

Burlington Northern Railroad (Lease Property 155,071) Pleasantville
(AKA Mosher Tank Wagon Services)
ISS

By Matthew Culp
September 30, 2005

Summarize the site history (past usage, past ownership, wastes, known or suspected contamination pathways such as tanks, septic tank/tile field, lagoon, land applications, S. W. burial, etc.)²

The site has been the location of bulk oil storage since 1930. The land has been owned by Burlington Northern Santa Fe Railroad and leased to tank owner/operators. In 2004 five aboveground storage tanks (ASTs) were removed. Contaminant pathways identified include a non-drinking water well within 1000 feet, plastic water lines within 200 feet.

Briefly describe the site assessment that was conducted (number of borings, monitoring wells, number of samples, depth of soil samples and monitoring wells, analysis, etc.)²

Six soil borings were completed to depths from 16 to 28 feet at the location of the removed ASTs. Soil samples were field screened using a photoionization detector (PID) at two-foot intervals or when noticeable changes in lithology occurred. One soil sample from each soil boring was collected for laboratory analysis from either the interval demonstrating the highest field PID reading or from the interval just above the water table. Soil and ground water samples were analyzed for benzene, toluene, ethylbenzene and total xylene (BTEX) by Iowa method OA1 and for total extractable hydrocarbons (TEH) as diesel and waste oil by Iowa method OA2.

Summarize the findings and conclusions regarding the contaminants found and their extent and concentrations. Relate those values to known criteria such as statewide standards, MCLs, water quality standards, background levels or other benchmarks used to determine site priority.²

No detection of BTEX or TEH was observed above Tier 1 standards in soil. In ground water, benzene was detected at 612 PPB, which exceeds the Tier 1 standard for actual and potential ingestion, plastic water lines, and surface water. TEH was detected at 3,320,000 PPB, which exceeds all Tier 1 exposure pathways including ground water vapor to enclosed space, however, no free product was observed in any of the monitoring wells. No other detected contaminant exceeded Tier 1 or statewide standards.

Identify on-site or off-site potential and actual targets (e.g., municipal wells, private wells, drinking water intakes). What is known of the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there utility lines that could be impacted by site contaminants? Identify any other use/location issues that deserve consideration.

The site is zoned non-residential and the surrounding land use includes a vacant (former) service equipment storage building to the north, open fields to the east, an abandoned concrete plant to the south and across the highway to the west is an automotive repair shop. Residential areas are located beyond these neighboring facilities (see map).

Rate the site on a scale of 1 to 4, in decreasing order of severity or priority.

2

Summarize the reasoning, knowledge or any other information used in determining your recommendation regarding the priority assigned to this site.

- Additional ground water sampling should be conducted down gradient from the point of highest (ground water) concentration in order to determine the extent of contamination.
- Soil vapor sampling should be conducted in the on-site building to determine the potential for exposure to vapors from ground water. Priority 2 for elevated benzene and TEH.

PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST/DECISION FORM

This checklist can assist the site investigator during the Pre-CERCLIS screening. It will be used to determine whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

Checklist Preparer:	<u>Matt Culp/ Senior ES</u>	<u>9/7/05</u>
	(Name/Title)	(Date)
	<u>502 East 9th Street</u>	<u>1-515-242-5087</u>
	(Address)	(Phone)
	<u>matt.culp@dnr.state.ia.us</u>	
	(E-mail Address)	
Site Name:	<u>BNSF Railway Lease Property #155,071</u>	
Previous Names (if any):	<u>Mosher Tank wagon Service</u>	
Site Location:	<u>East North Street and Hwy 5</u>	
	<u>Pleasantville</u>	<u>Iowa 50225</u>
	(City)	(ST) (Zip)
Latitude:	<u>41.391</u>	Longitude: <u>93.266</u>

Compare the following checklist. If "yes" is marked, please explain below.

	YES	NO
1. Does the site already appear in CERCLIS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Is the release from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Does the site consist of a release of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is the release into a public or private drinking water supply due to deterioration of the system through ordinary use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is some other program actively involved with the site (i.e., another Federal, State, or Tribal program)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (i.e., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are the hazardous substances potentially released at the site excluded by policy considerations (e.g., deferral to RCRA Corrective Action)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is there sufficient documentation that clearly demonstrates that there is no potential for a release that could cause adverse environmental or human health impacts (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance release have occurred, EPA approved risk assessment completed)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain all "yes" answer(s), attach additional sheets if necessary:

Question 6: The contamination at this site is petroleum (BTEX, diesel and waste oil) associated with activities related to rail road operations and are excluded by statute.

