NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

# BROWNFIELD CLEANUP PROGRAM (BCP) APPLICATION FORM

DEC requires an application to request major changes to the description of the property set forth in a Brownfield Cleanup Agreement, or "*BCA*" (e.g., adding a significant amount of new property, or adding property that could affect an eligibility determination due to contamination levels or intended land use). Such application must be submitted and processed in the same manner as the original application, including the required public comment period. **Is this an application to amend an existing BCA?**

☐ **Yes** ☑ **No** **If yes, provide existing site number:** _____

**PART A (note: application is separated into Parts A and B for DEC review purposes)** ***BCP App Rev 10***

**Section I. Requestor Information - See Instructions for Further Guidance**

DEC USE ONLY
BCP SITE #: _____

| | | |
|---|---|---|
| NAME County of Westchester | | |
| ADDRESS 148 Martine Ave Room 518 | | |
| CITY/TOWN White Plains | ZIP CODE 10601 | |
| PHONE 914 995-2546 | FAX 914 995-4479 | E-MAIL hjg7@westchestergov.com |

Is the requestor authorized to conduct business in New York State (NYS)? ☐ Yes ☑ No

- If the requestor is a Corporation, LLC, LLP or other entity requiring authorization from the NYS Department of State to conduct business in NYS, the requestor's name must appear, exactly as given above, in the NYS Department of State's Corporation & Business Entity Database. A print-out of entity information from the database must be submitted to the New York State Department of Environmental Conservation (DEC) with the application to document that the requestor is authorized to do business in NYS. **Please note:** If the requestor is an LLC, the members/owners names need to be provided on a separate attachment.

Do all individuals that will be certifying documents meet the requirements detailed below? ☑ Yes ☐ No

- Individuals that will be certifying BCP documents, as well as their employers, meet the requirements of Section 1.5 of *DER-10: Technical Guidance for Site Investigation and Remediation* and Article 145 of New York State Education Law. **Documents that are not properly certified will be not approved under the BCP**.

**Section II. Project Description**

1. What stage is the project starting at? ☑ Investigation ☐ Remediation

NOTE: If the project is proposed to start at the remediation stage, a Remedial Investigation Report (RIR) at a minimum is required to be attached, resulting in a 30-day public comment period. If an Alternatives Analysis and Remedial Work Plan are also attached (see DER-10 / Technical Guidance for Site Investigation and Remediation for further guidance) then a 45-day public comment period is required.

2. If a final RIR is included, please verify it meets the requirements of Environmental Conservation Law (ECL) Article 27-1415(2): ☐ Yes ☐ No

3. Please attach a short description of the overall development project, including:

- the date that the remedial program is to start; and First half of 2020.
- the date the Certificate of Completion is anticipated. Unknown at this time.

## Section III. Property's Environmental History

All applications **must include** an Investigation Report (per ECL 27-1407(1)). The report must be sufficient to establish contamination of environmental media on the site above applicable Standards, Criteria and Guidance (SCGs) based on the reasonably anticipated use of the property.

To the extent that existing information/studies/reports are available to the requestor, please attach the following (***please submit the information requested in this section in electronic format only***):

1. **Reports:** an example of an Investigation Report is a Phase II Environmental Site Assessment report prepared in accordance with the latest American Society for Testing and Materials standard (ASTM E1903). **Please submit a separate electronic copy of each report in Portable Document Format (PDF).**

**2. SAMPLING DATA: INDICATE KNOWN CONTAMINANTS AND THE MEDIA WHICH ARE KNOWN TO HAVE BEEN AFFECTED. LABORATORY REPORTS SHOULD BE REFERENCED AND COPIES INCLUDED.**

| Contaminant Category | Soil | Groundwater | Soil Gas |
|---|---|---|---|
| Petroleum | | | |
| Chlorinated Solvents | | 1,1,1TCA; 1,1DCA; 1,1DCE | |
| Other VOCs | | | |
| SVOCs | | 1,4-dioxane | |
| Metals | | | |
| Pesticides | | | |
| PCBs | | | |
| Other* | PFAS | PFAS | |

***Please describe:** PFAS has been detected in groundwater, soil, sediment and surface water.

**3. FOR EACH IMPACTED MEDIUM INDICATED ABOVE, INCLUDE A SITE DRAWING INDICATING:**

- **SAMPLE LOCATION**
- **DATE OF SAMPLING EVENT**
- **KEY CONTAMINANTS AND CONCENTRATION DETECTED**
- **FOR SOIL, HIGHLIGHT IF ABOVE REASONABLY ANTICIPATED USE**
- **FOR GROUNDWATER, HIGHLIGHT EXCEEDANCES OF 6NYCRR PART 703.5**
- **FOR SOIL GAS/ SOIL VAPOR/ INDOOR AIR, HIGHLIGHT IF ABOVE MITIGATE LEVELS ON THE NEW YORK STATE DEPARTMENT OF HEALTH MATRIX**

**THESE DRAWINGS ARE TO BE REPRESENTATIVE OF ALL DATA BEING RELIED UPON TO MAKE THE CASE THAT THE SITE IS IN NEED OF REMEDIATION UNDER THE BCP. DRAWINGS SHOULD NOT BE BIGGER THAN 11" X 17". THESE DRAWINGS SHOULD BE PREPARED IN ACCORDANCE WITH ANY GUIDANCE PROVIDED.**

**ARE THE REQUIRED MAPS INCLUDED WITH THE APPLICATION?* (*answering No will result in an incomplete application)** ☑ **Yes** ☐ **No**

**4. INDICATE PAST LAND USES (CHECK ALL THAT APPLY):**

| | | | |
|---|---|---|---|
| ☐ Coal Gas Manufacturing | ☐ Manufacturing | ☐ Agricultural Co-op | ☐ Dry Cleaner |
| ☐ Salvage Yard | ☐ Bulk Plant | ☐ Pipeline | ☐ Service Station |
| ☑ Landfill | ☐ Tannery | ☐ Electroplating | ☐ Unknown |

Other: County Public Airport; Former U.S. Army Air Force Base; Former NYS Air National Guard Base

**Section IV. Property Information - See Instructions for Further Guidance**

PROPOSED SITE NAME Westchester County Airport

ADDRESS/LOCATION 240 Airport Rd

CITY/TOWN West Harrison ZIP CODE 10604

MUNICIPALITY(IF MORE THAN ONE, LIST ALL): Harrison; North Castle; Rye Brook

COUNTY Westchester SITE SIZE (ACRES) 689.02

| LATITUDE (degrees/minutes/seconds) | LONGITUDE (degrees/minutes/seconds) |
|---|---|
| 41 ° 04 ' 06.48 " | 73 ° 42 ' 31.34 " |

**Complete tax map information for all tax parcels included within the proposed site boundary. If a portion of any lot is proposed , please indicate as such by inserting "P/O" in front of the lot number in the appropriate box below, and only include the acreage for that portion of the tax parcel in the corresponding far right column.ATTACH REQUIRED MAPS PER THE APPLICATION INSTRUCTIONS**.

| Parcel Address | Section No. | Block No. | Lot No. | Acreage |
|---|---|---|---|---|
| 240 Airport Rd West Harrison NY 10604 | | | | |
| Multiple Parcels - see Section IV attachments | | | | |

1. Do the proposed site boundaries correspond to tax map metes and bounds? ☑ Yes ☐ No
   If no, please attach an accurate map of the propsed site.

2. Is the required property map attached to the application? ☑ Yes ☐ No
   (application will not be processed without map)

3. Is the property within a designated Environmental Zone (En-zone) pursuant to Tax Law 21(b)(6)?
   (See DEC's website for more information) Yes ☐ No ☑

   If yes, identify census tract : _____

   Percentage of property in En-zone (check one): ☐ 0-49% ☐ 50-99% ☐ 100%

4. Is this application one of multiple applications for a large development project, where the development project spans more than 25 acres (see additional criteria in BCP application instructions)? ☐ Yes ☑ No

   If yes, identify name of properties (and site numbers if available) in related BCP applications:_____

5. Is the contamination from groundwater or soil vapor solely emanating from property other than the site subject to the present application? ☐ Yes ☑ No

6. Has the property previously been remediated pursuant to Titles 9, 13, or 14 of ECL Article 27, Title 5 of ECL Article 56, or Article 12 of Navigation Law? ☑ Yes ☐ No
   If yes, attach relevant supporting documentation.

7. Are there any lands under water? ☐ Yes ☑ No
   If yes, these lands should be clearly delineated on the site map.

**Section IV. Property Information (continued)**

8. Are there any easements or existing rights of way that would preclude remediation in these areas? If yes, identify here and attach appropriate information. ☐ Yes ☑ No

| Easement/Right-of-way Holder | Description |
|---|---|

9. List of Permits issued by the DEC or USEPA Relating to the Proposed Site (type here or attach information)

| Type | Issuing Agency | Description |
|---|---|---|
| | SEE SECTION IV ATTACHMENTS | |

10. Property Description and Environmental Assessment – **please refer to application instructions for the proper format of <u>each</u> narrative requested.**

Are the Property Description and Environmental Assessment narratives included in the **prescribed format**? ☑ Yes ☐ No

**Note: Questions 11 through 13 only pertain to sites located within the five counties comprising New York City**

11. Is the requestor seeking a determination that the site is eligible for tangible property tax credits? ☐ Yes ☐ No
If yes, requestor must answer questions on the supplement at the end of this form.

12. Is the Requestor now, or will the Requestor in the future, seek a determination that the property is Upside Down? ☐ Yes ☐ No

13. If you have answered *Yes* to Question 12, above, is an independent appraisal of the value of the property, as of the date of application, prepared under the hypothetical condition that the property is not contaminated, included with the application? ☐ Yes ☐ No

**NOTE:** If a tangible property tax credit determination is not being requested in the application to participate in the BCP, the applicant may seek this determination at any time before issuance of a certificate of completion by using the BCP Amendment Application, <u>except</u> for sites seeking eligibility under the underutilized category.

If any changes to Section IV are required prior to application approval, a new page, initialed by each requestor, must be submitted.

Initials of each Requestor: _____ _____ _____ _____ _____ _____

**BCP application - PART B (note: application is separated into Parts A and B for DEC review purposes)**

**Section V. Additional Requestor Information**
**See Instructions for Further Guidance**

DEC USE ONLY
BCP SITE NAME: _____
BCP SITE #:_____

| | | |
|---|---|---|
| NAME OF REQUESTOR'S AUTHORIZED REPRESENTATIVE Hugh J. Greechan, Jr., P.E. | | |
| ADDRESS 148 Martine Ave | | |
| CITY/TOWN White Plains | | ZIP CODE 10601 |
| PHONE 914 995-2546 | FAX 914 995-4479 | E-MAIL hjg7@westchestergov.com |
| NAME OF REQUESTOR'S CONSULTANT John Benvegna | | |
| ADDRESS WSP 4 Westchester Park Dr. Ste 175 | | |
| CITY/TOWN White Plains | | ZIP CODE 10609 |
| PHONE 914 461-2961 | FAX | E-MAIL john.benvegna@wsp.com |
| NAME OF REQUESTOR'S ATTORNEY John M. Nonna | | |
| ADDRESS 148 Martine Ave 6th Fl | | |
| CITY/TOWN White Plains | | ZIP CODE 10601 |
| PHONE 914 995-2690 | FAX | E-MAIL JNonna@westchestergov.com |

**Section VI. Current Property Owner/Operator Information – if not a Requestor**

| | | |
|---|---|---|
| CURRENT OWNER'S NAME Not applicable, current owner is requestor OWNERSHIP START DATE: 1942 | | |
| ADDRESS | | |
| CITY/TOWN | | ZIP CODE |
| PHONE | FAX | E-MAIL |
| CURRENT OPERATOR'S NAME | | |
| ADDRESS | | |
| CITY/TOWN | | ZIP CODE |
| PHONE | FAX | E-MAIL |

**PROVIDE A LIST OF PREVIOUS PROPERTY OWNERS AND OPERATORS WITH NAMES, LAST KNOWN ADDRESSES AND TELEPHONE NUMBERS AS AN ATTACHMENT. DESCRIBE REQUESTOR'S RELATIONSHIP, TO EACH PREVIOUS OWNER AND OPERATOR, INCLUDING ANY RELATIONSHIP BETWEEN REQUESTOR'S CORPORATE MEMBERS AND PREVIOUS OWNER AND OPERATOR. IF NO RELATIONSHIP, PUT "NONE".**

See Section VI. Attachment for Previous Property Owner List.

**IF REQUESTOR IS NOT THE CURRENT OWNER, DESCRIBE REQUESTOR'S RELATIONSHIP TO THE CURRENT OWNER, INCLUDING ANY RELATIONSHIP BETWEEN REQUESTOR'S CORPORATE MEMBERS AND THE CURRENT OWNER.**

**Section VII. Requestor Eligibility Information (Please refer to ECL § 27-1407)**

If answering "yes" to any of the following questions, please provide an explanation as an attachment.

1. Are any enforcement actions pending against the requestor regarding this site? ☐ Yes ☑ No
2. Is the requestor subject to an existing order for the investigation, removal or remediation of contamination at the site? ☑ Yes ☐ No
3. Is the requestor subject to an outstanding claim by the Spill Fund for this site? Any questions regarding whether a party is subject to a spill claim should be discussed with the Spill Fund Administrator. ☐ Yes ☑ No

**Section VII. Requestor Eligibility Information (continued)**

4. Has the requestor been determined in an administrative, civil or criminal proceeding to be in violation of i) any provision of the ECL Article 27; ii) any order or determination; iii) any regulation implementing Title 14; or iv) any similar statute, regulation of the state or federal government? If so, provide an explanation on a separate attachment. ☐ Yes ☑ No
5. Has the requestor previously been denied entry to the BCP? If so, include information relative to the application, such as name, address, DEC assigned site number, the reason for denial, and other relevant information. ☐ Yes ☑ No
6. Has the requestor been found in a civil proceeding to have committed a negligent or intentionally tortious act involving the handling, storing, treating, disposing or transporting of contaminants? ☐ Yes ☑ No
7. Has the requestor been convicted of a criminal offense i) involving the handling, storing, treating, disposing or transporting of contaminants; or ii) that involves a violent felony, fraud, bribery, perjury, theft, or offense against public administration (as that term is used in Article 195 of the Penal Law) under federal law or the laws of any state? ☐ Yes ☑ No
8. Has the requestor knowingly falsified statements or concealed material facts in any matter within the jurisdiction of DEC, or submitted a false statement or made use of or made a false statement in connection with any document or application submitted to DEC? ☐ Yes ☑ No
9. Is the requestor an individual or entity of the type set forth in ECL 27-1407.9 (f) that committed an act or failed to act, and such act or failure to act could be the basis for denial of a BCP application? ☐ Yes ☑ No
10. Was the requestor's participation in any remedial program under DEC's oversight terminated by DEC or by a court for failure to substantially comply with an agreement or order? ☐ Yes ☑ No
11. Are there any unregistered bulk storage tanks on-site which require registration? ☐ Yes ☑ No

THE REQUESTOR MUST CERTIFY THAT HE/SHE IS EITHER A PARTICIPANT OR VOLUNTEER IN ACCORDANCE WITH ECL 27-1405 (1) BY CHECKING ONE OF THE BOXES BELOW:

☑ PARTICIPANT

A requestor who either 1) was the owner of the site at the time of the disposal of hazardous waste or discharge of petroleum or 2) is otherwise a person responsible for the contamination, unless the liability arises solely as a result of ownership, operation of, or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.

☐ VOLUNTEER

A requestor other than a participant, including a requestor whose liability arises solely as a result of ownership, operation of or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.

NOTE: By checking this box, a requestor whose liability arises solely as a result of ownership, operation of or involvement with the site certifies that he/she has exercised appropriate care with respect to the hazardous waste found at the facility by taking reasonable steps to: i) stop any continuing discharge; ii) prevent any threatened future release; iii) prevent or limit human, environmental, or natural resource exposure to any previously released hazardous waste.

**If a requestor whose liability arises solely as a result of ownership, operation of or involvement with the site, submit a statement describing why you should be considered a volunteer – be specific as to the appropriate care taken.**

## Section VII. Requestor Eligibility Information (continued)

Requestor Relationship to Property (check one):
☐ Previous Owner ☑ Current Owner ☐ Potential /Future Purchaser ☐ Other_____

If requestor is not the current site owner, **proof of site access sufficient to complete the remediation must be submitted**. Proof must show that the requestor will have access to the property before signing the BCA and throughout the BCP project, including the ability to place an easement on the site Is this proof attached?

☐ Yes ☐ No

**Note: a purchase contract does not suffice as proof of access.**

## Section VIII. Property Eligibility Information - See Instructions for Further Guidance

1. Is / was the property, or any portion of the property, listed on the National Priorities List?
   If yes, please provide relevant information as an attachment. ☐ Yes ☑ No
2. Is / was the property, or any portion of the property, listed on the NYS Registry of Inactive Hazardous Waste Disposal Sites pursuant to ECL 27-1305? ☑ Yes ☐ No
   If yes, please provide: Site # 360037 Class # 02
3. Is / was the property subject to a permit under ECL Article 27, Title 9, other than an Interim Status facility? ☐ Yes ☑ No
   If yes, please provide: Permit type:_____ EPA ID Number:_____
   Date permit issued:_____ Permit expiration date:_____
4. If the answer to question 2 or 3 above is yes, is the site owned by a volunteer as defined under ECL 27-1405(1)(b), or under contract to be transferred to a volunteer? Attach any information available to the requestor related to previous owners or operators of the facility or property and their financial viability, including any bankruptcy filing and corporate dissolution documentation. ☐ Yes ☑ No
5. Is the property subject to a cleanup order under Navigation Law Article 12 or ECL Article 17 Title 10?
   If yes, please provide: Order # 3-20180308-44 ☑ Yes ☐ No
6. Is the property subject to a state or federal enforcement action related to hazardous waste or petroleum?
   If yes, please provide explanation as an attachment. ☐ Yes ☑ No

## Section IX. Contact List Information

To be considered complete, the application must include the Brownfield Site Contact List in accordance with *DER-23 / Citizen Participation Handbook for Remedial Programs*. Please attach, at a minimum, the names and addresses of the following: See Section IX. Attachment.

1. The chief executive officer and planning board chairperson of each county, city, town and village in which the property is located.
2. Residents, owners, and occupants of the property and properties adjacent to the property.
3. Local news media from which the community typically obtains information.
4. The public water supplier which services the area in which the property is located.
5. Any person who has requested to be placed on the contact list.
6. The administrator of any school or day care facility located on or near the property.
7. The location of a document repository for the project (e.g., local library). **If the site is located in a city with a population of one million or more, add the appropriate community board as an additional document repository**. In addition, attach a copy of an acknowledgement from each repository indicating that it agrees to act as the document repository for the site.

**Section X. Land Use Factors**

1. What is the current municipal zoning designation for the site? SB-O; IND-AA; OB-1

   What uses are allowed by the current zoning? (Check boxes, below)

   ☐ Residential ☑ Commercial ☑ Industrial

   If zoning change is imminent, please provide documentation from the appropriate zoning authority.

2. Current Use: ☐ Residential ☑ Commercial ☐ Industrial ☐ Vacant ☐ Recreational (check all that apply)
   **Attach a summary of current business operations or uses, with an emphasis on identifying possible contaminant source areas. If operations or uses have ceased, provide the date.**

3. Reasonably anticipated use Post Remediation: ☐ Residential ☑ Commercial ☐ Industrial (check all that apply) **Attach a statement detailing the specific proposed use.**

   If residential, does it qualify as single family housing? ☐ Yes ☐ No

| | |
|---|---|
| 4. Do current historical and/or recent development patterns support the proposed use? | ☑ Yes ☐ No |
| 5. Is the proposed use consistent with applicable zoning laws/maps? Briefly explain below, or attach additional information and documentation if necessary.<br><br>Current zoning regulations allow the existence and continued operation of the airport. | ☑ Yes ☐ No |
| 6. Is the proposed use consistent with applicable comprehensive community master plans, local waterfront revitalization plans, or other adopted land use plans? Briefly explain below, or attach additional information and documentation if necessary.<br><br>The comprehensive plans of Harrison, North Castle and Rye Brook recognize the existence and continued operation of the Westchester County Airport. | ☑ Yes ☐ No |

## XI. Statement of Certification and Signatures

(By requestor who is an individual)

If this application is approved, I hererby acknowledge and agree: (1) to execute a Brownfield Cleanup Agreement (BCA) within 60 days of the date of DEC's approval letter; (2) to the general terms and conditions set forth in the *DER-32, Brownfield Cleanup Program Applications and Agreements*; and (3) that in the event of a conflict between the general terms and conditions of participation and the terms contained in a site-specific BCA, the terms in the site-specific BCA shall control. Further, I hereby affirm that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.

