**TRANSPORATION MANAGEMENT PLAN** 

# BNSF SANGAMON RIGHT-OF-WAY CHICAGO, COOK COUNTY, ILLINOIS

December 2015

**Prepared for:** 

BNSF

Minneapolis, Minnesota

**Prepared by:** 



Chicago, Illinois

## **Transportation Management Plan**

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Prepared for:



BNSF Railway Company Minneapolis, Minnesota

Prepared by:



230 W. Monroe Street Suite 2300 Chicago, IL 60606

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#### List of Acronyms

bgs	Below Ground Surface
BNSF	Burlington Northern Santa Fe Railways
CDOT	Chicago Department of Transportation
COC	Contaminant of Concern
EQ	The Environmental Quality Company
IDOT	Illinois Department of Transportation
I-94	Interstate 94/Dan Ryan Expressway
PAH	Polycyclic Aromatic Hydrocarbon
ROW	Right-of-Way
TMP	Transportation Management Plan
WM	Waste Management
mg/L	Milligrams per liter
mph	Miles per hour

#### December 2015

#### 1.0 INTRODUCTION

This Transportation Management Plan (TMP) addresses site activities to be conducted as part of the BNSF Railway Company (BNSF) Removal Action at the BNSF-owned right-of-way (ROW) located along Sangamon Street between 16<sup>th</sup> Street to 21<sup>st</sup> Street in Chicago, Cook County, Illinois (the Site). The plan, dynamic in nature, establishes policies, procedures, routes, and guidelines that will be used to manage traffic associated with the removal activities as depicted in the *Removal Work Plan* (TRC, 2015). As a dynamic document, the plan may be revised as site conditions change. The specific removal activities which will require transportation management are:

**Removal Activities.** Removal activities will be conducted on portions of the Site within the BNSF ROW that runs between 18<sup>th</sup> and 21<sup>st</sup> Streets (Removal Area). Although the BNSF ROW between 16<sup>th</sup> and 18<sup>th</sup> Streets (North ROW) is also part of the Site, no soil removal activities will occur on this area and traffic associated with activities on the North ROW will be limited to those which enable the installation of two short sections of chain link fencing. As such, traffic associated with activities conducted on the North ROW is not expected to significantly impact the surrounding community.

Initial activities on the Removal Area will include the removal of the existing railroad track and ties followed by the excavation of lead-impacted soil to approximately 2 feet below ground surface (bgs). Excavated soil will be loaded into trucks and disposed of off-site at disposal facilities licensed to accept the waste. While excavation activities are taking place, TRC will conduct air monitoring, and manage fugitive dust control activities. In addition, TRC will coordinate traffic and road controls at the Site. Following excavation activities, a geosynthetic demarcation material (e.g., geotextile or geogrid) will be installed across the excavation floor, and the excavation will be backfilled with clean soil to serve as an engineered barrier (i.e., a clean soil cap). Following installation, the clean soil cap will be seeded and covered with erosion control matting.

The purpose of this TMP is to preemptively limit and control traffic congestion that may be caused by increasing the number of vehicles entering the Pilsen neighborhood, and closing or limiting traffic on streets adjacent to the Site. By delineating routes and zones for entering, leaving, or staging equipment around the Site, the negative impacts associated with increased traffic in the community will be substantially mitigated with this TMP. This TMP and any subsequent addenda will apply to all personnel and contractors who are involved with activities at the Site. All work will be conducted in compliance with applicable Chicago Department of Transportation (CDOT) and Illinois Department of Transportation (IDOT) regulations.

#### 1.1 Plan Organization

This TMP is organized into the following sections:

- Section 1 Introduction provides an overview and background of the project and describes the purpose and objectives of the TMP.
- Section 2 Waste Transportation, Handling and Management details the specific protocols that will be instituted to excavate, load and dispose of impacted soil during the Removal Action.
- Section 3 Staging and Transportation details designated staging and loading zones as well as routes traffic entering and leaving the Site.

