NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road, Avon, NY 14414-9516
P: (585) 226-5353 I F: (585) 226-8139
www.dec.ny.gov

March 11, 2021

Mr. Luke Stodola
Refinery Management LLC
996 Exchange Street
Rochester, NY 14608

Dear Mr. Stodola:

Subject: **Vacuum Oil Refinery, Site #C828193**
Interim Remedial Measure
Sub-slab Depressurization System – Building E
March 8, 2021
City of Rochester, Monroe County

The New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH), collectively referred to as the Departments, have completed their review of the document entitled *"Interim Remedial Measure Sub-slab Depressurization System – Building E"* dated March 8, 2021 and prepared by Dixon Rollins, P.E. (the IRM Work Plan). Based on this review, the Departments have determined that the IRM Work Plan, with the modifications provided below, substantially address the requirements of the Brownfield Cleanup Agreement. The general requirements in the approved February 2018 Interim Remedial Measures Work Plan are also applicable to this IRM Work Plan and some of the items below are reminders of existing requirements.

1. **SSDS Post Construction Confirmatory Testing:** The indoor air sampling event will serve as final confirmation sampling and include ASP- Category B format deliverables, DUSRs, and electronic data deliverables (EDDs) for EQuIS submittal.
2. **SSDS Post Construction Confirmatory Testing:** The audible loss of vacuum alarms will be tested as part of the post-construction confirmation testing. Please notify the Departments when the alarm testing is scheduled.
3. **SSDS Post Construction Confirmatory Testing**: The indoor air samples will be completed on a heating season day at least 30 days (but not more than 45 days) after sub-slab depressurization system (SSDS) activation to adequately evaluate the system effectiveness. Pressure field extension testing can still occur immediately after activation. Please notify the Departments when the SSDS is activated, when pressure field extension testing is scheduled, and when the indoor air sampling is scheduled.
4. **SSDS Post Construction Confirmatory Testing:** The SSDS post construction confirmatory sampling will be completed in accordance with the approved February 2018 Interim Remedial Measures Work Plan and the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH guidance). This includes a product inventory, building inspection (layout, HVAC, preferential pathways, etc.), verifying labeling on piping, recording initial manometer readings, etc. Please notify the Departments when this work is scheduled.

5. **SSDS Post Construction Confirmatory Testing:** As per the NYSDOH guidance:

   "Once a depressurization system is installed, its operation may compete with the proper venting of fireplaces, wood stoves and other combustion or vented appliances (e.g., furnaces, clothes dryers, and water heaters), resulting in the accumulation of exhaust gases in the building and the potential for carbon monoxide poisoning. Therefore, in buildings with natural draft combustion appliances, the building should be tested for backdrafting of the appliances. Backdrafting conditions should be corrected before the depressurization system is placed in operation."

   The Departments understand that at least one natural draft combustion appliance was identified in the 936 Exchange Street building. In accordance with the above guidance and the approved February 2018 Interim Remedial Measures Work Plan, the building inspection will include identification and backdraft testing of any natural draft combustion devices. The results will be included in the Construction Completion Report. This also needs to be performed at 22 Flint Street if it has not been already been completed. Please notify the Departments when this work is scheduled.
6. **Schedule:** The Construction Completion Report(s) (CCR) will include 22 Flint Street and 936 Exchange Street.
7. **Schedule:** An Interim Site Management Plan (ISMP) will be submitted at the same time as the CCR. The ISMP will address the operation, maintenance, monitoring, and reporting requirements for the sub-slab depressurization systems.

With the understanding that the Departments' modifications are agreed to, and in accordance with 6 NYCRR 375-1.6, the modified IRM Work Plan is hereby approved. If the Applicant chooses not to accept the modified IRM Work Plan, you are required to notify this office within 20 days after receipt of this letter. In this event, I suggest a meeting be scheduled to discuss your concerns prior to the end of this 20-day period.

This letter shall be attached to the final document and a copy of the approved document is required to be kept in each document repository established for this site.

Please notify me when the SSDS system is activated and at least seven days in advance of all field activities.

Please contact me via email at frank.sowers@dec.ny.gov if you have any questions regarding these items.

Sincerely,

Frank Sowers

Frank Sowers, P.E.
Professional Engineer 1

ec:

Sara Bogardus
Justin Deming
Alan Knauf
David Pratt
Michael Cruden
Dixon Rollins
Deborah Gorman
Melissa Valle
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Dixon Rollins, P.E.
89 Village Drive
Meredith, New Hampshire 03253
Email: dfroll1999@gmail.com

March 8, 2021

Frank Sowers, P.E.
Professional Engineer 1
Division of Environmental Remediation, Region 8
New York State Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414

Re: Former Vacuum Oil Refinery – Site #C828193
Interim Remedial Measure
Sub-slab Depressurization System – Building E
936 Exchange Street
City of Rochester, Monroe County

Dear Mr. Sowers:

On behalf of Flint Redevelopment LLC ("Flint") I am providing the New York State Departments of Environmental Conservation ("NYSDEC") and Health ("Departments") with this revised specific Work Plan for the Building E Interim Remedial Measure ("IRM") Sub-slab Depressurization System ("SSDS"). The revised Work Plan addresses the comments in a letter dated December 18, 2020. The Work Plan is for the specific design for the Building E SSDS located in the building at 936 Exchange Street. In accordance with your request, we prepared a Health and Safety Plan ("HASP") and a Community Air Monitoring Plan ("CAMP") specifically for the Building E SSDS installation.

During the SSDS design investigation for Building E, it was discovered that the construction methods will differ from those used in other areas at 936 Exchange Street in the approved Interim Remedial Measure ("IRM") Design Work Plan. Building E has a sub-floor basement with differing floor construction. Because of these differences, the typical suction/extraction points placed through the floors would not achieve the project's goals. As a result, I am proposing these design changes specific to Building E.

Building E SSDS Work Plan

Flint is in the process of renovations to Building E including repair of sewer and water lines, repair of the basement floor slab and preparations in the space for further renovations. During these activities Flint discovered a crawl space with a dirt floor and floor joists. The crawl space covers the majority of the south side of Building E extending approximately 30 feet (the width of Building E) and a length of approximately 18 feet in a north-south direction parallel to Exchange Street, (see Figure 1). The basement is located toward the north of the crawl space and south of a brick covered floor slab (see Figure 1). There is a stone and mortar foundation wall in the basement space. The brick floor is on the north side of the building's basement. I am proposing the following SSDS design to be constructed for Building E by Mitigation Technologies Inc. ("MTI").

Crawl Space Area SSDS

The crawl space is located south of the basement and is covered with wood flooring on top of a wood sub-floor and wood joists. The joists are hung or supported by the building's wall foundations on the north and south sides, and possibly on the east and west sides of the building. The crawl space has a height of approximately three feet.

Proposed Design

The design will include the following (see Figures 2 and 4):

- Locating PVC perforated pipe on the crawl space floor with 20-feet separating each run of pipe and parallel to the north to south building foundation walls. The spacing of the perforated pipe will be dependent on the area being covered and the materials encountered, which make up the crawl space floor.

- The crawl space floor and perforated pipe will be covered with a plastic sheeting vapor barrier. As needed, to cover the crawl space floor, multiple sheets will be used and overlapped with an approximate 12-inch overlap. The seams of the sheets will be taped and glued using a spray adhesive. The vapor barrier will be glued along the perimeter of the building using a spray adhesive. As necessary to keep the vapor barrier in place, seam tape will be used.

- Penetrations or cuts in the vapor barrier sheeting will be sealed with seam tape.

- The perforated piping will be collected by a PVC header that is piped to a PVC riser pipe connected to a fan to exhaust the SSDS. The stack upstream of the fan will exhaust on the roof of the building. The stack will discharge 10 feet above the roof line and will be located at least 10-feet from any air intakes, windows and doors. The fan will be located outside the building shell on the roof.

- The penetrations through the roof or building wall will be sealed with either flame retardant closed-cell foam, silicone caulk or a sealant compatible with the building materials.

- Following installation, the SSDS system will be tested to confirm the vacuum below the vapor barrier.

Basement Area SSDS

The design for the SSDS in the basement area in the vicinity of the new sewer line is similar to the design of the crawl space SSDS. Figure 3 is a schematic plan of the design and Figure 4 provides a layout of the piping. A length of PVC perforated pipe approximately 30-feet long, extending from the west to east building walls, will be placed into the sewer pipe's gravel bedding. The perforated pipe will be covered with vapor barrier sheeting in a similar manner as used in the crawl space. If multiple sheets of vapor barrier are used, they will be seam taped to each other. The edges of the vapor barrier sheeting will be pinned to the soil floor or foundation wall to prevent movement of the barrier during the concrete pour. The perforated pipe will be connected to a PVC wall riser below the floor routed upwards through the building and through the building wall or roof. The soil and vapor barrier will be covered with a poured concrete floor. Testing for leaks and confirmation of the vacuum pressure will occur after the concrete floor is poured and the concrete has cured.