Date: _____ Signature: _____

Print Name: _____

(By a requestor other than an individual)

I hereby affirm that I am Commissioner of Public Works & Transportation (title) of Westchester County (entity); that I am authorized by that entity to make this application and execute the Brownfield Cleanup Agreement (BCA) and all subsequent amendments; that this application was prepared by me or under my supervision and direction. If this application is approved, I acknowledge and agree: (1) to execute a BCA within 60 days of the date of DEC's approval letter; (2) to the general terms and conditions set forth in the *DER-32, Brownfield Cleanup Program Applications and Agreements*; and (3) that in the event of a conflict between the general terms and conditions of participation and the terms contained in a site-specific BCA, the terms in the site-specific BCA shall control. Further, I hereby affirm that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Date: 1/13/20 Signature: _____

Print Name: Hugh J Greechan Jr

**SUBMITTAL INFORMATION:**

- **Two (2)** copies, one paper copy with original signatures and one electronic copy in Portable Document Format (PDF), must be sent to:
  - Chief, Site Control Section
  - New York State Department of Environmental Conservation
  - Division of Environmental Remediation
  - 625 Broadway
  - Albany, NY 12233-7020

**FOR DEC USE ONLY**
**BCP SITE T&A CODE:** _____ **LEAD OFFICE:** _____

**BCP Application Summary (for DEC use only)**

**Site Name:** Westchester County Airport **Site Address:** 240 Airport Rd
**City:** West Harrison **County:** Westchester **Zip:** 10604

**Tax Block & Lot**
**Section (if applicable):** **Block:** **Lot:**

**Requestor Name:** County of Westchester **Requestor Address:** 148 Martine Ave Room 518
**City:** White Plains **Zip:** 10601 **Email:** hjg7@westchestergov.com

**Requestor's Representative (for billing purposes)**
**Name:** Hugh J. Greechan, Jr., P.E. **Address:** 148 Martine Ave
**City:** White Plains **Zip:** 10601 **Email:** hjg7@westchestergov.com

**Requestor's Attorney**
**Name:** John M. Nonna **Address:** 148 Martine Ave 6th Fl
**City:** White Plains **Zip:** 10601 **Email:** JNonna@westchestergov.com

**Requestor's Consultant**
**Name:** John Benvegna **Address:** WSP 4 Westchester Park Dr. Ste 175
**City:** White Plains **Zip:** 10609 **Email:** john.benvegna@wsp.com

**Percentage claimed within an En-Zone:** ☑ **0%** ☐ **<50%** ☐ **50-99%** ☐ **100%**

**DER Determination:** ☐ Agree ☐ Disagree

**Requestor's Requested Status:** ☐ **Volunteer** ☑ **Participant**

**DER/OGC Determination:** ☐ Agree ☐ Disagree
Notes:

**For NYC Sites, is the Requestor Seeking Tangible Property Credits:** ☐ Yes ☐ No

**Does Requestor Claim Property is Upside Down:** ☐ Yes ☐ No
**DER/OGC Determination:** ☐ Agree ☐ Disagree ☐ Undetermined
Notes:

**Does Requestor Claim Property is Underutilized:** ☐ Yes ☐ No
**DER/OGC Determination:** ☐ Agree ☐ Disagree ☐ Undetermined
Notes:

**Does Requestor Claim Affordable Housing Status:** ☐ Yes ☐ No ☐ Planned, No Contract
**DER/OGC Determination:** ☐ Agree ☐ Disagree ☐ Undetermined
Notes:

**ATTACHMENTS**

## Section II. #3

## Project Description

## SECTION II. PROJECT DESCRIPTION

### 3. Project Description

A start date for the remedial program is anticipated sometime in the first half of 2020. A date for issuance the Certificate of Completion (COC) is not known at this time.

The purpose of the project is to define the nature and extent of contamination on the property and to implement remedial measures as deemed appropriate. The site is an operating public airport owned by the County of Westchester. In 2017 and 2018 PFAS including PFOA and PFOS were discovered in groundwater throughout the site as well as in surface water and sediment. In 2019 the County entered into an Order on Consent with the NYSDEC (Index No. 3-20180308-44). The order required the submission of several workplans including a Site Characterization Work Plan and two Interim Remedial Measure (IRM) workplans for groundwater and surface water, all of which have been submitted. It is the County's intention to investigate and remediate the site through the Brownfield Cleanup Program.

**Section III. # 1**

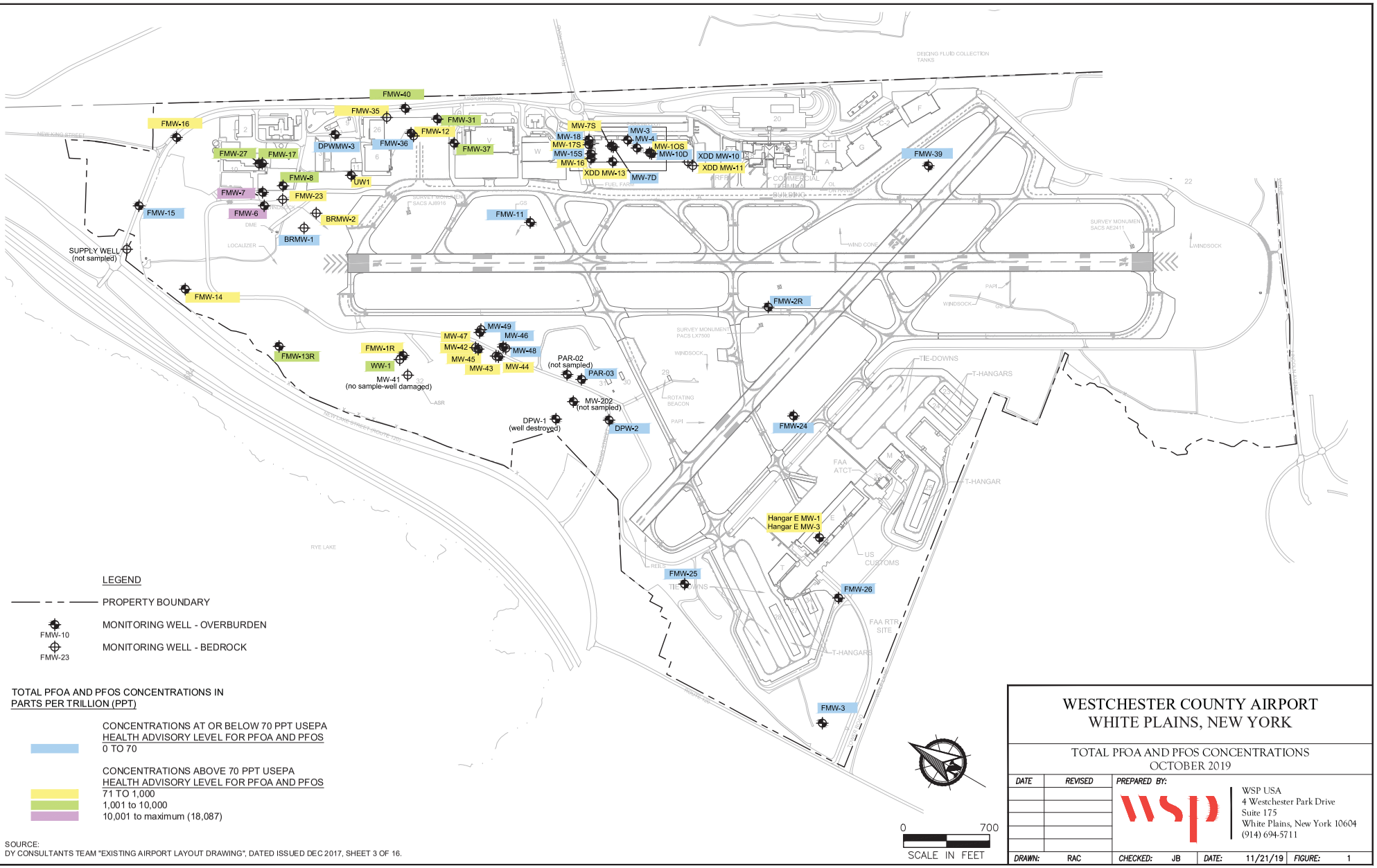
**Investigation Reports**

**(submitted as separate electronic files per application instructions )**

1) **Westchester County Airport, October 2019 Groundwater Sampling Results December 9, 2019**
2) **PFAS Surface Soil Sample Results, March 2020**

## Section III. # 3

## Impacted Media Drawings




LEGEND

PROPERTY BOUNDARY

FMW-10 MONITORING WELL - OVERBURDEN

FMW-23 MONITORING WELL - BEDROCK

TOTAL PFOA AND PFOS CONCENTRATIONS IN PARTS PER TRILLION (PPT)

CONCENTRATIONS AT OR BELOW 70 PPT USEPA HEALTH ADVISORY LEVEL FOR PFOA AND PFOS
0 TO 70

CONCENTRATIONS ABOVE 70 PPT USEPA HEALTH ADVISORY LEVEL FOR PFOA AND PFOS
71 TO 1,000
1,001 to 10,000
10,001 to maximum (18,087)

SOURCE:
DY CONSULTANTS TEAM "EXISTING AIRPORT LAYOUT DRAWING", DATED ISSUED DEC 2017, SHEET 3 OF 16.

0 700
SCALE IN FEET

# WESTCHESTER COUNTY AIRPORT
# WHITE PLAINS, NEW YORK

TOTAL PFOA AND PFOS CONCENTRATIONS
OCTOBER 2019

| DATE | REVISED |
|---|---|
| | |
| | |
| | |
| | |
| | |

PREPARED BY:

WSP USA
4 Westchester Park Drive
Suite 175
White Plains, New York 10604
(914) 694-5711

| DRAWN: | RAC | CHECKED: | JB | DATE: | 11/21/19 | FIGURE: | 1 |
|---|---|---|---|---|---|---|---|

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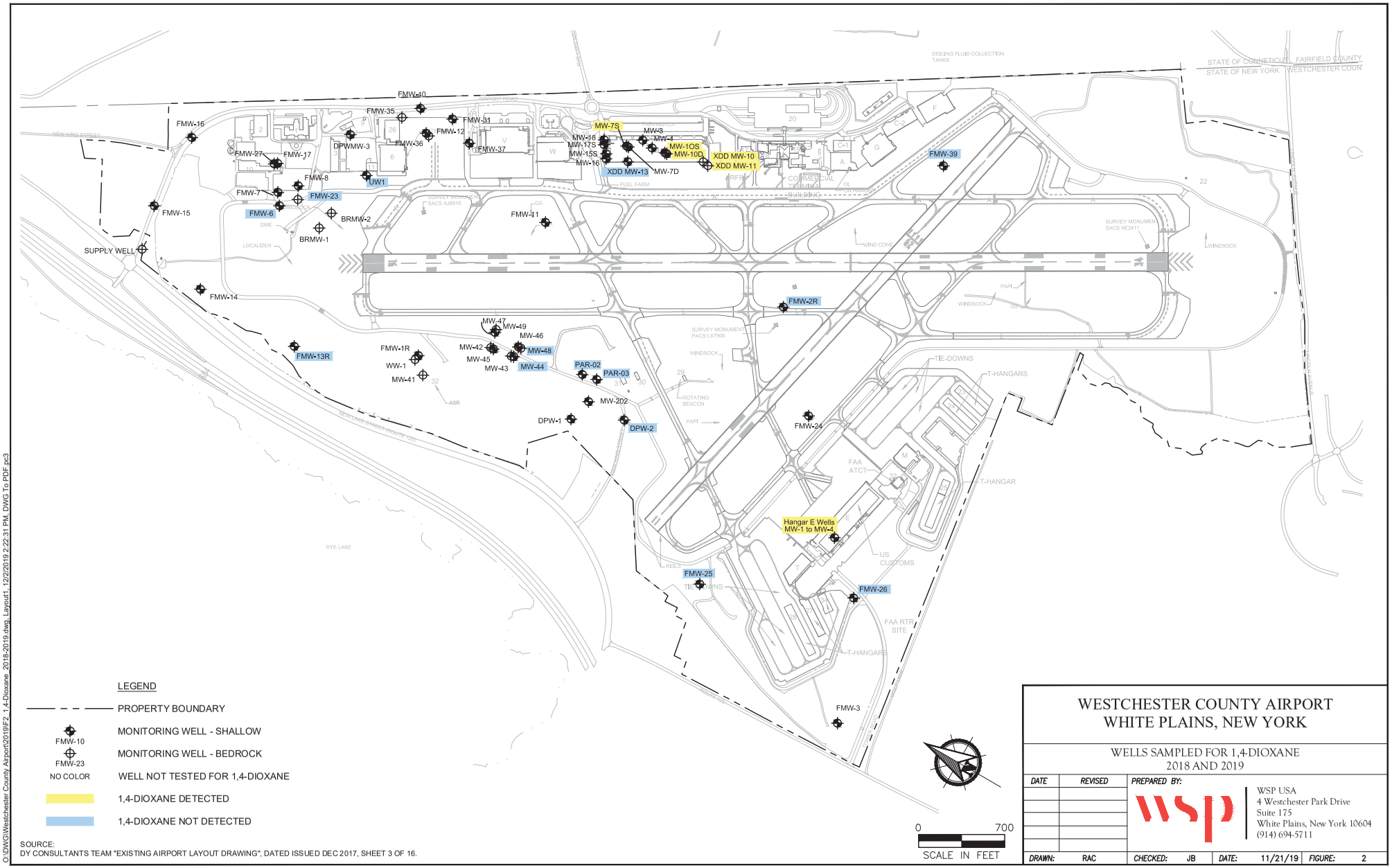



LEGEND

- PROPERTY BOUNDARY
- FMW-10 — MONITORING WELL - SHALLOW
- FMW-23 — MONITORING WELL - BEDROCK
- NO COLOR — WELL NOT TESTED FOR 1,4-DIOXANE
- 1,4-DIOXANE DETECTED
- 1,4-DIOXANE NOT DETECTED

SOURCE:
DY CONSULTANTS TEAM "EXISTING AIRPORT LAYOUT DRAWING", DATED ISSUED DEC 2017, SHEET 3 OF 16.

0 700
SCALE IN FEET

# WESTCHESTER COUNTY AIRPORT
# WHITE PLAINS, NEW YORK

## WELLS SAMPLED FOR 1,4-DIOXANE 2018 AND 2019

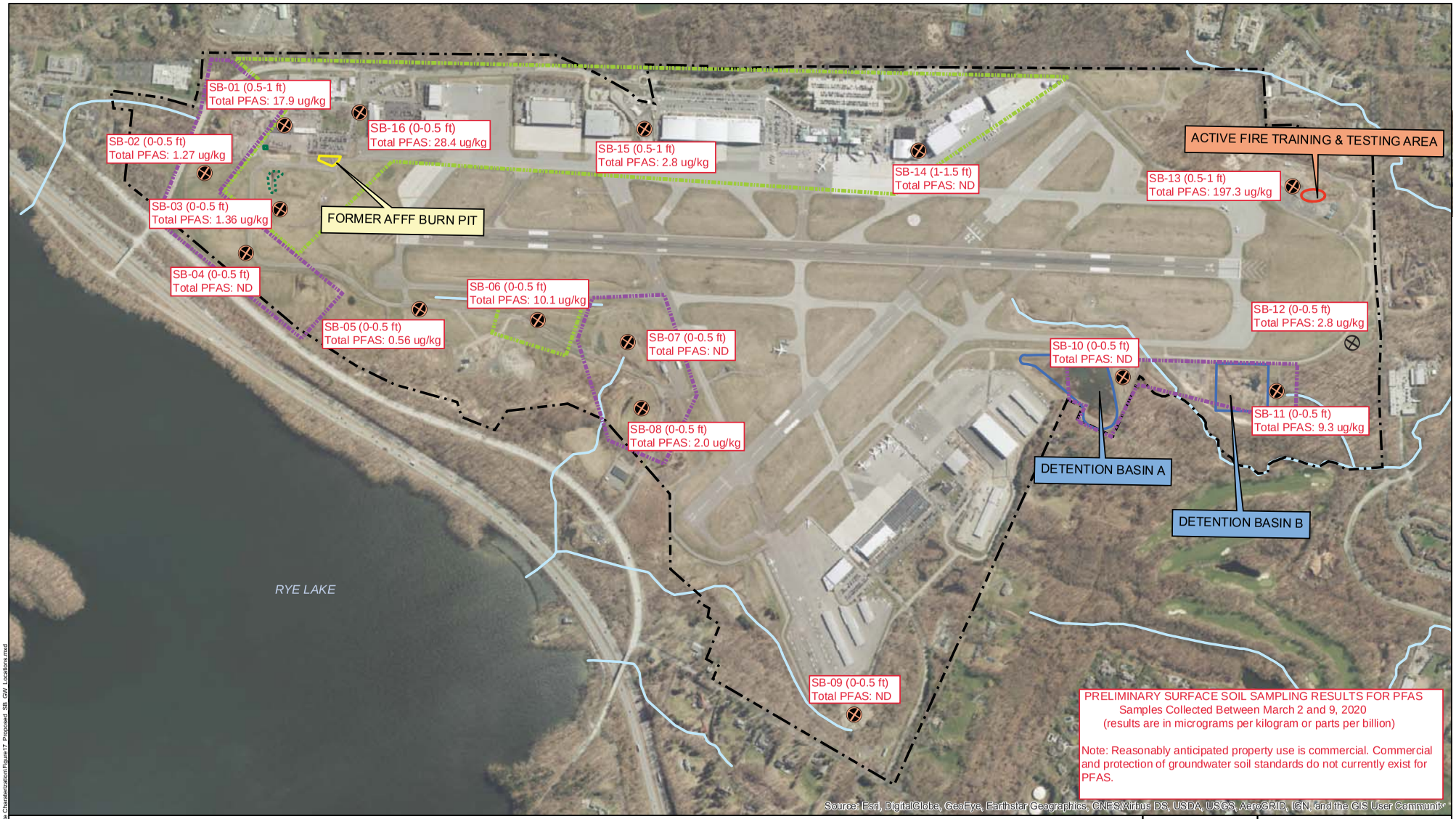
| DATE | REVISED |
|---|---|
| | |

PREPARED BY:

WSP USA
4 Westchester Park Drive
Suite 175
White Plains, New York 10604
(914) 694-5711

| DRAWN: | RAC | CHECKED: | JB | DATE: | 11/21/19 | FIGURE: | 2 |
|---|---|---|---|---|---|---|---|

O:\DWG\Westchester County Airport\2019\F2_1,4-Dioxane_2018-2019.dwg, Layout1, 12/2/2019 2:22:31 PM, DWG To PDF.pc3




**Legend**

Some usable data for VOCs and SVOCs. Some full suite sampling will be required to confirm no change in conditions and provide missing TAL data.

Some usable data for VOCs, SVOCs, metals, pesticides, PCBs. Some full suite sampling will be required to confirm no change in condtions and provide missing TAL data.

