



ENVIRONMENTAL RESPONSE WORK PLAN

FOR:

Environmental Services In Response
to Train Incident

Casselton, North Dakota

PREPARED FOR:

BNSF RAILWAY, CO.

PREPARED BY:

Pinnacle Engineering, Inc.
11541 95th Avenue North
Minneapolis, Minnesota 55369

January 3, 2014

**Environmental Response Work Plan
BNSF Railway, Co. Rail Tanker Car Release Incident
Casselton, ND
Pinnacle Project No. R013560.000**

1.0 Introduction

BNSF Railway, Co. (BNSF) retained Pinnacle Engineering, Inc. (Pinnacle) to prepare an Environmental Response Work Plan (Work Plan) for environmental services associated with a rail car and locomotive incident located approximately one mile West of Casselton. This Work Plan has been prepared for submittal to BNSF to describe the work parameters to be performed in response to the incident.

2.0 Project Contacts

BNSF Railway

Mr. Greg Jeffries
Manager of Environmental Remediation
80-44th Ave NE
Minneapolis, MN, 55421



Environmental Consultant/Engineer

Mr. Matt Richardson
Pinnacle Engineering, Inc.
11541 95th Avenue North
Minneapolis, MN 55369



3.0 Background

On Monday, December 30, 2013 at approximately 2:30 p.m. the BNSF derailed several cars and two locomotives just west of Casselton, North Dakota. The incident involved grain cars, crude oil tanker cars, and two locomotives. The resulting collision ignited the crude oil causing a fire.

4.0 Emergency Response Tasks

Pinnacle will serve as the emergency environmental contractor acting on behalf of BNSF. Pinnacle's responsibilities associated with the emergency response phase include:

Emergency Contractor Project Management

Greg Jeffries will serve as BNSF's Project Manager. Matt Richardson will serve as the Pinnacle Project Manager for the emergency response. Mr. Richardson will act as a liaison with other BNSF

environmental contractors on-site to ensure a coordinated effort is in-place for this incident response.

Initial Response Actions

Railroad Response – Pinnacle will document, monitor, and report locomotive and rail car removal, and impacts to drainage areas, soil, sediment, and surface waters. Pinnacle will serve as the environmental contractor and respond to emergency conditions from a temporary trailer deployed adjacent to the spill site, which will serve as the base station for coordinating the emergency response. Pinnacle emergency response staff will act at the direction of BNSF, and may include additional activities not included in this Work Plan.

On Monday, December 30, 2013, BNSF enacted its Environmental Emergency Response Teams to the site. Response teams met with local officials and emergency responders to develop a safe course of action. Initial actions included removing approximately 70 rail cars that were not derailed from the derailment area to prevent further spread of the fire. Contractors also staged sand near the ditches leading out of the derailment area to prevent possible runoff from leaving the area.

On Tuesday, December 31, 2013, BNSF Contractors initiated cleanup operations. Crude oil tanker cars were separated with machinery to isolate the cars that were burning from the remaining cars. Operations to remove the cars were conducted throughout the day and into the next morning. BNSF representatives met with the North Dakota Department of Health Officials to discuss the cleanup procedure and plans.

On Wednesday, January 1, 2014, the rail cars were removed from the track area and environmental cleanup operations began. All grain and crude oil cars were removed from the tracks, and placed into holding areas. Immediately crews began the process of removing the contents of the crude oil cars to limit any further environmental impacts. Concurrent with these operations, excavation was initiated to remove impacted soil from the right of way prior to replacing the railroad tracks. Soil was also excavated on the north side of the rail bed that was impacted by the crude oil. In addition, grain from the grain cars was separated from the areas impacted by the crude oil with the intentions of keeping the products segregated.

5.0 Initial Remedial Actions

Planned Response Actions

Further actions planned for the site:

- Excavate impacted soil to the north and south of the BNSF main lines.
- Excavate soil to the north of the Red River Valley & Western Railroad's tracks.
- Perform sampling of environmental media (e.g., soil) at the request of BNSF.
- Excavate grain spilled by grain cars.
- Properly manage and dispose of excavated materials.
- Remove contents of tanker cars so they can be disposed of properly.
- Establish erosion and sediment control systems in the excavated areas.
- Establish control measures to prevent any sheen from leaving the site in the stormwater or snowmelt runoff.
- Repair private properties affected by the incident to an acceptable condition to property owners.

All excavation in the initial emergency response activities will focus on removing the gross contamination on the site. Soil excavation depths will vary depending on impact depth and site conditions. Several buried fiber optic cables are present between the main line tracks and the Red River Valley tracks that may impede some remedial actions.

Timeline

- Excavation of impacted soils is expected to be completed the week of January 6th.
- The crude oil cars are anticipated to be cleaned and ready for scrapping on the week of January 6th (pending release from NTSB).
- Disposal of the grain and soil is expected to be completed by week of January 13th.
- Repairs to the field and erosion control measures are anticipated to be completed by the start of the spring growing season.

The timeline is dependent on conditions on-site. Weather, equipment availability and track protection will affect the timeline. An updated timeline can be obtained from the BNSF Project Manager upon request.


5.0 Post-Emergency Response Assessments

Following the completion of the Initial Remedial Actions, a Remedial Investigation Work Plan will be prepared by BNSF and submitted to the North Dakota Department of Health for review and comment. It is anticipated that this Work Plan will be submitted in January 2014.

6.0 Health and Safety Plan

A Site Health and Safety Plan (HASP) for use by Pinnacle personnel has been prepared under separate cover and will be maintained at the Site at all times when Pinnacle personnel are on-Site.

PINNACLE ENGINEERING, INC.


Jeff Melby, P.E.
Vice President of Operations