Brick Covered Floor Area SSDS

The brick-covered floor section of the SSDS will be built following the standard construction procedures described in the Interim Remedial Measure Work Plan-SSDS (approved by NYSDEC in May 2018). Testing will be conducted by MTI to confirm the ability of the sub-grade below the brick floor to communicate a vacuum and to determine the spacing for extraction points.

SSDS Construction

The construction of the SSDS will be conducted by MTI with assistance from the Flint facility maintenance staff. Flint will be responsible for clearing debris, placement of the vapor barrier, placing gravel as needed, applying spray sealant to the perimeter of the vapor barrier sheeting, seam taping the vapor barrier sheets together and ensuring the vapor barrier remains in good condition (free of punctures and tears). MTI will be responsible for layout and sizing of the PVC perforated and solid wall pipe, inspecting vapor barrier, routing pipe and electrical wire, specifying and installing the exhaust fan, performance testing of the SSDS and preparing an operation and maintenance plan.

Prior to the clearing of the debris in the crawl space and disturbing the existing floor in the work area, Leader Professional Services, Inc. ("Leader") conducted an asbestos inspection and located asbestos containing materials ('ACM") on Building E. Flint arranged for the abatement of the ACM.

The brick floor area where SSDS extraction points will be installed, using either the existing sub-floor utility routes to place a perforated pipe in a similar fashion as used in the basement or constructed using typical construction methods. Typical construction will first bore a nominal 3 to 6-inch diameter hole through the concrete, clearing a space in the soil beneath the concrete, inserting a solid wall 3 to 4-inch pipe and closing the floor around the pipe with gravel and cement. MTI will assess the existing piping beneath the brick floor for suitability as a conveyance for depressurization. The discharge pipe will be routed through the building as previously discussed. This will be a less disruptive alternative. Mechanical equipment and materials selected for this work are provided in the attached Specifications. Figure 4 provides a plan view of the proposed SSDS system.

The exhaust riser will extend to the fan(s) and stack(s) on the roof, routed through the building and outside an exterior building wall to a point where it rises more than 10-feet above the roofline. The stack will be more than 10-feet from openings that are less than 2-feet below the discharge point or 10-feet from HVAC intakes or supply registers.

SSDS Post Construction Confirmatory Testing

Following the completion of the SSDS, the vacuum beneath the crawl space floor, brick floor and basement floor will be verified and reviewed to determine if the system meets the acceptance criteria, is free of leaks and achieves the vacuum goals in the approved Work Plan. If the SSDS fails to meet the vacuum performance criteria beneath the floor(s) or within the exhaust risers/stacks, additional fans will be used to obtain the necessary vacuum capture, vacuum readings and discharge from the stack.

Following confirmation of these results, the indoor air quality will be re-evaluated and the emissions from the SSDS discharge point(s) will be calculated. Proposed locations for the SSDS performance sampling and indoor air samples are shown in Figure 4 and 5. For system monitoring, a U-tube type vacuum gauge and an audible loss of vacuum alarm indicator will be installed on the exhaust stack inside Building E.

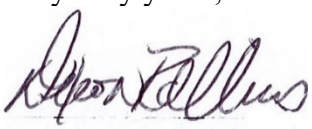
Schedule

The schedule for project is presented in the table below.

Activity	**Duration to Complete**	**Task End Date**
Start Date of SSDS Work		February 5, 2021
Completion of SSDS Installation and Fan Installation	20-days	March 4, 2021
Verification of Vacuum Field in Building E	2-days	March 5, 2021
Completion of Indoor Air Testing, Receipt of Data, and DUSR	25-days	April 9,2021
Preparation of Draft Construction Completion Report	7-days	April 16, 2021

If you have any questions or require further information, please contact me at (585) 764-7187 or dfroll1999@gmail.com.

Very truly yours,



Dixon Rollins, P.E.

Attachments: Figures 1-5

Enclosures: CAMP
HASP
Pictures

cc: Sara Bogardus – NYSDOH
Peter von Schondorf – Leader
Alan Knauf, Esq. – Knauf Shaw LLP
Luke Stodola – Flint Redevelopment

CERTIFICATIONS

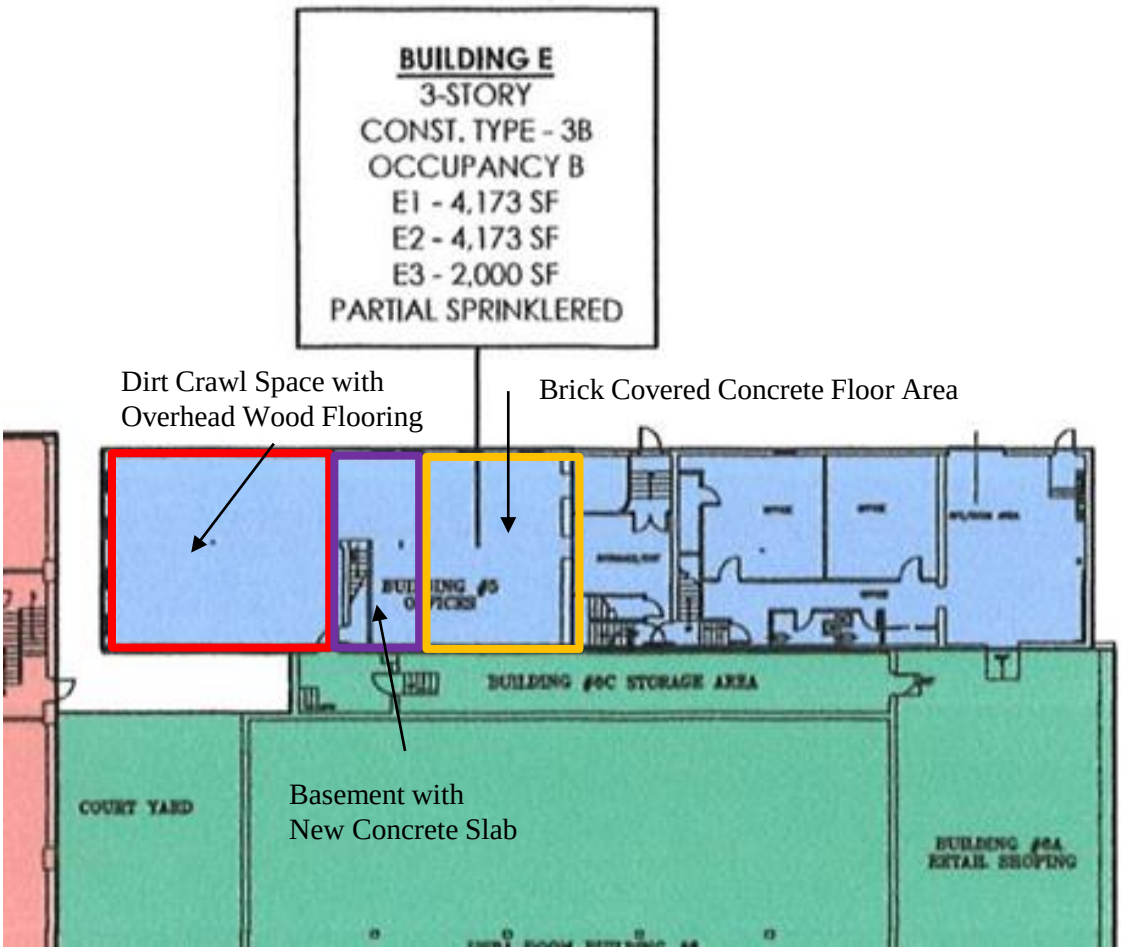
I, Dixon Rollins, certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Interim Remedial Measure report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

059206	03/08/2021	
NYS Professional Engineer #	Date	Signature

It is a violation of Article 130 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 130, New York State Education Law

