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APPENDIX B
FEMA FIRM Panel

DRAFT

necessary detail in areas subject to flooding; particularly from local drainage sources of similar size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Pennsylvania State Plane North Zone (FIPS zone 3701). The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NNGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base Map information shown on this FIRM was derived from PAMAP Program, Bureau of Topographic and Geologic Survey, Pennsylvania Department of Conservation and Natural Resources at a scale of 1:2,400 from photography dated 2006 or later.

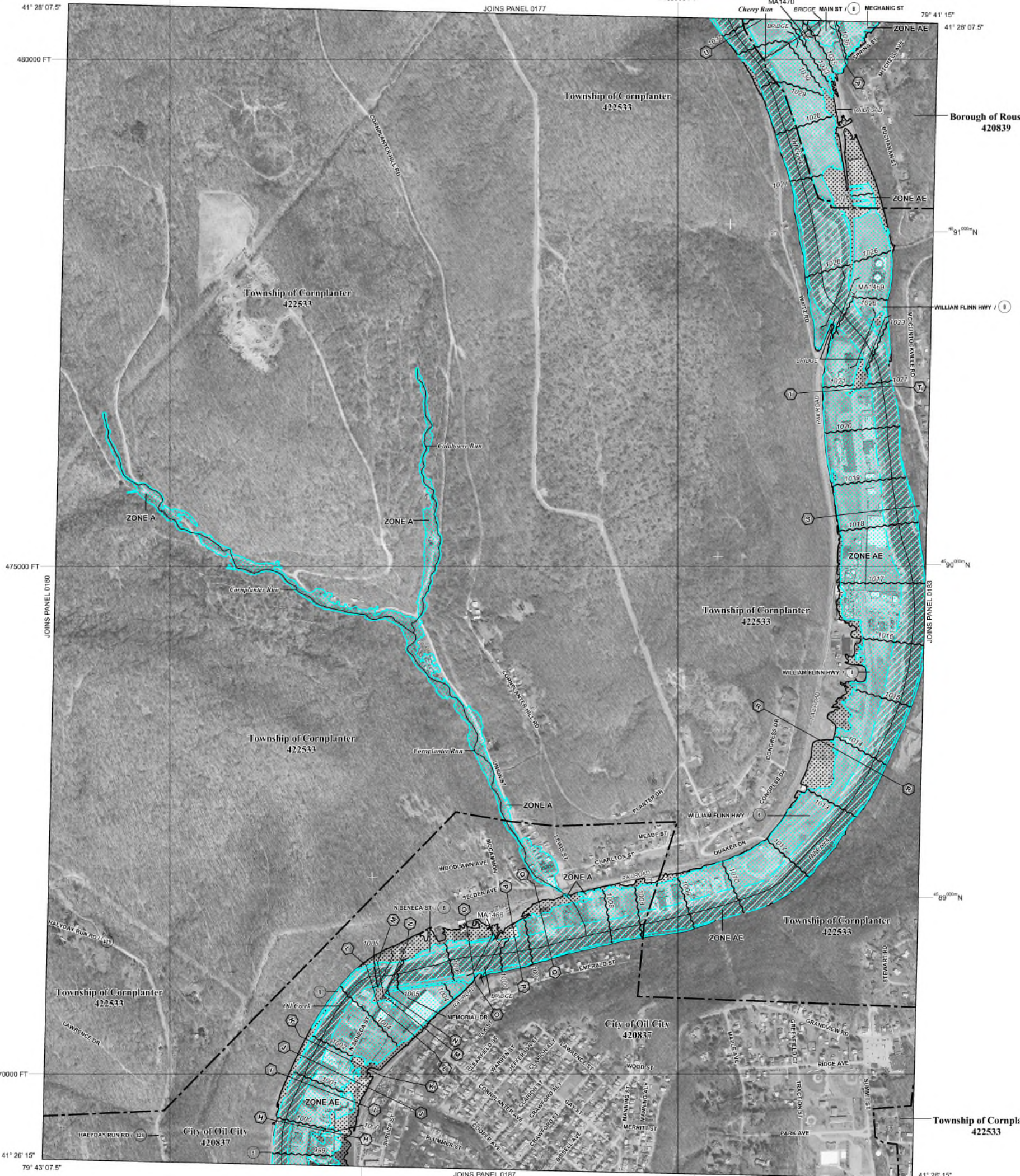
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/nfp>.



The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AD, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AD** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently destroyed. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% Annual Chance Floodplain Boundary

0.2% Annual Chance Floodplain Boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.

Base Flood Elevation line and value; elevation in feet*

Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

Cross section line

Transect line

Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere

5000-foot ticks: Pennsylvania State Plane North Zone (FIPS Zone 3701), Lambert Conformal Conic projection

1000-meter Universal Transverse Mercator grid values, zone 17

Bench mark (see explanation in Notes to Users section of this FIRM panel)

MAP REPOSITORIES

Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

January 16, 2014

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

FEET

METERS

PANEL 0179D

FIRM

FLOOD INSURANCE RATE MAP

VENANGO COUNTY, PENNSYLVANIA

(ALL JURISDICTIONS)

PANEL 179 OF 470

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY

NUMBER

PANEL

SUFFIX

COMMUNITY

NUMBER

PANEL

SUFFIX

COMMUNITY

NUMBER

PANEL

SUFFIX

MAP NUMBER

4212C0179D

APPENDIX C

Amended SAP

DRAFT

US EPA - Region III BROWNFIELDS

AMENDED – Kraft/Dahlstrom

Site-Specific

Sampling and Analysis Plan

DRAFT

Title and Approval Page

**Oil Region Alliance of Business, Industry & Tourism
AMENDED - Kraft/Dahlstrom Site-Specific Sampling and Analysis Plan
U.S. EPA Brownfields Site-Specific Assessment Grant #96377801**

Document Title

Mark B. Miller – Moody and Associates, Inc.

Prepared by: (Preparer's Name and Organizational Affiliation)

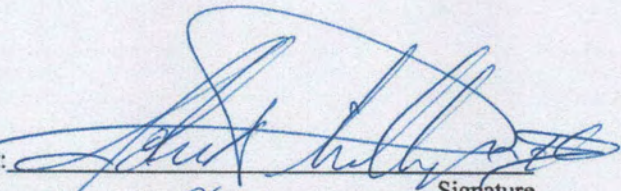
11548 Cotton Road, Meadville, PA 16335

Address and Telephone Number

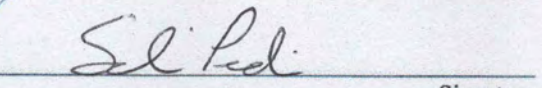
May 6, 2022

Day/Month/Year

Cooperative Agreement Recipient:


John B. Phillips
Signature
Printed Name/Date 5-6-2022

ORA Project QA Officer:


Selina Pedi
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Printed Name/Date 5/6/22

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Mark B. Miller
Signature
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This Site-Specific Sampling and Analysis Plan is a companion document to the Oil Region Alliance of Business, Industry & Tourism Quality Assurance Project Plan. All of the policies and procedures specified in the Oil Region Alliance of Business, Industry & Tourism Quality Assurance Project Plan will be followed for this project.

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PROJECT MANAGEMENT

A1 SITE INFORMATION/BACKGROUND

On behalf of the Oil Region Alliance of Business, Industry & Tourism (“ORA”), Moody and Associates, Inc. (“Moody”) is submitting this Amended Sampling and Analysis Plan (“SAP”), which describes the proposed site characterization work that will be completed at the Kraft/Dahlstrom Site (“Site”), located in Oil City, Venango County, Pennsylvania. The previous SAP included only the Kraft portion of the site.