#### • Section 4 – References

All contractors and personnel accessing the Site will comply with this TMP. Implementation of the TMP will be carried out by all on-site contractors with authority given to TRC personnel. During the removal activities, TRC will direct the implementation of traffic routes and required signage.

#### 1.2 Transportation Management Plan Objectives

The objectives of the TMP are as follows:

- Detail truck loading and unloading procedures that will be utilized to ensure the safety of site workers and local residents;
- Provide a consistent, convenient, and safe route for workers, heavy equipment, and trucks to enter, leave, and stage around the Site;
- Provide details and specifications for temporary signage, traffic controls, ROW closures and parking restrictions that will be installed and implemented during the removal action.

#### 2.0 WASTE TRANSPORTATION, HANDLING AND MANAGEMENT

On behalf of BNSF, TRC will provide environmental oversight for this project. BNSF will hire the construction contractor directly. The construction contractor will be responsible for implementing the TMP and procuring any and all items that the TMP requires.

Based on previous investigation activities, approximately 135 tons of soil classified as a characteristic hazardous waste is anticipated to be excavated, directly loaded into dump trucks and transported for off-site treatment and disposal. Approximately 6,200 tons of nonhazardous soil is anticipated to be excavated, directly loaded into dump trucks and transported for off-site disposal. Lead is the primary contaminant of concern (COC) in the soil to be excavated; however, the soil is an urban fill which, in the greater Chicago area, is typically characterized as having elevated concentrations of other metals and organic compounds such as polycyclic aromatic hydrocarbons (PAHs).

#### 2.1 Waste Profile

The hazardous waste soil is required to be properly profiled prior to being treated at The Environmental Quality Company (EQ) / US Ecology Chicago, located in Harvey, Illinois. After treatment, hazardous waste soil may be disposed at the Waste Management (WM) Laraway Landfill located in Joliet, Illinois. The nonhazardous soil material has already been profiled for acceptance at Laraway Landfill. The profiling documentation will be obtained by TRC and provided to the construction contractor and BNSF prior to any off-site shipments of waste.

#### 2.2 Requirement of Transporters

All excavated soil will be directly loaded into covered dump trucks that are lined with plastic sheeting (visqueen). Hazardous waste soil will be transported by licensed hazardous waste transporters. The construction contractor will be responsible for obtaining qualified transporters for the hauling of nonhazardous soil. All transporters will be fully licensed and insured to transport contaminated soil.

#### 2.3 Traffic Control Procedures

Prior to loading, all dump trucks will be staged as described in Section 3.0 below. Traffic will be coordinated in such a manner that, at any given time, no more than three dump trucks will be waiting to be loaded within, or adjacent to, the work area. Upon entering the Removal Area, all vehicles will be required to maintain slow speeds (i.e., less than 5 miles per hour [mph]) for safety purposes and dust control. A traffic flagger will be used to control truck traffic entering and leaving the active work area. Trucks and other vehicles will use the entrance and exit points as described in Sections 3.0 through 3.5.

#### 2.4 Truck Loading Operations

Trucks will be directly loaded at the active Removal Area by excavator or similar equipment. Soil will not be stockpiled prior to loading trucks for off-site disposal; however, excavators will be allowed to pull soil within reach of the excavator so that the trucks may be efficiently direct-loaded. Trucks will be stationed for direct loading along the east side (northbound) of Sangamon between 18<sup>th</sup> and Cullerton Streets. Trucks will enter the Removal Area to be direct loaded between Cullerton and 21<sup>st</sup> Streets.

All vehicles and equipment will be cleaned prior to leaving the work area. All stray waste material on vehicles, tires, etc., will be brushed off and/or sprayed off with water, if necessary. Care will be taken to avoid soil spillage during loading activities, and if spillage occurs, spilled material will be immediately removed from the street and returned to the active work area. Any streets immediately adjacent to active excavation and loading areas will be cleaned daily using a street sweeper or similar. Truck beds will be lined with plastic sheeting (i.e., visqueen) and, after loading, dump trucks will be covered with a tarp to prevent soil and/or dust from spilling out of the truck during transport to the disposal facility. Prior to leaving the loading area, each truck will be inspected by on-site personnel to ensure that the loads are adequately covered, the trucks are cleaned of any soil, and the shipment is properly documented.