- Site Determination:**
- ☐ Enter the site into CERCLIS. Further assessment is recommended (Explain below).
- ☒ The site is not recommended for placement into CERCLIS (Explain below).
- ☐ Further assessment is recommended under PRE-CERCLA (Explain below).

DECISION/DISCUSSION/RATIONALE:

The site fails the following potential exposure pathways for petroleum as diesel.

The first is for potential and actual ground water ingestion, however the site does not qualify as a protected groundwater source.

The second is for ground water vapor to enclosed space

The third is for ground water to a plastic water line.

Additional ground water sampling should be conducted downgradient from the point of highest (ground water) concentration.

Also soil vapor sampling should be conducted in the onsite building to determine the potential for exposure to vapors from ground water.

The site is to be removed from CERCLA but oversight will continue under state authority.

Regional EPA Reviewer:

Print Name/Signature

Date

State Agency/Tribe:

Print Name/Signature

Date

BNSF Lease #155,071

AKA Mosher Tank Wagon Service



- ☆ LUST sites
 - UST Sites
 - Geologic_sampling_points.shp
 - Pvtperm
 - Municipal wells
- Source Water Protection Area
- 2-year
 - 5-year
 - 10-year
 - 2500-foot
 - 1-mile
 - primary protection area
 - surface runoff area
 - hydrologic boundary
 - County



0.2 0 0.2 0.4 Miles



REGION VII U.S. EPA SUPERFUND

SITE DISCOVERY ENTRY FORM

Discovery Lead (choose one):

Discovery Date: 9/2/05

☐ F-EPA Fund Fin☒ S-State Fund Fin☐ FF-Fed Fac☐ EP-EPA-In-house☐ TR Tribal Lead - Fund Fin

Removal

Check if, ☐ FUD Site

Site Name: BNSF (Lease 155,071)

Initiated Date 9/7/05

Identified By: ☐ Removal ☒ Site Assessment ☐

States

☐ Fed. Facilities ☐ Other Fed. Agency

Address: East North Stree and Hwy 5

County Name: Marion

City, State, Zip: Pleasantville

State ID (if one exists): Iowa

Congressional District: 3

NPL Status: ☐ Currently on the Final NPL☒ Not on the NPL☐ Deleted on the final NPL☐ Pre-Proposal Site☐ Site is Part of NPL Site☐ Proposed for NPL☐ Removed from Proposed NPL☐ WithdrawnSection: ☐ C-(STAR) SPFD Technical Assistance/Re-Use Branch☒ L-(EFLR) Enfr/Fund Lead RV BranchFed Fac Ind: ☐ Federal Facility☐ F-(FFSE) Federal Facilities/Apecial Emphasis Brmach☐ M-(MOKS) MO/KS Remedial Branch☐ Not a Federal Facility☐ I-(IANE) IA/NE Remedial Branch☐ O-(ER&R) Emergency Response & RV Branch☐ Status Undetermined

List Site Alias Name (s): Mosher Tank Wagon Service

Directions to Site: From Des Moines take state highway 5 south to Pleasantville. The site is located on the corner of east north street

Site Description: The site had four tanks, a pumphouse and a loading rack but they have been removed. Currently, only a single building exist on site.

Site Size: 9000

Site Dimension:

☐ Acres ☒ Square Feet☐ Feet ☐ Square Miles ☐ Miles

USGS Quadrant: pleasantville USGS Hydro Unit: _____

Latitude: 41.391 Longitude: 93.266

(Decimal Degree format/with release of 3.17 see attached required location data form)

Owner ☐ Bank/Loan Company☐ Indian LandsOperator ☐ County Owned☐ OtherType ☐ District Owned☒ Private☐ Federally Owned☐ Mixed Ownership☐ Former Federally Owned or Operated☐ State Owned☐ Government Owned/Contractor Operated☐ Trustee, Federal☐ Privately Owned/Government Operated☐ Trustee, State☐ Property Defaulted Back to Government☐ MunicipalityOperational Status: ☐ Active ☒ Inactive ☐ Unknown

Non-NPL Status (Choose one):

☐ Addressed as part of NPL site (AX)☐ Combined PA/SI Ongoing (CO)☐ Deferral of NPL Listing Dec. While States

Oversee Resp. (SD)

