Community Protection Plan for Remedial Action 837 Bailey Ave. Off-Site Site, Buffalo, New York

Site Number C915298A

September 2020

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
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Introduction

This Community Protection Plan (CPP) describes procedures to be employed to protect workers, residents, and the general public during soil remediation activities at the 837 Bailey Ave. Off-Site, in Buffalo, New York.

Scope of Work

Remedial construction activities are associated with the off-site deposition from the former 837 Bailey Avenue Site (Site No. C915298) The 837 Bailey Avenue site is approximately 8.7 acres and is located in an urban area in the City of Buffalo near the intersection of Dingens Street and Bailey Avenue. A mix of commercial and residential properties surrounds the site. The Buffalo River is located approximately 0.75 miles south of the property and the I-190 (Niagara Thruway) is located approximately 0.5 miles east of the property. The site is comprised of filled land with no building structures and is mostly fenced. The subject property was used as an auto salvage/wrecking facility from at least 1940 to 2014, an automotive repair facility from at least 1946 to 1986, a tire recapping facility until at least 1950 and a filling station from at least 1946 to 1950.

Prior to remediation, the primary contaminants of concern were metals (arsenic, barium, cadmium, copper, lead, and mercury) and polycyclic aromatic hydrocarbons (PAHs). Remedial actions have successfully achieved soil cleanup objectives for commercial use and a cover system is in place. A Certificate of Completion was issued for this remedial action dated December 20, 2019 and residual contamination at the site is being managed under a Site Management Plan.

Residential and commercial properties surrounding the former foundry site are impacted by arsenic and lead contamination associated with historical air emissions from the property. These properties are adjacent to the site and located along the north property line along Dingens Street and Bailey Avenue. The site is shown on Figure 1.

A Decision Document was issued by the New York State Department of Environmental Conservation (NYSDEC) in July 2019 requiring remediation of properties in the area with contaminated soils exceeding the soil cleanup objectives (SCOs). Because the prior remedial action was completed under the NYS Brownfields Clean-up Program (BCP), the volunteer completing this action was not required to clean-up properties beyond the boundaries of the site. As such, NYSDEC is responsible for the remediation of any areas outside the boundaries of the site that exceed the SCOs that have been established for the project. In the case of the off-site properties, SCOs of 16 parts per million (ppm) for arsenic and 400 ppm for lead were established. Predesign soil sampling will be conducted to define the horizontal and vertical excavation limits that will be approved by NYSDEC and the New York State Department of Health (NYSDOH) prior to construction.

NYSDEC is responsible for implementing remediation in accordance with the requirements of NYSCRR Part 375. The Engineer responsible for design and construction management is Ecology and Environment Engineering and Geology, P.C. (E & E). The Contractor responsible for construction activities including excavation and restoration is National Vacuum Environmental Services (Nation Vacuum).

Site Description

Typical residential and commercial properties in the area of the site are primarily 1- to 2-story, conventionally-framed, wood structures with full basements of varying heights, constructed from the early 19th century through the end of the 20th century. The individual private property parcel boundaries define the individual work areas during remedial activities.

One project staging area have been constructed to support the remedial action. This staging area, currently a vacant lot, is located at 15 Dingens Street.

Site Layout and Work Zones

No work will be performed on private properties without a signed access agreement from the property owner or their duly appointed representative.

Property-specific excavation and restoration plans will be prepared for each parcel to be remediated. The excavation plan describes the horizontal and vertical limits of excavation based on soil analytical results and survey maps prepared during the pre-design investigation. Excavation will require the removal of most trees and plants from each property, and the removal of hardscaping (including concrete sidewalks, walkways, and pads; asphalt and stone driveways; etc.). Restoration plans detail the replacement or reinstallation of affected site features, including paving, fences, trees, and plants, as well as grading plans.