Water spray or mist, as appropriate, will be applied during loading operations for dust control purposes. The aforementioned street sweeping will also ensure streets and curbs are clean and free of dust and debris.

### 2.5 Shipment Documentation

### 2.5.1 Hazardous Waste Shipment

A hazardous waste shipping manifest will accompany and document each truck shipment containing soils profiled as hazardous waste.

The Site manager will maintain a copy of shipping documents at the Site for each truckload until completion of the Removal Action.

### 2.5.2 Non-Hazardous Waste Shipment

A nonhazardous waste shipping manifest or bill of lading will accompany and document and each truck shipment of soils excavated from the Site.

## 2.6 Off-Site Disposal Facilities

### 2.6.1 Hazardous Waste Disposal Facility

Based on the results of previous sampling efforts, three separate areas within the Removal Area have lead concentrations above the characteristically hazardous criteria of 5 milligrams per liter (mg/L). Hazardous material is currently planned to be transported to the following BNSF-approved facility for treatment:

EQ/US Ecology 16435 Center Avenue Harvey, Illinois 60426 (708) 596-7040 8:00am – 4:30pm

Once the material arrives at EQ/US Ecology, it will be treated to nonhazardous levels. After treatment, the nonhazardous soils will be transported to and disposed of at the Laraway Landfill located in Joliet, Illinois. Note that this material requires appropriate profiling; as such, this location may change based on the results of the profiling.

#### 2.6.2 Non-Hazardous Waste Disposal Facility

Based on previous sampling results, the majority of the lead-impacted soil material is a nonhazardous waste. Non-hazardous soil will be transported to the following BNSFapproved disposal facility:

WM Laraway RDF 21233 W Laraway Road Joliet, Illinois 60436 815-727-6148 6:00am – 4:00pm

#### 3.0 STAGING AND TRANSPORTATION ROUTES

Transportation routes for trucks transporting excavated waste materials will be on arterial streets and/or freeways approved for truck traffic to minimize any potential impact on the local neighborhood. TRC anticipates that the majority of all traffic entering the Site will come from the south on Interstate 94/Dan Ryan Expressway (I-94), located approximately 0.25 miles east of the Site. The routes described below are anticipated to be the most suitable for truck and heavy equipment traffic; however, they are subject to change, based on CDOT permit requirements and stakeholder preference. Figure 1 provides a visual representation of the anticipated routes, loading zones, and signage detailed in this section.

#### 3.1 Entering the Staging Area

To access the Site from the south (heading north) on I-94, trucks will take Exit 53A (at right) and merge onto South Ruble Street. Trucks will continue on South Ruble Street approximately 0.3 miles, turning left on West 16<sup>th</sup> Street. Trucks will continue on West 16<sup>th</sup> Street approximately 0.1 miles, turning left onto South Peoria Street. Two blocks of Peoria Street, from 16<sup>th</sup> Street to 18<sup>th</sup> Street, will serve as the truck staging/waiting area in order to avoid engine idling noise and congestion within the active construction zone along Sangamon Street (Figure 1).

#### 3.2 Staging/Waiting Area

Temporary "No Parking" signage will be posted along the southbound side of Peoria Street from 16<sup>th</sup> Street to 18<sup>th</sup> Street during planned construction periods when trucks and/or heavy equipment are anticipated to be at the Site. This section of Peoria Street is a relatively unutilized block adjacent to the former National Lead facility which has been converted into a vacant block. Access to the Site via Sangamon Street is clearly visible from this area of Peoria Street, and either radio communications or visual flagging can be used to direct truck flow into the work area as removal activity progresses (Figure 1).