- Soil Sample Location
- Active Fire Training & Testing Area
- Former AFFF Burn Pit
- Detention Basin
- Subsurface Catch Basin
- Open Catch Area
- Property Boundary
- Streams (USGS NHD)

1 inch = 700 feet
0 175 350 700 Feet

N

FIRST ENVIRONMENT
91 Fulton Street
Boonton, New Jersey 07005

SITE CHARACTERIZATION
WESTCHESTER COUNTY AIRPORT
White Plains, Westchester County, New York
FIGURE
PFOA/PFOS SURFACE SOIL CONCENTRATIONS

| Revised | Drawn | Checked | Approved | Date |
|---|---|---|---|---|
| | LS | SG | SG | 10/18/2019 |

I:\WESCHESTER AIRPORT\Site Characterization\Figure17 Proposed_SB_GW_Locations.mxd


**Legend**

- Sediment Sample Location
  - 38 - PFOA + PFOS (parts per trillion)
  - OF - Outfall
  - SW - Surface Water
  - SED - Sediment
- Streams (USGS NHD)
- Outfall Location
- Former AFFF Burn Pit
- Property Boundary

SPDES - State Pollutant Discharge Elimination System

Sources
Outfall Locations: TRC Engineers, Inc. Existing (2019) Conditions Drainage Area Map. Nov. 2010.
Streams: USGS National Hydrography Dataset.

0 175 350 700 Feet
1 inch = 700 feet

N

FIRST ENVIRONMENT
91 Fulton Street
Boonton, New Jersey 07005

SITE CHARACTERIZATION
WESTCHESTER COUNTY AIRPORT
White Plains, Westchester County, New York
FIGURE
PFOA/PFOS SEDIMENT CONCENTRATIONS

| Revised | Drawn | Checked | Approved | Date |
|---|---|---|---|---|
| | LS | SG | SG | 7/5/2019 |

I:\WESCHESTER AIRPORT\Site Characterization\Figure10_PFOA-PFOS_Sediment_Concentrations.mxd


**Legend**

- Surface Water Sample Location (FE March 2019)
- Surface Water Sample Location (DEP January 2019)
- Streams (USGS NHD)
- Outfall Location
- Former AFFF Burn Pit
- Property Boundary

38 - PFOA+PFOS (parts per trillion)
OF - Outfall
SW - Surface Water

SPDES - State Pollutant Discharge Elimination System

Sources
Outfall Locations: TRC Engineers, Inc. Existing (2019) Conditions Drainage Area Map. Nov. 2010.
Streams: USGS National Hydrography Dataset.

0 175 350 700 Feet
1 inch = 700 feet

N

FIRST ENVIRONMENT
91 Fulton Street
Boonton, New Jersey 07005

SITE CHARACTERIZATION
WESTCHESTER COUNTY AIRPORT
White Plains, Westchester County, New York
FIGURE
PFOA/PFOS SURFACE WATER CONCENTRATIONS

| Revised | Drawn | Checked | Approved | Date |
|---|---|---|---|---|
| | LS | SG | SG | 7/9/2019 |

I:\WESCHESTER AIRPORT\Site Characterization\Figure9 PFOA-PFOS Surface Water Concentrations.mxd

## Section IV.

## Tax Parcel Information

## and Maps

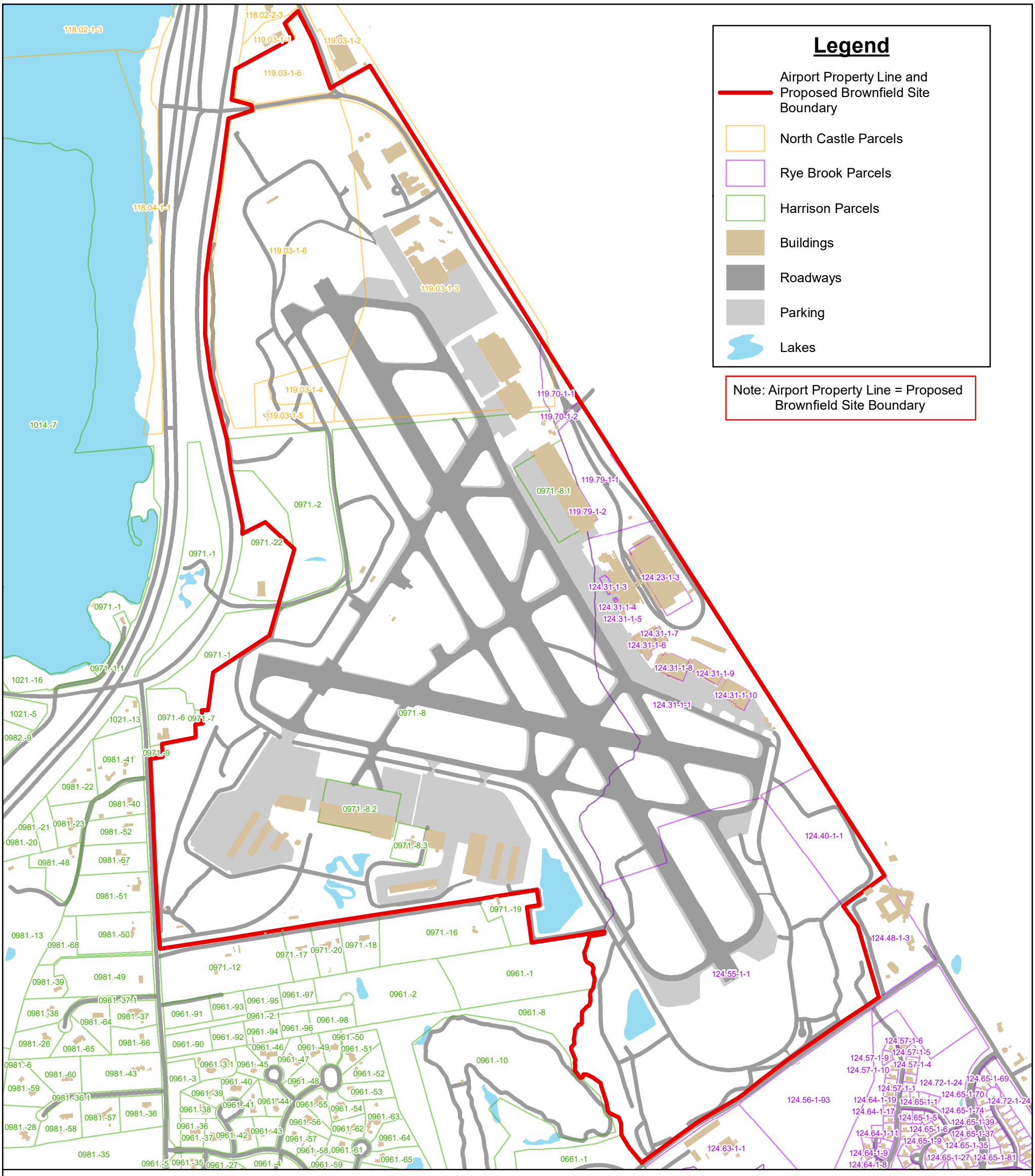
## Site Boundary Tax Parcel Information

All parcels are located at 240 Airport Rd West Harrison, NY 10604

| Municipality | Section, Block and Lot | Acres |
|---|---|---|
| Harrison | 097-1-2 | 17.23 |
| | 097-1-8 | 285.85 |
| | 097-1-8.1 | 6.74 |
| | 097-1-8.2 | 5.63 |
| | 097-1-8.3 | 2.08 |
| | P/O 097-1-22 | 4.06 |
| North Castle | 119.03-1-3 | 74.92 |
| | 119.03-1-4 | 4.90 |
| | 119.03-1-5 | 2.67 |
| | 119.03-1-6 | 72.23 |
| Rye Brook | 119.70-1-1 | 2.71 |
| | 119.70-1-2 | 0.03 |
| | 119.79-1-1 | 9.58 |
| | 119.79-1-2 | 0.42 |
| | 124.23-1-3 | 3.68 |
| | 124.31-1-1 | 66.98 |
| | 124.31-1-10 | 0.89 |
| | 124.31-1-3 | 0.26 |
| | 124.31-1-4 | 0.06 |
| | 124.31-1-5 | 0.02 |
| | 124.31-1-6 | 0.61 |
| | 124.31-1-7 | 0.27 |
| | 124.31-1-8 | 0.93 |
| | 124.31-1-9 | 0.59 |
| | 124.40-1-1 | 12.55 |
| | 124.55-1-1 | 113.12 |
| | Total | 689.02 |

P/O = Partial. Only part of the parcel lies within the airport property boundary.

WSP Office: Shelton, CT | Source: K:\Jobs\Westchester County Airport\DB Airport Info.mxd, 2/26/2020, 1:51:12 PM, NAD 1983 StatePlane New York East FIPS 3101 Feet




**PARCEL OWNERS ADJACENT TO THE AIRPORT PROPERTY**

| Parcel ID | Owner | Address | Parcel ID | Owner | Address |
|---|---|---|---|---|---|
| 0961.-1 | Westchester Joint Water | 12 Stone Ridge Rd, Purchase, NY 10577 | 0971.-8.3 | United States of America | Airport, West Harrison, NY 10604 |
| 0971.-1 | City of New York | Purchase St, West Harrison, NY 10604 | 0971.-9 | Billone, Joseph | 4443 Purchase St, West Harrison, NY 10604 |
| 0971.-12 | Price Ii, Virgil M | 6-10 Wolfe Ln, Purchase, NY 10577 | 0981.-39 | Ammirato, Fulvio | 4288 Purchase St, Purchase, NY 10577 |
| 0971.-16 | Valentino Anthony A | 34 Wolfe Ln, Purchase, NY 10577 | 0981.-40 | Burton, Steven | 4390 Purchase St, Purchase, NY 10577 |
| 0971.-17 | Kanter, Malcolm J | 14 Wolfe Ln, Purchase, NY 10577 | 0981.-41 | Rehman Abaid | 4 Kempner Ln, Purchase, NY 10577 |
| 0971.-18 | Gjokaj, Tony T | 22 Wolfe Ln, Purchase, NY 10577 | 0981.-49 | Ammirato, Barbara | 4282 Purchase St, Purchase, NY 10577 |
| 0971.-19 | Valentino Anthony A | 38 Wolfe Ln, Purchase, NY 10577 | 0981.-50 | Hirabayashi, Kazuko | 4300 Purchase St, Purchase, NY 10577 |
| 0971.-2 | Westchester County | 11 New King St, West Harrison, NY 10604 | 0981.-51 | Summerhill Realty LLC | 4330 Purchase St, Purchase, NY 10577 |
| 0971.-20 | Kern, Hal | 18 Wolfe Ln, Purchase, NY 10577 | 0981.-52 | Hashem Hashem J | 4350 Purchase St, Purchase, NY 10577 |
| 0971.-22 | State of New York | 55 New King St, WestHarrison, NY 10604 | 0981.-67 | Sprewell, Latrell F | 4340 Purchase St, Purchase, NY 10577 |
| 0971.-6 | Society of Friends | 4455 Purchase St, West Harrison, NY 10604 | 0981.-68 | Ammirato, Fulvio | 4290 Purchase St, Purchase, NY 10577 |
| 0971.-7 | Society of Friends | Purchase St, West Harrison, NY 10604 | 124.48-1-3 | United Cerebral Palsy | 1186 King St, West Harrison, NY 10604 |
| 0971.-8 | County of Westchester | Purchase St, West Harrison, NY 10604 | 124.56-1-93 | Village of Rye Brook | 311 Lincoln Ave, Port Chester, NY 10573 |
| 0971.-8.1 | County of Westchester | Purchase St, West Harrison, NY 10604 | 124.63-1-1 | NYS Housing Finance Agency Suny Purchase | Lincoln Ave, Purchase, NY 10577 |
| 0971.-8.2 | County of Westchester | Purchase St, West Harrison, NY 10604 | | | |

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.



Drawn: 2/26/2020
Service Layer Credits:
Westchester County Data sourced from:
http//giswww.westchestergov.com retrieved 2/26/2020

WSP USA Inc.
4 RESEARCH DRIVE
SUITE 204
SHELTON, CT 06484
TEL: (203) 929-8555

WESTCHESTER COUNTY AIRPORT
NEW YORK

PREPARED FOR

County of Westchester

SECTION IV TAX PARCEL INFORMATION

WESTCHESTER COUNTY AIRPORT TAX MAP


0 500 1,000 2,000 Feet

1 inch = 2,000 feet

N W E S

United States Geological Survey, Glenville NY Topographic Quadrangle, 1967, Photorevised 1981

FIRST ENVIRONMENT

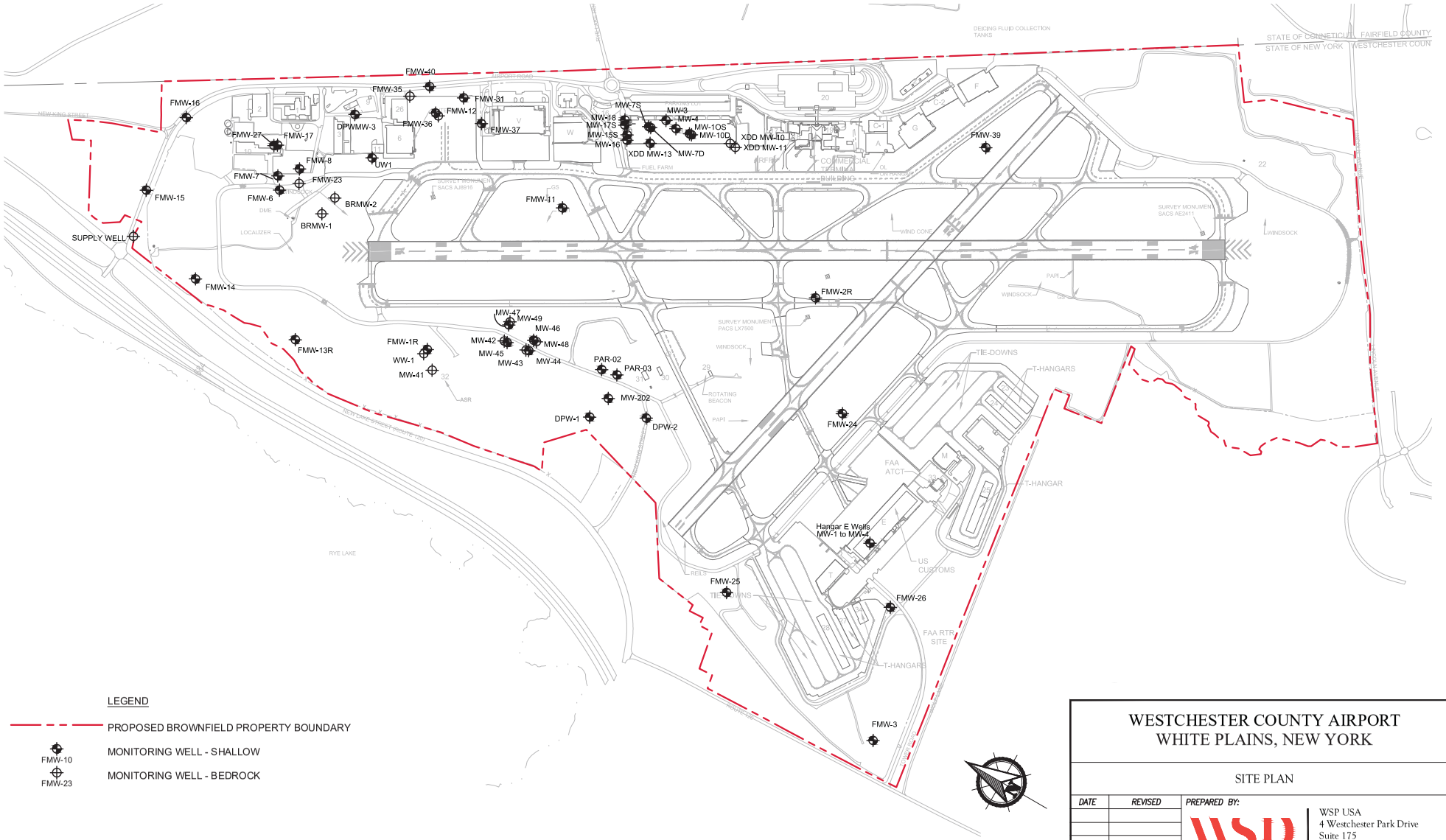
91 Fulton Street
Boonton, New Jersey 07005

WESTCHESTER COUNTY AIRPORT
White Plains, Westchester County, New York

SITE TOPOGRAPHIC LOCATION MAP

| Revised | Drawn | Checked | Approved | Date |
|---|---|---|---|---|
| | LS | SG | SG | 7/2/2019 |

\\WESCHESTER AIRPORT\GIS\Site_Location_Map.mxd




SOURCE:
DY CONSULTANTS TEAM "EXISTING AIRPORT LAYOUT DRAWING", DATED ISSUED DEC 2017, SHEET 3 OF 16.

# WESTCHESTER COUNTY AIRPORT
# WHITE PLAINS, NEW YORK

## SITE PLAN

| DATE | REVISED |
|---|---|
| | |
| | |
| | |
| | |
| | |

PREPARED BY:

WSP USA
4 Westchester Park Drive
Suite 175
White Plains, New York 10604
(914) 694-5711

| DRAWN: | RAC | CHECKED: | JB | DATE: | 02/27/20 | FIGURE: | 2 |
|---|---|---|---|---|---|---|---|

O:\DWG\Westchester County Airport\2019\F1_SitePlan2019.dwg, Layout1, 2/27/2020 12:59:32 PM, DWG To PDF.pc3

## Section IV. # 6

## Remediation Documentation

# Air National Guard Burn Pit

FIRST ENVIRONMENT

90 Riverdale Road
Riverdale, New Jersey 07457
Tel: 973.616.9700 Fax: 973.616.1930
www.firstenvironment.com

January 15, 2001

Mr. Peter Scherrer
Assistant Airport Manager
Westchester County Airport
240 Airport Road, Suite 202
White Plains, New York 10604

Re: Progress Report – Aircraft Rescue & Firefighting (ARFF) Burn Pit
NYSDEC SPILL #9911702
Westchester County Airport

In accordance with the initial AARF Work Plan dated April 3, 2000 and a revised Phase II Investigation and Proposed Workplan letter dated May 22, 2000, incorporating the comments of the New York State Department of Environmental Conservation (NYSDEC), First Environment has conducted site investigation and remediation activities at the AARF Burn Pit. This Progress Report has been prepared in order to document site investigation and remediation activities completed to date. Since existing analyte concentrations in groundwater at one location exceed regulatory guidelines additional investigation is warranted prior to requesting closure from the NYSDEC for this spill (#9911702). The proposed additional investigation is described at the end of this report.

## BACKGROUND

The Westchester County Airport study area, including the subject area is located in Westchester County, New York as shown in Figure 1. Based on information provided by Airport personnel, an area near the north end of the airport, southwest of Building 10, was used for ARFF training. The ARFF training activities consisted of the repeated burning and extinguishing of aviation fuel. The training activities were initially conducted by the Air National Guard from approximately 1950 and were later conduced by Airport personnel. The training activities are reported to have been conducted in this area for the past 20 years by Airport personnel and were suspected to have potentially impacted soil and groundwater at this location. ARFF training activities at this area of the site were permanently discontinued prior to this investigation and remediation.

The soil in the area of the ARFF Burn Pit consists of approximately 12 feet of sand, gravel and silt overlying schist bedrock. The area contains up to 7 feet of fill that includes pieces of asphalt, concrete and angular gravel. Groundwater in the shallow (unconfined) aquifer is encountered at a depth of approximately three feet below ground. Groundwater flow in the shallow aquifer is towards the north as shown on Figure 2. Based on limited data from the investigation of this and other areas of the airport, groundwater flow in the bedrock aquifer is expected to be towards the south.

## SITE INVESTIGATION/REMEDIATION

The investigation, and subsequent remediation conducted by First Environment was conducted in stages as further information on site conditions became evident based on analytical testing results. The stages of the investigation and remediation of the ARFF Burn Pit Area are discussed below.

### Initial Sampling

The initial investigation of the ARFF Burn Pit Area was conducted on December 22, 1999, and consisted of the drilling of eight soil borings (B-1 through B-8) and installing two temporary wells (B-5W and B-7W) as shown on Figure 2, to assess the soil and groundwater conditions in the area. Based on field screening results, specifically photoionization detector (PID) readings of 17 and 225 ppm, at B-5 and B-7 respectively, soil and groundwater samples were collected from borings and temporary wells at each of the two locations. The samples were submitted to a NYS-certified laboratory for volatile organic compounds (VOCs) and semi volatile organic compounds (SVOCs) analysis by EPA methods 8260 and 8270, respectively. There were no elevated PID readings, at borings B-1, 2, 3, 4, 6 or 8, therefore no samples were collected from these locations for chemical analysis. On April 17, 2000 two soil samples (Sample-1 and Sample-2) were collected for waste classification analysis from test pits excavated at boring locations B-5 and B-7 respectively. All boring logs are presented in Appendix A.