☐ ESI Ongoing (EO)☐ ESI Start Needed (ES)☐ Fed Fac ESI Review Start Needed (FE)☐ Fed Fac Prelim Assessment Rev Ongoing (PG)☐ Fed Fac Prelim Assessment Rev Start Needed (PN)☐ Fed Fac Site Inspection Rev Ongoing (FG)☐ Fed Fac Site Inspection Rev Start Needed (FS)☐ HRS Ongoing (HO)☐ HRS Package Completed-Further Eval. Needed (HN)☐ HRS Start Needed (HS)☐ Integrated ESI RI Ongoing (IO)☐ Integrated ESI/RI Start Needed (IS)☐ Integrated Removal/Remedial Eval Ongoing (IN)☐ Integrated Removal/Remedial Eval Start Needed (IR)☐ NFRAP (NF)☐ Other Cleanup Activity:

Fed Fac-lead Cleanup (OF)

☐ Other Cleanup Activity:

Private Party-Lead Cleanup(OP)

☐ Other Cleanup Activity:

State-Lead Cleanup (OS)

☐ Other Cleanup Activity:

Tribal-lead Cleanup (OT)

☐ PA Ongoing (PO)☐ PA Start Needed (PS)☐ Ref to Rvl-Further Assess Needed (RW)☐ Referred to Rvl - NFRAP (RR)☐ Removal Only Site (No Site Assess Work) (RO)☐ SI Ongoing (SO)☐ SI Start Needed (SS)☐ SIP Ongoing (SG)☐ SIP Start Needed (SN)☐ Site Reassessment Ongoing (SR)☒ Status Not Specified (SX)☐ Site Reassessment Start Needed (RN)

Site Type: (Choose all that apply - for every main category chosen in bold at least one sub-category must be selected; if more than one main and sub category is selected indicate which is primary):

Primary designation: OT

☐ MP-Manufacturing/Processing/Maintenance - Applicable sub-categories:☐ CA-Chemicals and allied products☐ CG-Coal gasification☐ CP-Coke production☐ EP-Electric power generation and distribution.☐ EE-Electronic/electrical equipment☐ FT-Fabrics/textiles☐ WP-Lumber and wood products/wood preserving/treatment☐ MF-Metal fabrication/finishing/coating and allied industries☐ OR-Oil and gas refining☐ OP-Ordnance production☐ PR-Plastics and rubber products☐ PM-Primary metals/mineral processing☐ RA-Radioactive products☐ TA -Tanneries ☐ OT-Other-Description(needed):☐ TS-Trucks/ships/trains/aircraft and related components☐ MI-Mining - Applicable sub-categories☐ CO-Coal ☐ ME-Metals ☐ NM-Non-metal minerals☐ OG-Oil and Gas ☐ OT-Other-Description(needed):☐ WM-Waste Management - Applicable sub-categories☐ CL-Co-disposal landfill (municipal and industrial)☐ ID-Illegal disposal/open dump☐ IF-Industrial waste facility (non-generator)☐ IL-Industrial waste landfill☐ MD-Mine tailings disposal ☐ OT-Other-Desc.(needed):☐ RW-Radioactive waste treatment, storage, disposal (non-generator)☐ OT-Other - Applicable sub-categories☐ AG-Agricultural (e.g., grain elevator)☐ CS-Contaminated sediment site with no identifiable source☐ DC-Dust control ☐ OT-Other-Desc.(needed):☐ GP-Ground water plume site with no identifiable source☐ MO-Military/Other Ordinance☒ PS-Product storage/distribution☐ RD-Research, development, and testing facility☐ RC-Retail/commercial☐ SE-Spill or other one-time event☐ TP-Transportation (e.g., railroad yards, airport, barge docking, site)☐ TW-Treatment works/septic tanks/other sewage treatment☐ RE-Recycling - Applicable sub-categories☐ AT-Automobiles/tires ☐ DT-Drums/tanks ☐ WO-Waste/used oil☐ BS-Batteries/scrap metals/secondary smelting/precious metal recovery☐ CC-Chemicals/chemical waste (e.g., solvent recovery)☐ OT- Other-Description (needed):

Signatures:

State: Cal. Lunder

Date: 10 / 10 / 05 RPM/OSC/SAM:

Date: / /



REGION VII
U.S. ENVIRONMENTAL PROTECTION AGENCY

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

LOCATION FORM - (Required information highlighted in red)

SITE NAME: BNSF (Lease 155,071)

EPA ID: _____

Latitude: 41.391
(Decimal Degree format)

Longitude: 93.266

Measurement Sequence: _____
(See Comment A)

Lat/Long Source:

<input type="checkbox"/> Contractor	<input type="checkbox"/> EPA Headquarters
<input type="checkbox"/> Dun & Bradstreet	<input type="checkbox"/> Epic
<input type="checkbox"/> EPA Region 7	<input checked="" type="checkbox"/> Other
<input type="checkbox"/> Geograph	<input type="checkbox"/> Private
<input type="checkbox"/> Other Federal Agency	<input type="checkbox"/> SNAP
<input type="checkbox"/> Regulated Entity	<input type="checkbox"/> Tribe
<input type="checkbox"/> State	<input type="checkbox"/> Unknown

☐ (Blank)

Designate Lat/Long: ☐ Primary

Collection Method:

<input type="checkbox"/> Address Matching -House Number	<input type="checkbox"/> Address Matching - Block Face	<input type="checkbox"/> Address Matching - Street Centerline
<input type="checkbox"/> Address Matching -Nearest Intersection	<input type="checkbox"/> Address Matching - Primary Name	<input type="checkbox"/> Address Matching - Digitized
<input type="checkbox"/> Address Matching - Other	<input type="checkbox"/> Census Block - 1990 - Centroid	<input type="checkbox"/> Census Block/Group 1990-Centroid
<input type="checkbox"/> Census Block/Tract - 1990 - Centroid	<input type="checkbox"/> Classical Surveying Techniques	<input type="checkbox"/> Census - Other
<input type="checkbox"/> GPS Carrier Phase Static Relative Position	<input type="checkbox"/> GPS Carrier Phase Kinematic Relative Position	<input type="checkbox"/> GPS, with Canadian Active Control System
<input type="checkbox"/> GPS Code (Pseudo Range) Differential	<input type="checkbox"/> GPS Code (Pseudo Range) Precise Position	<input type="checkbox"/> GPS Code (Pseudo Range) Standard Position (SA-Off)
<input type="checkbox"/> GPS Code (Pseudo Range) Standard Position Service SA-On	<input type="checkbox"/> GPS-Unspecified	<input checked="" type="checkbox"/> Interpolation-Digital Map Source (TIGER)
<input type="checkbox"/> Interpolation-Map	<input type="checkbox"/> Interpolation -Photo	<input type="checkbox"/> Interpolation - Satellite
<input type="checkbox"/> Interpolation-TM	<input type="checkbox"/> Interpolation - Other	<input type="checkbox"/> Interpolation - SPOT
<input type="checkbox"/> Public Land Survey-Quarter Section	<input type="checkbox"/> LORAN C	<input type="checkbox"/> Public Land Survey-Eighth Section
<input type="checkbox"/> ZIP+2 Centroid	<input type="checkbox"/> Public Land Survey-Section	<input type="checkbox"/> Public Land Survey-Footing
<input type="checkbox"/> ZIP+4 Centroid	<input type="checkbox"/> ZIP Code - Centroid	<input type="checkbox"/> Public Land Survey-Sixteenth Section
	<input type="checkbox"/> (Blank)	<input type="checkbox"/> Unknown

Reference Point:

<input type="checkbox"/> Administrative Building	<input type="checkbox"/> Air Monitoring Station	<input type="checkbox"/> Air Release Stack	<input type="checkbox"/> Air Release Vent
<input type="checkbox"/> Atmos. Emissions Trtmt Unit	<input type="checkbox"/> Boundary Point	<input type="checkbox"/> Building Entrance	<input type="checkbox"/> Facility/Centroid Cent
<input type="checkbox"/> Intake Point	<input type="checkbox"/> Lagoon or Settling Pond	<input type="checkbox"/> Liquid Waste Treatment Unit	<input type="checkbox"/> Facility/Station Bldg Entrance
<input type="checkbox"/> Monitoring Point	<input type="checkbox"/> NE Corner of Land Parcel	<input type="checkbox"/> Loading Area Centroid	<input type="checkbox"/> Loading Facility
<input type="checkbox"/> Plant Entrance (General)	<input type="checkbox"/> Plant Entrance (Personnel)	<input checked="" type="checkbox"/> Other	<input type="checkbox"/> Plant Entrance (Freight)
<input type="checkbox"/> Solid Waste Storage Area	<input type="checkbox"/> Solid Waste Trtmt/Disp. Unit	<input type="checkbox"/> Process Unit Area Centroid	<input type="checkbox"/> SE Corner of Land Parcel
<input type="checkbox"/> Water Monitoring Station	<input type="checkbox"/> Water Release Pipe	<input type="checkbox"/> Process Unit	<input type="checkbox"/> SW Corner of Land Parcel
	<input type="checkbox"/> Well	<input type="checkbox"/> Storage Tank	<input type="checkbox"/> Unknown
	<input type="checkbox"/> Well Protection Area	<input type="checkbox"/> Release Point	<input type="checkbox"/> Treatment/Storage Plant