Specifications



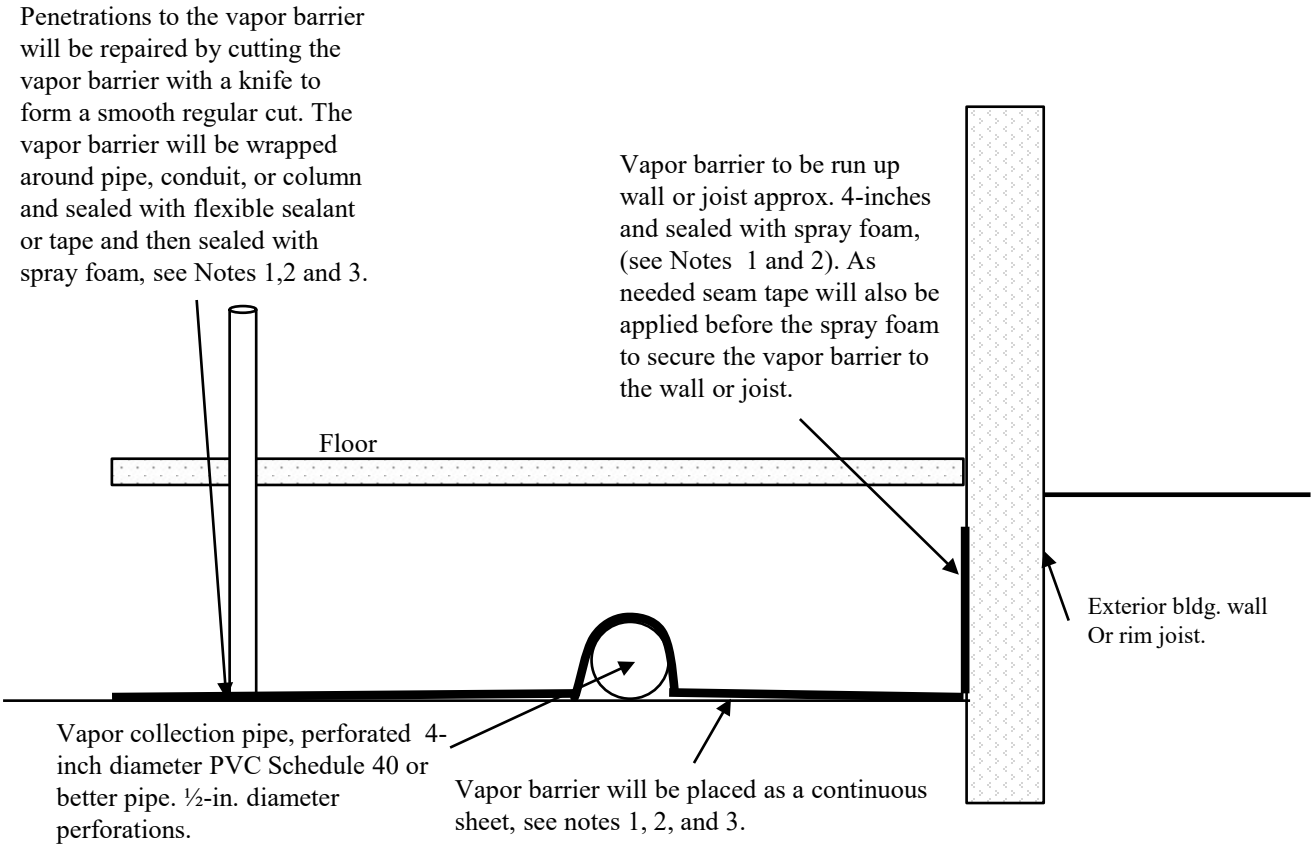
Title: Flooring Conditions Building E 936 Exchange Street Rochester, New York	Project Flint Redevelop.	Drawn PVS	Figure
Prepared For: Flint Redevelopment LLC 2 State Street Rochester, New York	Date 10/07/20	Checked DR	1
	Scale NTS	File Name Typical	

Detail for Vapor Barrier and Collection Pipes in Crawl Space

Notes:

1. Vapor barrier, Vaporblock Plus VBP20 20 mil. Product manufactured by Raven Industries or equivalent product approved by Engineer with ripstop bi-directional nylon re-enforcement.
2. Gaco OnePass Closed cell foam or product approved by the Engineer.
3. Red construction seaming tape, 2-in. or greater width, Home Depot, #M Model 8087CW, or Engineer approved equivalent
4. If vapor barrier must be joined to another sheet a 1-foot overlap will be made. The seam will be taped and sealed with spray foam.

Area where spray foam is applied will be ventilated as recommended by the manufacturer. All applicators and observers will have appropriate health and safety training to be in the work area. Adjacent occupied spaces will be monitored for odors as recommended by manufacturer.

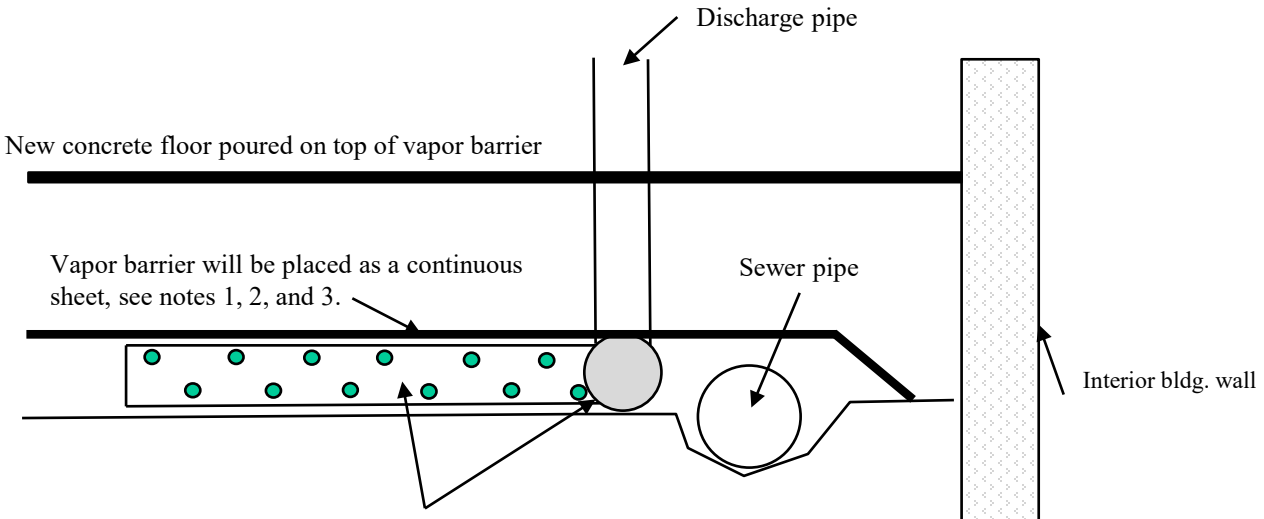


Title: Crawl Space Vapor Barrier Design, Building E 936 Exchange Street, Rochester, New York	Project: Flint Redevelop.	Drawn: NM	Figure: 2
Prepared For: Flint Redevelopment LLC, 2 State Street, Rochester, New York	Date: 10/07/20	Checked: DR	
	Scale: NTS	File Name: Typical	

Detail for Vapor Barrier and Collection Pipes in Basement

Notes:

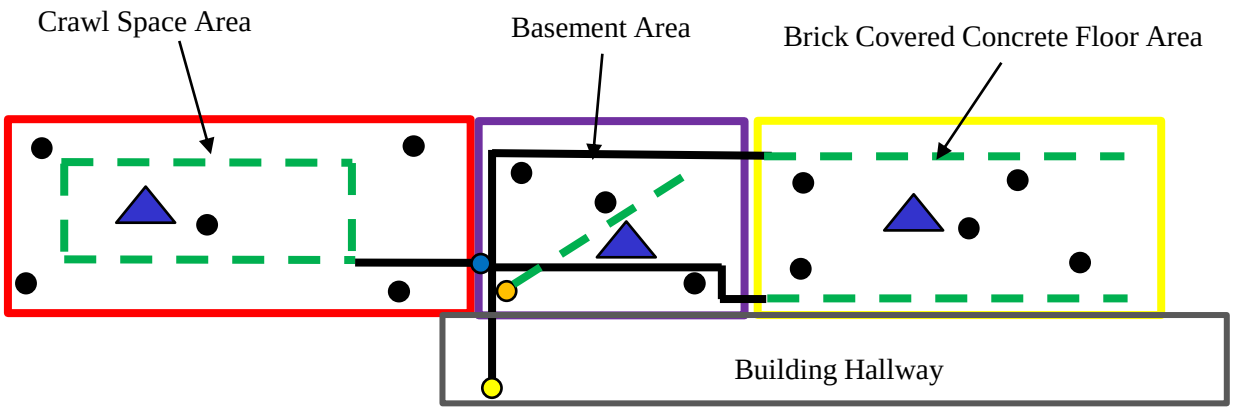
1. Vapor barrier, Vaporblock Plus VBP20 20 mil. Product manufactured by Raven Industries or equivalent product approved by Engineer with ripstop bi-directional nylon re-enforcement.
2. Red construction seaming tape, 2-in. or greater width, Home Depot, #M Model 8087CW, or Engineer approved equivalent
3. If vapor barrier must be joined to another sheet a 1-foot overlap will be made. The seam will be taped.
4. Penetrations to the vapor barrier will be repaired by cutting the vapor barrier with a knife to form a smooth regular cut. The vapor barrier will be wrapped around pipe, conduit, or column and sealed with flexible silicone sealant or tape, see Notes 1 and 2.
5. Vapor barrier to be either pinned to ground or run up the adjacent wall 4-inches and sealed to wall with flexible silicone sealant or seam tape, (see Notes 1 and 2). Joint will be located below the concrete floor.



Vapor collection pipe, perforated 4-inch diameter PVC Schedule 40 or better pipe, ½-in. diameter perforations. Pipe will be surrounded with ¾-inch washed crushed stone.