The surface water in the area of the former ARFF burn pit was observed to have a sheen when the sediment was disturbed, therefore a soil/sediment sample was also collected and submitted to a NYS-certified laboratory for VOC and SVOC analysis by methods 8260 and 8270, respectively.

The analytical results from the samples collected identified the presence of VOCs and SVOCs in the soil and groundwater in excess of the NYSDEC Technical Administrative Guidance Memorandum (TAGM) and Technical and Operational Guidance Series (TOGS) standards respectively. The exceedances identified in the soil and groundwater samples warranted additional investigation, as discussed below. Analytical results are discussed in detail in a subsequent section.

### Monitoring Wells FMW-5, FMW-6, FMW-7, FMW-8, and FMW-23

Three permanent monitoring wells were installed and developed on January 28, 2000 to assess groundwater quality in the area of ARFF Burn Pit. The locations of all monitoring wells in the area of the ARFF Burn Pit are shown on Figure 2. One monitoring well (FMW-5) was installed at the suspected source area identified at B-5 and two monitoring wells (FMW-6 and FMW-7) were installed approximately 100 feet down gradient (northwest) of the ARFF source location, consistent with the northwesterly direction of groundwater flow as had been reported in the Draft Groundwater Flow Evaluation and Sampling Plan. All three monitoring wells were installed to a total depth of 12 feet below grade and were screened across the water table. All boring logs and well construction summaries are presented in Appendix A. Groundwater samples were collected from each of the wells on February 17, 2000 and were analyzed for VOCs and SVOCs by EPA Method 8260 and 8270, respectively by the Westchester Department of Laboratories and Research, a NYS-certified laboratory. The

results of those analyses identified VOCs and SVOCs at the source area location (FMW-5), but no VOCs or SVOCs were detected in either of the two down gradient wells (FMW-6 and FMW-7).

Monitoring well FMW-8 was installed to the east of the Former ARFF Burn Pit on June 15, 2000 to a depth of 12 feet. This monitoring well was installed to provide background data upgradient of the ARFF Burn Pit area. A groundwater sample was collected from monitoring well FMW-8 on November 30, 2000 and was analyzed for VOCs and SVOCs by a NYS-certified laboratory by USEPA methods 8260 and 8270, respectively.

Previous sampling of monitoring well FMW-5 detected several VOCs in groundwater above the NYSDEC regulatory guidelines, including cis-1,2-dichloroethene, a chlorinated solvent, which is more dense than water. Compounds that are more dense than water will tend to sink in groundwater when present at high concentrations. In order to evaluate the potential for contaminants in a deeper hydrologic unit, specifically the bedrock, a bedrock monitoring well (FMW-23) was completed on November 16, 2000. A groundwater sample was collected from monitoring well FMW-23 on November 30, 2000 and analyzed for VOCs and SVOCs by a NYS-certified laboratory by USEPA methods 8260 and 8270, respectively.

The results of the groundwater sample analysis are discussed in detail in a subsequent section.

Soil Excavation And Post-Excavation Soil Sampling

Soil in the area of the Former Burn Pit was excavated in several stages. Initially, an area approximately 60 by 90 by 6 feet deep was excavated between May 16 and 19, 2000. Post-excavation bottom and sidewall samples were collected at a frequency of approximately one per 35 linear feet of excavation sidewall (S1 through S-13). The extent of excavation and locations of post-excavation samples are presented on Figure 3. Soil samples were analyzed for VOCs and SVOCs by USEPA methods 8260 and 8270, respectively. Based on the initial round of post excavation soil sampling results, four locations were identified as having concentrations above the TAGM recommended soil cleanup criteria for SVOCs, therefore additional excavation and sampling was warranted.

The second round of soil excavation addressed the soil with SVOC concentrations above the TAGM criteria identified at S-4, S-6, S-9, and S-11. The second round of excavation was conducted on July 3, 2000 at the eastern and western edges of the excavation, where additional post excavation soil samples S-14 through S-20 were collected.

The final rounds of excavation addressed soil with SVOC concentrations above the TAGM criteria identified at sample locations S-14 through S-17. Additional post excavation soil samples S-21 through S-24 were collected from geoprobe borings on August 25, 2000, and post excavation samples S-25 through S-28 were collected from geoprobe borings on September 15, 2000. Post excavation samples S-29 and S-30 were collected on October 20, 2000.

A total of 2,803 tons of soil was excavated and transported off-site to Soil Safe, Inc of Salem, New Jersey for disposal. Copies of the non-hazardous material manifests for the soil removed from the ARFF Burn Pit Area are included in Appendix B.

Soil Re-Use Sampling

In order to restore the area of the excavation to original grade, soil previously stockpiled on site was evaluated to determine if it was suitable for reuse to backfill the ARFF Burn Pit area excavation. The proposed backfill soil consisted of a stockpile of soil located west of Hanger B. The stockpile was generated from the construction of a taxiway as part of the Phase III Construction at the Airport.

Although not a regulatory requirement, the soil pile was sampled to confirm its suitability for use as backfill material. The stockpile was sampled on October 30, 2000 (GB-49 through 59) for VOCs and SVOCs. Each sample consisted of a composite sample collected from a depth ranging from 0 to 7 to 0 to 12 feet from the top of the soil pile, to be representative of the entire soil pile thickness. The soil consisted of reddish-brown sand, gravel and silt, free of deleterious material, with no elevated PID readings observed. Boring logs for the geoprobe borings are included in Appendix A.

## ANALYTICAL RESULTS

Initial Sampling

The results of the initial soil sampling in the ARFF Burn Pit Area identified trace concentrations of VOCs, including toluene, ethylbenzene and xylenes below recommended soil cleanup objectives, and total tentatively identified compounds (TICs) at B-5 of 14.18 ppm, above the recommended soil cleanup criteria of 10 ppm for total VOCs. The total TICs at B-7 and the sediment sample were below the soil cleanup criteria of 10 ppm with concentrations of 3.977 and 3.214 ppm, respectively. The concentration of the SVOC benzo(a)pyrene in all three soil samples exceeded the recommended soil cleanup criteria for benzo(a)pyrene of 61 ppb, with concentrations ranging from 144 to 2,580 ppb. The SVOCs benzo(a)anthracene, chrysene, and dibenz(a,h)anthracene were detected in soil sample B-5 and the sediment sample in excess of the recommended soil cleanup levels. The results of the initial soil sampling at B-5 and B-7 as well as the waste classification sampling Sample 1 and Sample 2 are presented in Table 1. The laboratory report for the soil and groundwater samples collected at B-5 and B-7, including Samples 1 and 2 were previously submitted in the Phase II Investigations and Proposed Workplan dated May 22, 2000.

The concentrations of the following VOCs were above the guidance values in one or both of the initial groundwater samples; vinyl chloride, benzene, toluene, ethylbenzene, and total xylenes. The VOC trichloroethene was detected in groundwater at B-5, but at a concentration below the regulatory guidance value. The SVOCs naphthalene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene were detected in groundwater at B-5 above the regulatory guidance value. Other SVOCs, including phenanthrene, anthracene, and pyrene were detected in groundwater at both B-5 and B-7, but at concentrations below regulatory guidelines. The results of the groundwater sampling at B-5 and B-7 are presented on Table 2.

The analysis of Sample 1 and Sample 2 identified total xylenes at 1,910 ppb above the TAGM recommended soil cleanup criteria of 1,200 ppb. The analysis of Sample 2 identified toluene at 44,300 ppb above the recommended cleanup criteria of 1,500 ppb. Based on the results of the soil sampling, the soil was characterized as non-hazardous.

Monitoring Wells FMW-5 through FMW-8 and FMW-23

The groundwater sample from FMW-5 had detections for the VOCs cis-1, 2 dichloroethene (62 ppb) and total xylenes (29.91 ppb) above the regulatory guideline of 5 ppb, and the VOCs vinyl chloride (40 ppb) and benzene (1.2 ppb), above the regulatory guidelines of 2 and 1, respectively. The VOCs ethylbenzene and trichloroethene were also detected at FMW-5, but below the regulatory guideline of 5 ppb. The SVOCs naphthalene, phenanthrene, 2-methylnaphthalene, carbozole, and fluorene were detected at FMW-5, but at concentrations below the regulatory guideline of 5 ppb. The groundwater sample analytical results for the former ARFF Burn Pit area monitoring wells are presented in Table 3. The laboratory reports for the groundwater samples collected from monitoring wells in the former ARFF Burn Pit area are presented in Appendix C.

During excavation activities, FMW-5 was destroyed. Since all contaminated soil in the area of FMW-5 was removed to a depth of six feet, no further monitoring of shallow groundwater at this location was warranted therefore FMW-5 was not replaced.

No VOCs or SVOCs were detected at either FMW-6 or FMW-7. The groundwater sample from monitoring well FMW-8 detected the VOC trichloroethene at 0.606 ppb, and the SVOC bis-(2-ethylhexyl)phthalate at 1.77 ppb, both below their regulatory guidelines of 5 ppb.

The groundwater sample from the bedrock monitoring well FMW-23 identified the VOC vinyl chloride at 15.2 ppb, above the regulatory guideline of 2 ppb. The VOCs trichloroethene (4.66 ppb) and chloroform (0.986) were detected at FMW-23 at concentrations below their regulatory guidelines of 5 and 7 ppb, respectively. The SVOCs di-n-butylphthalate (1.8 ppb) and bis(2-ethylhexyl)phthalate (0.881) were detected at concentrations below their regulatory guidelines of 50 and 5 ppb, respectively.

Soil Excavation and Post-Excavation Soil Sampling

The results of the post-excavation soil sampling are presented in Table 4. The laboratory reports for post excavation sample analysis are presented in Appendix C. No exceedances of the recommended soil cleanup objectives for VOCs were identified in any of the soil samples. Post-excavation soil sampling after the first round of soil excavation identified concentrations above the recommended soil cleanup objectives for one or more of the following SVOCs: benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(a)pyrene, and/or dibenz(a,h)anthracene at the following locations:S-4, S-6, S-9, S-10 and S-11. The slight exceedances at S-10 are believed to be attributable to asphalt in the fill therefore additional excavation at this area was not warranted.

The results of the second round of post-excavation soil sampling identified soil concentrations above the recommended soil cleanup objectives for one or more of the following SVOCs: benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(a)pyrene, and/or dibenz(a,h)anthracene, at one or more of the following locations: S-14, S-15, S-16 and S-17. Based on the concentrations identified, additional soil sampling was conducted.

The third round of soil sampling at the former burn pit identified exceedances for SVOCs at S-23 (benzo(a)anthracene, chrysene, and benzo(a)pyrene) and S-24 (chrysene). The soil encountered at S-23 was excavated, however the SVOC concentrations identified at S-24

were attributed to asphalt in the fill, therefore no additional excavation was warranted at this location.

The final round of post-excavation soil sampling (S-29 and S-30) identified soil concentrations above the recommended soil cleanup objectives for the SVOCs benzo(a)anthracene, chrysene, benzo(b)fluoranthene, and benzo(a)pyrene, however these exceedances are believed to be attributable to asphalt in the fill therefore no additional excavation was warranted at this location.

Soil Re-Use Sampling

Soil samples collected from the soil pile did not identify any VOCs or SVOCs above the recommended soil cleanup criteria. Based on the results of the soil re-use sampling, presented on Table 5, the soil pile was determined to be suitable for backfilling the excavation at the former ARFF Burn Pit. The excavation at the former ARFF Burn Pit area was backfilled to match the elevation of the surrounding area of the site. The results of the soil reuse sampling are summarized on Table 5. The laboratory report for the soil reuse sampling analysis is presented in Appendix C.

## CONCLUSIONS/RECOMMENDATIONS

The results of the post excavation soil sampling verify that all soil with VOC and SVOC concentrations above the recommended soil cleanup objectives related to the operations at the Former ARFF Burn Pit has been removed. The remaining locations where SVOC concentrations were identified in soil above the recommended soil cleanup objectives are believed to be attributable to asphalt in the fill. The soil used to backfill the excavation was suitable for reuse, and the excavation has been backfilled to grade. No further remediation of the soil contamination previously identified is warranted.

The results of the groundwater sampling from the remaining monitoring wells in the overburden aquifer (FMW- 6 through FMW-8) identify no exceedances of the regulatory guidelines for either VOCs or SVOCs.

The analytical results of the groundwater sampling of the bedrock monitoring well (FMW-23) identified the VOC vinyl chloride at a concentration in excess of the regulatory guideline and the VOCs tetrachloroethene and trichloroethene at concentrations below regulatory guidelines. The installation of two additional bedrock monitoring wells is warranted in the area of FMW-23 in order to determine the extent of VOCs in the bedrock aquifer above the regulatory guidelines.

The additional bedrock monitoring wells are proposed adjacent to FMW-8 to the east of the former ARFF Burn Pit and a second well approximately 100 feet south (hydraulically downgradient) of the former ARFF Burn Pit. The proposed locations of the additional bedrock monitoring wells are presented on Figure 2. The two proposed bedrock monitoring wells as well as the four existing monitoring wells are proposed to be sampled regularly for VOCs and SVOCs. The installation and monitoring of the additional bedrock monitoring wells, combined with the existing bedrock monitoring well FMW-23, will be used to evaluate both the extent of VOCs as well as groundwater flow direction in the shallow and bedrock aquifers.

If you have any questions or require additional information, please do not hesitate to contact me.

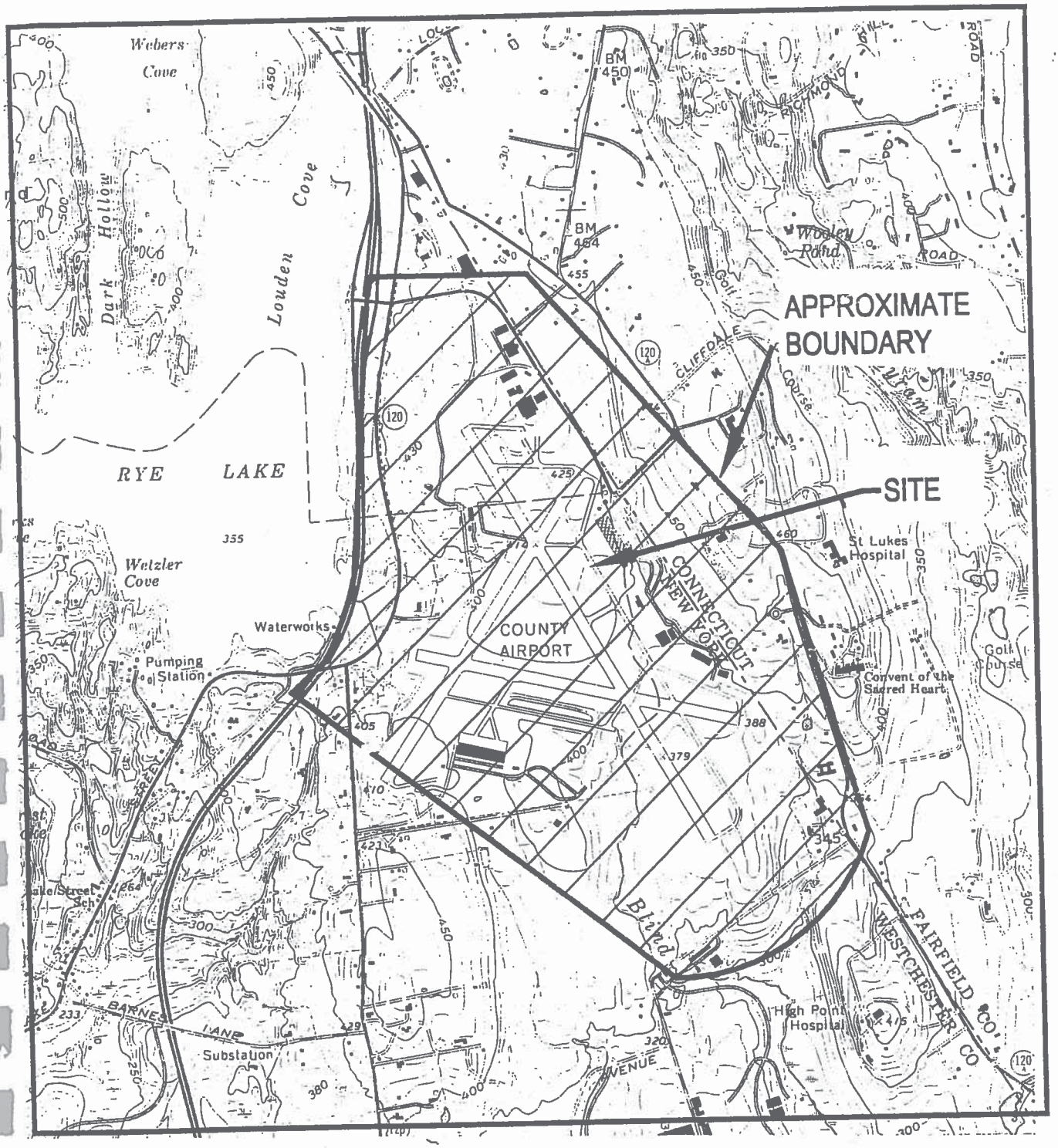
Very truly yours,

FIRST ENVIRONMENT, INC.

Timothy B. Egan
Project Hydrogeologist

cc: Robert Funicello
Henry Stanton
Todd Delaney Ph.D., P.E., DEE
Reeva Schiffman, Esq.
Scott Green, P.G.

# FIGURES



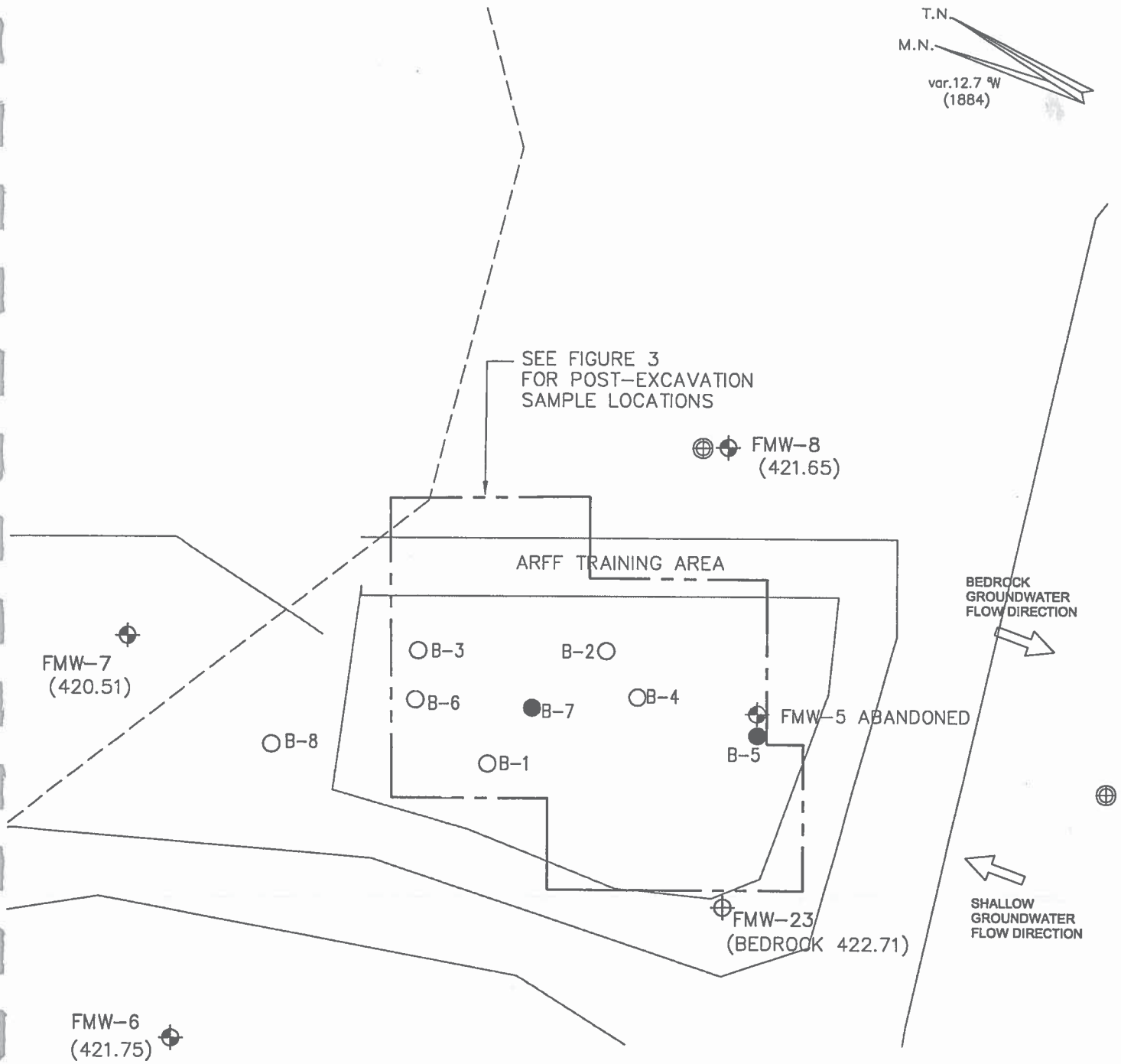

REFERENCE: GLENVILLE, CONN. - N.Y.
QUADRANGLES 7.5 MIN SERIES
1960 PHOTOREVISED 1971

N

SCALE: 1" = 2000'

FIGURE 1
SITE LOCATION MAP
WESTCHESTER COUNTY
AIRPORT
HARRISON, N.Y.

