

Community Protection Plan for Remedial Action at the Former Geneva Foundry Site, Geneva, New York

Site Number C835027A

June 2017

Prepared for:

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
625 Broadway
Albany, New York 12233-7017**

Prepared by:

**ECOLOGY AND ENVIRONMENT ENGINEERING, P.C.
368 Pleasant View Drive
Lancaster, New York 14086**

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 Former Geneva Foundry site, in Geneva, New York.

SCOPE OF WORK

Remedial construction activities are associated with the air deposition area (Operable Unit 3) of the Former Geneva Foundry site. A foundry was present at the site since the late 1800s, and part of the site was a coal yard until expansion of the foundry in the 1940s. Foundry operations ceased in 1988. Residential and commercial properties surrounding the former foundry site are impacted by arsenic and lead contamination associated with historical air emissions from the foundry. These properties are located across several blocks, including Genesee Street, Lewis Street, Geneva Street, Tillman Street, Jackson Street, Exchange Street, State Street, Center Street, Wadsworth street, and Middle Street. The site is shown on Figure 1.

A Record of Decision (ROD) was issued by the New York State Department of Environmental Conservation (NYSDEC) in January 2017 requiring remediation of properties in the area with contaminated soils exceeding the soil cleanup objectives (SCOs) of 16 parts per million (ppm) for arsenic and 400 ppm for lead. Predesign 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. In an effort to limit disruption to the community and increase the efficiency of remediation activities, a phased remediation approach is being implemented.

NYSDEC is responsible for implementing remediation in accordance with the January 2017 ROD. The Engineer responsible for design and construction management is Ecology and Environment Engineering, P.C. (EEEPC). The Contractor responsible for construction activities including excavation and restoration is LaBella Associates, D.P.C. (LaBella).

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 field office/equipment storage area and one material stockpile area (staging areas), both on city-owned land, will be used throughout the remedial action. The first staging area, to be used primarily for office space and small equipment storage, is located at 57 State Street. The second staging area is located at the intersection of Avenue F and Lehigh Avenue. This location will house the contractor's equipment trailer and be used for temporary stockpiling of imported clean fill, contaminated soil pending off-site disposal, equipment decontamination, and contact water storage. Contaminated soils shall be temporarily stored in designated material stockpile areas double-lined with polyethylene sheeting. Stockpiles shall be covered with

plastic sheeting during inclement weather and whenever work is not taking place at the site, to prevent the migration of materials. Contaminated soil will be disposed off-site as non-hazardous solid waste at a NYSDEC-approved facility.

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 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. Site visitors must be approved by the NYSDEC or EEEPC.

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. In accordance with Geneva City Code², any excavation with a depth greater than 2 feet below existing grade shall immediately be filled in, or all such excavations shall be entirely surrounded by a substantial fence at least 6 feet high that will effectively block access to the area in which the excavation is locate.

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

¹ Ecology and Environment Engineering, P.C., 2017, *Remedial Construction Work Plan, Former Geneva Foundry Site, Operable Unit 3, Geneva, New York*, June 2017.

² Geneva City Code § 350-24. General provisions.

of cones and signs to divert and warn oncoming traffic. Depending on the type of work 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 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 of 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

All vehicle and equipment decontamination will occur at a decontamination pad at the staging area located at the intersection of Avenue F and Lehigh Avenue. The pad shall have adequate dimensions to contain wash water and debris from the largest sized vehicles that contact potentially contaminated materials. Trucks and the tracks of excavators used at the work areas will be operated in a manner that they do not contact contaminated soil to the maximum extent practicable. Excavator buckets will be loaded onto trucks or trailers for transportation to the staging area to perform decontamination of the buckets at the completion of excavation activities.

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)³. 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 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 Plan⁴ 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 until the cause of the exceedance has been determined. If remediation activities caused the exceedance, mitigation measures to reduce potential impacts on structures from vibrational energy will be discussed with the Contractor before resuming activity. This may require expansion of the monitoring network.

³ Ecology and Environment Engineering, P.C., 2017, “Community Air Monitoring Plan for Remedial Action at the Former Geneva Foundry Site, Geneva, New York.”