Title	Basement Space Vapor Barrier Design Building E 936 Exchange Street Rochester, New York
Prepared For	Flint Redevelopment LLC 2 State Street Rochester, New York
Project	Flint Redevelop.
Date	10/07/20
Scale	NTS
Drawn	NM
Checked	DR
File Name	Typical
Figure	3

Exchange Street



Perforated pipe

Solid pipe

Valve connecting basement collection piping

Valve connecting crawl space piping to fan

Riser to fan on roof

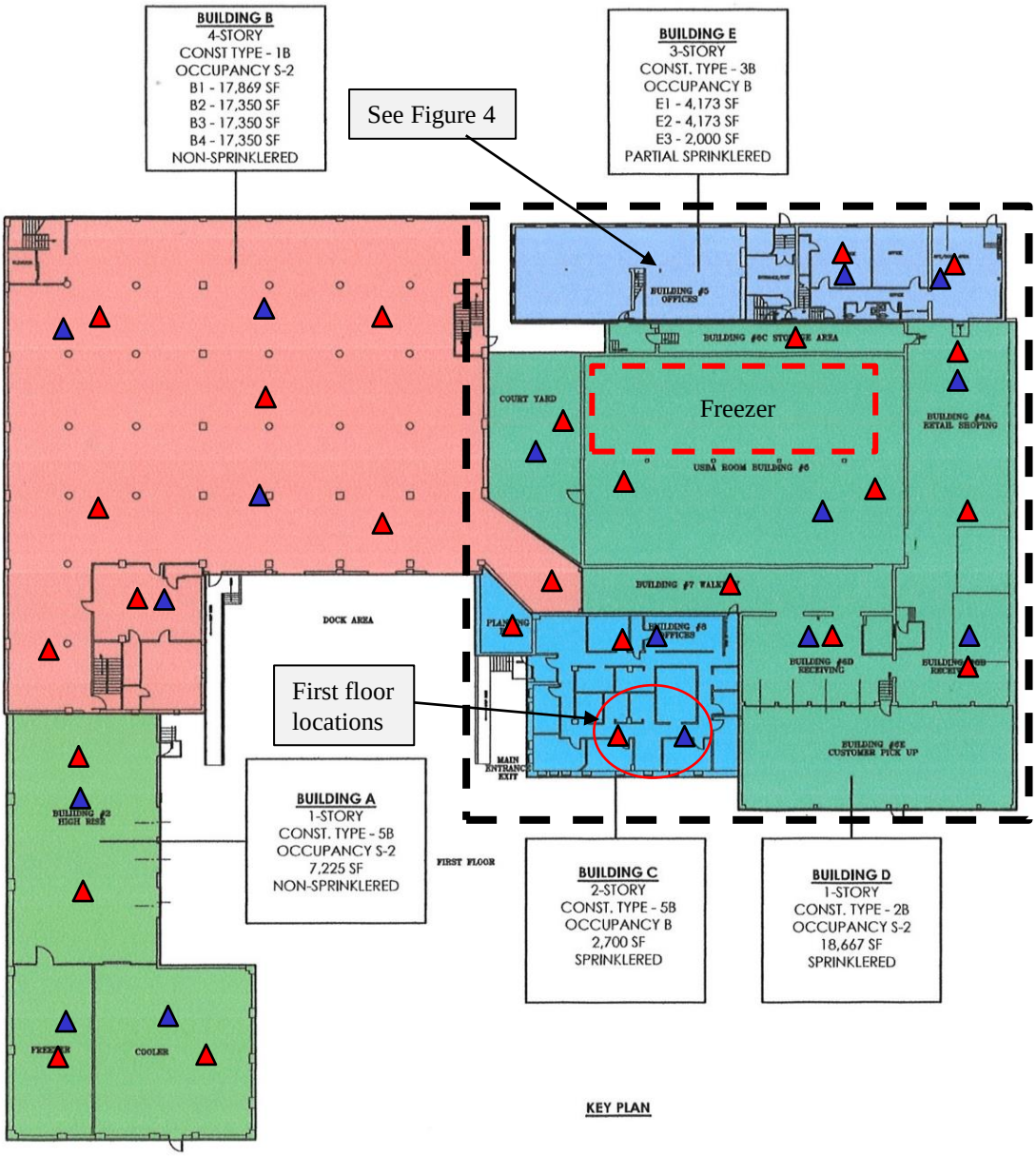
Sampling locations for sub-slab performance vacuum measurements

Indoor Air sampling

Title	Proposed SSDS Design for Building E Building E 936 Exchange Street Rochester, New York
Prepared For	Flint Redevelopment LLC 2 State Street Rochester, New York
Project	Flint Redevelop.
Date	1/3/21
Scale	NTS
Drawn	NM
Checked	DR
File Name	Typical
Figure	4

Exchange Street

Flint Street



▲ Proposed air flow testing location

▲ Proposed indoor air quality testing location

Title:	Proposed Testing Locations 936 Exchange Street Vacuum Oil Refinery 936 Exchange St. and 22 Flint St. Rochester, New York
Prepared For:	Flint Redevelopment LLC 2 State Street Rochester, New York

Project	900.003
Date	12/23/20
Scale	NTS
Drawn	PVS
Checked	DR
File Name	Location Map
Figure	5

Attachment 1
Special Requirements for Air Monitoring
Community Air Monitoring Plan
Vacuum Oil Refinery Site
Site No. C828193
Flint Redevelopment LLC
Rochester, New York

This attachment addresses the special requirements for air monitoring when investigation, design studies, or remediation work is being conducted inside buildings or within 20 feet of potentially exposed individuals (not involved with site work activities), or occupied buildings.

When work areas are within 20 feet of potentially exposed populations or occupied structures, continuous monitoring will be conducted for VOCs, particulates or any other known or suspected hazard (carbon monoxide, carbon dioxide, explosivity, methane, oxygen, etc.). The type of monitoring device and location of the monitoring devices will reflect the hazard and the nearest potentially exposed individuals (whether they are located outdoors or inside buildings) and will consider how the exposure or hazard may occur. Prior to beginning field work outdoors, the location of buildings within 20 feet of the planned activity will be evaluated to locate building ventilation system intakes and windows (and doors) that can be opened, and assessed for locating monitoring devices. Weather conditions and where tenants in the buildings are located during the planned field activities will also be considered.

Prior to conducting activities indoors, the building ventilation system will be evaluated, since ductwork can act as a pathway for contaminants and odors to spread into adjacent rooms and throughout the building. As a result, monitoring will be conducted within the room where activities are being conducted and in adjacent rooms with periodic monitoring of rooms on other floors, stairways, or elevators, if present. In the areas where work will be conducted, all non-project related individuals will be relocated for the duration of the activity.

Depending on the duration of the indoor field activity, different engineering controls will be evaluated. For activities lasting a day or multiple days temporary negative- pressure enclosures may be practical, but for tasks which will take a few minutes or several hours fans or vacuums where the discharge is directed outdoors and, or passed through HEPA filters may be used. The planning stage of the activities will also consider who might be exposed; such as building occupants whose work station is stationary. In such cases where the workers are stationary, scheduling of the work during weekends or nights may be appropriate. Terminating the use of the building's ventilation system and using temporary area wide ventilation systems may also be considered. It is envisioned that for many tasks, small pilot holes can be drilled through the pavement or floor slab to obtain real data to make health and safety decisions on the amount of control that is required. In all cases air monitoring will be conducted regardless of the air quality initially found.

Prior to the start of work involving drilling through pavement, concrete, soil, or floor slabs where

the concrete lays on fill or soil, background readings in the occupied spaces will be measured. Any unusual background readings will be recorded and discussed with the on-site NYSDEC or NYSDOH representative prior to commencement of the work. If total VOC concentrations from the environmental activity being conducted exceed 1 ppm outside of, or next to intake vents of an occupied building, monitoring will be conducted within the structure(s) at the nearest window(s), door(s) and at the ventilation ducts nearest to the outdoor air intake.

If total particulate concentrations related to work activities exceed 150 mcg/m^3 (micrograms per cubic meter) outside of the nearest occupied structures or next to intake vents, work activities will be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m^3 or less at the monitoring point.

Depending upon the nature of contamination and the type of remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide, etc.) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each parameter.

Attachment 2
DER-10 Appendix 1B
Fugitive Dust and Particulate Monitoring

HEALTH AND SAFETY PLAN
For the Construction and Testing of the Sub-slab Depressurization System – Building E

Vacuum Oil Refinery Site
936 Exchange Street – Building E
New York State Department of Environmental Conservation
Site # C828193

Prepared for:

Flint Redevelopment, LLC
1400 Crossroads Building
2 State Street
Rochester, New York 14604

October 2020

Table of Contents

FIGURES

TABLES

Table of Contents

APPENDICES

1.0 Project Personnel Responsibilities

This Health and Safety Plan ("HASP") was prepared for Flint Redevelopment LLC ("Flint") for the environmental projects taking place on the property (936 Exchange Street and 22 Flint Street), also referred to as the site or project site. This HASP was prepared for the construction and testing required of a sub-slab depressurization system ("SSDS"). The project organization is presented in Section 1.5.

1.1 Principal-In-Charge

The Principal-In-Charge for this project is Dixon Rollins, PE. Mr. Rollins will act in a supervisory capacity for all Leader Professional Services, Inc. ("Leader") employees and Flint subcontractors involved with the SSDS and the planned project activities with respect to the site. Mr. Rollins has the authority to direct site operations including the performance of this health and safety plan. The project manager will have the required 29 CFR 1910.120 40-Hour Training and have an updated 8-Hour Refresher Training Certificate.

