LL	0.1 ppm	Range: 0.25 to 120 ppm Volume: Variable	Var.

Analyte	Action Level	Corrected Value	Action to be Taken	Basis	Instrument	Detection Limit	Notes	Correction Factor
LEL	1 %	2.5 %	Notify PM	Elevated LEL sustained 1 min	MultiRAE AreaRAE	1 %	Measuring range: 1 – 100%	2.5*
LEL	4 %	10 %	Exit area and Notify PM		MultiRAE AreaRAE	1 %	Measuring range: 1 – 100%	2.5*

\*Rough estimate based on common crude oil volatiles.

**Plan 2: Site Characterization Monitoring**

Objective: Characterize nature and extent of release

Analyte	Action Level	Action to be Taken	Basis	Instrument	Detection Limit	Notes	Correction Factor
Total VOCs	NA	Report reading to PM	NA	MultiRAE PID AreaRAE PID	0.1 ppm	Measuring range: 1 – 5,000 ppm	NA
Benzene	NA	Report reading to PM	NA	UltraRAE	0.05 ppm	UltraRAE - Change SEP tube frequently	NA
				Gastec tube #121L	0.05 ppm	Range: 0.1 to 65 ppm Volume: Variable	Var.
Toluene	NA	Report reading to PM	NA	Gastec tube #122L	0.5 ppm	Range: 1 to 100 ppm Volume: Variable	Var.
Hexane	NA	Report reading to PM	NA	Gastec tube #102L	1 ppm	Range: 4 to 1,200 ppm Volume: Variable	Var.
Hydrogen Sulfide	NA	Report reading to PM	NA	MR Sensor	1 ppm	MultiRAE - Measuring range: 0 – 100 ppm	NA
				MR Pro Sensor	0.1 ppm	MR Pro - Measuring range: 0 – 100 ppm	NA
				MultiRAE PID	0.1 ppm	Measuring range: 0 – 100 ppm	3.3
				Gastec tube #4LL	0.1 ppm	Range: 0.25 to 2.5 Volume: 1,000 ml	Var.

**Analytical Methods\***

Analyte	Media/Can	Method	Notes
BTEX (+Hexane)	3M 3520 Badge	Modified NIOSH 1500/1501	

\*Determination of analytical samples collected for analysis will be based on site conditions.



### General Information on Procedures (Assessment Techniques) Used

Procedure	Description
Hand-held Survey	CTEH® staff members may utilize handheld instruments (e.g. MultiRAE Plus; ppbRAE, Gastec colorimetric detector tubes, etc.) to measure airborne chemical concentrations. CTEH® will use these hand-held instruments primarily to measure for potential breathing zone exposures. Additionally, measurements can be made at grade level, as well as in elevated workspaces, as indicated by chemical properties or site conditions. CTEH® may also use these techniques to verify detections observed by the AreaRAE network.
Analytical sampling	Analytical sampling may be used to validate the fixed station and hand-held data monitoring data, or to provide data beyond the scope of the real-time instruments. Analytical samples may be collected as whole air samples in evacuated canisters or on specific collection media and sent to an off-site laboratory for further chemical analysis.

### Monitoring Plans

Sampling Plans	Description
Worker Exposure Monitoring	Potential Worker breathing zone exposures in the area directly surrounding the incident site and occupied by workers actively or sporadically involved in remediation and/or normal work activities.
Site Characterization	During the course of the response, some additional tasks may require unique sampling (e.g. worst case determination, container head space, etc.)



### Quality Assurance/Quality Control Procedures

Method	Procedure
Real-time	<ul style="list-style-type: none"><li>• Real time instruments may be calibrated in excess of the manufacturer's recommendations.<ul style="list-style-type: none"><li>○ At a minimum whenever indicated by site conditions or instrument readings.</li></ul></li><li>• Co-located sampling for analytical analysis may be conducted, if necessary, to assess accuracy and precision in the field.</li><li>• Lot numbers and expiration dates may be recorded with use of Gastec colorimetric tubes.</li></ul>
Analytical	<ul style="list-style-type: none"><li>• Chain of custody documents may be completed for each sample.</li><li>• Level IV data validation may be performed on the first sample group analyzed.</li><li>• Level II data validation may be performed on 20% of all samples.</li><li>• Level IV data validation may be performed on 10% of all samples.</li></ul>
Other	

### Glossary

Term	Definition
Sustained	Instrument reading above the action level sustained for the listed time period.
Excursion Limit	Whenever a reading exceeds a ACGIH® TLV reading by 3 times (if the chemical does not have a STEL or Ceiling based action level), exit the area and notify the PM.
Breathing zone	The area within an approximate 10-inch radius of an individual's nose and mouth.

**Change from version 1.0 to 1.1**

- *Removal of air monitoring for crude oil combustion products.*

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**Change from version 1.1 to 1.2**

- *Removal of community real-time and analytical air monitoring activities.*

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# PROPOSED SITE LAYOUT PLAN

2015-03-11

CTEH



## Legend

### Feature Type

 Culvert

 Gate

 Parcel Boundary and Owner

Service Layer Credits: Imagery by CTEH, LLC®