⁴ Ecology and Environment Engineering, P.C., 2017, “Vibration Monitoring Plan for Remedial Action at the Former Geneva Foundry Site, Geneva, New York.”

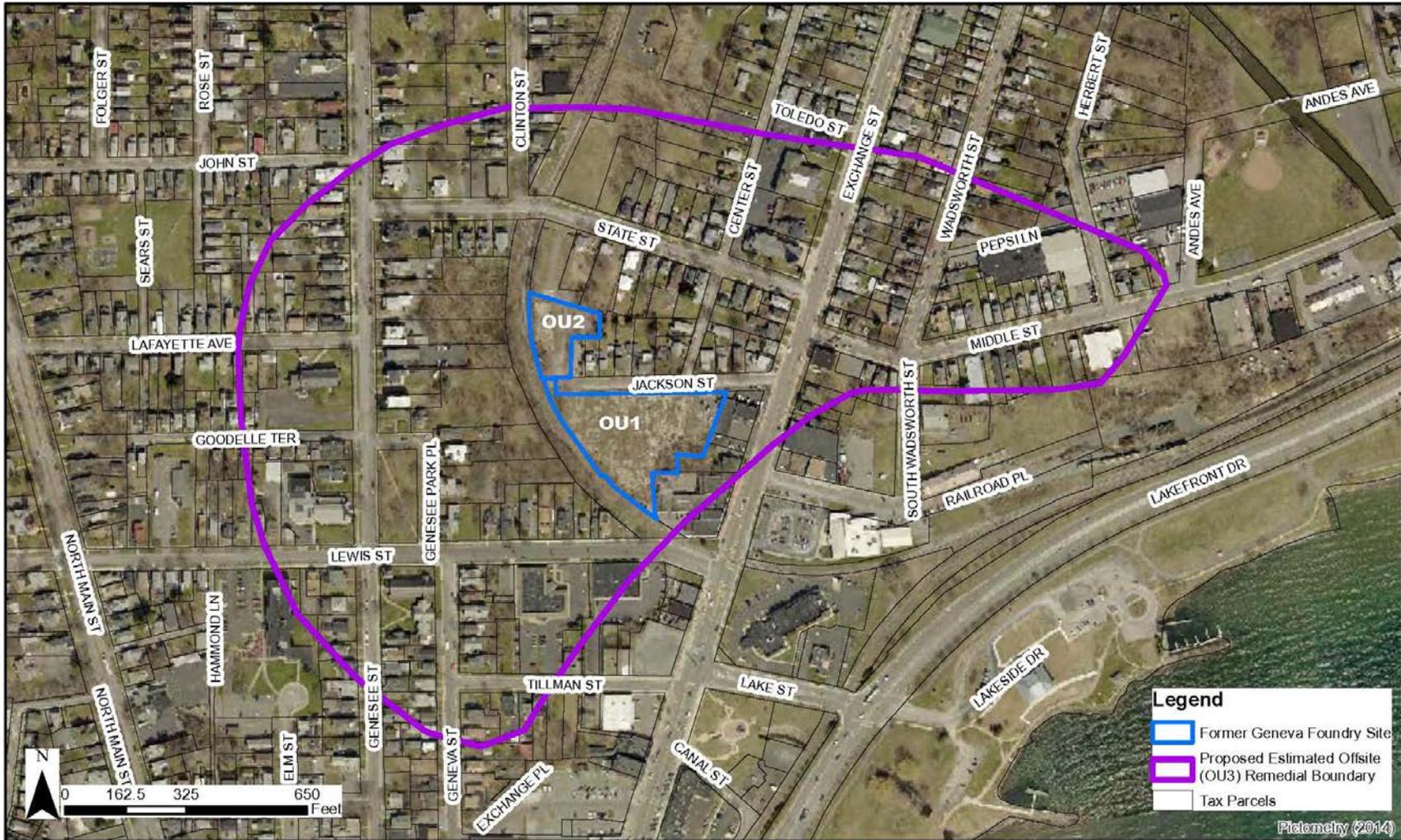


Figure 1 Former Geneva Foundry Site
 Site No. C835027A
 Geneva, Ontario County, New York