Excavation requires the establishment of an exclusion zone at the perimeter of the work area for each property. The exclusion zone will include the active excavation and backfilling areas as well as any areas previously excavated where backfilling is incomplete. This may include the entire property parcel or a portion thereof, depending on the locations of daily site activities. The exclusion zone may be altered as needed by the Engineer's Site Safety Officer (SSO) to accommodate remedial activities while maintaining protection for the property owner, on-site residents, and members of the public. The exclusion zone is meant to deter residents, pedestrians, and other members of the public who are not actively involved with remedial efforts or are not approved site visitors from potential exposure to safety hazards associated with the remedial activities. All site visitors must report to an E & E representative prior to entering the project site.

The exclusion zone will be marked using temporary fencing (such as high visibility construction fencing), other barricades (such as high visibility cones and barrels) and/or signs. The exclusion zone will extend to the road, blocking public sidewalks when excavation work will be within 10 feet of sidewalks.

At least one route of ingress/egress from each dwelling will be maintained for residents throughout the remedial action. This may require the relocation of the exclusion zone around entryways as needed to accommodate the safe passage of residents and their visitors. Ingress/egress routes will be safe and stable routes for the protection of residents and their visitors. For example, boards will be laid down for residents to walk on if the sidewalk has been removed, stone or temporary platforms will be installed to maintain safe step heights if backfilling around stairs is not performed immediately, etc. The determination of the need for these measures to maintain safe ingress/egress will be made by the Engineer's SSO. Ingress/egress routes for a typical residential structure are shown on Figure 2.

Excavation Activities

Removal of contaminated soil will be performed using conventional excavation equipment such as backhoes and small dump trucks. For the protection of the structural integrity of property features (such as building foundations), non-mechanical excavation means will be used where necessary. This may include vacuum excavation or manual digging. A structural engineer will make observations of permanent structures at each property prior to excavation to assist in setting excavation limits and recommending other measures to mitigate any potential damage to structures. Limits and setback distances for non-mechanical excavation are presented on the Design Drawings.

All excavated material will be transported using small dump trucks and dump trailers to the disposal facility or temporary stockpile area where it will be reloaded onto larger trucks for transportation to the disposal facility. Additional details are provided in the "Remedial Construction Work Plan"[1].

All soil excavation and restoration activities will occur during daylight hours only. Large equipment operation will typically take place five days per week (Monday through Friday, excluding federal holidays) between 7:00 a.m. and 6:00 p.m. If required to maintain the project schedule, work may also be performed on Saturdays.

For the protection of property, residents, and pedestrians, equipment workers need to maintain line of sight with any surrounding structures or people in the area, using spotters as necessary.

No excavation pits or trenches are to be left open and unattended. If an excavated area poses a slip/trip/ fall hazard and needs to remain open and unattended, the area will be fenced with temporary construction fence to reduce the physical hazard.

All trucks transporting contaminated soil will be lined with plastic sheeting and covered to prevent materials from escaping from the trucks while in transit.

Any equipment left within the work area overnight will only be done with the property owner's verbal approval and the equipment will be locked and the keys will be removed from the site.

Truck Traffic

When working on or near a public road, the regulations listed in the Federal Highway Association's Manual on Uniform Traffic Control Devices and the New York State Department of Transportation's New York State Supplement will be implemented. This includes the placement of cones and signs to divert and warn oncoming traffic. Depending on the type of work, location and length of time needed, traffic controllers and observers may be required.

Traffic control will be the responsibility of the contractor and provided as needed in accordance with the aforementioned guidance documents. When work is conducted adjacent to roadways, all personnel will be aware of possible traffic concerns and be cautious of nearby vehicles. Temporary construction signs shall be provided to warn approaching motorists and pedestrians

[1] Ecology and Environment Engineering and Geology, P.C., 2020, *Remedial Construction Work Plan, 837 Bailey Ave. Off-Site Site, Buffalo, New York*, August 2020.

of the work. Flag persons shall be used to direct traffic while construction vehicles are entering or exiting work areas. A spotter will be required to confirm an area to be clear anytime vehicles are to cross walkways.