FIGURE 1 represents a portion of the Oil City, Pennsylvania, United States Geological Survey (USGS) 7 ½ Minute Topographic Map illustrating the location of the Site. FIGURE 2 is an aerial photograph showing the approximate Site property boundaries, neighboring properties, and other relevant features.

The Site consists of approximately 3.79 acres situated on six parcels, identified as Venango County tax parcel numbers 16.034-140..-000, 16.034-154..-000, 16.034-155..-000, 16.034-161..-000, 16.034-164..-000, and 16.034-149..-000. Parcel 16.034-140..-000 is currently owned by Gilbert E Dahlstrom and will herein be referenced as the Dahlstrom property. Parcels 16.034-154..-000, 16.034-155..-000, 16.034-161..-000, 16.034-164..-000, and 16.034-149..-000 are currently owned by Kraft Concrete Products and will herein be referenced as the Kraft property. The Site is currently owned by ORA and is unoccupied.

The Site has historically been used for railroad operations, lumber supplies, concrete block manufacturing, cigar manufacturing, dry cleaning, and as a scrap yard. The subject site is currently unutilized, but remnants of the scrap yard operations along with vacant buildings remain on the subject site. First development of the Site is unknown but appears developed on Sanborn Fire Insurance Maps as early as 1886.

A2 PREVIOUS ENVIRONMENTAL REPORTS

A Phase I Environmental Site Assessment (“ESA”) was previously completed and submitted to the EPA for the Kraft and Dahlstrom sites by Moody on January 29, 2021. A previous SAP was submitted on May 12, 2021 that was only applicable to the Kraft portion of the Site. This Amended SAP applies to the Kraft and Dahlstrom portions of the Site. The Phase I ESA is included as APPENDIX A. The Phase I ESA identified the following Recognized Environmental Conditions (“RECs”) at the Site:

- The historical use of the subject site for railroad operations is considered to be a REC.
- The unidentified pipe existing the bank to the east of the old concrete block garage foundation is considered to be a REC.
- The four reported USTs at the subject site are considered to be a REC.
- The presence of a former dry-cleaning facility along with an empty AST and drainage features in the concrete of the former dry-cleaning building is considered to be a REC.
- The reported pile of approximately 100 car batteries between the Dahlstrom office and the Dahlstrom garage with battery acid dumped to the ground surface is considered to be a REC.
- The three homemade smelters present on the Dahlstrom property and associated burnt waste on the ground is considered to be a REC.
- The solvent plume on the Webco site originating from an upgradient source is considered to be a REC.
- The scrap piles extending from the northern edge of the former dry-cleaning building to the northern extent of the subject site containing 55-gallon drums, waste

from oil and gas operations, gas tanks, car batteries, and other unknown components is considered to be a REC.

- Firsthand historical observation by Moody personnel of oil staining from drums leaking/dumping to the surface on the Kraft property is considered to be a REC.
- Petroleum staining in numerous locations on the Kraft and Dahlstrom properties north of the former dry-cleaning building is considered to be a REC.

A3 PROJECT DESCRIPTION

The proposed characterization work will not commence without EPA approval of this Amended SAP. The site characterization work will be completed in phases with the evaluation of remedial alternatives being the last step.

The purpose and intent of the work outlined in this Amended SAP is to assess the RECs outlined in above in Section A2 and complete a Remedial Investigation Report for the Site detailing the findings and any additional site characterization work needed and/or a path to site closure under Act 2.

The following items outline the tasks to be completed under this Amended SAP:

- **Monitoring Well Installation and Sampling**

Nine (9) monitoring wells will be installed and constructed into the first water bearing zone to sample groundwater and soils in the subsurface. The locations of the monitoring wells have been chosen to assess the RECs outlined above in Section A2. Groundwater and soil samples will be collected from each of these monitoring wells.

- **Additional Subsurface Media Sampling**

Three (3) additional borings will be installed to the first water bearing zone to sample soils in the subsurface. These borings will not be converted into monitoring wells. The locations of the soil borings have been chosen to assess the RECs outlined above in Section A2.

- **Surface Media Sampling**

Twelve (12) surface soil samples will be collected. The location of the surface soil samples have been chosen to assess the RECs outlined above in Section A2.

- **UST Tank Assessment**

Soil sampling will be conducted to assess whether soils have been impacted by leaking product from the USTs. Comprehensive soil sampling can only be conducted once THE USTs have been removed. Moody will inspect the UST outside the southeastern corner of the concrete block manufacturing building and the UST to the north of the boiler room building to determine if these USTs are regulated under the Pennsylvania Chapter 245 Administration of the Storage Tank and Spill Prevention Program Regulations. Based on the Phase I ESA, Moody believes the USTs are unregulated. If the USTs are regulated this Amended SAP will be revised to address the additional requirements associated with regulated USTs. The USTs will be assessed by a Moody's OSHA trained, Licensed Professional Geologist who is a Pennsylvania state certified underground storage tank installer. The soils beneath the USTs will be assessed by removing the USTs and sampling in accordance with the guidelines established by the PADEP Storage Tank Program

- **Site Assessment Report**

The above site characterization activities will be completed and a Site Assessment Report detailing the activities will be completed. The Site Assessment Report will include an updated CSM and detail any additional site characterization work needed and/or a path to site closure under Act 2. The Site Assessment Report can be utilized in the generation of a Remedial Investigation Report for Act 2 if required.

A4 PROJECT TIMELINE

The progress of any project will be tracked from its inception through implementation to ensure all sampling and analytical activities are performed in a correct and cost-effective manner. Each step in this process will be scheduled in an objective and realistic time frame to assure that adequate attention is devoted to the minimization of effort and the maximization of information. TABLE 1 provides a project timeline for this project if work is moved forward.

A5 MEASUREMENT QUALITY INDICATORS

TABLE 2 provides the measurement quality indicators for this project.

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MEASUREMENT/DATA ACQUISITION

B1 SAMPLING DESIGN

Sampling design will follow all applicable portions of the PADEP Act 2 Technical Guidance Manual (“TGM”) and applicable SOPs found in the Quality Assurance Project Plan (“QAPP”).

Nine (9) monitoring wells will be installed and constructed into the first water bearing zone. Monitoring wells will be installed and constructed per applicable SOPs in the QAPP and in accordance with the PADEP Act 2 TGM Appendix A – Groundwater Monitoring Guidance. The approximate locations of the proposed monitoring wells are illustrated on FIGURE 3. The monitoring well locations have been selected to assess the RECs identified above in Section A2.

The monitoring wells will be installed and constructed utilizing a Geoprobe direct push rig with hollow stem auguring capability. The monitoring wells will be constructed by setting 2-inch PVC screen across the water table. They will be constructed utilizing approximately 10 feet of 2-inch 20 slot PVC screen, which will be set from approximately 10-20 feet bgs. 10 feet of 2-inch PVC riser will be placed above the screen back to the surface. A sand pack will be placed around and above the screen. A bentonite seal will be placed above the sand pack back to the surface. A flush mount well cover or guard pipe will be grouted in place at the ground surface, depending on the location. Following installation, the additional monitoring wells will be developed. The water developed from the monitoring wells will be containerized onsite for proper disposal.