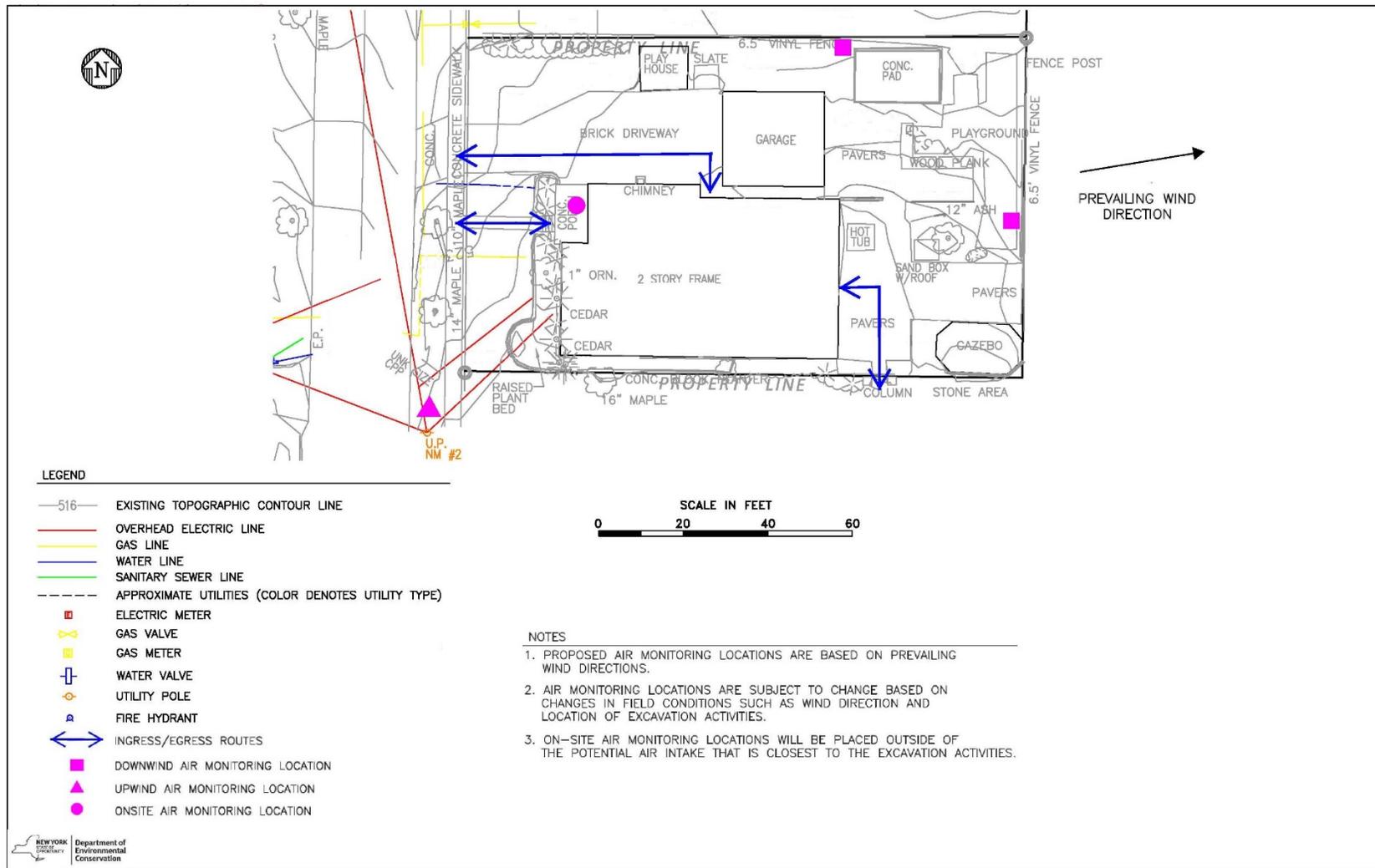


Figure 2
Typical Dust Monitoring Locations and
Ingress/Egress Routes for a Residential Property