WES001




## LEGEND

- MONITORING WELL – SHALLOW
- MONITORING WELL – BEDROCK
- PROPOSED MONITORING WELL – BEDROCK
- GEOPROBE – (SOIL FIELD SCREENING SAMPLE)
- GEOPROBE – (SOIL & GROUNDWATER SAMPLE)
- WELL – ABANDONED
- (420.51) GROUNDWATER ELEVATION (MEASURED 12/5/00)

WESTCHESTER COUNTY AIRPORT

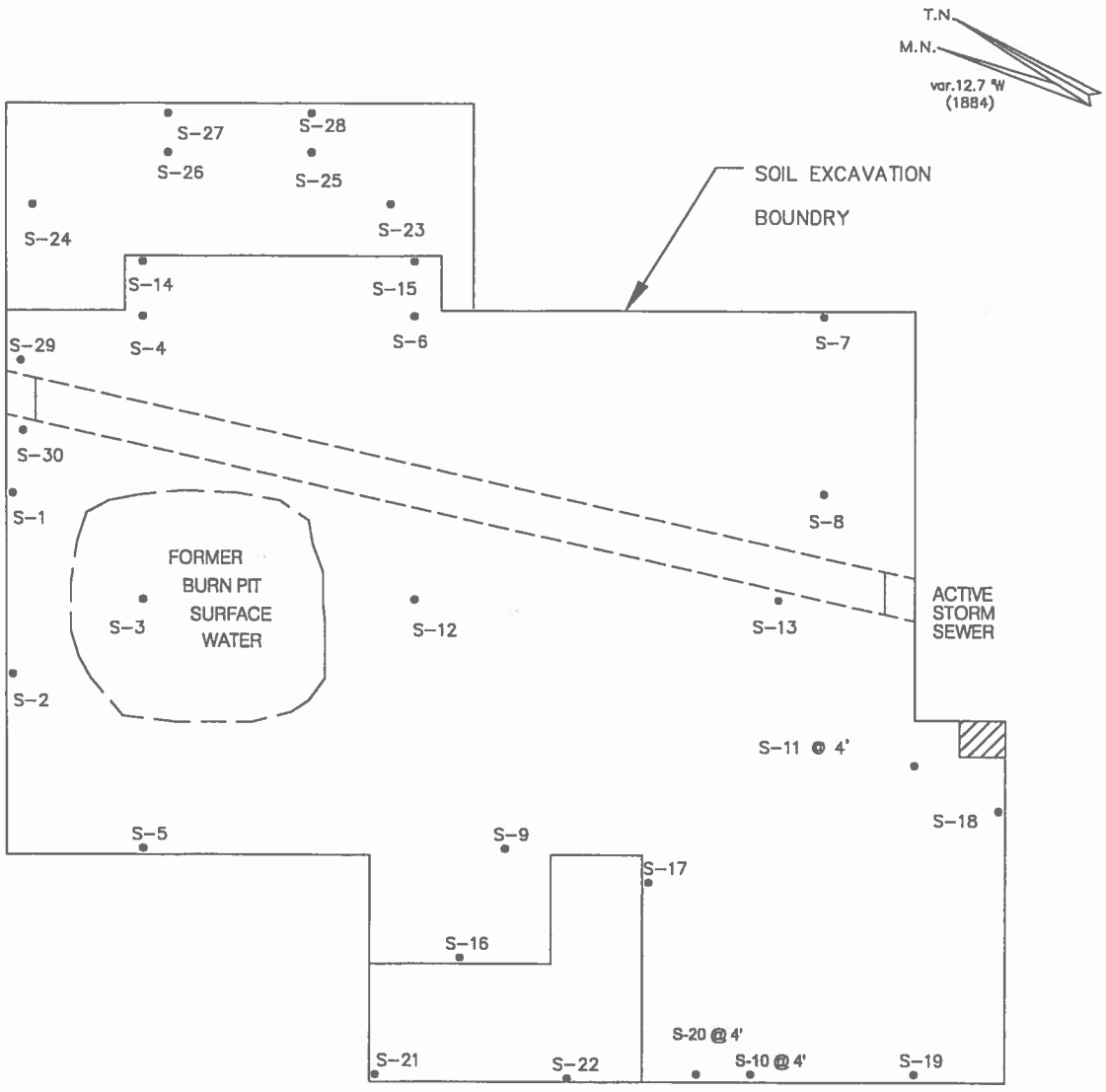
WESTCHESTER NEW YORK

SOIL BORING AND
MONITORING WELL LOCATIONS

| FIGURE | DRAWN STR | CHKD TE |
|---|---|---|
| 2 | SCALE 1"=50' | |
| | DATE 1/8/01 | DATE |

FIRST ENVIRONMENT

RIVERDALE NEW JERSEY




LEGEND:

- • POST EXCAVATION SAMPLE LOCATION
- ▨ 4' DEEP EXCAVATION
- ▭ 6' DEEP EXCAVATION

NOTE: ALL SAMPLES TAKEN FROM BOTTOM OF EXCAVATION UNLESS OTHERWISE NOTED.

| | |
|---|---|
| WESTCHESTER COUNTY AIRPORT | |
| WESTCHESTER | NEW YORK |
| POST EXCAVATION SAMPLE LOCATIONS | |
| FIGURE 3 | DRAWN STR / CHKD. TE / SCALE 1"=20' / DATE 1/8/01 / DATE |
| FIRST ENVIRONMENT | |
| RIVERDALE | NEW JERSEY |

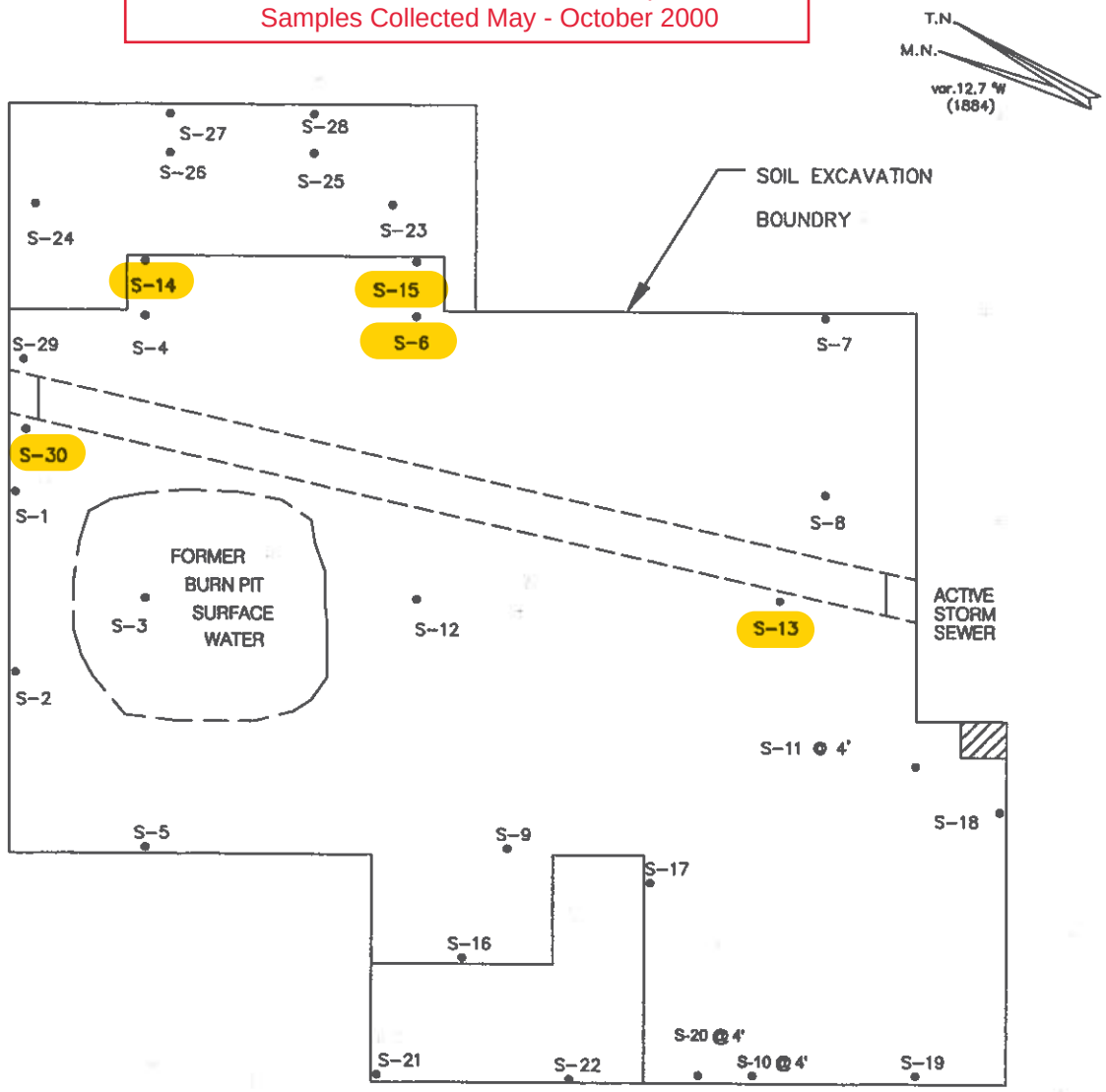
**BROWNFIELD CLEANUP APPLICATION # C360174**
**WESTCHESTER COUNTY AIRPORT**
**APPLICATION SECTION IV. #6**

**Former ARFF Burn Pit Post Excavation Sample Results - Comparison to Current Standards**
**Samples Collected May - October 2000**
**(see following page for sample locations)**

| **Client ID:**<br>**Sample Depth (ft):**<br>**Lab ID:**<br>**Date Sampled:**<br>**Matrix:** | **S-6**<br>**5**<br>**2983-010**<br>**5/19/2000**<br>**Soil** | **S-13**<br>**6**<br>**2983-006**<br>**5/19/2000**<br>**Soil** | **S-14**<br>**4**<br>**4012-001**<br>**7/3/2000**<br>**Soil** | **S-15**<br>**4**<br>**4012-002**<br>**7/3/2000**<br>**Soil** | **S-30**<br>**5**<br>**6614-015**<br>**10/20/2000**<br>**Soil** | **NYSDEC Part 375 Soil Cleanup Objectives Commercial** | **NYSDEC Part 375 Soil Cleanup Objectives Protection of GW** |
|---|---|---|---|---|---|---|---|
| **Semi-Volatiles** | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg |
| Phenanthrene | 867 | 4420 | 402 | 1100 | 626 | 500,000 | 1,000,000 |
| Anthracene | 158 | 481 | 149 | 127 | 209 | 500,000 | 1,000,000 |
| Carbazole | 122 | ND | ND | 171 | ND | NS | NS |
| Di-n-butylphthalate | 222 | 385 | ND | ND | ND | NS | 8,100 |
| Fluoranthene | 1580 | 3120 | 1440 | 2370 | 1340 | 500,000 | 1,000,000 |
| Pyrene | 1280 | 2440 | 1710 | 2010 | 1470 | 500,000 | 1,000,000 |
| Benzo[a]anthracene | 835 | **1350** | 983 | 942 | 779 | 5,600 | 1,000 |
| Chrysene | **1080** | **1220** | 916 | **1070** | 920 | 56,000 | 1,000 |
| bis(2-Ethylhexyl)phthalate | 443 | 709 | ND | ND | ND | NS | 435,000 |
| Benzo[b]fluoranthene | **2070** | **2130** | **2470** | **2070** | 1460 | 5,600 | 1,700 |
| Benzo[k]fluoranthene | 632 | 933 | 777 | 670 | 428 | 5,600 | 1,700 |
| Benzo[a]pyrene | **1490** | **1620** | **1730** | **1320** | **1040** | 1,000 | 22,000 |
| Indeno[1,2,3-cd]pyrene | 559 | 521 | 482 | 450 | 446 | 5,600 | 8,200 |
| Dibenz[a,h]anthracene | 160 | ND | 137 | 122 | ND | 560 | 1,000,000 |
| Benzo[g,h,i]perylene | 567 | 508 | 490 | 476 | 531 | 500,000 | 1,000,000 |

ug/kg - micrograms per kilogram
ND = Not Detected
NS = No Standard

Former ARFF Burn Pit Post Excavation Sample Locations
Samples Collected May - October 2000




Note: highlighted locations exceed current commercial or protection of groundwater Soil Cleanup Objectives for SVOC's per 6 NYCRR Part 375-6.8(b).

LEGEND:

- • POST EXCAVATION SAMPLE LOCATION
- ▨ 4' DEEP EXCAVATION
- ▭ 6' DEEP EXCAVATION

NOTE: ALL SAMPLES TAKEN FROM BOTTOM OF EXCAVATION UNLESS OTHERWISE NOTED.

WESTCHESTER COUNTY AIRPORT
WESTCHESTER NEW YORK
POST EXCAVATION
SAMPLE LOCATIONS
FIGURE 3
DRAWN STR CHKD. TE
SCALE 1"=20'
DATE 1/8/01 DATE
FIRST ENVIRONMENT
RIVERDALE NEW JERSEY

**Former DPW Staging Area**

**Site V00652**

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

# Environmental Site Remediation Database Search Details

## Site Record

### Administrative Information

**Site Name:** Former DPW Staging Area
**Site Code:** V00652
**Program:** Voluntary Cleanup Program
Classification: C
**EPA ID Number:**

### Location

**DEC Region:** 3
**Address:** Old Lake Street
**City:**Harrison Zip: 10604
**County:**Westchester
**Latitude:** 41.07030695
**Longitude:** -73.714179747
**Site Type:** DUMP
**Estimated Size:** 3 Acres

### Site Owner(s) and Operator(s)

**Current On-Site Operator:** AFCO AvPORTS Management LLC
**Stated Operator(s) Address:** Westchester County Airport
White Plains,NY 10604

### Site Document Repository

**Name:** Town of Harrison
**Address:** Alfred F. Sulla, Jr. Municipal Building
1 Heineman Place Harrison,NY 10528
**Name:** Harrison Public Library
**Address:** 2 Bruce Avenue
Harrison,NY 10528

### Site Description

Location: The Department of Public Works (DPW) Staging Area in the town of Harrison is an approximately 3 acre parcel of real property located in the western portion of Westchester

County Airport between Route 120 (Purchase Street) and New King St. Site Features: The site is currently an undeveloped portion of the airport or grassy area surrounded by trees, and bounded to the west by a stone wall and the airport fencing. The site is also 1000 feet from the Kensico Reservoir. Current Zoning and Land Use: The site is within an active public and private use airport owned by Westchester County. The airport is further restricted by federal regulations. This area of the airport serves as a buffer and open space between the airport and the Kensico Reservoir. Past Use of the Site: Westchester County DPW used this area to stage and dispose of materials for construction projects in Westchester County. Materials stored on the site when last actively used included asphalt, concrete, piping and green waste such as tree cuttings and wood chips. Site Geology and Hydrogeology: Groundwater flow is to the west towards the Kensico Reservoir (Rye Lake).

## Contaminants of Concern (Including Materials Disposed)

**Contaminant Name/Type**

lead

copper

chromium

zinc

## Site Environmental Assessment

Remediation at the site is complete. Prior to remediation the primary contaminants of concern identified in surface soil and sub-surface soil were semi-volatile organic compounds and petroleum compounds associated with the asphalt products stored on-site. Past surface water and groundwater samples contained two metals which exceeded guidance values, iron and manganese, which are naturally occurring in the bedrock and groundwater on the airport property. Upgradient surface water sampling in 2015 within a nearby stream showed arsenic in sediments at 78.4 parts per million (ppm) above Class C Sediments of 33 ppm. Iron and manganese were also detected in iron floc in the surface water. Groundwater samples from 2017 and 2018 show perfluorooctane sulfonate (PFOS) was detected at 50.8 parts per trillion (ppt)and perfluorooctanoic acid (PFOA)at 34.2 ppt. Surface water had PFOS at 134 ppt and PFOA at 20.3 ppt.

## Site Health Assessment

Exposure to contaminated groundwater is not expected because public water serves the area. Exposure to residual subsurface contaminants is not expected because the site is fenced, covered with an engineered soil cover, and future use of the site is restricted.

For more Information: E-mail Us

Refine This Search

**Hangar D Bay 1**

**Site 360037**

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

# Environmental Site Remediation Database Search Details

## Site Record

### Administrative Information

**Site Name:** Texaco Hangar (formerly Mobil Corp.)
**Site Code:** 360037
**Program:** State Superfund Program
Classification: 02
**EPA ID Number:**

### Location

**DEC Region:** 3
**Address:** Hangar D - Bay 1
**City:**Harrison Zip: 10604
**County:**Westchester
**Latitude:** 41.071493
**Longitude:** -73.706614
**Site Type:** STRUCTURE
**Estimated Size:** 2 Acres

### Site Owner(s) and Operator(s)

**Current Owner Name:** Westchester County
**Current Owner(s) Address:** 100 East First St.
Mount Vernon,NY, 10601
**Current On-Site Operator:** Peterjohn Management
**Stated Operator(s) Address:** 184 Airport Rd, Box 14
Harrison,NY 10604
**Current On-Site Operator:** Landmark Aviation
**Stated Operator(s) Address:** 184 Airport Rd
Harrison,NY 10604
**Current On-Site Operator:** TISMA, Inc.
**Stated Operator(s) Address:** 184 Airport Road
Harrison,NY 10604

### Site Document Repository

**Name:** Harrison Public Library
**Address:** 2 Bruce Avenue
Harrison,NY 10528

**Name:** NYSDEC Region 3 Office
**Address:** 21 South Putts Corners Road
New Paltz,NY 12561-1696
**Name:** Town of Harrison
**Address:** 1 Heineman Place
Harrison,NY 10528

## Hazardous Waste Disposal Period

**From:** 1969 **To:** 1991 ?

## Site Description

Location: The Texaco Hangar Site is located at Hangar D1, Bay 1B near the eastern boundary of the Westchester County Airport, in the Town of Harrison. The site is currently owned by the Airport and leased by Landmark Aviation. The northeast boundary of the Airport is adjacent to the Fairfield County, Connecticut border. Undeveloped woodlands are located north, south, and east of the Airport. Site Features: Texaco Hangar occupies one bay of a row of hangars at the airport. The Texaco Hangar facility is approximately 1.6 acres in size and contains the hangar bay (the contaminated portion of the site) which also contains an office space and an aircraft pad. The Westchester County Airport is situated on generally flat land. The Airport is surrounded by varied land uses which include: residential; industrial; institutional; light commercial; woodlands; golf courses and watershed areas. The Airport is bounded to its west by woodlands and Route 120 (Purchase Street); to the east by woodlands and the New York-Connecticut border; to the north by Airport Road and commercial and industrial areas; and to the south by Lincoln Avenue and woodlands. Current Zoning and Land Use: The site is within an active public and private use airport, and zoned Industrial AA (IND-AA), which allows for commercial and industrial uses such as businesses, professional offices, studios, Motels, light industrial, and at the Westchester County Airport, such uses shall include the storage and repair of aircraft, the storage and distribution of aviation gasoline and warehouses(excluding truck storage or truck terminal facilities). The airport is further restricted by federal regulations. As discussed above, used for aircraft operations and maintenance by Landmark Aviation. Past Use of Site: A 55 gallon drum of cleaner (primarily 1,1,1-Trichlorethane (1,1,1-TCA) and Tetrachloroethene (PCE) routinely used in the aircraft maintenance operations is known to have been spilled in the hangar bay close to the east/southeast wall of the bay, and has spread southward under the slab. Additionally, 1,1,1-TCA was also detected in soils under the aircraft pad and under the bay floor. Site Geology and Hydrogeology: Blind Brook is located 5,000 feet south of the site and flows south to Long Island Sound. Rye Lake, which is part of the Kensico Reservoir, is approximately 3,500 feet west of the Texaco Hangar site. Groundwater flow is to the southeast towards Blind Brook. Blind Brook runs through the lower portion of the site towards the Town of Rye. Soils are approximately 15 feet thick consisting of

mostly consolidated fill placed during the airport construction. A buried stream channel was encountered at 20 feet below ground surface, trending north-south, same as groundwater flow.