Reference Datum: ☐ NAD27 ☒ NAD83 ☐ Other ☐ Unknown ☐ WGS84 ☐ (Blank)

Accuracy Meters +/-: _____ **Collection Date:** ____/____/____

Verification Method:

<input type="checkbox"/> Ground Truth Conducted	<input type="checkbox"/> Point in Polygon (County)	<input type="checkbox"/> Blank
<input type="checkbox"/> Point in Polygon (Zip)	<input type="checkbox"/> Proximity to Alternative Facility Coordinate	<input checked="" type="checkbox"/> Not Verified
<input type="checkbox"/> Proximity to Polygon Centroid(Other)	<input type="checkbox"/> Proximity to Polygon Centroid (Zip Code)	
<input type="checkbox"/> Verified Relative to Map Features (1:100K/Tiger)	<input type="checkbox"/> Verified Relative to Map Features (1:24K)	
<input type="checkbox"/> Verified Relative to Map Features (Other)	<input type="checkbox"/> Verified, Unknown Method	
<input type="checkbox"/> Proximity to Polygon Centroid (County)	<input type="checkbox"/> Point in Polygon (Other)	

Point/ Line/ Area: ☒ AREA ☐ LINE ☐ POINT ☐ REGION ☐ ROUTE ☐ (BLANK)

Source Map Scale:

<input type="checkbox"/> (BLANK)	<input type="checkbox"/> 1:10,000	<input type="checkbox"/> 1:12,000	<input type="checkbox"/> 1:15,840	<input type="checkbox"/> 1:20,000	<input type="checkbox"/> 1:24,000	<input type="checkbox"/> 1:25,000	<input type="checkbox"/> 1:50,000
<input type="checkbox"/> 1:62,500	<input type="checkbox"/> 1:63,360	<input type="checkbox"/> 1:100,000	<input type="checkbox"/> 1:125,000	<input type="checkbox"/> 1:250,000	<input type="checkbox"/> 1:500,000	<input type="checkbox"/> NONE	<input type="checkbox"/> UNKNOWN
<input type="checkbox"/> OTHER							

COMMENTS:

Signatures:

RPM/OSC: _____ **Date:** ____/____/____ **BRANCH CHIEF:** _____ **Date:** ____/____/____

A) A sequential number to indicate the order in which points on a line or area are connected. For an area, the maximum point is connected to the first. Required if the feature is polygonal or linear. 3 numeric.



August 19, 2005

Lambert Nnadi
Environmental Specialist Senior
Contaminated Sites Section
Iowa Department of Natural Resources
502 E. 9th Street, Wallace State Office Building
Des Moines, Iowa 50319

**RE: Iowa Department of Natural Resources Correspondences
BNSF Leased Property – 155,071 (Mosher Tank Wagon Service)
Pleasantville, Iowa
EMR Project #6808.002**

Dear Mr. Nnadi,

EMR, Inc. (EMR), on behalf of the BNSF Railway Company (BNSF), is providing the Iowa Department of Natural Resources (IDNR) with a Tier 1 Investigation Report (Tier 1) for the BNSF former Mosher Tank Wagon Service leased property at the intersection of East North Street and Highway 5 in Pleasantville, Iowa (Site).

EMR conducted this Tier I risk analysis utilizing the Tier 1 software and format developed by the IDNR Leaking Underground Storage Tank Section. The concentrations of the constituents of concern found while conducting this initial risk assessment were in exceedance of the Tier 1 levels for the following pathways: Groundwater Ingestion, Groundwater Vapor to Enclosed Space, and Groundwater to Plastic Water Line. EMR will be returning to the site to conduct another round of monitoring and will collect the rest of the necessary data to assess the site at the Tier 2 level to further evaluate these pathways.

EMR appreciates the opportunity to assist the IDNR and BNSF in this matter. If you have any questions or comments, please feel free to contact Tanya Drake or myself at (763) 277-5200.

Thank you,
EMR, Inc.

A handwritten signature in black ink, appearing to read "David Radabaugh", is written over the printed name.

David Radabaugh
Project Scientist

Attachment

CC: Ms. Judy McDonough, Manager Environmental Remediation, BNSF Railway

4769 AM10:21 09/02/05