Continuous sleeve samples will be collected during monitoring well installations. Soil samples will be collected in accordance with the applicable SOPs in the QAPP. The materials removed will be containerized onsite for proper disposal. The materials encountered will be described, recorded, and screened utilizing a photoionization detection (“PID”) meter and an X-Ray Fluorescence (“XRF”) meter. One soil sample will be collected from each of the monitoring wells based on the highest PID or XRF reading and visual and olfactory observations. A field duplicate will be collected from one monitoring

well on each day of sampling. The soil samples will be submitted to the PADEP certified laboratory to be analyzed for target metals, volatile organic compounds (“VOCs”) and semi-volatile organic compounds (“SVOCs”). The target metal list will include Pb, As, Cd, Cr, Hg, Ba, Se, Ni, Cu, Sb, Zn and Ti.

One round of groundwater samples will be collected from the monitoring wells. Groundwater samples will be collected in accordance with the applicable SOPs in the QAPP. A field duplicate will be collected for every twenty samples, or once per day, whichever is more frequent. Field blanks, VOA trip blanks and cooler temperature blanks will be utilized as per TABLE 2 of the Quality Assurance Project Plan. The water samples will be submitted to the PADEP certified laboratory to be analyzed for target metals, VOCs and SVOCs.

Three (3) additional borings will be installed to the first water bearing zone to sample soils in the subsurface. These borings will not be converted into monitoring wells. The approximate locations of the proposed soil borings are illustrated on FIGURE 3. The locations of the soil borings have been chosen to assess the RECs outlined above in Section A2. The borings will be installed utilizing a Geoprobe direct push rig with continuous sleeve sampling. Soil samples will be collected in accordance with the applicable SOPs in the QAPP. The materials removed will be containerized onsite for proper disposal. The materials encountered will be described, recorded, and screened utilizing a PID meter and an XRF meter. One soil sample will be collected from each of the monitoring wells based on the highest PID or XRF reading and visual and olfactory observations. A field duplicate will be collected from one monitoring well on each day of sampling. The soil samples will be submitted to the PADEP certified laboratory to be analyzed for target metals, VOCs and SVOCs.

One round of surface soil samples will be collected from twelve (12) locations. Surface soil samples will be collected in accordance with the applicable SOPs in the QAPP. The approximate locations of these surface soil samples are illustrated on FIGURE 3. The locations of the surface soil samples have been selected to assess the RECs identified above in Section A2. The samples will be collected at locations based on the highest PID or XRF

reading and on visual and olfactory observations. A field duplicate will be collected and a VOA trip blank and cooler temperature blank will be utilized for the sampling event. These surface soil samples will be submitted to the PADEP certified laboratory to be analyzed for target metals, VOCs and SVOCs.

Moody will utilize a XRF Meter to assess surface soil samples at the Site. A grid will be overlayed on the site with 40 foot centers, resulting in approximately 100 locations, and surface soil XRF readings will be recorded at each location for the target metals list.

Soil sampling will be conducted to assess whether soils have been impacted by leaking product from the USTs. Comprehensive soil sampling can only be conducted once the USTs have been removed. Moody will inspect the UST outside the southeastern corner of the concrete block manufacturing building and the UST to the north of the boiler room building to determine if these USTs are regulated under the Pennsylvania Chapter 245 Administration of the Storage Tank and Spill Prevention Program Regulations. Based on the Phase I ESA, Moody believes the USTs are unregulated. If the USTs are regulated this Amended SAP will be revised to address the additional requirements associated with regulated USTs. The USTs will be removed by a Moody's OSHA trained, Licensed Professional Geologist who is a Pennsylvania state certified underground storage tank installer. Each of the USTs will be assessed by carefully removing the UST from its location, and a soil sample will be collected from under the ends of each UST and analyzed for the PADEP Storage Tank UST #2 Fuel list. The soils below the USTs will be inspected utilizing a PID meter and visual and olfactory observations.

TABLE 3 provides the types and number of samples and analyses required for this project. FIGURE 3 is a Site map with specific sample locations.

B2 SAMPLING METHODS REQUIREMENTS

TABLE 3 provides information about the sampling techniques that will be used for this project. For specific details about the sampling procedures referenced in TABLE 3, refer to the appropriate section of the QAPP. All samples will be collected and preserved in accordance with procedures found in TABLE 1 of the QAPP. Field Quality Control Requirements for this sampling activity are found in TABLE 2 of the QAPP.

B3 ANALYTICAL METHODS REQUIREMENTS

TABLE 3 provides information about the analytical methods (including any extraction or digestion methods) being used for this project. Additional information about analytical methods requirements (MDL, PQL, etc.), laboratory quality control requirements and laboratory equipment calibration procedures can be found in APPENDIX B. Metals, VOC and SVOC parameters in aqueous and soil samples will be analyzed to a detection limit meeting the PADEP Act 2 MSCs for a Used Aquifer in a Residential Setting.

DATA VALIDATION AND USABILITY

C1 RECONCILIATION WITH USER REQUIREMENTS

Data will be reviewed throughout the project as data is collected. Data will be reviewed, and documents will be signed and dated by at least two individuals (the data preparer and the data reviewer). The data reviewer will ensure that the data have been recorded, transmitted, and processed correctly per Section B of the QAPP. Data review will include checking for data entry, transcription, calculation, reduction, and transformation errors. It will also ensure that there is a complete list of sample information available, such as sample matrixes, blanks, duplicates, shipping dates, preservatives, holding times, etc., and ensuring that there are no programming errors. It is also a completeness check to determine if there are any deficiencies, such as data missing or integrity lost (for example, due to corruption or loss in storage or processing).

Accuracy will be assessed through the analysis of quality control samples. The analytical accuracy will be expressed as the percent recovery (“%R”) of an analyte which has been added to the environmental sample at a known concentration before analysis and is calculated according to the following equation.

$$\%R = 100x \frac{S - U}{C_{sa}}$$

Where: %R = percent recovery

S = measured concentration in spiked aliquot

U = measured concentration in un-spiked aliquot

C = actual concentration of spike added

The following formula should be used to for measurements where a standard reference material is used:

$$\%R = 100x \frac{C_m}{C_{rm}}$$

Where: %R = percent recovery

C_m = measured concentration of standard reference material

C_{rm} = actual concentration of standard reference material

Precision will be determined through the use of field duplicates, matrix spike/matrix spike duplicates and duplicate quality control samples. The Relative Percent Difference (“RPD”) between the two results will be calculated and used as an indication of the precision of the analyses performed. The following formula should be used to calculate precision:

$$RPD = \frac{(C_1 - C_2)}{(C_1 + C_2)/2} \times 100$$

Where: RPD = relative percent difference

C₁ = larger of the two observed values

C₂ = smaller of the two observed values

Completeness is defined as the measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under normal conditions. Data completeness will be expressed as the percentage of valid data obtained from the measurement system. For data to be considered valid, it must meet all the acceptable criteria including accuracy and precision, as well as any other criteria required by the prescribed analytical method. The following formula should be used to calculate completeness:

$$\%C = 100 \times \frac{V}{n}$$

Where: %C = percent completeness

V = number of measurements judged valid

n = total number of measurements necessary to achieve a specified level of confidence in decision making.