## Contaminants of Concern (Including Materials Disposed)

| Contaminant Name/Type |
| --- |
| 1,2-dichloroethane |
| trichloroethene (TCE) |
| vinyl chloride |
| tetrachloroethene (PCE) |
| 1,1 dichloroethene |
| 1,1,1-Trichloroethane(TCA) |
| 1,1-dichloroethane |
| chloroethane |

## Site Environmental Assessment

Nature and Extent of Contamination: Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were tetrachloroethene (PCE) and 1,1,1-Trichloroethane (1,1,1 TCA) in soil vapor and groundwater. Remedial actions have successfully achieved soil cleanup objectives for commercial use. Residual contamination in the soil vapor and groundwater is being managed under a Site Management Plan.

## Site Health Assessment

Investigations have shown that site-related groundwater contamination is not affecting the nearby Kensico Reservoir or any water supply wells. Direct exposure to contaminated soil beneath the building is unlikely. The remedy is addressing contaminated groundwater and soil. The potential for soil vapor intrusion at the site is being investigated.

For more Information: E-mail Us

Refine This Search

**Former Hangar B Site**

**V 00611-3**

**New York State Department of Environmental Conservation**
**Division of Environmental Remediation, Region 3**
21 South Putt Corners Road, New Paltz, New York 12561-1696
**Phone:** (845) 256-3003 • **FAX:** (845) 255-4238
**Website:** www.dec.state.ny.us

Denise M. Sheehan
Acting
Commissioner

07/08/05

Mr. Michael Parletta
Environmental Officer
Westchester County Airport
240 Airport Road, Suite 202
White Plains, NY 10604

Re : #V00611
Final Interim Remedial Measure 2004/2005
Former Hangar B Septic Field Site WCAP
White Plains, New York

Dear Mr. Parletta,

After reviewing the confirmation results collected on 06/01/05, the New York State Department of Environmental Conservation ( NYSDEC ) and the New York State Department of Health (NYSDOH), are in complete agreement that we are satisfied with the excavation work carried out at the site to remove the presence of Benzo(a)pyrene in the soil.

The excavated pit can be closed with clean fill as soon as you have made appropriate arrangements to close the pit. I would like to be informed when you are ready to commence this operation.

Please contact me if you need further clarification.

Sincerely,

S. E. Mahamooth / Endra P.E.
NYSDEC/Remediation

CC : Mr. John Benvegna (Leggette, Brashears and Graham, Inc.)
Mr. Ramanand Pergadia P.E. (NYSDEC)
Mr. Robert Schick P.E. (NYSDEC)
Mr. Michael F. Rivara (NYSDOH )
Ms. Katherine Comerford ( NYSDOH)
Mr. James Schreyer (NYSDEC)

JUL 11 2005
LBG

# LETTER REPORT

**RE: WESTCHESTER COUNTY AIRPORT**
**HANGAR B SEPTIC SITE, #V 00611-3**

# PREPARED BY:

**JOHN BENVEGNA, CPG**
**LEGGETTE, BRASHEARS & GRAHAM, INC.**
**FEBRUARY 21, 2006**

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JOHN NASO, JR.
WILLIAM K. BECKMAN
DAN C. BUZEA
J. KEVIN POWERS
FRANK J. GETCHELL
CHARLES W. KREITLER
JEFFREY B. LENNOX
W. JOHN SEIFERT, JR.
DAVID A. WILEY
ROBERT F. GOOD, JR.
TIMOTHY L. KENYON

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER AND
ENVIRONMENTAL ENGINEERING SERVICES

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ROBERT M. ROHLFS
JAMES A. BEACH
WILLIAM G. STEIN
JOHN W. NELSON
WILLIAM H. AVERY

February 21, 2006

Ms. Michelle Tipple
New York State Department of
Environmental Conservation
21 South Putt Corners Road
New Paltz, NY 12561-1696

RE: Westchester County Airport
Hangar B Septic Site, #V 00611-3

Dear Ms. Tipple:

The Interim Remedial Measure (IRM) for the former Hangar B Septic Field Site at the Westchester County Airport, has been completed. The IRM was conducted in accordance with our Site Investigation/Interim Remedial Measures Work Plan for the former Hangar B site, dated January 2003. Below is a summary of the field activities and results of the confirmation sampling. Figure 1 is a site plan for the airport showing the location of the former Hanger B site.

## IRM SUMMARY

The Hangar B IRM consisted of the excavation of residually contaminated soil, associated with a septic system that served the former Hangar B (figure 2). The septic system and approximately 200 cubic yards of contaminated soil were removed previously, after being discovered during construction of the now adjacent Taxiway L. At that time it was determined that an investigation of the former septic field site would be required, before any further remediation could take place. As part of the site investigation work plan, LBG proposed an IRM to address the remaining contaminated soil, which was expected to be minimal. A complete history of the Hangar B site is included in the Investigation Work Plan.

### Initial Excavation and Sampling

The Hangar B IRM was completed over the course of four days between April and July 2005. All field activities were conducted in accordance with the work plan noted above. Initial

soil excavation began on April 4, 2005. At the end of that day, all obviously contaminated soil had been excavated and was stockpiled onsite pending disposal. In addition 14 confirmation soil samples were collected, 10 from the sidewalls and four from the excavation bottom. The sampling locations are shown on figure 3.

The confirmation samples were submitted for the analysis of volatile organics by EPA Method 8260 and semivolatile organics by EPA Method 8270, with ASP Category B deliverables. Table 1 is a summary of the detected compounds. Laboratory data sheets are attached in Appendix I, along with the Data Usability Summary Report (DUSR) from an independent data validator. As shown on table 1, several semivolatile compounds were detected above the New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) 4046, Recommended Soil Cleanup Objectives (RSCO) in three of the four samples from the east sidewall.

**Follow Up Excavation and Sampling**

Based on the April 4, 2005 confirmation sampling results, additional excavation along the east sidewall was required. On April 26, 2005 the second round of excavation began. As the excavation progressed, access to the east sidewall became limited due to the excavated soil that was being stockpiled adjacent to the excavation. As a result, disposal of the stockpiled soil was required before any further excavation could take place. On May 24, 2005, the stockpiled soil was removed from the site and transported to Clean Earth, Inc. of Philadelphia, Pennsylvania for treatment by low temperature thermal desorption.

On June 1, 2005 the excavation was extended to its final limits (figure 2). The final excavation dimensions were 100 feet long, 43-45 feet wide and approximately 10 feet deep. Final confirmation samples were collected on April 26 and June 1, 2005, from the locations shown on figure 3. The samples were submitted for the analysis of volatile organics by EPA Method 8260 and semivolatile organics by EPA Method 8270, with ASP Category B deliverables. Laboratory data sheets are attached in Appendices II and III along with the DUSRs from an independent data validator. The sampling results are summarized on table 1, which shows that one semivolatile compound, benzo(a)pyrene, was detected above the TAGM RSCO of 61 ug/kg (micrograms per kilogram) in three samples from the east sidewall. The detected concentrations ranged between 91 and 100 ug/kg, and were significantly lower than the concentrations detected in the first round samples collected on April 4, 2005 (table 1).

The excavated soil was removed from the site on June 2 and 3, 2005 and transported to Clean Earth, Inc. for treatment. Disposal manifests are attached in Appendix IV. A total of 510.10 tons of soil were removed from the site, including what was removed on May 24.

**Excavation Closure**

The soil excavated from the site on June 1, was removed from the site on June 2 and 3, 2005 and transported to Clean Earth, Inc. for treatment. A total of 510.10 tons of soil were removed from the site, including what was removed on May 24. Disposal manifests for all of the soil removed from the site are attached in Appendix IV.

On July 5, 2005 the confirmation sampling results were submitted to the NYSDEC and New York State Department of Health (NYSDOH) for review. On July 8, 2005 the NYSDEC issued a letter to the airport approving closure of the excavation. A copy of this letter is attached in Appendix V. On July 20, 2005 the excavation was backfilled and the area was graded.

The material used for backfill had been excavated from another area of the site and stockpiled near the Hangar B site. This material was generated during the construction of a Run-Up Pad for Taxiway C, which was completed in the summer of 2004. The construction site was an area of grass adjacent to the taxiway, which is approximately 1,100 feet east of the former Hangar B site in the airport infield. There were never any structures in this area or any record of a spill. On July 18, 2005 LBG inspected the soil stockpile, found no indication of contamination and deemed it acceptable for use as backfill. This information was documented in a letter from the airport to the NYSDEC dated July 19, 2005, which is included in Appendix V.

**Backfill Sampling**

On October 5, 2005 a Draft Closure Report for the Hangar B site was submitted to the NYSDEC and NYSDOH for their review. On November 10, 2005 the NYSDOH issued a comment letter requesting sampling of the backfill material to verify that its quality was consistent with the State Guidelines for the protection of human health and the environment. A copy of this letter is included in Appendix V.

On December 22, 2005 the requested samples were collected and submitted for analysis. On January 27, 2006 the sampling results were submitted by letter to the NYSDEC and

NYSDOH; a copy of this letter with the analytical results is attached in Appendix VI. On February 9, 2006 the NYSDEC verbally confirmed to LBG that the backfill sampling results were satisfactory and requested submission of a final closure report for the Hangar B site.

In consideration of the above information, and on behalf of the Westchester County Airport, we are requesting closure of the former Hangar B Septic Field Site, NYSDEC Site #V 00611-3, and termination of the associated Voluntary Cleanup Agreement, Index #W3-0937-02-09.

Very truly yours,

LEGGETTE, BRASHEARS & GRAHAM, INC.

John Benvegna
Senior Associate

Reviewed By:

Dan C. Buzea, CPG
Vice President

JB:dmd
cc: R. Funicello
M. Parletta
f:\reports\westchester county airport\hangar b investigation\irm final ltr.doc

**TABLE**

**TABLE 1**

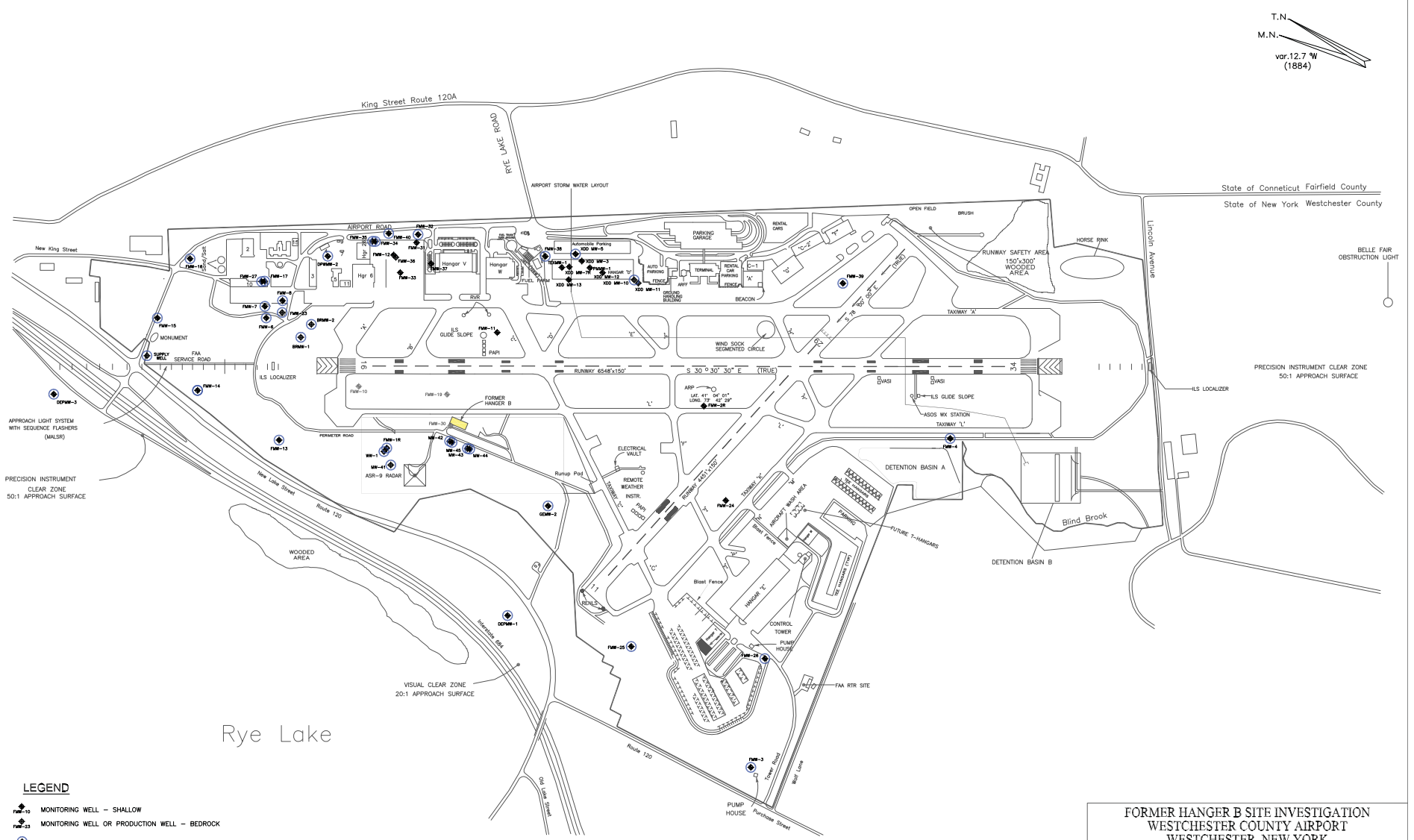
**FORMER HANGER B SITE IRM**
**WESTCHESTER COUNTY AIRPORT**
**WHITE PLAINS, NEW YORK**

**Summary Of Confimation Sampling Results**
**(All results are in micrograms per kilogram)**

| Sample Location | SW-N | SW-N1 | SW-N2 | SW-W1 | SW-W2 | SW-W3 | SW-W4 | SW-S | SW-E1 | SW-E1A | SW-E2 | SW-E2A | SW-E3 | SW-E3A | SW-E4 | B-1 | B-2 | B-3 | B-4 | RSCO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Date** | **4/4/05** | **6/1/05** | **6/1/05** | **4/4/05** | **4/4/05** | **4/4/05** | **4/4/05** | **4/4/05** | **4/4/05** | **6/1/05** | **4/4/05** | **4/26/05** | **4/4/05** | **4/26/05** | **4/4/05** | **4/4/05** | **4/4/05** | **4/4/05** | **4/4/05** | |
| **Parameter** | | | | | | | | | | | | | | | | | | | | |
| Acetone | ND | 2.2 J | ND | ND | 5.1 J | ND | 4.8 J | ND | ND | 7.1 J | ND | 6.5 J | 3.9 J B | ND | 5.8 J B | ND | ND | ND | ND | 200 |
| Methylene chloride | 4.7 J B | 4.7 J B | 7.3 J B | 4.8 J B | 5.6 J B | 5.2 J B | 5.5 J | 4.4 J | 6.4 J | 6.2 J B | 5.0 J | 12 J B | 5.5 J B | 8.1 J B | 7.0 J B | 6.4 J | 7.9 J | 6.5 J | 7.2 J | 100 |
| MTBE | ND | ND | 1.9 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 120 |
| Naphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 200 J | ND | ND | 13,000 |
| 2-Methylnaphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 150 J | ND | ND | 36,400 |
| Acenaphthylene | ND | ND | 49 J | ND | ND | ND | ND | ND | 770 | 60 J | 140 J | ND | ND | ND | ND | ND | ND | ND | ND | 50,000 |
| Phenanthrene | ND | ND | 45 J | ND | ND | ND | ND | ND | 520 | ND | 120 J | 55 J | 150 J | ND | ND | ND | ND | ND | ND | 50,000 |
| Anthracene | ND | ND | ND | ND | ND | ND | ND | ND | 580 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 50,000 |
| Fluoranthene | ND | ND | 58 J | ND | ND | ND | ND | ND | 1,300 | 120 J | 610 | 140 J | 380 J | 100 J | ND | ND | ND | ND | ND | 50,000 |
| Pyrene | ND | ND | 100 J | ND | ND | ND | ND | ND | 2,200 | 170 J | 610 | 170 J | 330 J | 140 J | ND | ND | ND | ND | ND | 50,000 |
| Benzo(a)anthracene | ND | ND | ND | ND | ND | ND | ND | ND | **800** | 83 J | **360 J** | 82 J | 170 J | 66 J | ND | ND | ND | ND | ND | 224 |
| Chrysene | ND | ND | 70 J | ND | ND | ND | ND | ND | **1,400** | 110 J | **440** | 120 J | 240 J | 95 J | ND | ND | ND | ND | ND | 400 |
| Bis(2-ethylhexyl)phthalate | ND | 55 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 50,000 |
| Benzo(b)fluoranthene | ND | ND | ND | ND | ND | ND | ND | ND | **780** | ND | **360 J** | ND | ND | ND | ND | ND | ND | ND | ND | 220 |
| Benzo(k)fluoranthene | ND | ND | ND | ND | ND | ND | ND | ND | **770** | 51 J | **330 J** | 110 J | **220 J** | 68 J | ND | ND | ND | ND | ND | 220 |
| Benzo(a)pyrene | ND | ND | 54 J | ND | ND | ND | ND | ND | **1,200** | **100 J** | **430** | **100 J** | **250 J** | **91 J** | ND | ND | ND | ND | ND | 61 |
| Indeno(1 2 3-cd)pyrene | ND | ND | ND | ND | ND | ND | ND | ND | 600 | 60 J | 230 J | 63 J | 150 J | 61 J | ND | ND | ND | ND | ND | 3,200 |
| Dibenzo(a h)anthracene | ND | ND | ND | ND | ND | ND | ND | ND | **280 J** | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 14 |
| Benzo(ghi)perylene | ND | ND | ND | ND | ND | ND | ND | ND | 900 | 80 J | 260 J | 91 J | 180 J | 89 J | ND | ND | ND | ND | ND | 50,000 |

**NOTES**
See Figure 3 for sample locations.
ND - Not Detected.
B - Compound was found in the method blank.
J - The result is an estimated value below the reporting limit
RSCO - Recommended Soil Cleanup Objective per Technical and Adminstrative Guidance Memorandom (TAGM) 4046.
**Bold** text indicates exceedence of the RSCO

**FIGURES**




## LEGEND

- MW-10 — MONITORING WELL – SHALLOW
- FMW-23 — MONITORING WELL OR PRODUCTION WELL – BEDROCK
- SENTINEL MONITORING WELL

NOTE:
BASE MAP TAKEN FROM FIRST ENVIRONMENT REPORT "SITE INVESTIGATION REPORT AND GROUND-WATER MONITORING PROGRAM, WESTCHESTER COUNTY AIRPORT, FEBRUARY 2001."