To minimize congestion on local roads and to maximize the protection of the safety of residents, truck traffic will be minimized to the extent practicable when school buses are actively picking up and dropping off students near work zones. In addition, parking laws will be strictly enforced. If variance from parking laws is required for the safe completion of remediation, then the appropriate officials, including City Police, will be notified.

Erosion Control

Erosion-control measures will be implemented to prevent storm water and soil from potentially migrating off each property during work activities. Temporary erosion control shall be installed and maintained at each residence as needed and at the temporary material stockpile areas. Erosion control measures will be inspected at least weekly and after significant rain events.

Decontamination

The need for vehicle and equipment decontamination will be minimized by directly loading all contaminated soils into trucks without the need for a material staging area and secondary handling. Vehicles and equipment will use designated haul roads equipped with mats so that tires and tracks do not contact potentially contaminated materials. If decontamination of equipment, such as excavator buckets, is required, it will be performed using a potable water wash directly over soil to be excavated such that decontamination water will disposed of with contaminated soil.

Health and Safety Monitoring

Health and safety monitoring will be conducted to aid in the proper selection of engineering and administrative controls, work practices, and/or personal protective equipment (PPE) so that workers, residents, site visitors, and the general public are not exposed to contamination at levels that exceed permissible exposure limits. PPE use by site workers and visitors is presented in the Contractor's and Engineer's site-specific Health and Safety Plans.

The following monitoring will be implemented during excavation and backfilling activities:

Particulate Monitoring

Particulate (i.e. dust) concentrations will be monitored continuously at the upwind and downwind perimeters and adjacent to the nearest residential structure within the work area according to the equipment and procedures outlined in the Community Air Monitoring Plan (CAMP)[2]. In addition, upwind and downwind monitoring will occur at the contaminated soil stockpile area whenever contaminated soils are being staged and when the contaminated soil stockpile is not covered. Proposed particulate monitoring locations for a typical residential structure based on typical prevailing winds of the area are provided on Figure 2. The actual air monitoring locations for individual properties will be determined on at least a daily basis and are subject to change based on actual field conditions such as wind direction, location of excavation activities, and the location of the nearest downwind receptor. It shall be the responsibility of the

[2] Ecology and Environment Engineering and Geology, P.C., 2020, "Community Air Monitoring Plan for Remedial Action at the 837 Bailey Ave. Off-Site Site, Buffalo, New York."

SSO to ensure that particulate monitoring is conducted in accordance with the CAMP and record all relevant data. Action levels for nuisance dust are included in the CAMP. If action levels are exceeded, mitigation measures will be implemented in accordance with the CAMP.

Vibration Monitoring

Vibration monitoring will be conducted during excavation and backfilling operations. The Vibration Monitoring Plan[3] describes the monitoring methods, locations, and action levels. At a minimum, vibration monitoring will be conducted immediately adjacent to the residential structure on the subject property and may include the two nearest neighboring residential structures and outside of the work area along the trucking route. The actual monitoring locations for individual properties are subject to change based on field conditions such as the daily locations of excavation activities or potentially sensitive structures. Should vibratory action levels be exceeded, the Engineer will stop work activities and evaluate work practices with the Contractor. Mitigation measures to reduce potential impacts on structures from vibrational energy will be implemented with the Contractor before resuming activity. This may require expansion of the monitoring network, alternative compaction equipment, etc.

[3] Ecology and Environment Engineering and Geology, P.C., 2020, "Vibration Monitoring Plan for Remedial Action at the 837 Bailey Ave. Off-Site Site, Buffalo, New York."