1.2 Project Manager

The Project Manager/QA/QC Manager is Peter von Schondorf of Leader. If a substitute is required they will be named later. The project manager will have the required 29 CFR 1910.120 40-Hour Training and have an updated 8-Hour Refresher Training Certificate.

1.3 Health and Safety Officer

Mary Ellen Holvey, CIH, the site health and safety officer ("HSO"). Ms. Holvey has the authority to stop work if any operation threatens the health and safety of workers or the public. The HSO may designate a member of the work party for site health and safety responsibilities when the HSO cannot be on site.

1.4 Project Team

Personnel and subcontractors on the project team will be responsible for the completion of the required tasks in the work plan. All personnel on the project team will comply with the site safety plan and ensure the site safety and health officer or supervisor is notified of any unsafe conditions. It is anticipated that the project team will consist of one to three individuals. This may vary due to any changes that occur during the actual site work. All personnel on the project team will have the required 29CFR 1910.120 40-Hour Training and participate in daily tailgate health and safety meetings.

1.5 Project Organization

Project Manager – Peter von Schondorf, Leader
Project Engineer – Dixon Rollins, P.E,
Health and Safety Officer – Mary Ellen Holvey, CIH
Property Manager – Luke Stodola, Flint
SSDS Contractor – Mitigation Tech, Nick Mouganis

2.0 Site Standard Operating Safety Procedures

Standard operating and safety procedures include safety precautions and operating practices that all personnel will follow. They include:

2.1 Personal Precautions

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in any area designated contaminated.

- Hands and face must be thoroughly washed upon leaving the work area.

- Whenever decontamination procedures for outer garments are in effect, the entire body should be thoroughly washed as soon as possible after the protective garment is removed.

- No facial hair, which interferes with a satisfactory fit of the mask-to-face seal, is allowed on personnel required wear respirators. Personnel will use the negative pressure fit test prior to each use of the equipment. This requirement is only applicable if air monitoring indicates there is a potential hazard from volatile organic compounds (once the floor is penetrated or during testing when off gas is created) or dust during the drilling of concrete or other materials. Engineering controls can be used to eliminate the need for wearing respirators.

- Contact with contaminated or suspected contaminated surfaces should be avoided. Whenever possible, do not walk through puddles, leachate, discolored surfaces, kneel on ground, lean, sit or place equipment on drums, containers, or the ground.

- Medicine and alcohol can enhance or mask the effects from exposure to toxic chemicals. Prescribed drugs should not be taken by field personnel where the potential for absorption, inhalation, or ingestion of toxic substances exists unless specifically approved by a qualified physician. Alcoholic beverages should be avoided, in the off-duty hours, during the project.

- Electrical safety, the project building is an active building and the presence of live electrical wiring is present. Each contractor is responsible with working with the Flint to identify where electrical panels for each section of the building are located and to take appropriate safety precautions consistent with OSHA. Drilling or cutting through walls, floors and ceilings may require inspection or remote sensing to determine the location of hidden conduits, wires, pipes, etc.). Before any wiring is connected to a live electrical panel all work will be inspected by a licensed electrician to determine if wiring was done correctly and to code. The electrician will also perform the need procedures to make the panel safe before making final connections. This may include terminating the electrical service to portions of the building or locking and tagging out circuits.

- Elevated work safety. Portions of the work to be performed will be conducted from ladders, lifts and, or platforms. All contractors and workers working from any height above 6-feet on a ladder, lift, or platform will be familiar with the use and operation of the equipment and be responsible following the applicable citations in OSHA. This includes inspection of equipment, training, and the use of other safety equipment (harnesses, lanyards, etc.).

2.2 Operations

- All personnel going on-site must be adequately trained and thoroughly briefed on anticipated hazards, equipment to be worn, safety practices to be followed, emergency procedures and communications.

- Any required respiratory protection and chemical protective clothing must be worn by all personnel going into areas designated for wearing protective equipment.

- Personnel on-site must use the buddy system when wearing respiratory protection. As a minimum, one person, suitably equipped, is required as safety backup during initial entry.

- Visual contact must be maintained between pairs on-site and safety personnel. Entry team members should remain together to assist each other during emergencies.

- During continual operations, on-site workers act as safety backup to each other. Off-site personnel provide emergency assistance.

  Communications using radios, hand signals, signs, or other means must be maintained between team members at all times.

- Personnel and equipment in the contaminated area should be minimized to reduce the potential for cross contamination and the generation of decontamination waste.

- Work areas for various operational activities will be established by the project manager, or his designee, and the HSO.

- Procedures for leaving a potentially contaminated area must be planned and implemented prior to going on-site. Work areas and decontamination procedures have been established based on expected site conditions and are described in the project Work Plan. This section applies only if the Site Supervisor identifies the area as being potentially contaminated. In general, any floor penetration may encounter contaminated materials, but field screening will be used to confirm the necessity for use of PPE.

3.0 Health and Safety Hazards

The potential hazards that may be experienced during the performance of the Work Plan include: chemical exposures from contact with contaminated soil; potential for disturbing asbestos containing materials, hazards inherent to working with electrical equipment, drilling concrete and other building materials, and working on ladders or other lifts and platforms above the floor or roof. This is also an active commercial property, the work area will be excluded to tenants, but the exterior portions of the property will have vehicles enter and leave the property. As with all work areas slip, trip and fall hazards, and heat stress from performing heavy work are a concern. Workers will be encouraged to use the "buddy-system" while lifting heavy tools or items to reduce early fatigue. The Site HSO will monitor the work area before and during each work day.

Table 1 lists potential health and safety hazards that may be encountered at the Site based on general site tasks. This list has been compiled based on the scheduled activities and potential site conditions.

4.0 Personal Protective Equipment

4.1 Protective Equipment

All contractors will provide appropriate personal safety equipment and protective clothing to their workers as needed. Everyone will be properly trained in the use of this safety equipment before the start of field activities. Safety equipment and protective clothing shall be used as directed by the Project Manager and/or Site HSO. All such equipment and clothing will be cleaned and maintained in proper condition by the personnel. The Site HSO will monitor the maintenance of personnel protective equipment to ensure proper procedures are followed.

The required personal protective equipment designated by this Health and Safety Plan will be worn at all times. Levels of protective clothing and equipment are not expected to exceed Level C. Results from the previous air and sub-slab sampling and on-site readings will be used to set action levels and levels of personal protection.

The personal protective equipment levels designated below are in conformance with USEPA criteria for Level A, B, C, and D protection. All respiratory protective equipment used will be approved by National Institute for Occupational Safety and Health ("NIOSH") and Mine Safety and Health Administration ("MSHA"). The conditions within the proposed work areas are not well known, but monitoring will be completed when the floor is penetrated to evaluate each work area. It is anticipated that the level of respiratory protection will be Level D.

4.2 Level C Protection

A. Personal Protective Equipment

- Half-face, air-purifying, canister-equipped respirator (MSHA/NIOSH approved) for acid/gas/organic vapor with particulate filter
- Chemical-resistant clothing (overalls and long sleeved jacket; coveralls or hooded, one piece or two-piece chemical-splash suit; disposable chemical resistant one-piece suits)
- Work Clothes (Long Shelve Shirt and pants)
- Gloves (outer), chemical resistant
- Gloves (inner), chemical resistant
- Boots (inner), leather work shoe with steel toe and shank
- Boots (outer), chemical resistant (disposable*)
- Hard Hat (face shield*)
- Safety Glasses or goggles
- Taping between suit and gloves, and suit and boots
- High visibility vest

*Optional

B. Criteria for Selection

In order to use Level C protective equipment, the following criteria must be met:

- The measured air concentration of identified substances will be reduced by the respirator to, at, or below the substance's Threshold Limit Value (TLV)/Permissible Exposure Limits (PEL) and the concentration is within the service limit of the canister.

- Atmospheric contaminant concentrations do not exceed IDLH levels.

- Atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect the small area of skin left unprotected by chemical resistant clothing.

4.3 Level D Protection

A. Personal Protective Equipment

- Work Clothes (Long shelve shirt and pants)

- Leather, steel-toed boots

- High visibility vest

- As required:

    - Hard hat
    - Safety glasses/goggles
    - Hearing protection
    - Gloves

B. Criteria for Selection

Meeting all of these criteria permits the use of Level D Protection.

- Measured air concentrations of identified substances are below the substances Permissible Exposure Limit (PEL) or TLV.

- Oxygen content is > 19.5%.

- No unknown substances are present.

5.0 Decontamination

It is expected that the usual level of protection for the Site will be Level D. Level C will be used when potential exposures to contaminants justify increased protection. A decontamination zone will be set up at the entrance of each work zone. Based on the level of expected exposure to contaminants, the following decontamination protocol will be used.

If asbestos is present then licensed workers will either conduct the work (drilling floor or ceiling penetrations) or the asbestos will be abated prior to the completion of this work.