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TABLES

TABLE 1
PROJECT TIMELINE

[illegible]

TABLE 2
MEASUREMENT QUALITY INDICATORS

Compound	Matrix	Action Limit ¹	Precision	Accuracy	Completeness
Volatile Organics	Soils	PADEP Act 2 Used Aquifer in a Residential Setting	See QAPP Table 2	See QAPP Table 2	See QAPP Table 2
Semi-volatile Organics	Soils	PADEP Act 2 Used Aquifer in a Residential Setting	See QAPP Table 2	See QAPP Table 2	See QAPP Table 2
Volatile Organics	Aqueous	PADEP Act 2 Used Aquifer in a Residential Setting	See QAPP Table 2	See QAPP Table 2	See QAPP Table 2
Semi-volatile Organics	Aqueous	PADEP Act 2 Used Aquifer in a Residential Setting	See QAPP Table 2	See QAPP Table 2	See QAPP Table 2
Metals	Soils	PADEP Act 2 Used Aquifer in a Residential Setting	See QAPP Table 2	See QAPP Table 2	See QAPP Table 2
Metals	Aqueous	PADEP Act 2 Used Aquifer in a Residential Setting	See QAPP Table 2	See QAPP Table 2	See QAPP Table 2

¹Include the concentration units

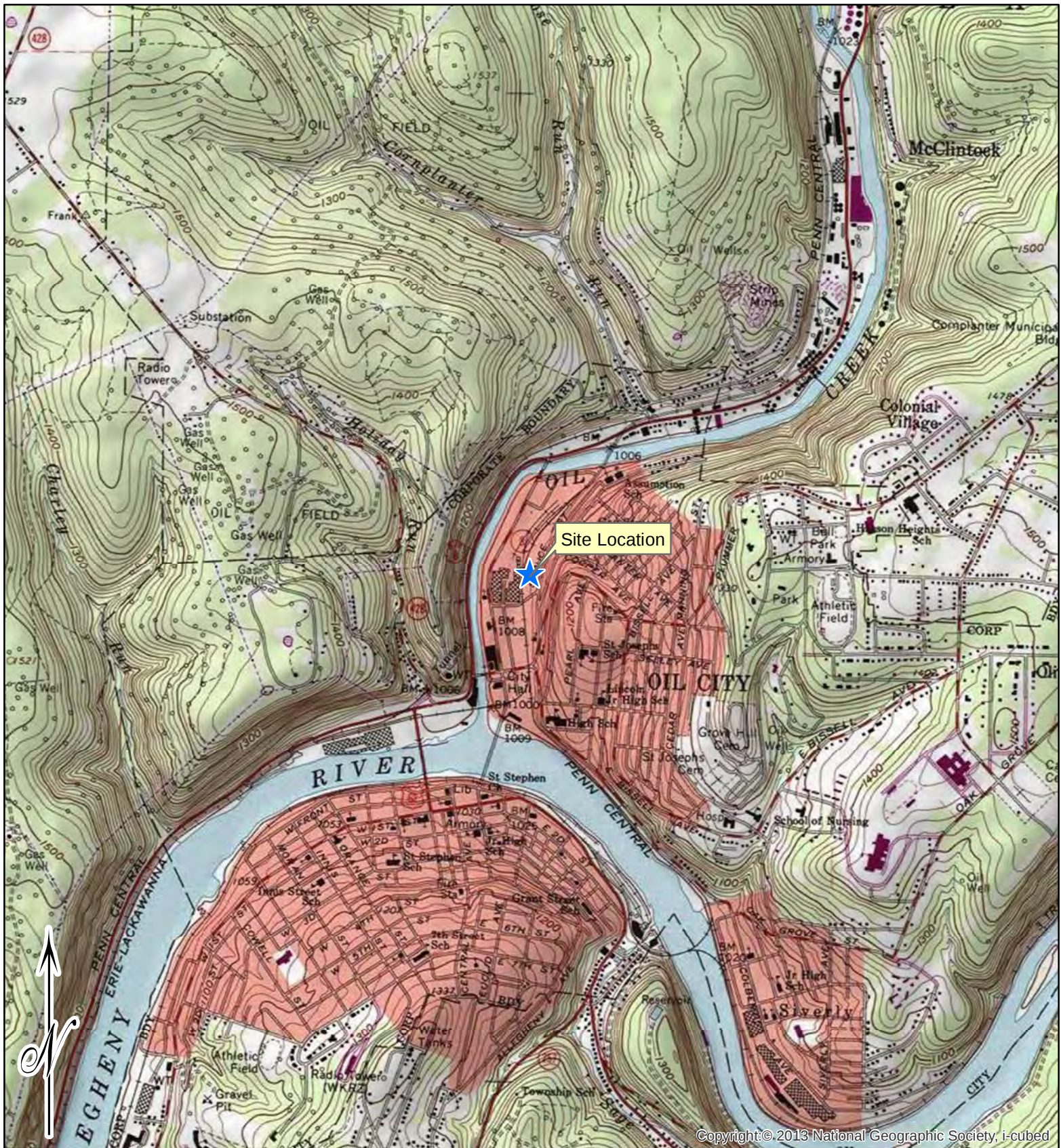
TABLE 3
SAMPLING AND ANALYTICAL METHODS REQUIREMENTS

Matrix	Parameter¹	Number of Samples	Sampling Procedure²	Sample Preparation/Extraction Method Number	Analytical Method Number
Soils	Volatile Organics	28 + MS/MSD, Blanks & Duplicates	11	EPA 5035A	EPA 8260C
Soils	Semi-volatile Organics	24 + MS/MSD, Blanks & Duplicates	11	EPA 3546	EPA 8270D
Aqueous	Volatile Organics	9 + MS/MSD, Blanks & Duplicates	10,12	EPA 5030B/C	EPA 8260C
Aqueous	Semi-volatile Organics	9 + MS/MSD, Blanks & Duplicates	10,12	EPA 3510C	EPA 8270D
Aqueous	Metals	9 + MS/MSD, Blanks & Duplicates	10, 12	EPA 3005A	EPA 6010B/7470A
Soils	Metals	24 + MS/MSD, Blanks & Duplicates	11	EPA 3005A	EPA 6010B/7471A

¹May include other categories of analyses or individual analyses

²Insert the QAPP page number or the SOP number from the QAPP's Appendix

FIGURES



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Legend

★ Site Location

Prepared for:

Oil Region Alliance

Map Reference:

This exhibit is based on the ESRI USA Topographic Map. ESRI.com
USGS Topographic 7.5' Quadrangle:
Oil City, PA.

NAD 83 State Plane - PA North

FIGURE 1 Amended SAP Kraft/Dahlstrom Site

Project #: 20-222-MM

Drawn by: Checked by: Date: Revision:

SMR

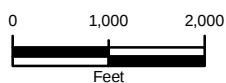
5/3/2022

1

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Scale:
1 in = 2,000 ft



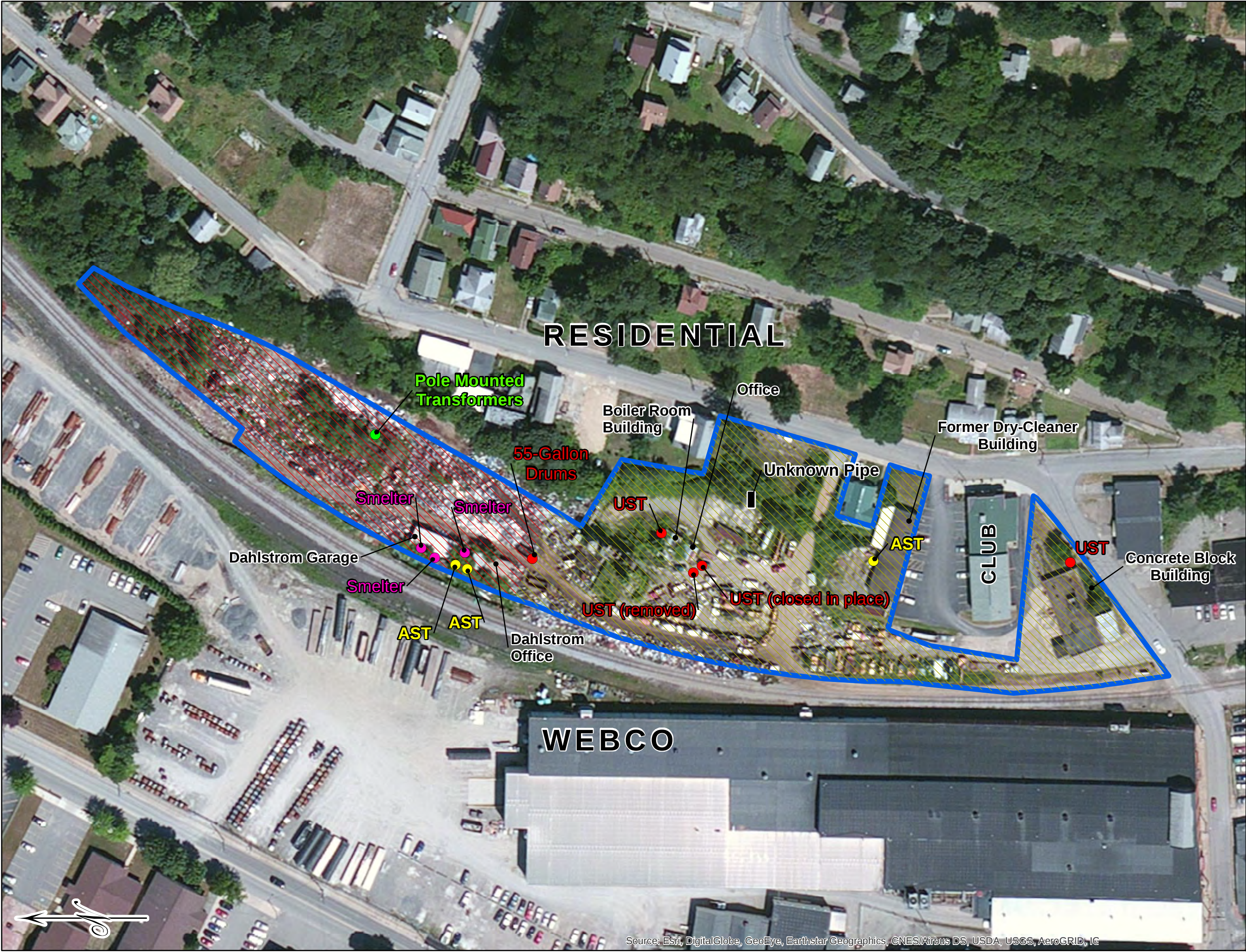


FIGURE 2

AMENDED SAP

Kraft and Dahlstrom Site
Oil City, Pennsylvania

Prepared for:
Oil Region Alliance

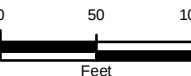
LEGEND

- 55-Gallon Drums
- Pole Mounted Transformers
- AST
- Smelter
- Approximate UST Locations
- Unknown Pipe
- /// DAHLSTROM PROPERTY
- /// KRAFT PROPERTY
- SUBJECT SITE

Map Reference:
This exhibit is based on the World Imagery - Esri and it's data suppliers

NAD 83 State Plane - PA North

Scale: 1 in = 100 ft



Project #: 20-257-MM

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SMR		5/3/2022	1

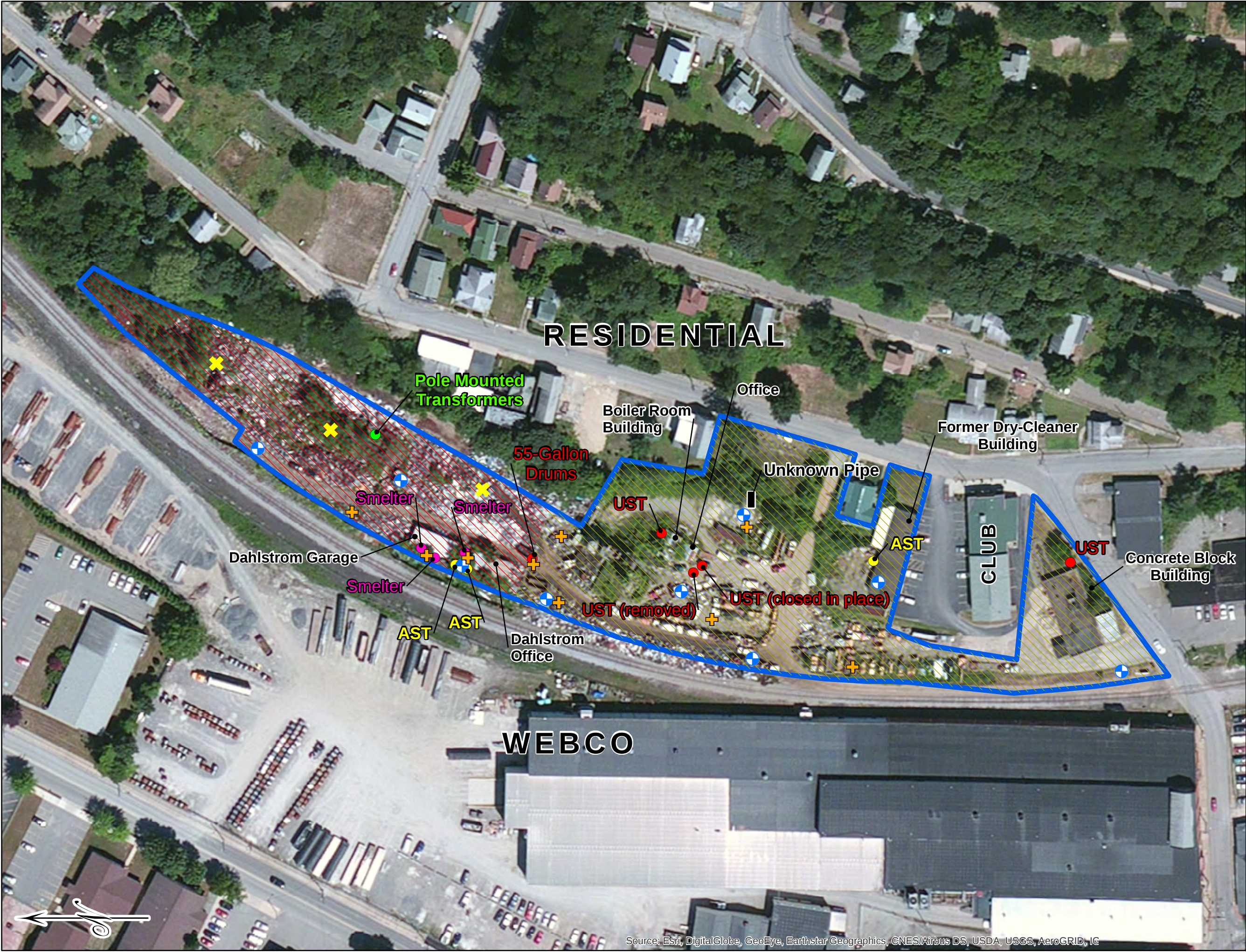


FIGURE 3

AMENDED SAP

Kraft and Dahlstrom Site
Oil City, Pennsylvania

Prepared for:
Oil Region Alliance

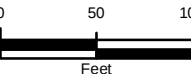
LEGEND

- Proposed Monitoring Well Location
- Proposed Surface Soil Sample Location
- Proposed Surface and Subsurface Soil Sample Location
- 55-Gallon Drums
- Pole Mounted Transformers
- AST
- Smelter
- Approximate UST Locations
- Unknown Pipe
- DAHLSTROM PROPERTY
- KRAFT PROPERTY
- SUBJECT SITE

Map Reference:
This exhibit is based on the World Imagery - Esri and it's data suppliers