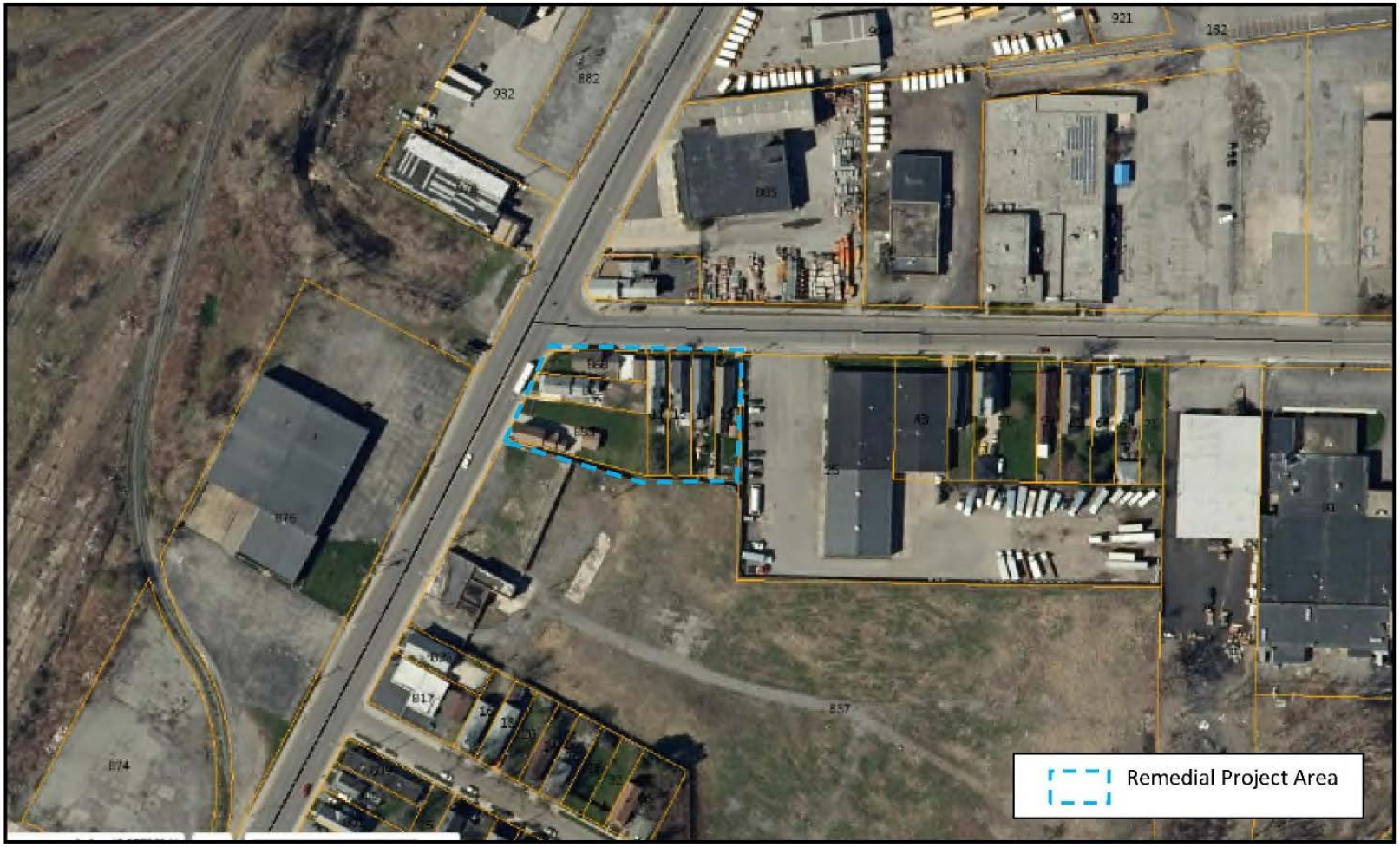

Figure 1
837 Bailey Avenue – Off-Site
Buffalo, Erie County, New York