5.1 Personnel Decontamination

It is expected that a minimum of Level D decontamination will be continually in effect at the site. On these occasions when higher levels of protection are required, appropriate decontamination procedures will be used. The extent of the decontamination procedures will be at the discretion of the site Health and Safety Officer. The following is only applicable to chemical contamination found beneath the floor of the building. Decontamination for asbestos workers is a highly regulated activity and if needed will be an addendum to this Health and Safety Plan.

In general, chemical decontamination involves removing potentially contaminated soil from gloves and clothing, followed by scrubbing with a non-phosphate soap/water solution and clean water rinses. As a general rule, protective clothing will be removed in the reverse order as it was put on: gloves and boots off first, followed by protective suits and then breathing apparatus. As different types of waste are generated, the team members will segregate the waste into different drums. Potentially contaminated soil and concrete will be placed into one drum and decontamination waste fluid into a second drum. All disposable items will be placed into a dry goods drum.

Certain parts of contaminated respirators, harness assemblies and leather or cloth components, are difficult to decontaminate. If grossly contaminated, they may have to be discarded. Rubber components can be soaked in soap and water and scrubbed with a brush. In addition to being decontaminated, all respirators, non-disposable protective clothing and other personal articles must be sanitized before they can be used again unless they are assigned to individuals. The manufacturer's instruction should be followed in sanitizing the respirator masks. The Site HSO will be responsible for supervising the proper protective equipment.

All decontamination wastewaters will be collected and disposed of according to applicable regulations. This disposal will be done at the direction of the Project Manager.

5.2 Equipment Decontamination

Decontamination will be applicable to all activities on site and be completed in the contamination reduction zone ("CRZ") section of the exclusion zone. All equipment (i.e. tools, monitoring equipment, etc.) will receive initial decontamination. All equipment that has been in contact with contaminants shall be stored in an area within the limits of the existing exclusion zone or shall be thoroughly decontaminated prior to leaving the area. Decontamination will consist of cleaning of the working surfaces exposed to contaminants or as necessary, the entire piece of equipment to the satisfaction of the Project Manager or the HSO. Decontamination will be a multi-process task, first all loose dirt or other foreign materials will be removed from the equipment surface. Scrubbing with a synthetic wire brush may be required to remove materials that adhere to the surfaces. After the loose material is removed, the equipment will be washed using a detergent and water solution and a wire brush followed by successive rinses with clean water. Washing with hot water from a power washer may be substituted for a synthetic wire brush.

All contaminated equipment will be stored on plastic sheeting in such a manner that decontamination fluids can be collected and disposed of in accordance with applicable regulations. Clean equipment not in use will be covered with plastic and stored at a designated storage area.

Air monitoring equipment will be protected with an outer coating (i.e. plastic), if there is a potential for the equipment to come into contact with potentially contaminated materials prior to the initial entry into the exclusion zone. Decontamination will then consist of removal of the protective coating in a manner that will not contaminate the air monitoring equipment.

6.0 Site Air Monitoring

Field activities associated with the work tasks at the Site may pose hazardous conditions, such as the release of hazardous substances into the worker's breathing zone. These substances may be in the form of vapors, dusts, or mists that can enter the body through ingestion, inhalation, or direct skin or eye contact. If the HSO, relying on instrument observations and odor, determines that a condition exists in which workers may be exposed to airborne hazardous materials, the HSO will upgrade the team's level of respiratory protection and complete chemical specific monitoring.

The following paragraphs describe the monitoring parameters to be evaluated during the start of the project. As the project continues, other site-specific

monitoring will be required based on site conditions and experience at the site. Because this project will be completed indoors where most work surfaces will be covered with concrete, wood, plasterboard or plaster and lathe, or roofing materials, there is a concern about dust being an issue. Potential combustible concentrations of petroleum related compounds have not been identified to date as a concern in the soil or groundwater, and this concern is probably less of a factor since most sub-slab work will be only to a depth of 1-foot or less. As a result the necessity for oxygen and combustible gas monitors is not supported. All instruments to be used during site activities will meet the established requirements set forth by OSHA, MSHA, NIOSH, and state agencies where applicable.

Field instrument measurements will be made when floor penetrations are made. If no elevated readings are found, then measurements will stop. If elevated readings are found, compound specific detector tubes will be used to determine the contaminant concentration. As needed, monitoring of the work zone will take place. Any active vacuuming or removal of sub-slab air will be measured or vented outside. The discharge of the testing off gas will also be completed to determine if there is a hazard present and if off gas filtering is needed.

If dust exceeds thresholds in the work area the HSO/Project Manager will instruct the contractor to take an appropriate level of corrective action. If dust from the exceeds project or OSHA thresholds, the HSO seek a remedy, and if needed, they will stop work until it can be corrected. As a result, air monitors will be located in the work areas where drilling or cutting of the concrete is taking place.

Based on preliminary soil and groundwater sampling data, it is anticipated that organic vapors will range from 0 to 250 ppm in the sample headspace, but no VOCs were identified in the breathing zone. Nuisance odors are noticeable and the odor is that of petroleum compounds. Organic vapor concentrations will be the primary measure for upgrading or downgrading worker respiratory protective equipment and implementing additional precautions or procedures (See Table 2, Action Levels).

All site monitoring will be conducted by or under the direction of the HSO. All readings obtained will be recorded in a dedicated site notebook maintained by the Project Supervisor or designee. The HSO or the Project Manager will maintain all monitoring instruments throughout the Site work to ensure their reliability and proper operation.

7.0 Action Levels

Action levels have been established for the levels of personal protective equipment. Table 2 lists the action levels, airborne concentrations and their respective personal protection for unknown sources of organic vapor concentrations. Section 8.0 discusses the minimal personal protection required for

specific Site activities based on current information. Changes to these specified levels are dependent on the result of air monitoring as outlined below.

8.0 Site Activities and Associated Personnel Protective Requirements

The levels of protection have been assigned anticipated Site activities (below) and represent a best estimate of exposure potential and protective equipment needed for that exposure. The site HSO will revise those levels of protection, up or down, based on air monitoring results, and on-site assessments of actual exposures.

- *Level D* - General site work with limited physical contact with contaminated soil by personnel. If workers must pick up contaminated tools or a soil samples, protective chemical resistant gloves will be worn. Respiratory protection is not required because contaminant action levels cited on Table 2 are not exceeded.

- *Modified Level C* - General site work where personnel will be in direct contact with contaminated soil or groundwater, but respiratory protection is not required because contaminant action levels cited on Table 2 are not exceeded.

- *Level C* - General site work where personnel will be in direct contact with contaminated soil or groundwater, and organic vapor measurements or dust measurements are greater than those action levels cited on Table 2.

9.0 Contingency Plan

The Project Manager or HSO is responsible for implementing the Contingency Plan whenever there is either a threat to human health or an environmental hazard. Possible Contingency Plan situations include actual or imminent fires, explosions or spills.

The individual discovering the emergency is to notify the Project Manager/HSO/Property Manager who will then notify the tenants, the appropriate organizations as described in Table 3, and the property owner.

9.1 Assessment

The Project Manager/HSO/Property Manager are responsible for ascertaining any possible health or environmental hazards and determining the need for evacuation and notification of the proper authorities.

9.2 Control Procedures

The team member or site employee discovering a fire, explosion, spill or other emergency situation is responsible for notifying the Project Manager or HSO and

as much as possible, provide the information listed in Table 3.0. The Project Manager or HSO will assess the situation and notify the Flint representative to determine if it can be adequately handled by yard personnel or if additional assistance is needed.

Before any team member attempts to extinguish a fire, clean up and contain a spill or take any action, he or she must be aware of the properties of the material involved and its associated hazards. All team members are familiarized with this information during the initial tail grate safety meeting and are instructed on the proper protective clothing to be worn in such a situation.

Table 3 includes a list of the organizations that are available to provide emergency assistance.

9.3 Fire and/or Explosion

The most serious emergency that could be faced at the site would be a chemical release or major fire. In the event of a fire or explosion, the Project Manager or HSO should be notified as described in the preceding section. The Project Manager or HSO are responsible for determining the requirements for outside assistance as well as the necessity for site evacuation.

The Fire Department should be notified immediately once a fire is detected. Small fires can be extinguished using a fire extinguisher located at the site. Larger fires will require the assistance of the fire department. The fire department will be informed of the nature of any fire requiring the use of a fire extinguisher or the presence of hazardous wastes at the site.

9.4 Spill and/or Material Releases

The procedure for notification of the Project Manager/HSO are described in Section 9.2. Immediately following the discovery of a spill, the NYSDEC will be notified. In addition, the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (“CERCLA”, or “Superfund”) requires that the National Response Center be notified of any release in excess of the reportable quantity of a listed material.

Spill cleanup poses no danger under normal conditions. The first step is to determine the source of the spill and correct it. This may involve patching a leaking drum, closing a valve or turning off a pump. In the event of a small spill, absorbent granules or sorbent pads will be utilized to soak up the spilled material. The granules would then be swept up and containerized in U.S. Department of Transportation approved drums.