MONITOR WELLS FMW-10, FMW-19 AND FMW-30 DESTROYED DURING CONSTRUCTION ACTIVITIES.

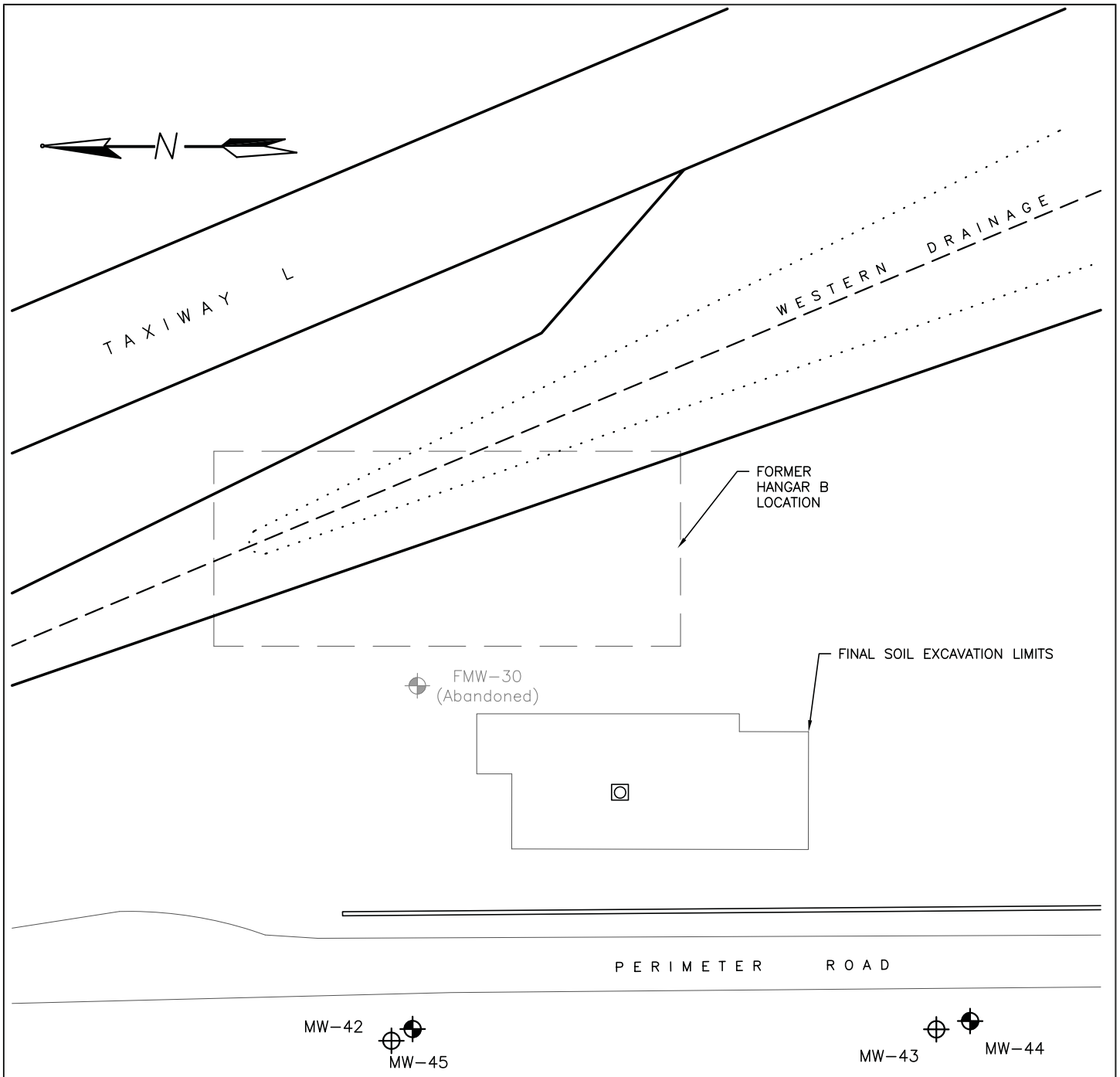
# FORMER HANGER B SITE INVESTIGATION
# WESTCHESTER COUNTY AIRPORT
# WESTCHESTER, NEW YORK

## SITE LOCATION MAP

| DATE | REVISED |
|---|---|
| | |

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
110 Corporate Park Drive
Suite 112
White Plains, NY 10604
(914) 694-5711

| DRAWN: | MRV | CHECKED: | ED | DATE: | 1/17/03 | FIGURE: | 1 |
|---|---|---|---|---|---|---|---|




LEGEND

- FORMER SEPTIC TANK
- EXISTING SHALLOW OVERBURDEN WELL
- EXISTING BEDROCK WELL

0 50

SCALE IN FEET

# FORMER HANGAR B SITE IRM
# WESTCHESTER COUNTY AIRPORT
# WESTCHESTER, NEW YORK

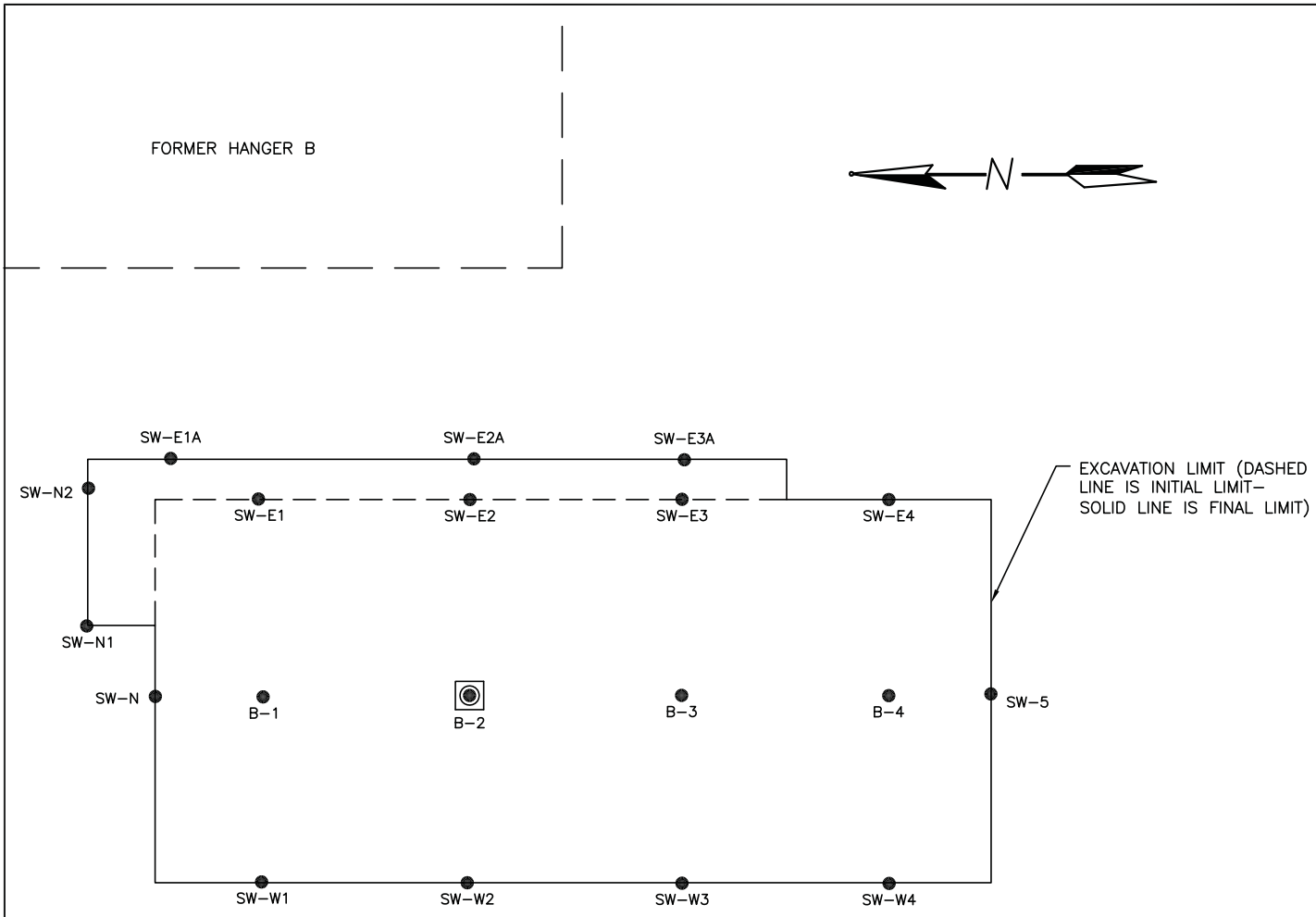
## FINAL EXCAVATION LIMITS

| DATE | REVISED |
|---|---|
| | |
| | |
| | |
| | |
| | |

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
110 Corporate Park Drive
Suite 112
White Plains, NY 10604
(914) 694-5711

| DRAWN: | CP | CHECKED: | JB | DATE: | 10/5/05 | FIGURE: | 2 |
|---|---|---|---|---|---|---|---|




LEGEND

| | |
|---|---|
| ◎ | FORMER SEPTIC TANK |
| ● | SOIL SAMPLE LOCATION |
| SW | SIDE WALL SAMPLE |
| B | BOTTOM SAMPLE |

0 20

SCALE IN FEET

# FORMER HANGAR B SITE IRM
# WESTCHESTER COUNTY AIRPORT
# WESTCHESTER, NEW YORK

## CONFIRMATION SAMPLE LOCATIONS

| DATE | REVISED |
|---|---|
| | |
| | |
| | |
| | |
| | |


PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
110 Corporate Park Drive
Suite 112
White Plains, NY 10604
(914) 694-5711


| DRAWN: | CP | CHECKED: | JB | DATE: | 10/4/05 | FIGURE: | 3 |
|---|---|---|---|---|---|---|---|

**FORMER HANGER B SITE IRM**
**WESTCHESTER COUNTY AIRPORT**
**WHITE PLAINS, NEW YORK**

**Summary Of Post Excavation Confimation Soil Sampling Results - Comparison to Current Standards**

**(Note: Several locations were re-excavated and re-sampled. These locations are noted as "Initial" and "Final". See preceding page for sample locations)**

| Sample Location | Initial SW-N | Final SW-N1 | SW-N2 | SW-W1 | SW-W2 | SW-W3 | SW-W4 | SW-S | Initial SW-E1 | Final SW-E1A | Initial SW-E2 | Final SW-E2A | Initial SW-E3 | Final SW-E3A | SW-E4 | B-1 | B-2 | B-3 | B-4 | NYSDEC Part 375 Commercial SCO | NYSDEC Part 375 Protection of GW SCO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Date** | **4/4/05** | **6/1/05** | **6/1/05** | **4/4/05** | **4/4/05** | **4/4/05** | **4/4/05** | **4/4/05** | **4/4/05** | **6/1/05** | **4/4/05** | **4/26/05** | **4/4/05** | **4/26/05** | **4/4/05** | **4/4/05** | **4/4/05** | **4/4/05** | **4/4/05** | | |
| **Parameter** | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg |
| Acetone | ND | 2.2 J | ND | ND | 5.1 J | ND | 4.8 J | ND | ND | 7.1 J | ND | 6.5 J | 3.9 J B | ND | 5.8 J B | ND | ND | ND | ND | 500,000 | 50 |
| Methylene chloride | 4.7 J B | 4.7 J B | 7.3 J B | 4.8 J B | 5.6 J B | 5.2 J B | 5.5 J | 4.4 J | 6.4 J | 6.2 J B | 5.0 J | 12 J B | 5.5 J B | 8.1 J B | 7.0 J B | 6.4 J | 7.9 J | 6.5 J | 7.2 J | 500,000 | 50 |
| MTBE | ND | ND | 1.9 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 500,000 | 930 |
| Naphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 200 J | ND | ND | 500,000 | 12,000 |
| 2-Methylnaphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 150 J | ND | ND | NS | 36,400 |
| Acenaphthylene | ND | ND | 49 J | ND | ND | ND | ND | ND | 770 | 60 J | 140 J | ND | ND | ND | ND | ND | ND | ND | ND | 500,000 | 107,000 |
| Phenanthrene | ND | ND | 45 J | ND | ND | ND | ND | ND | 520 | ND | 120 J | 55 J | 150 J | ND | ND | ND | ND | ND | ND | 500,000 | 1,000,000 |
| Anthracene | ND | ND | ND | ND | ND | ND | ND | ND | 580 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 500,000 | 1,000,000 |
| Fluoranthene | ND | ND | 58 J | ND | ND | ND | ND | ND | 1,300 | 120 J | 610 | 140 J | 380 J | 100 J | ND | ND | ND | ND | ND | 500,000 | 1,000,000 |
| Pyrene | ND | ND | 100 J | ND | ND | ND | ND | ND | 2,200 | 170 J | 610 | 170 J | 330 J | 140 J | ND | ND | ND | ND | ND | 500,000 | 1,000,000 |
| Benzo(a)anthracene | ND | ND | ND | ND | ND | ND | ND | ND | 800 | 83 J | 360 J | 82 J | 170 J | 66 J | ND | ND | ND | ND | ND | 5,600 | 1,000 |
| Chrysene | ND | ND | 70 J | ND | ND | ND | ND | ND | **1,400** | 110 J | 440 | 120 J | 240 J | 95 J | ND | ND | ND | ND | ND | 56,000 | 1,000 |
| Bis(2-ethylhexyl)phthalate | ND | 55 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NS | 435,000 |
| Benzo(b)fluoranthene | ND | ND | ND | ND | ND | ND | ND | ND | 780 | ND | 360 J | ND | ND | ND | ND | ND | ND | ND | ND | 5,600 | 1,700 |
| Benzo(k)fluoranthene | ND | ND | ND | ND | ND | ND | ND | ND | 770 | 51 J | 330 J | 110 J | 220 J | 68 J | ND | ND | ND | ND | ND | 5,600 | 1,700 |
| Benzo(a)pyrene | ND | ND | 54 J | ND | ND | ND | ND | ND | **1,200** | 100 J | 430 | 100 J | 250 J | 91 J | ND | ND | ND | ND | ND | 1,000 | 22,000 |
| Indeno(1 2 3-cd)pyrene | ND | ND | ND | ND | ND | ND | ND | ND | 600 | 60 J | 230 J | 63 J | 150 J | 61 J | ND | ND | ND | ND | ND | 5,600 | 8,200 |
| Dibenzo(a h)anthracene | ND | ND | ND | ND | ND | ND | ND | ND | 280 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 560 | 1,000,000 |
| Benzo(ghi)perylene | ND | ND | ND | ND | ND | ND | ND | ND | 900 | 80 J | 260 J | 91 J | 180 J | 89 J | ND | ND | ND | ND | ND | 500,000 | 1,000,000 |

**NOTES**

ND - Not Detected.

NS - No Standard

B - Compound was found in the method blank.

J - The result is an estimated value below the reporting limit

**Bold** text indicates exceedence of the NYSDEC Part 375-6.8(b) Soil Cleanup Objective.

**Hangar E Site**

ARCADIS Design & Consultancy for natural and built assets

Note - This Report is for the 4th Quarter of 2018 not 2016.

Westchester County Airport

# REMEDIAL ACTION PROGRESS REPORT

## OCTOBER-DECEMBER 2016 WITH ANNUAL SUMMARY

Westchester County Airport – Hangar E-1
73 Tower Road
Harrison, New York 10604
Spill No. 0901011

# REMEDIAL ACTION PROGRESS REPORT

Westchester County Airport – Hangar E-1

Prepared for:

Westchester County Airport
240 Airport Road, Suite 202
White Plains, NY 10604

Prepared by:

Arcadis U.S., Inc.
35 Columbia Road
Branchburg
New Jersey 08876
Tel 908 526 1000
Fax 908 526 7886

Our Ref.:

BB018238.0000.00001

# CONTENTS



# TABLES

# FIGURES



# APPENDICES

# 1 INTRODUCTION

Arcadis CE, Inc. (Arcadis) is submitting this Remedial Action Progress Report (RAPR) to Westchester County Department of Public Works and Transportation, Division of Engineering (Westchester County) to document the operation of the soil vapor extraction (SVE) system and the groundwater monitoring activities being conducted at Hangar E-1 at the White Plains Westchester County Airport (HPN) located at 73 Tower Road in the Town of Harrison, Westchester County, New York ("the Site").

The RAPR was developed based on the findings of Arcadis' Site Characterization sampling program, which was implemented in the summer of 2010. Arcadis previously issued various Site Characterization Reports (SCRs) to document the findings at the Site. The SCR investigations and Remedial Action (RA) were completed in accordance with the New York State Department of Environmental Conservation (NYSDEC) DER-10 Technical Guidance for Site Investigation and Remediation (DER-10).

The initial Remedial Action was developed based on the findings of Arcadis' Phase II Environmental Site Assessment (Phase II ESA) and Supplemental Environmental Site Investigation (Supplemental SI) which identified the presence of soil and groundwater impacts at the Site. As part of the RA, Arcadis installed a soil vapor extraction system to remediate contaminated soils below the hangar slab and monitoring wells to monitor concentrations of contaminants in groundwater.

# 2 PHYSICAL SETTING

## 2.1 Property Description

The Site is comprised of approximately 200,000 square-feet of leased land improved with an approximately 50,000 square-foot aircraft hangar (Hangar E-1). Additional improvements include asphalt paved automobile and aircraft parking areas, concrete covered taxi-way areas and landscaped areas. The Site and surrounding 702-acre associated airport property are owned by Westchester County. According to the Westchester County Clerk's Office, the parcel number is 0971-008.

A Site Location Map and Site Plan are provided as Figures 1 and 2, respectively.

## 2.2 Soils and Geology

According to the USGS topographic map, Glenville, Connecticut Quadrangle, the Site is located at an elevation of approximately 400 feet above mean sea level. Area topography is relatively flat. The topography at the Site is essentially level with a slight slope to the north and west.

The environmental soil sampling at the Site confirmed that the Site is underlain by brown fine to medium sands or silty sands, and gravelly sands that are likely native materials. The deeper geologic conditions observed during the installation of the soil borings consisted of native fine to medium sands, silty sands, sandy silt, peat and gravelly sands.

According to the New York State Geologic Map (1989), the Site is underlain by amphibolite or schist of the Ordovician and Silurian Manhattan Formation. The bedrock is overlain by gravelly and sandy soils which were encountered by Arcadis during geotechnical drilling and environmental drilling activities at the Site.

## 2.3 Hydrogeology and Topography

Based on topography and the location of the closest body of surface water, groundwater is inferred to flow in a northwesterly direction. During Arcadis' drilling activities, groundwater at the Site was encountered at a depth of approximately 8 to 12 feet below grade.

No surface water bodies were observed on Site. Storm water flow at the Site is overland towards the north until it infiltrates the ground in the vegetated portions of the Site. A wetlands area is located approximately 250 feet south of the hangar and Rye Lake is located approximately 0.5 miles to the northwest.

# 3 SITE BACKGROUND AND HISTORY

The Site consisting of Hangar E-1 is used by JPMorgan Chase for the storage and maintenance of a number of jet aircraft and portions of the building are used as a passenger terminal for JPMorgan Chase employees. The Site is currently leased by JPMorgan Chase from Westchester County Airport, who is the owner of the property. JPMorgan Chase completed a major renovation of the hangar interior and exterior areas in 2010. As part of the Site renovation activities, an environmental investigation was conducted to identify potential environmental impacts to the Site.

From November 2009 through March 2010, Arcadis performed environmental investigation activities at Hangar E-1. Based on the findings of the environmental investigation activities, three potential areas of concern (AOCs) were identified at the Site. These included the following:

- Jet fueling and storage areas on the exterior concrete apron and asphalt paved areas.
- Trench drains and associated oil interceptor within the hangar.
- 5,000 gallon No. 2 fuel oil underground storage tank (UST).

