

# Burlington Northern Fueling Facility Havre

Site Response Section



# Update

Summer 2009



## Final Remedial Investigation Report Approved

In May 2009, the Montana Department of Environmental Quality (DEQ) approved the Final Remedial Investigation (RI) Report for the Burlington Northern Fueling Facility, Havre. The RI Report incorporates information and data obtained between 1985 and 1999 to describe the physical characteristics of the Facility and define the nature and extent of contamination.

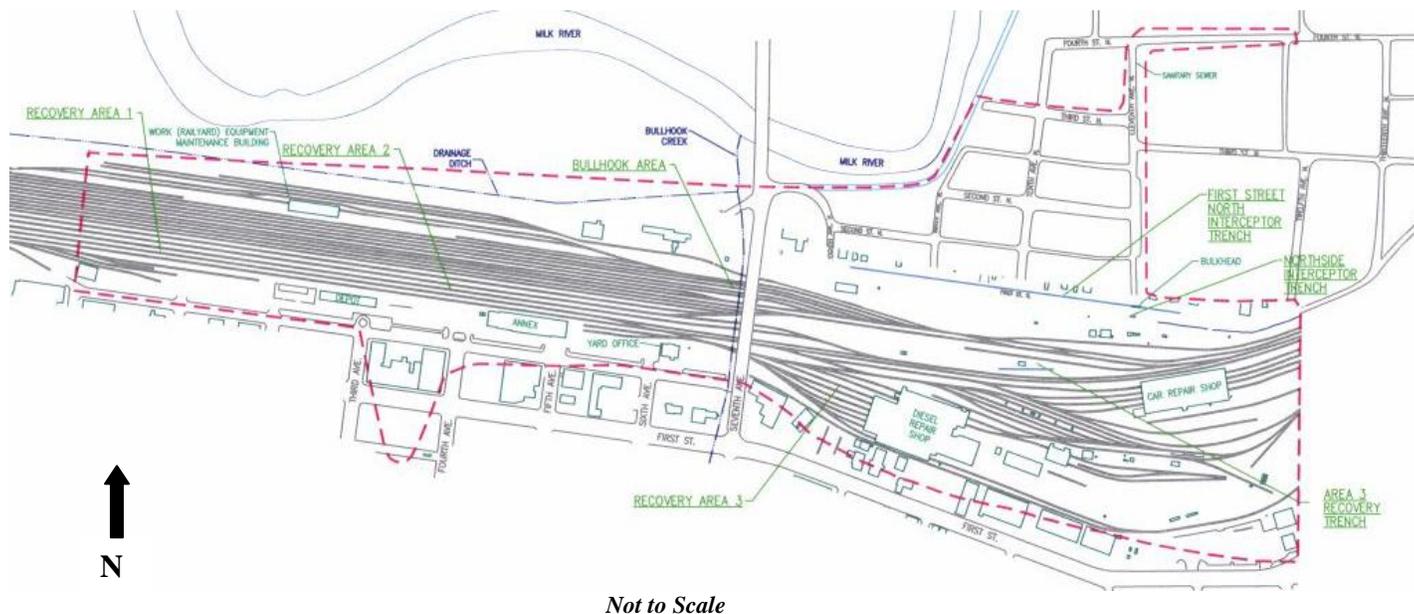
The Facility is approximately 107 acres and consists of the railyard between Montana Avenue to the west and Fourteenth Avenue to the east, to the north between the railyard and Milk River, and to the south between the railyard and First Street. The Facility boundary is shown in Figure 1 and includes any area where contamination has come to be located.

The RI was conducted by the BNSF Railway Company (BNSF) to:

(1) characterize the nature and extent of contamination, (2) provide information needed to develop and evaluate alternative remedies, and (3) provide information needed to conduct a human health and environmental risk assessment.

The RI identified polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, volatile organic compounds (VOCs), and metals contamination in groundwater, surface soil, subsurface soil, and sediment. The contaminants are the result of historic railroad fueling and maintenance operations. The VOCs detected west of Seventh Avenue appear to be associated with a tetrachloroethene (PCE) release from a former dry cleaner.

The RI also identified data gaps that must be addressed to adequately meet the objectives listed above.



**Figure 1. Burlington Northern Fueling Facility, Havre, Boundary Map (December 2005)**

## Supplemental Remedial Investigations

Since 2000, the following supplemental investigations have been conducted or are ongoing at the Facility:

- Groundwater monitoring (ongoing);
- Domestic water sampling in North Havre (ongoing);
- Subsurface soil sampling across the railyard;
- Soil gas sampling in North Havre;
- Soil, sediment, groundwater, and surface water sampling of Bullhook Creek;
- Indoor and outdoor air sampling south of railyard between Third and Fourth Avenues; and
- Soil and groundwater sampling in the area of U.S. Highway 2.

In addition to the above, DEQ is requiring BNSF to conduct additional supplemental investigations as described in the DEQ-approved 2009 Supplemental Investigation Work Plan (Kennedy/Jenks, April 2009).

Field activities for the supplemental investigation will occur this summer and upcoming winter. Activities will include monitoring well installation with soil and groundwater sampling; direct-push groundwater sampling; surface soil sampling; and subslab soil gas, soil gas, indoor air, and outdoor air sampling.

BNSF will summarize the results of the supplemental investigation in an RI report supplement to be submitted to DEQ in the spring of 2010.



Aerial Photograph – Circa 1960 (from RI)

## Petroleum Product Recovery

BNSF has been recovering diesel product from the groundwater since 1989. As of June 2008, over 185,500 gallons have been recovered.

Currently, product recovery systems are installed and operating in Recovery Area 1, Recovery Area 2, Recovery Area 3 (Diesel Repair Shop), Northside Interceptor Trench, First Street North Interceptor Trench, and

Bullhook Recovery Area System (see Figures 1 and 2).

In 2008, BNSF began a microwell recovery pilot test in the areas of Recovery Area 2, the Northside Interceptor Trench, and the Diesel Offloading (Fuel AST) area. The microwells will be used to evaluate the effectiveness of this technology to recover product.

## Ongoing Groundwater Monitoring

In May 2006, DEQ approved the *Groundwater and Domestic Water Sampling and Analysis Plan (SAP)* for the Facility. Under this SAP, select monitoring wells and domestic wells are sampled quarterly, semi-annually, or annually to evaluate the nature and extent of petroleum hydrocarbons and VOCs in the upper saturated zone (USZ) and 50-foot zone aquifers. Chlorinated hydrocarbons, primarily vinyl chloride, have been detected in USZ domestic wells in North Havre. Only one well had concentrations exceeding drinking water standards.

In 2007, BNSF replaced a 45-foot residential drinking water well with a 90-foot well because the shallower well had become impacted with vinyl chloride exceeding drinking water standards. Vinyl chloride has not been detected in the deeper well.



Monitoring well on railyard

## For Additional Information

You can review documents related to the Burlington Northern Fueling Facility, Havre, at the following locations:

### **Havre-Hill County Library**

403 Third Street  
Havre, MT 59501  
Telephone (406) 265-2123

### **Montana Department of Environmental Quality**

Remediation Division  
1100 North Last Chance Gulch  
Helena, MT 59620-0901  
Telephone (406) 841-5000

In addition, the approved RI Report is also available, in part, online at:

<http://deq.mt.gov/StateSuperfund/Havre.asp>

For additional information please contact:

**Kate Fry, DEQ Project Officer**  
(406) 841-5066

*Montana Superfund Hotline:*  
*1-800-246-8198*



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