### 3.3 Entering the Site

To enter the Site from the staging area on Peoria Street, trucks will continue south, turning right onto 18<sup>th</sup> Street, and immediately left onto Sangamon Street. The eastern (northbound) side of Sangamon Street will be utilized as the primary truck parking/loading zone for remediation activities (excavation or backfilling) between 18<sup>th</sup> Street and Cullerton Street. To facilitate remediation activities, temporary "No Parking" signage will be posted on the northbound and southbound sides of Sangamon Street on a block-by-block basis as work occurs. It is anticipated that all truck and traffic flow

through the work area during construction will be in the southbound direction; however, some loading and unloading activities may require travel in the northbound direction.

Trucks will enter the active work zone to load and unload in the ROW between Cullerton and 21<sup>st</sup> Streets. The south (eastbound) side of Cullerton Street will serve as the primary entrance to this portion of the Site. To enter the active work zone/loading area, trucks will drive over the curb and sidewalk and down an earthen ramp, into the excavation area. A ramp will also be built at the southern end of the excavation area to exit the excavation area. Prior to exiting the Site on 21<sup>st</sup> Street, trucks will pass over a decontamination pad. The decontamination pad will be constructed of cobble size (3 to 6 inch diameter) stone underlain by a durable geosynthetic barrier. The intent of the decontamination pad is to create a mechanical force to remove stray soil that becomes struck in tires as trucks pass over exposed soil within the active work zone. The geosynthetic barrier will prevent stones from being buried in the subsurface as trucks will be inspected and cleaned as discussed in section 2.4. Refer to Figure 1 for a map detailing the proposed loading zones.

#### 3.3.1 Lane Closure and Traffic Direction

Due to the nature of the Site, TRC anticipates that the eastern (northbound) lane of Sangamon Street will require temporary closure during remediation activities. Trucks and heavy equipment will be utilizing this portion of Sangamon to gain access to the Site and for load in/load out of materials. Signage conforming to CDOT standards will be utilized in order to provide notice of the lane closure in advance of any construction activities at the Site. Lane closures will only be in effect during working hours while construction activities are taking place at the Site. TRC does not anticipate that it will be necessary to close the western (southbound) lane of Sangamon Street; however, temporary closures via flaggers may be implemented as necessary.

#### 3.4 Leaving the Site

Trucks that are not performing work within the ROW between Cullerton and 21<sup>st</sup> Streets will exit the Site by continuing South on Sangamon Street and turning right (west) onto Cullerton Street. Trucks will continue on Cullerton Street approximately 0.1 miles, turning left on Morgan Street. Trucks will continue on Morgan Street approximately 0.1 miles, turning sharply left onto Canalport Avenue. Trucks will continue on Canalport Avenue approximately 0.2 miles, turning right to enter I-94 enroute to either a disposal facility or the contractor's staging area.

Trucks performing work within the ROW between Cullerton and 21<sup>st</sup> Streets will exit the Site heading south. Trucks will turn left (east) onto 21<sup>st</sup> Street, turning slightly

left onto Canalport Avenue enroute to I-94. Figure 1 details both of the proposed exit routes.

#### 3.5 Signage

Signage detailing parking bans will be installed as per City of Chicago regulations in advance of any planned work. TRC anticipates that both sides of the street adjacent to active work areas will require daily parking bans to facilitate access to the Site. Lane closures will be implemented via the installation of temporary reflective barriers as well as "Lane Closed" signage. Signage giving notice of construction activity (such as "Construction Ahead" and/or "Trucks Entering and Leaving Roadway") is proposed on Figure 1; however, final signage requirements will be determined by CDOT permit requirements and stakeholder input.

#### 4.0 REFERENCES

IDOT, Quality Standard for Work Zone Traffic Control Devices, 2010. May 2010.

TRC. Removal Work Plan, BNSF Sangamon Right-of-Way. October 2015

FIGURES





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