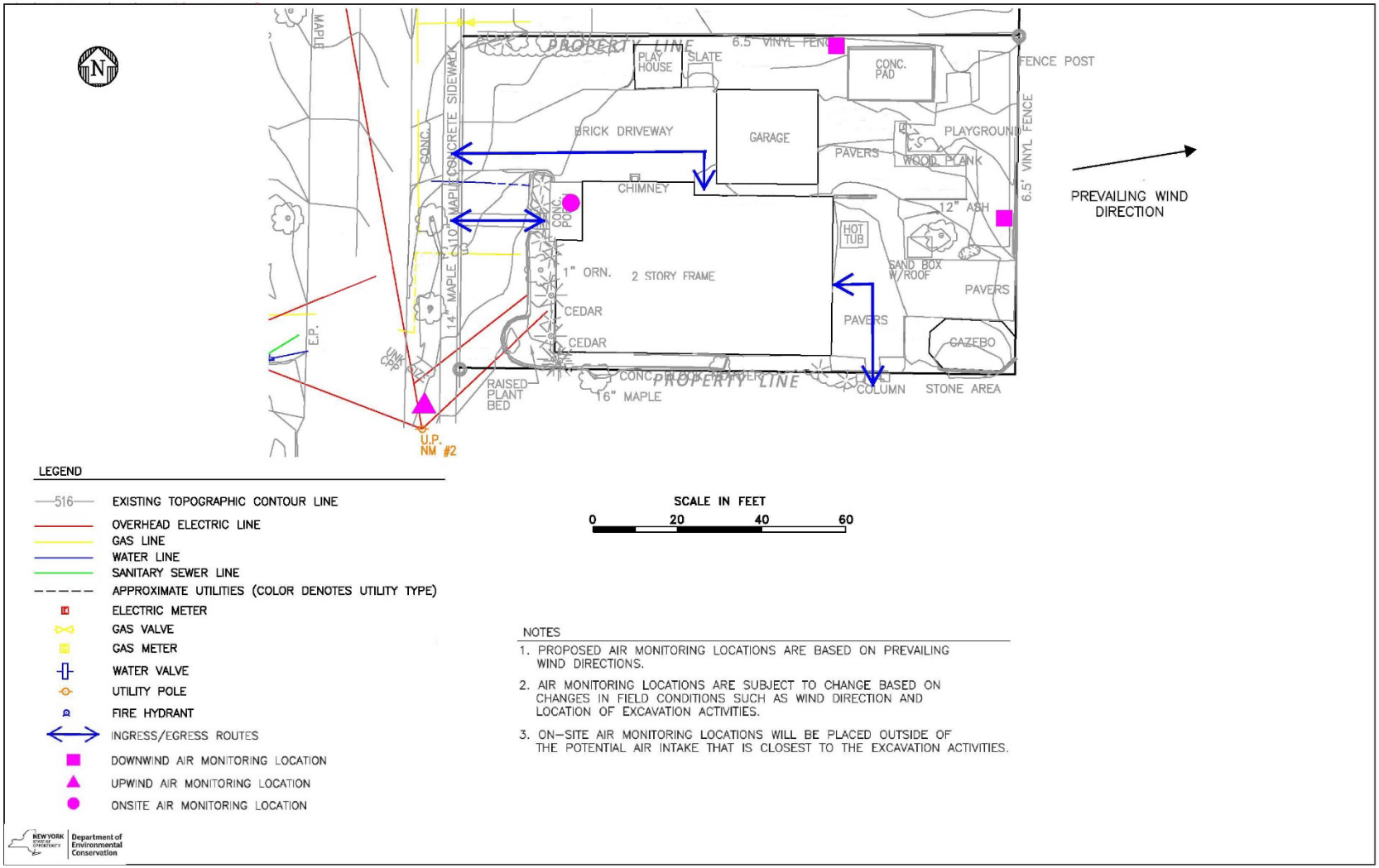

Figure 2
Typical Dust Monitoring Locations and Ingress/Egress Routes for a Residential Property