NAD 83 State Plane - PA North

Scale: 1 in = 100 ft



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SMR		5/3/2022	0

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APPENDIX A

PHASE I ENVIRONMENTAL SITE ASSESSMENT

U.S. EPA Brownfields Site-Specific Assessment Grant #96377801

Kraft & Dahlstrom Site

Oil City, Venango County, Pennsylvania

Moody Project No. 20-218 MM

December 18, 2020

Prepared for and submitted to:

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
U.S. EPA Brownfields Site-Specific Assessment Grant #96377801
Kraft & Dahlstrom Site
Oil City, Venango County, Pennsylvania

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
U.S. EPA Brownfields Site-Specific Assessment Grant #96377801
Kraft & Dahlstrom Site
Oil City, Venango County, Pennsylvania

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APPENDIX F – ESA Search Tool Report	Attached
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APPENDIX H – Sanborn Fire Insurance Maps	Attached
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APPENDIX K – Historical Topographic Maps	Attached
APPENDIX L – December 7, 2020 Site Inspection Photographs	Attached

PHASE I ENVIRONMENTAL SITE ASSESSMENT
U.S. EPA Brownfields Site-Specific Assessment Grant #96377801
Kraft & Dahlstrom Site
Oil City, Venango County, Pennsylvania

EXECUTIVE SUMMARY

Moody and Associates, Inc. (Moody) performed a Phase I Environmental Site Assessment (ESA) of the site located in Oil City, Venango County, Pennsylvania, hereinafter referenced as the subject site. The subject site consists of approximately 3.79 acres situated on six parcels, identified as Venango County tax parcel numbers 16.034-140..-000, 16.034-154..-000, 16.034-155..-000, 16.034-161..-000, 16.034-164..-000, and 16.034-149..-000. Parcel 16.034-140..-000 is currently owned by Gilbert E Dahlstrom and will herein be referenced as the Dahlstrom property. Parcels 16.034-154..-000, 16.034-155..-000, 16.034-161..-000, 16.034-164..-000, and 16.034-149..-000 are currently owned by Kraft Concrete Products and will herein be referenced as the Kraft property. First development of the subject site is unknown but appears developed on Sanborn Fire Insurance Maps as early as 1886. The subject site has historically been used for railroad operations, lumber supplies, concrete block manufacturing, cigar manufacturing, dry cleaning, and as a scrap yard. The subject site is currently unutilized, but remnants of the scrap yard operations along with vacant buildings remain on the subject site.

There are 6 buildings on the subject site.

The southernmost building (concrete block manufacturing building) was built in circa 1906 and contains shop areas, the old office space and furnace areas for curing the concrete blocks. The building was previously utilized for wood manufacturing until circa 1963 when it started being utilized for concrete block manufacturing. A floor drain was present in the shop area which reportedly discharged to municipal sewer.

The building to the north of the Club (former dry-cleaning building) was built in circa 1963 and contains offices and garage/storage areas. The building was originally utilized

as a dry-cleaner until circa 1968. It was later converted to office space for the concrete block manufacturing company. The building contains a suspended AST that was empty upon inspection. Drainage features in the western end of the building concrete are indicative of possible dry-cleaning operations in the building in the past.

Two buildings are present in the middle of the subject site on the Kraft property. The southern building is an old office building (office building) with a collapsed roof. The northern building is an old boiler room (boiler room building) for the concrete manufacturing.

Two buildings were present on the northwestern portion of the property on the Dahlstrom property. The southern building was the previous office (Dahlstrom office building) and contained files and assorted debris on the floor throughout the building. The northern building was a garage (Dahlstrom garage) for the scrap yard and contained approximately two feet of scrap on the floor throughout the building. A homemade smelter was observed in the northwest corner of the building which had an exhaust pipe exiting the western wall.

The subject site buildings are connected to the municipal public water supply and sanitary sewer systems if either was utilized in the specific building. There are no known water wells or septic located on the property.

FIGURE 1 represents a portion of the Oil City, Pennsylvania, United States Geological Survey (USGS) 7 ½ Minute Topographic Map illustrating the location of the subject site. FIGURE 2 is an aerial photograph showing the approximate subject site property boundaries, neighboring properties, and other relevant features identified in the Phase I ESA.

The purpose of a Phase I ESA is to identify recognized environmental conditions (RECs). As defined by the ASTM 1527-13, a REC is *“the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to release to*

the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.”

FINDINGS

A cursory summary of the findings is provided below. However, details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- Based on the review of the historical information described above, as well as interview information, the subject site is currently owned by Gilbert E. Dahlstrom and Kraft Concrete Products. Parcel 16.034-140..-000 is currently owned by Gilbert E. Dahlstrom. Parcels 16.034-154..-000, 16.034-155..-000, 16.034-161..-000, 16.034-164..-000, and 16.034-149..-000 are currently owned by Kraft Concrete Products. First development of the subject site is unknown but appears developed on Sanborn Fire Insurance Maps as early as 1886. The subject site has historically been used for railroad operations, lumber supplies, concrete block manufacturing, cigar manufacturing, dry cleaning, and as a scrap yard. The subject site is currently unutilized, but remnants of the scrap yard operations remain on the subject site.
- A fill pipe and vent pipe was observed outside the southeastern corner of the concrete block manufacturing building where a underground storage tank (UST) reportedly containing approximately 1-inch of fuel oil is located.
- A fill pipe and vent pipe was observed to the north of the boiler room building where a UST containing air entrainment fluid is located.
- Two USTs were reported to have been closed at the site. It was reported that one of the USTs was removed. The other UST was filled with cement and closed in place. These USTs were reportedly located southwest of the office building.

- Three above ground storage tanks (ASTs) were observed during the site inspection. Two ASTs contained propane for heating the buildings on the Dahlstrom property. A suspended AST was observed in the former dry-cleaning building that was empty upon inspection.
- Three pole-mounted transformers were observed on the Dahlstrom property. No evidence of releases from these transformers was observed. No other PCB-containing equipment was observed.
- A homemade smelter was observed in the northwest corner of the building which had an exhaust pipe exiting the western wall. Two homemade smelters were present around the Dahlstrom garage and the burnt waste was observed on the ground around the smelters.
- Three 55-gallon drums were present to the west of the Dahlstrom office building with staining around them that had a petroleum odor.
- Numerous empty 55-gallon drums were observed throughout the Dahlstrom property.
- Approximately 100 automobile fuel tanks were observed throughout the Dahlstrom property.
- Where ground was not covered by scrap, staining with a petroleum odor was observed in numerous locations on the Kraft and Dahlstrom properties.
- Sections of pipe previously utilized in oil and gas operations were observed in piles that reportedly screened positive for Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) at an offsite scrap yard and was returned to the subject site.
- The Dahlstrom property was a former scrap yard and scrap mounds were present over the majority of the property. It was reported that the scrap mounds had extended onto the Kraft property but they were not present at the time of inspection. It was reported

the scrap piles contained a veneer of scrap covering mounds of soils mixed with remnant scrap from decades of disposal. The makeup of the scrap remnants in the soil could not be determined.