In the event a large spill occurs, the Site spill response contractors, Trec Environmental or Sun Environmental will be called for assistance and NYSDEC

will be notified. Any spent materials used to contain or cleanup a spill will be placed in DOT approved drums.

Any contaminated structures and equipment must be properly cleaned before it is returned to service. This procedure will include the use of pressure washers and sorbent materials. All affected floors and equipment, pumps and hoses, will be cleaned with an appropriate detergent and rinsed with clear clean water.

10.0 Work Areas

The Project Manager/HSO and, if needed, the Contractor(s), will clearly layout and identify work areas in the field and will limit equipment, operations and personnel as defined in the following areas:

a) "Exclusion Zone" - This area will include the immediate area around floor penetrations and any open pipe exposing the atmosphere or indoor air to sub-slab vapors. These will be areas a potential chemical exposure problem to workers. The level of personnel protective equipment required in these areas will be determined by the Site HSO. The area will be clearly delineated from the decontamination area. As work within the hazardous zone proceeds, the delineating boundary will be relocated as necessary to prevent the accidental contamination of nearby people and equipment. The Exclusion Zone will be delineated by plastic caution tape, barriers, or fencing (e.g. chain link, snow, or orange plastic fencing).

b) Contamination Reduction Zone (CRZ) - This zone will occur where waste materials are stored and where decontamination and safety equipment are placed so it can be accessed by workers. This area will be clearly delineated by plastic tape or signs.

c) Support Zone ("Clean" Area) - This area is the remainder of the work site and project site. The "Clean" area will be clearly delineated and procedures implemented to prevent active or passive contamination from the work site.

The function of the "Clean" area includes:

1) An entry area for personnel, material, and equipment to the "Contaminated Zone" area of site operations through the neutral zone.

2) An exit for decontaminated personnel, materials, and equipment from the "CRZ" area of site operations; and

3) A clean storage area for safety and work equipment.

11.0 Safety Equipment and Protective Clothing Specifications

All project team members and contractors will have the following safety equipment:

- Air purifying respirator with appropriate cartridges
- All protective clothing including, but not limited to:
  - Tyvek and washable PVC rain suits
  - Gloves
  - Boots
- Safety glasses
- Hearing protection
- Hard hats
- High visibility vest.

12.0 Air Emissions Control

The Project Team and contractor shall have on-site all equipment and personnel necessary to monitor and control air emissions.

It is not expected that air emissions will pose a significant risk to health and safety or to the environment due to the nature of the contaminants on this project.

The Project Manager/HSO will make the determination for requiring monitoring and control of air emissions with the assistance of the following monitoring equipment and the action levels cited on Table 2. It is anticipated that an organic vapor analyzer and chemical specific detection tubes will be used to measure the concentration of most organic contaminants in the air. These two measurement devices will handle the bulk of the real-time contaminant monitoring.

13.0 Additional Health and Safety Comments

1) The HSO will ensure that all safety equipment and protective clothing is kept clean and well maintained.

2) All prescription eyeglasses in use on this project will be safety glasses and will be compatible with respirators. No contact lenses shall be allowed on-site.

3) All disposable or reusable gloves worn on the site will be approved by the HSO.

4) During periods of prolonged respirator usage in contaminated areas, respirator filters will be changed upon breakthrough and at a minimum, filters will be changed daily.

5) All personnel protective equipment used on-site will be decontaminated or disposed of at the end of the workday.

6) All air purifying respirators will be individually assigned and not interchanged between workers without cleaning and sanitizing.

7) Any team member or Contractor unable to pass a fit test as a result of facial hair or facial configuration shall not enter or work in an area that requires respiratory protection.

8) Team members found to be disregarding any provision of this plan will, at the request of the HSO, be barred from the project.

9) Used disposable outerwear will be removed upon leaving CRZ and will be placed inside disposable containers labeled for that purpose. These containers will be stored at the site at the designated staging area. Leader will be responsible for proper disposal of these materials at the completion of the project.

10) Tyvek or PVC rain suits that become torn or badly soiled will be replace immediately.

11) Eating, drinking, chewing gum or tobacco, smoking, etc., will be prohibited in the exclusion zones and CRZ zones.

12) All personnel will thoroughly cleanse their hands, face, forearms, and other exposed areas prior to eating, smoking, or drinking.

13) All personnel will wash their hands, face, and forearms before using toilet facilities.

14) No alcohol, firearms, or drugs (without prescription) will be allowed on-site at any time.

14.0 Miscellaneous Health and Safety Items

14.1 Heat Stress

A heat stress is a serious condition caused by a combination of ambient temperature, the individual's physical condition, the physical activities individuals are conducting, and clothing being worn. The following guidelines are a part of this plan.

Pervious Clothing: When the ambient indoor air temperature rises above 80º F. with a humidity of more than 40% the Site HSO will begin to monitor employees for signs of heat stress. Monitoring will take the form of measuring oral temperatures. The air temperature will be measured two times a day when the outdoor air temperature is expected to be above 75º F or as determined by the HSO.

Impervious Clothing: When the ambient indoor air temperature rises above 60º F. the HSO will begin to monitor employees for signs of heat stress. The HSO will take the heart rate of each worker at the beginning of the work day if outdoor temperatures expect to exceed 80ºF and 40% humidity. Monitoring will take the form of measuring oral temperatures and checking an individual's verbal and physical responses. As the outdoor air temperature rises above 75º F. and has a humidity level of more than 40% oral temperatures will be measured at the direction of the HSO and, or every hour during work periods.

In the event that the oral temperature at the beginning of the rest period drops below 99º F. and the heart rate is more than 110 beats per minute, the employee will be decontaminated and be advised to proceed to a cooler areas and remove protective clothing or wet clothing, and to drink cool fluids. At the end of the rest period, the oral temperature will be taken again to ensure that the employee's temperature is below 98.6º F and the heart rate is below 110 beats per minute. If the oral temperature has remained above 99º F. or the heart rate is above 110 beat per minute, the employee will be advised to extend the rest period. However, if the oral temperature does not lower after the extended rest period, the employee will be immediately sent to consult with a physician.

A fluid/electrolyte replacement will be used as necessary to minimize fluid loss. This liquid supplement will be stored in a cooler at the edge of the decontamination zone in plastic squeeze bottles. The plastic bottles will be marked with individual's names. Disposable cups with lids and straws may be used in place of the squeeze bottles.

Prior to drinking within the decontamination zone, the project personnel shall follow the following decontamination procedures:

1) Personnel shall wash and rinse their outer gloves and remove them.

2) Personnel shall remove their hard hats and respirators and place on a table.

3) Personnel shall remove their inner gloves and place them on a table.

4) Personnel shall wash and rinse their face and hands.

5) Personnel shall carefully remove their personal bottle or cup from the cooler to ensure that their outer clothes do not touch any bottles, cups, etc.

6) The used bottle or cups will not be returned to the cooler, but will be placed in a receptacle or container to be cleaned or disposed of.

7) Personnel shall replace their respirators, hard hats, gloves, and tape gloves prior to re-entering the hazardous zone.

14.2 Retention On-Site

During the course of the project, it is expected that waste materials will be retained on-site until removed by Flint. All waste containers will be labeled according to DOT and other regulations where appropriate. Waste materials, both drummed and bulk, will be stored in designated areas. All waste drums will be sealed before they are moved from the exclusion zone.

14.3 Equipment and Material Decontamination

All equipment and material used in this project shall be thoroughly decontaminated using procedures described in the project Work Plan or in this plan before it is removed from the site. Debris and contaminated clothing and tools which cannot be decontaminated, shall be disposed of.

14.4 Communications

Telephone communications will be available at all times on the site. A telephone will be maintained with the Project Manager .

Communication procedures are outlined in the Contingency Plan in Section 9.0 of the HASP.

Table 3 contains an emergency call list and will be posted in one of the team member's vehicles, and provided to Rainbow International of Monroe, the only tenant with employees and an office on the Site.

14.5 On-Site Hygiene Facilities

The office lavatories will be available for decontaminated team members and subcontractors. Water will be available in the CRZ for decontamination.

A first aid kit will be kept in the support zone at the Site at all times.

15.0 Tailgate Safety Meetings

The HSO or the designated representative will conduct daily tailgate safety meetings each workday and will be mandatory for all project personnel. The meetings will provide information on the anticipated site conditions and the work to be completed that day. Appendix A contains a form for documenting Safety Meetings. Completed forms will be retained in Leader's project file.

Additional safety meetings will be held on an as required basis.

16.0 Medical Surveillance

All team members and subcontractors that may potentially have contact with hazardous substances at concentrations above the permissible exposure level (PEL) will be part of a Medical Monitoring Program as outlined in 29CFR 1910.134 and 29CFR 1910.120.