- Drainage features in the concrete of the former dry-cleaning building indicative of possible dry-cleaning operations in the building in the past were observed.
- An unknown pipe was present existing the bank to the east of the old concrete block garage foundation.
- No evidence of oil or gas wells was observed or reported during the site inspection.
- No groundwater wells were observed on the subject site. The subject site is connected to the municipal water system.
- No on-site septic systems were observed or reported during the subject site inspection. The subject site is reportedly connected to the municipal sewer system.
- No pits, ponds, or lagoons were observed during the subject site inspection though a surface water body exists on the adjoining property and is piped beneath the surface of the subject site.
- A floor drain was present in the concrete block manufacturing building which reportedly discharged to municipal sewer.
- The subject site was listed in the RGA LUST, LUST and ARCHIVE UST databases.
- The subject site is listed in the Pennsylvania Department of Environmental Protection (PADEP) Storage Tank Cleanup Location list as Kraft Concrete Prod at 304 Duncomb Street. The confirmed date of release is 11/03/2005. The site status is Cleanup Completed with a date of 08/03/2007. The comments state:

A diesel fuel Underground Storage Tank (UST) system and a gasoline UST system were closed by removal in November 2005. Obviously contaminated soil was encountered. Approximately 138 tons of impacted soil was over-excavated and sent to SRI for thermo-remediation. All eight confirmatory soil samples were within Statewide Standards. The UST Closure Report was submitted to the Department on December 23, 2005. The soil manifests were submitted to the Department on March 19, 2007. USTIF approved Claim # 05-203(F). DEP sent an Act 2 approval letter for soil on August 3, 2007.”

- A site to the west identified as Webco’s Oil City Tube Works (Webco), located adjacent to the adjoining railroad property to the west of the subject site, is listed in the RCRA-SQG, ICIS, US AIRS, FINDS, ECHO, MANIFEST, NPDES, AST databases. A known solvent plume in groundwater exists on the Webco site. The PADEP terminated an existing Consent Order and Agreement dated August 7, 1989 on July 11, 1997 related to the solvent plume based on a Moody report indicating that the solvent plume originated from an upgradient source. The subject site is upgradient of the Webco site.
- It was reported that the site has been through equity injunctions with the adjoining railroad and litigation with the Kraft property owners due to the operations of the scrap yard and that this was related to the scrap extending off the Dahlstrom property onto the adjoining railroad property and Kraft property.
- It was reported that the fire department had been called to the subject site multiple times during the scrap yard operations to respond to fires. These fires were commonly caused by the owner cutting into scrapped vehicles with torches that still had fluids present in them.

- It was reported that the city and fire department had multiple complications with the Dahlstrom property owner over egress as the extensive scrap piles on the Dahlstrom and Kraft properties hindered the fire department's ability to respond to fires.
- It was reported that there was previously a large pile of approximately 100 car batteries between the Dahlstrom office and the Dahlstrom garage and that it was suspected the property owner dumped the battery acid to the ground.
- Firsthand historical observation by Moody personnel was reported of oil staining from drums leaking/dumping to the surface on the Kraft property to the northwest of the former dry-cleaning building from scrap piles from the Dahlstrom operations were previously present on the Kraft property.

OPINIONS

Moody has the following opinions concerning the subject site:

- The subject site has historically been used for railroad operations with turntables and machine shops shown on historical documents. Similar historical railroad operations are commonly indicative of petroleum contamination in the subsurface.
- Four USTs were reported at the subject site. A fill pipe and vent pipe was observed outside the southeastern corner of the concrete block manufacturing building where a UST reportedly containing approximately 1-inch of fuel oil is located. A fill pipe and vent pipe was observed to the north of the boiler room building where a UST containing air entrainment fluid is located. Two USTs were reported to have been closed at the site. It was reported that one of the USTs was removed. The other UST was filled with cement and closed in place. These USTs were reportedly located southwest of the office building.

- Three ASTs were observed during the site inspection. Two ASTs contained propane for heating the buildings on the Dahlstrom property. A suspended AST was observed in the former dry-cleaning building that was empty upon inspection. This AST may have contained heating oil or may possibly have contained solvents related to the former dry-cleaning plant. Drainage features in the concrete of the former dry-cleaning building indicative of possible dry-cleaning operations in the building in the past were observed.
- Three pole-mounted transformers were observed on the Dahlstrom property. No evidence of releases from these transformers was observed. No other PCB-containing equipment was observed.
- A homemade smelter was observed in the northwest corner of the building which had an exhaust pipe exiting the western wall. Two homemade smelters were present around the Dahlstrom garage and the burnt waste was observed on the ground around the smelters.
- Three 55-gallon drums were present to the west of the Dahlstrom office building with staining around them that had a petroleum odor.
- The Dahlstrom property was a former scrap yard and numerous scrap mounds were present over the majority of the property. It was reported that the scrap mounds had extended onto the Kraft property but they were not present at the time of inspection. The extent of the scrap piles is suspected to have extended to the northern edge of the former dry-cleaning building. It was reported the scrap piles contained a veneer of scrap covering mounds of soils mixed with remnant scrap for decades of disposal. The makeup of the scrap remnants in the soil could not be determined.

Numerous empty 55-gallon drums were observed throughout the scrap piles on the Dahlstrom property and are suspected to have also been present in the scrap piles on the Kraft property.

Approximately 100 automobile fuel tanks were observed throughout the scrap piles on the Dahlstrom property and are suspected to have also been present in the scrap piles on the Kraft property.

- Sections of pipe previously utilized in oil and gas operations were observed in piles that reportedly screened positive for TENORM at an offsite scrap yard and was returned to the subject site. These pieces of pipe are suspected to have been present in scrap piles on the Kraft and Dahlstrom properties.
- It was reported that the city and fire department had multiple complications with the Dahlstrom property owner over egress as the extensive scrap piles on the Dahlstrom and Kraft properties hindered the fire department's ability to respond to fires. It is suspected from city and fire department reports that the scrap piles have not been stationary throughout time and any portion of the subject site north of the former dry-cleaning building may have been overlain by scrap piles in the past.
- Staining with a petroleum odor was observed in numerous locations on the Kraft and Dahlstrom properties. Firsthand observation was reported of oil staining from drums leaking to the surface on the Kraft property to the northwest of the former dry-cleaning building from scrap piles from the Dahlstrom operations were previously present on the Kraft property.
- It was reported that there was previously a large pile of approximately 100 car batteries between the Dahlstrom office and the Dahlstrom garage and that it was suspected the property owner dumped the battery acid to the ground.
- The potential exists that petroleum products or hazardous substances were discharged to the surface; therefore, vapors cannot be ruled out as a concern at subject site.
- An unknown pipe was present existing the bank to the east of the old concrete block garage foundation.

- A site to the west identified as Webco's Oil City Tube Works (Webco), located adjacent to the adjoining railroad property to the west of the subject site, is listed in the RCRA-SQG, ICIS, US AIRS, FINDS, ECHO, MANIFEST, NPDES, AST databases. A known solvent plume in groundwater exists on the Webco site. The PADEP terminated an existing Consent Order and Agreement dated August 7, 1989 on July 11, 1997 related to the solvent plume based on a Moody report indicating that the solvent plume originated from an upgradient source. The subject site is upgradient of the Webco site.

CONCLUSIONS

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-13 of the subject site located in Oil City, Venango County, Pennsylvania. Any exceptions to, or deletions from, this practice are described in the Limitations and Exceptions Section of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the subject site, except for the following:

- The historical use of the subject site for railroad operations is considered to be a REC.
- The unidentified pipe existing the bank to the east of the old concrete block garage foundation is considered to be a REC.
- The four reported USTs at the subject site are considered to be a REC.
- The presence of a former dry-cleaning plant along with an empty AST and drainage features in the concrete of the former dry-cleaning building is considered to be a REC.

- The reported pile of approximately 100 car batteries between the Dahlstrom office and the Dahlstrom garage with battery acid dumped to the ground surface is considered to be a REC.
- The three homemade smelters present on the Dahlstrom property and associated burnt waste on the ground is considered to be a REC.
- The solvent plume on the Webco site with an upgradient source is considered to be a REC.
- The scrap piles extending from the northern edge of the former dry-cleaning building to the northern extent of the subject site containing 55-gallon drums, waste from oil and gas operations, gas tanks, car batteries, and other unknown components is considered to be a REC.
- Firsthand historical observation by Moody personnel of oil staining from drums leaking/dumping to the surface on the Kraft property is considered to be a REC.
- Petroleum staining in numerous locations on the Kraft and Dahlstrom properties north of the former dry-cleaning building is considered to be a REC.

RECOMMENDATIONS

Moody has the following recommendations for the subject site:

- A Phase II ESA should be conducted to determine potential impacts to soil, groundwater, and vapors at the subject site from the identified RECs.

INTRODUCTION

Project Objectives

Moody has completed a Phase I ESA on the subject site on behalf of Oil Region Alliance of Business, Industry & Tourism for the purchase of the subject site. FIGURE 1 represents a portion of the Oil City, Pennsylvania, USGS 7 ½ Minute Topographic Map illustrating the location of the subject site.

The Phase I ESA included observations and research on the subject site and adjoining properties. The primary objectives of the Phase I ESA were to evaluate potential environmental liabilities, identify RECs (as defined by the ASTM Standard) on the subject site, and to provide opinions regarding potential environmental impact. It is Moody's understanding that this Phase I ESA is being conducted for the subject site for the purpose of property acquisition.

Scope of Services

The Phase I ESA scope of services included:

- Research into historical land use activities on and near the subject site using potentially available sources such as historical aerial photographs and USGS Topographic Quadrangle Maps.
- Review applicable geologic publications to evaluate the physical setting of the subject site.
- Review of information provided by the User and Owner that disclosed conditions of the subject site.
- Review environmental records search data and other obtained environmental data.
- On-site inspection of the subject site.
- Interviews with knowledgeable individuals.
- Preparation of this Phase I ESA report.

Documentation associated with, and relevant to, the findings, conclusions, and opinions provided in this report are include in the APPENDICES.

Significant Assumptions

Property lines were assumed in the field based on tax maps. Moody assumes interview and data base search information is true and accurate. Moody makes no warranty or guarantees that information, either written or verbal, provided by others is true and accurate. No other significant assumptions beyond those allowed by the ASTM standards were made in the performance of this Phase I ESA.

Limitations, Data Gaps, and Exceptions

No limitations or data gaps were encountered during the performance of this Phase I ESA and no exceptions to the ASTM E1527-13 Practice were taken except the following:

- Moody submitted a written request to the PADEP Northwest Regional Office in Meadville, Pennsylvania to review files pertaining to the subject site, adjoining and nearby sites. The PADEP is not conducting in house file reviews at this time due to COVID-19. Files were not able to be provided at the time of this report. This is considered a data gap but is not considered to be significant due to Moody's knowledge of the subject site. It is Moody's professional opinion that a review of the PADEP files will not eliminate the RECs identified at the subject site.
- History is reviewed to 1940 or first development, whichever is earlier. The subject site appears developed as early as 1886. Moody could not ascertain the date of first development. This is considered to be a limitation but is not considered to be significant.

Special Terms and Conditions

Moody was authorized to proceed with this Phase I ESA through a Master Consulting Service Agreement (MCSA) on October 26, 2020. The MCSA included in APPENDIX A.

User Reliance

This Phase I ESA report has been completed for the use of Oil Region Alliance of Business, Industry & Tourism and the Environmental Protection Agency.

USER/OWNER PROVIDED INFORMATION

The user questionnaire was sent to Ms. Selina Pedi. In regard to conditions indicative of releases or threatened releases at the subject site the user questionnaire states:

“... it is expected that the Dahlstrom site, in particular, will have considerable residual leaks from decades of use as a scrap yard”

In regard to any obvious indicators that point to the presence or likely presence of contamination at the property the user questionnaire states:

“It is very likely that the Dahlstrom site is contaminated due to the fact that it has been a catch-all scrap yard for decades. The site is completely covered in old metal, plastic, and other assorted rubbish, including vehicles, gas tanks, and machinery. Oily patches are visible in many places, and it is expected that there is more contamination underground.”

Additional documentation was provided regarding two registered storage tanks on the subject site. The storage tanks were registered to Kraft Concrete Products Inc. with registration numbers 61-01220-001 and 61-01220-002. Tank 001 is listed as a 3,000-gallon gasoline UST. Tank 002 is listed as a 2,000-gallon diesel UST. A newspaper article dated October 30, 2007 was provided concerning Oil City levying fines on the Dahlstrom property in relation to access concerns for the fire department. The user provided information is included in APPENDIX B.

SITE BACKGROUND

Site Location and Description

The subject site is located at located in Oil City, Venango County, Pennsylvania, hereinafter referenced as the subject site. The subject site consists of approximately 3.79 acres situated on six parcels, identified as Venango County tax parcel numbers 16.034-140..-000, 16.034-154..-000, 16.034-155..-000, 16.034-161..-000, 16.034-164..-000, and 16.034-149..-000. The subject site is currently owned by Kraft Concrete Products and Gilbert E Dahlstrom. First development of the subject site is unknown but appears developed on Sanborn Fire Insurance Maps as early as 1886. The subject site has historically been used for railroad operations, lumber supplies, concrete block manufacturing, cigar manufacturing, dry cleaning, and as a scrap yard. The subject site is currently unutilized, but remnants of the scrap yard operations along with vacant buildings remain on the subject site.

There are 6 buildings on the subject site.

The southernmost building (concrete block manufacturing building) was built in circa 1906 and contains shop areas, the old office space and furnace areas for curing the concrete blocks. The building was previously utilized for wood manufacturing until circa 1963 when it started being utilized for concrete block manufacturing. A floor drain was present in the shop area which reportedly discharged to municipal sewer.

The building to the north of the Club (former dry-cleaning building) was built in circa 1963 and contains offices and garage/storage areas. The building was originally utilized as a dry-cleaner until circa 1968. It was later converted to office space for the concrete block manufacturing company. The building contains a suspended AST that was empty upon inspection. Drainage features in the western end of the building concrete are indicative of possible dry-cleaning operations in the building in the past.

Two buildings are present in the middle of the subject site on the Kraft property. The southern building is an old office building (office building) with a collapsed roof. The northern building is an old boiler room (boiler room building) for the concrete manufacturing.

Two buildings were present on the northwestern portion of the property on the Dahlstrom property. The southern building was the previous office (Dahlstrom office building) and contained files and assorted debris on the floor throughout the building. The northern building was a garage (Dahlstrom garage) for the scrap yard and contained approximately two feet of scrap on the floor throughout the building. A homemade smelter was observed in the northwest corner of the building which had an exhaust pipe exiting the western wall.

The subject site buildings are connected to the municipal public water supply and sanitary sewer systems if either was utilized in the specific building. There are no known water wells or septic located on the property.

FIGURE 1 represents a portion of the Oil City, Pennsylvania, USGS 7 ½ Minute Topographic Map illustrating the location of the subject site. FIGURE 2 is an aerial photograph showing the approximate subject site property boundaries, neighboring properties, and other relevant features identified in the Phase I ESA.

The adjoining properties are mixed industrial, residential and commercial.

The subject site is located within the High Plateau Section of the Appalachian Plateaus Physiographic Province of Pennsylvania. The High Plateau Section is characterized by broad, rounded to flat uplands having deep, angular valleys. According to the Pennsylvania Geological Survey publication entitled Geologic Map of Pennsylvania (1980), the bedrock underlying the subject site is made up of the Corry Sandstone through Riceville Formation, Undivided, the Cuyahoga Group, and the Shenango Formation. The Corry Sandstone through Riceville Formation, Undivided consists of