TABLE 1

KNOWN AND POTENTIAL HEALTH AND SAFETY HAZARDS
VACUUM OIL REFINERY SITE
ROCHESTER, NEW YORK

Known and Potential Site Hazards: *Chemical* (See Appendix B for information sheets and/or MSDSs)

1) Contaminants

- Petroleum
- Perchloroethylene
- Trichloroethylene
- Arsenic
- Cadmium
- Chromium
- Lead
- Mercury

2) Review of Symptoms

Symptoms of exposure to hazardous wastes, in particular to the contaminants above, will be reviewed with all site personnel. Symptoms of both acute and chronic exposures will be covered. In addition, the on-site coordinators will be advised to watch for outward evidence of changes in workers' health. These outward symptoms may include fatigue, tremor, insomnia, skin irritations or discoloration, eye, nose and throat irritation, cough, or abdominal soreness.

Note the number and nature of potential contaminants mandate that contact of waste materials with the exposed skin must not be allowed to occur under any circumstances.

Known and Potential Site Hazards: *Non-Chemical*

- General Physical Hazards. Since the project will take place at an active truck terminal, the physical hazards include:

  Vehicular traffic
  Sharps (metals and glass)
  Underground and aboveground utilities
  Slip, trip, and fall
  Electrical shock

TABLE 2

ACTION LEVELS
VACUUM OIL REFINERY SITE
ROCHESTER, NEW YORK

Unknown Organic Vapor Concentrations (ppm)[1]	Level of Protection
< 1	Level D
≥ 1 < 10	Level C
>10	Level B
Anticipated Chemical Contaminants[2]	**Time Weight Average (ppm)**
Petroleum (Gasoline)	300
Metals (as Mercury dust)	<0.025 mg/cubic meter
Trichloroethylene or Perchloroethylene	100

Note:

1 Unknown organic vapor action levels are based on the lowest known exposure limits for chlorine (PEL = 1 ppm, IDLH = 30 ppm). The air purifying cartridge limitation for chlorine is 10 ppm.

TABLE 3

EMERGENCY CALL LIST
VACUUM OIL SITE
ROCHESTER, NEW YORK

Fires - Spills

Rochester City Fire Department	911

Public Services

Rochester City Police Emergency	911

Emergency Medical Services

URMC - Strong Hospital	(585) 275-4551

SPILL NOTIFICATION

Agencies

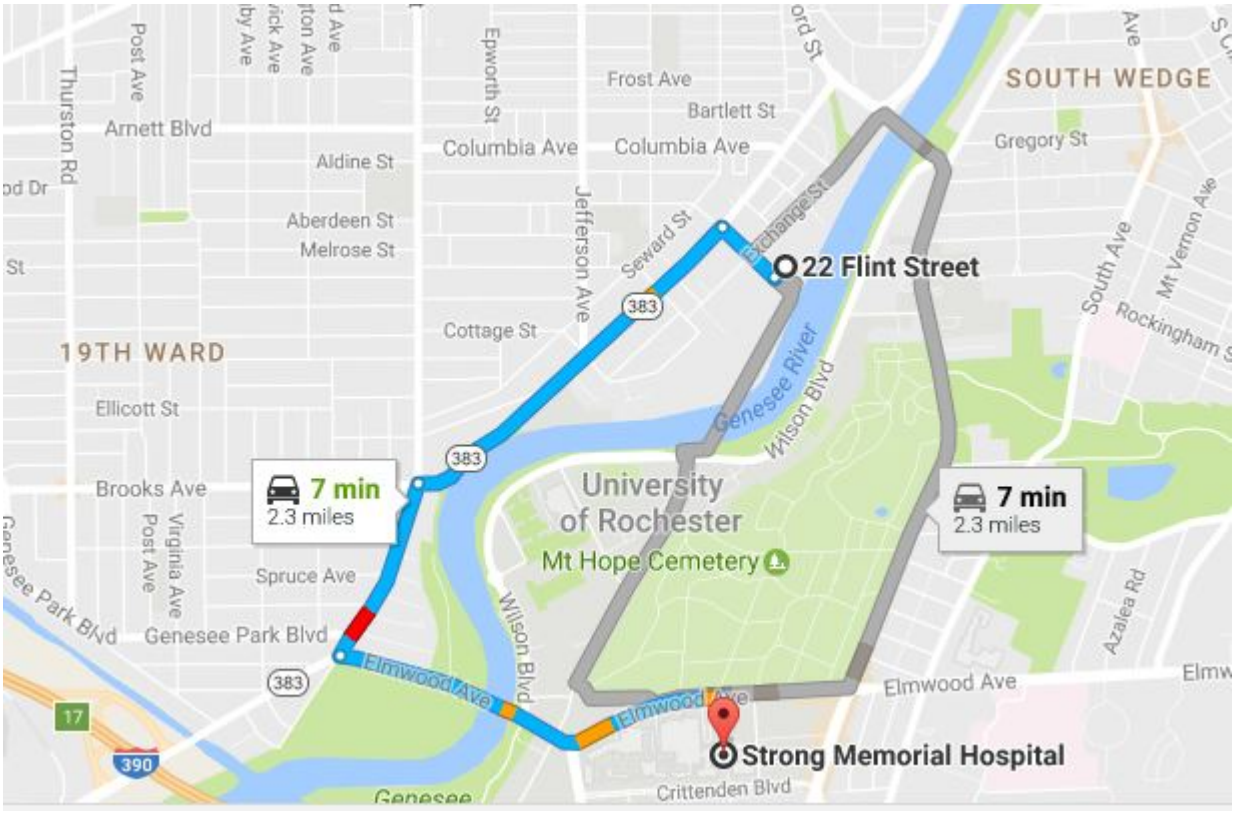
National Response Center	(800) 424-8802
NYSDEC Spill Hotline	(800) 457-7362

Provide the following information to the agencies:

- Name of person making the call
- Company and location
- Nature of fire (fire calls only)
- Name and estimated amount of chemical released to the environment (spills only)
- Time of release
- Remedial action taken to correct the problem

Site Contacts

Frank Sowers, P.E. (NYSDEC Project Manager)	(585) 226-8193
Dixon Rollins, P.E.	(585) 764-7187
Peter von Schondorf (Leader Professional Services-Rochester)	(585) 248-2413
Luke Stodola – Flint Redevelopment	(585) 857-2634



1. Head northwest on Flint Street toward Exchange Street.
2. Turn left on to Plymouth Avenue (second intersection)
3. Turn left on to Genesee Street
4. Use two left lanes and turn left on to Elmwood Avenue
5. Hospital is on the right at 601 Elmwood Avenue

Strong Hospital 585-275-2100

Title	Route to Hospital 936 Exchange Street and 22 Flint Street Rochester, NY
Prepared For	Flint Redevelopment, LLC 2 State Street Rochester, New York
Project	900.003
Date	10/16/20
Scale	Not to Scale
Drawn	PVS
Checked	DR
File Name	Hospital Map
Figure	1

APPENDIX A

SAFETY MEETING SIGN-OFF SHEETS

SAFETY MEETING ATTENDENCE SIGN-OFF SHEET

Person/Company	Date

Current Conditions
Sub-slab Depressurization System
Vacuum Oil Refinery

Top of basement wall (north) looking west.

Top of basement wall (north) looking east.

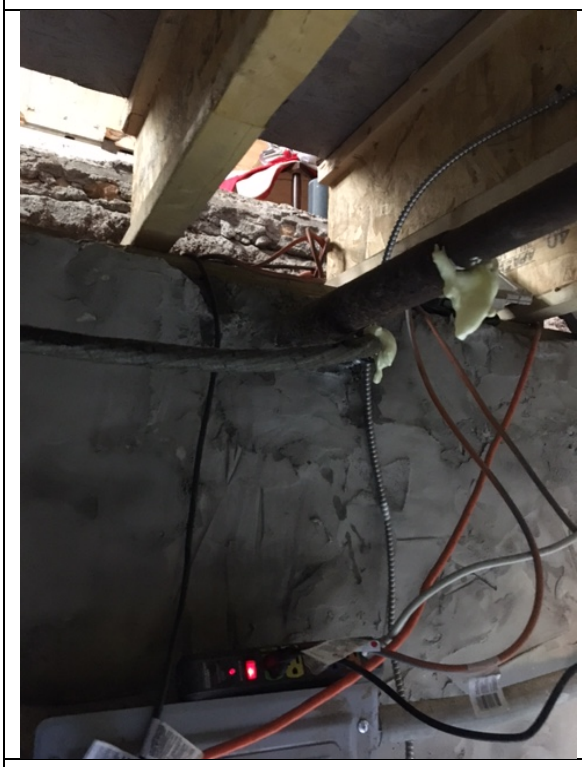
Test extraction hole, north side of Building E through brick floor slab.

SSDS riser and valve from basement area intake pipe.

Current Conditions
Sub-slab Depressurization System
Vacuum Oil Refinery

Basement floor in progress of being sealed and coated.

Basement wall, west side. Newly pointed.



North basement wall joining basement with brick floor and slab floor.

Floor on the west side of basement. Sealed and coated.

Current Conditions
Sub-slab Depressurization System
Vacuum Oil Refinery

View of crawl space beneath the south side of the basement. Utility and SSDS pipe in view. Looking south.