Environmental investigation activities including soil and groundwater sampling were completed in these three areas to evaluate the past impacts of facility operations and current conditions. The investigation activities identified petroleum contamination in the soil and groundwater adjacent to the exterior concrete apron; solvent and petroleum contamination in the soil and groundwater beneath the hangar floor adjacent to the trench drain system; and petroleum contamination also was identified in the groundwater adjacent to the 5,000 gallon fuel oil UST.

Arcadis proposed remedial actions to address the soil impacts that included excavation in the concrete apron area and hangar trench drain, and the installation of a SVE system to address the contamination identified beneath the hangar floor.

The fuel oil UST system was removed in August and September 2010. Based on the findings of the UST closure site assessment investigation, no release was detected from the tank or associated piping.

During the repairs to the apron, impacted soils in this area were excavated and disposed off-site. Arcadis determined that no additional removal of impacted soil was necessary.

The presence of petroleum and solvent impacts in the soil beneath the hangar floor adjacent to the trench drain and oil interceptor indicated that the former trench drain and/or the former oil interceptor had leaked. The presence of impacted areas further from the trench drain system may indicate that substances were spilled on the concrete floor and leaked into the subsurface soil through the construction joints located between the slabs. The drain system was replaced during the renovation activities by JPMorgan Chase to eliminate this source of impact. Additionally, the existing concrete floor was sealed to prevent future releases of any materials from potentially migrating into the subsurface soil though the floor joints or concrete.

Impacted soils were excavated during the replacement of the hangar floor drain system. SVE piping was installed beneath the hangar floor within the excavated area to address the residual impacted soil.

# 4 SVE SYSTEM

## 4.1 Description of SVE System

The SVE system consists of a skid-mounted SVE unit and an extraction piping system located beneath a portion of the hangar floor. The SVE unit includes a vacuum extraction blower that provides the necessary vacuum and air flow to remove the contaminated soil vapors from the subsurface impacted soils. The extraction piping below the hangar concrete slab includes seven separate subsurface extractions zones (Zones A to G) that can be operated simultaneously or separately. A figure illustrating the SVE system, extraction zones and manifold piping are provided in Figure 2.

The extraction zones consist of horizontal sections of 2-inch and 3-inch diameter slotted polyvinyl chloride (PVC) piping located approximately 8 feet below the surface of the hangar floor. The approximate length of slotted pipe in Zone A is 35 feet, Zone B is 30 feet, Zone C is 25 feet, and 40 feet in Zones D, E, F and G. The seven zones connect above grade to a 4-inch diameter PVC extraction manifold located on the eastern wall of the hangar. The manifold is connected by 4-inch diameter PVC piping to the SVE unit located outside within an enclosure on the southern side of the building.

The SVE unit includes a 7.5-hp extraction blower. The SVE unit also includes a water separator that is heat traced and insulated for winter operation. Two activated carbon treatment canisters are installed adjacent to the SVE unit for the removal of volatile organic compounds from the vapor stream prior to discharging to the atmosphere. The carbon canisters each contain 1,000 pounds of activated carbon and are approximately 4 feet in diameter by 5.5 feet in height. These carbon units are also insulated and heat traced. The system has been operational since October 2010.

## 4.2 SVE System Operation & Maintenance

Routine maintenance activities were completed in the 4$^{th}$ Quarter of 2018 (October, November, and December 2018). The SVE system was operational with no shutdowns experienced. No condensate accumulated in the tank during the monitoring period. The system was winterized in preparation for the cold weather.

## 4.3 SVE System Vapor Monitoring

Monthly monitoring of the vapor concentrations was conducted on various portions of the SVE system. The extracted soil vapors were screened for the presence of solvents and petroleum hydrocarbons using a PID that is capable of measuring in the parts per billion (ppb) range. The instrument is calibrated to 100 ppb of isobutylene per the manufacturer's specifications prior to each measurement event.

In addition to the monthly monitoring, semi-annual vapor samples were collected from the system on December 18, 2018 for laboratory analysis. The samples were collected to supplement the monthly monitoring measurements of VOC concentrations with a PID and assist in the evaluation of the performance of the system. The vapor samples were collected from sample ports located prior to the carbon treatment units (influent), between the carbon units (mid-point) and after the carbon units (effluent) using summa canisters. The samples were submitted to a New York certified laboratory and analyzed for VOCs. The results are summarized in Table 3.

The total extracted volatile organic compound (VOC) concentration as measured by the PID was 134,000 ppb when the SVE system was initially commissioned on October 12, 2010. Arcadis was retained in July 2011 to perform O&M activities. The estimated VOCs removed during the monitoring period based on PID readings and laboratory sampling results were 0.12 pounds in October, 14.28 pounds in November and 0.45 pounds in December. Since startup of the system in 2010, approximately 812.21 pounds of VOCs have been removed.

Zones A, B, C, D, E, F, and G were fully opened for October, November, and December 2018.

# 5 DESCRIPTION OF MONITORING WELL NETWORK

Arcadis installed four permanent groundwater monitoring wells (MW-1, MW-2, MW-3 and MW-4) within the hangar area to monitor natural attenuation of the groundwater contaminants. One well was installed upgradient of the trench drains/oil interceptor (MW-3) and two wells were installed downgradient of the impacted area (MW-1 and MW-4). In addition, one well was installed within the area of greatest impact in the eastern area of the hangar near the former oil interceptor (MW-2). A Site Plan showing the monitoring wells is provided as Figure 2.

The monitoring wells consist of 2-inch diameter PVC permanent wells installed with 15 feet of 0.010-slotted screened intervals to a total depth of approximately 20 feet below grade surface (bgs). The screened interval was installed to straddle the water table, which locally has been measured at depths of 10-12 feet bgs. A sand filter pack was constructed from approximately 1 foot above the screened interval to the bottom of the well. The wells were finished as flush-mount wells.

Arcadis sampled the monitoring wells using a standard three-volume purge sampling method. Field parameters such as pH, conductivity, temperature, and dissolved oxygen were recorded prior to and after purging and after sample collection. The field parameters and sampling information were recorded on field sampling forms. The samples were submitted to a NYSDOH certified laboratory for analysis.

# 6 GROUNDWATER MONITORING ACTIVITIES

The following procedures were used to purge and sample the wells during each monitoring event. The SVE system was turned off prior to purging. Well headspace VOC readings were measured using a photoionization detector (PID) upon removing the expansion cap. The total depth of the well, the depth to water and depth to any floating product, if present, were measured using a Solinst oil/water interface meter. Dissolved oxygen, specific conductance, temperature, and pH were measured using a Horiba water quality meter.

The volume of water in the well was calculated from the depth to water and the total depth measurements of the well. The wells were then purged using a submersible pump with polyethylene tubing, which was wiped using paper towels and distilled water as it was placed into the well. New dedicated tubing was used and the tubing in the pump was replaced for each well. Each well was purged of three volumes. Upon completion of the well purging, the field analytical parameters were measured again. The wells were then sampled using disposable bailers dedicated to each well. Bailers were lowered into the well using nylon twine. Field personnel wore disposable gloves for purging and sampling. Gloves were changed between each well. After completion of the sampling, field parameters were measured again. All data was recorded on monitoring well purge forms.

Groundwater samples collected from the monitoring wells were placed into new laboratory supplied sample containers, which contained the appropriate preservative. The samples were stored in a cooler with ice and transported under chain of custody to a NY State Department of Health-certified analytical laboratory. All samples were analyzed for VOCs using United States Environmental Protection Agency (U.S. EPA) Method 624, including calibration for MTBE.

# 7 GROUNDWATER ANALYTICAL RESULTS

Monitoring wells MW-1, MW-2, MW-3 and MW-4 were sampled during the December 17, 2015 groundwater sampling event. The compounds present at concentrations that exceeded the NYSDEC Groundwater Quality Standards, and the ranges of these contaminants in the wells, are as follows: 1,1-dichloroethane (1.1 to 34.1 ug/L), 1,1-dichloroethene (1.2 to 130 ug/L), 1,2-dichloroethane (undetected to 6.1 ug/L), benzene (undetected to estimated 0.62 ug/L), chloroethane (undetected to 64.2 ug/L), cis-1,2-dichloroethene (estimated 0.7 to 17.5 ug/L), methylene chloride (undetected to 1.6 ug/L), and vinyl chloride (undetected to 18 ug/L).

No measurable free product or petroleum sheens were observed during this sampling event.

Table 1 summarizes the December 2018 groundwater sampling results. Table 2 summarizes the historic groundwater sampling results for each well. Figure 3 depicts the groundwater contour for the sampling event. The groundwater contours fluctuate and are influenced by the SVE system operation and which zones are active. The laboratory data pages and chain of custody form are provided as Appendix A.

# 8 DATA EVALUATION

Arcadis prepared a groundwater elevation contour map and isoconcentration maps for the monitoring wells MW-1, MW-2, MW-3, and MW-4 so data trends can be established. Concentrations of total BTEX

(benzene, toluene, ethylbenzene, total xylenes) compounds and total chlorinated volatile organic compounds (1,1-DCA, 1,1-DCE, 1,2-DCE, chloroethane, methylene chloride, and vinyl chloride) which represent the greatest mass of the on-site contamination are presented on Figures 4 and 5, respectively.

The concentrations of VOCs in MW-1, MW-2, and MW-3 generally decreased from the prior sampling events. Concentrations within MW-4 remain below the GWQS.

# 9 CONCLUSIONS AND RECOMMENDATIONS

The data obtained by Arcadis indicate the following:

- The concentrations of VOCs in MW-1, MW-2, and MW-3 generally decreased from the prior sampling events. Concentrations within MW-4 remain below the GWQS.
- Approximately 14.86 lbs. of VOCs were removed during the 4$^{th}$ quarter of 2018, and approximately 36.59 lbs. of VOCs were removed during the year.
- An estimated 812.21 lbs. of VOCs have been removed since startup of the system in October 2010.
- The system has been operating effectively throughout the year.

**Section IV. #9**

**List of Permits**

## SECTION IV PROPERTY INFORMATION

### 9. List of Permits

Discharge Permit, Westchester County DEF, #7515 – 1/1/2019-12/31/2020; Deicing wastewater and storm water runoff.

SPDES Permit, NYSDEC, #NY0075132 – 2/1/2019-1/31/2024; Deicing wastewater and storm water runoff.

Air Permits, NYSDEC, 5/21/2019 – 5/21/2029; SVE System

Certificates to Operate A Source of Air Contamination, WC DOH (Oil fired Boiler Permits)

Petroleum Bulk Storage Certificate, WC DOH PBS #3-177768; 3/28/2018 – 3/28/2021

Wildlife Permits, NYS

Tree cutting Permits, NYSDEC/ NYCDEP

Wetland Permits, NYS/US Army Corps

Municipal Separate Storm Sewer System MS-4 Permit, Westchester County

**Section IV. # 10**

**Property Description and**

**Environmental Assessment**

## SECTION IV. PROPERTY INFORMATION

### 10. Property Description and Environmental Assessment

#### Location

The Site is located at 240 Airport Road, White Plains, Westchester County, New York in a mixed-use suburban area.

#### Site Features

The Site is primarily covered with grassy fields, airplane runways and taxiways. The main structures on the Site consist of airplane hangars and terminal buildings located along the eastern property line. A few hangars are located along the southern property line. To the north of the Site is residential housing. To the east and south are residences and commercial properties, including a golf course. To the west is Interstate 684 and Rye Lake.

#### Current Zoning and Land use

Current zoning for the site is commercial / industrial. The site is an active County, public airport. Surrounding land use is a mixture of commercial, residential, institutional and water supply properties.

#### Past Use of the Site

Westchester County Airport was initially constructed by the U.S. Army Corps of Engineers in 1942 on land owned by the County of Westchester. The site was leased by the County to the United States government during World War II for use by the United States Army Air Corps. Before the end of the war the government surrendered its lease and in February 1945 the Westchester County Airport opened as a public airport. Over subsequent years the airport expanded to its current configuration.

In 1947, the NY Air National Guard leased the northeast section of the Airport from Westchester County. As part of its operations the Guard performed aircraft rescue and firefighting (ARFF) operations on a regular basis. These training activities were performed at a

"burn pit" that was located near the Guards former hanger from approximately 1968 until their departure in 1983. As part of its firefighting exercises, the Guard used Class B Aqueous Film-Forming Foam (AFFF) which contained concentrations of various PFAS. The duration of AFFF use and the fact that the burn pit was unlined likely resulted in the release of VOCs, SVOCs and PFAS to the environment. From May to October 2000, approximately 2,800 tons of impacted soil over a 130-foot by 60-foot area, encompassing the former burn pit, were excavated to between 4 and 6 feet below grade.

In subsequent years, several other areas of investigation and remediation have occurred at the Airport as summarized below.

1. Former Hangar B Septic Field (Site No. C00611); Investigated and remediated for soil impact (VOCs) by excavation and offsite disposal.
2. Former DPW Staging Area (Site No. V00652); Investigated and remediated with an engineered soil cover and institutional controls.
3. Hangar D Bay 1 (Site No 360037); chlorinated solvent contamination in groundwater currently being remediated / monitored by a third party.
4. Hangar E Site (Spill No. 912936); chlorinated solvent contamination in soil and groundwater; remediated via excavation (completed) and SVE (active).

Site Geology and Hydrogeology

The geology at the Site consists of unconsolidated overburden soil overlying bedrock. The overburden consists of topsoil, fill, glacial till, and glacial outwash deposits. Bedrock beneath the Site consists of Manhattan Schist underlain by the Inwood Marble. The depth-to-bedrock varies across the site ranging from approximately 10 to 20 feet below grade. Groundwater underlying the site occurs in two units, an upper unconfined aquifer comprised of unconsolidated soils and the uppermost weathered bedrock, and the underlying confined bedrock aquifer. Groundwater in the unconfined aquifer from the northern and southwestern portions of site flows in a westerly direction toward Rye Lake. Groundwater for the rest of the

site flows toward the east and southeast away from Rye Lake. Groundwater within the bedrock flows to the south. Depth to groundwater ranges between 1.5 and 20 feet below grade.

Environmental Assessment

Based upon investigations completed to date, the primary contaminants of concern for the site, and those most likely to drive remedial decisions, are per and polyfluoroalkyl substances (PFAS).

*Groundwater*: PFAS is present in groundwater across the site in both the overburden and bedrock aquifers. The highest concentrations are detected in the shallow groundwater and in the northern portion of the site. Total PFAS concentrations as of October 2019 ranged between 6 and 37,000 nanograms per liter (ng/l). Concentrations of PFOA and PFOS exceeded the EPA Guidance value of 70 parts per trillion (ppt) in 31 out of 54 wells with concentrations up to 18,000 ng/l. PFAS has also been detected in offsite bedrock water supply wells.

*Surface Water*: PFAS has been detected in surface water draining from various locations around the site. The highest concentrations were detected in the northern portion of the site which drains into Rye Lake. Total PFAS was detected at 8,800 ng/l and PFOA / PFOS were detected at 4,565 ng/l.

*Sediments:* PFAS have been detected in surface water sediments at various locations around the site with the highest concentrations detected in the northern portion of the property. Total PFAS was detected up to 53,260 ppt and PFOA / PFOS were detected up to 31,560 ppt.

*Soil* : PFAS is expected to be present in soil in the vicinity of the former burn pit (in the northern portion of the site) however no investigations of soil have been completed.

## Section VI.

## Previous Property Owners

## List of Previous Property Owners

| Previous Property Owners | Year Transferred | Contact Information | Requestor's Relationship |
|---|---|---|---|
| Percy A. Deutsch | 1950 | Not Available | None |
| C. A. Becker Est. | 1942 | Not Available | None |
| Sires Realty Corp. | 1942 | Not Available | None |
| George Clarke | 1949 | Not Available | None |
| Charles A. & Jean Fox | 1968 | Not Available | None |
| Charles A. & Jean Fox | 1994 | Not Available | None |
| Emmigrant Industrial Savings Bank | 1942 | Not Available | None |
| Elizabeth J. Hamilton, et al. | 1942 | Not Available | None |
| Helen Burke Garfunkel | 1942 | Not Available | None |
| United States Postal Service | Not Available | Not Available | None |
| New York, Westchester & Boston RR Co. | 1947 | Not Available | None |
| New York, New Haven & Hartford RR Co. | 1948 | Not Available | None |
| Joanna W. Purdy Est. | 1947 | Not Available | None |
| State of New York | 1942 | Not Available | None |
| State of New York | 1955 | Not Available | None |

Previous Property Owners: former owners of various parcels of the current airport property.

Year Transferred is the year transferred to Westchester County.

## Section VII. #2

## Existing Orders

## SECTION VII. REQUESTOR ELIGIBILITY INFORMATION

### 2. Existing Orders for Investigation, Removal or Remediation

In 2017 and 2018 PFAS including PFOA and PFOS were discovered in groundwater throughout the site as well as in surface water and sediment. In 2019 the County entered into an Order on Consent with the NYSDEC (Index No. 3-20180308-44). The order required the submission of several workplans including a Site Characterization Work Plan and two Interim Remedial Measure (IRM) workplans for groundwater and surface water at the Westchester County Airport. The required plans have been submitted and as of this time (December 2019) are under department review.

**Section VIII. #2**

**NYS Inactive Haz Waste**

**Site Description**

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

# Environmental Site Remediation Database Search Details

## Site Record

### Administrative Information

**Site Name:** Texaco Hangar (formerly Mobil Corp.)
**Site Code:** 360037
**Program:** State Superfund Program
Classification: 02
**EPA ID Number:**

### Location

**DEC Region:** 3
**Address:** Hangar D - Bay 1
**City:**Harrison Zip: 10604
**County:**Westchester
**Latitude:** 41.071493
**Longitude:** -73.706614
**Site Type:** STRUCTURE
**Estimated Size:** 2 Acres

### Site Owner(s) and Operator(s)

**Current Owner Name:** Westchester County
**Current Owner(s) Address:** 100 East First St.
Mount Vernon,NY, 10601
**Current On-Site Operator:** Peterjohn Management
**Stated Operator(s) Address:** 184 Airport Rd, Box 14
Harrison,NY 10604
**Current On-Site Operator:** Landmark Aviation
**Stated Operator(s) Address:** 184 Airport Rd
Harrison,NY 10604
**Current On-Site Operator:** TISMA, Inc.
**Stated Operator(s) Address:** 184 Airport Road
Harrison,NY 10604

### Site Document Repository

**Name:** Harrison Public Library
**Address:** 2 Bruce Avenue
Harrison,NY 10528

**Name:** NYSDEC Region 3 Office
**Address:** 21 South Putts Corners Road
New Paltz,NY 12561-1696
**Name:** Town of Harrison
**Address:** 1 Heineman Place
Harrison,NY 10528

## Hazardous Waste Disposal Period

**From:** 1969 **To:** 1991 ?

## Site Description

Location: The Texaco Hangar Site is located at Hangar D1, Bay 1B near the eastern boundary of the Westchester County Airport, in the Town of Harrison. The site is currently owned by the Airport and leased by Landmark Aviation. The northeast boundary of the Airport is adjacent to the Fairfield County, Connecticut border. Undeveloped woodlands are located north, south, and east of the Airport. Site Features: Texaco Hangar occupies one bay of a row of hangars at the airport. The Texaco Hangar facility is approximately 1.6 acres in size and contains the hangar bay (the contaminated portion of the site) which also contains an office space and an aircraft pad. The Westchester County Airport is situated on generally flat land. The Airport is surrounded by varied land uses which include: residential; industrial; institutional; light commercial; woodlands; golf courses and watershed areas. The Airport is bounded to its west by woodlands and Route 120 (Purchase Street); to the east by woodlands and the New York-Connecticut border; to the north by Airport Road and commercial and industrial areas; and to the south by Lincoln Avenue and woodlands. Current Zoning and Land Use: The site is within an active public and private use airport, and zoned Industrial AA (IND-AA), which allows for commercial and industrial uses such as businesses, professional offices, studios, Motels, light industrial, and at the Westchester County Airport, such uses shall include the storage and repair of aircraft, the storage and distribution of aviation gasoline and warehouses(excluding truck storage or truck terminal facilities). The airport is further restricted by federal regulations. As discussed above, used for aircraft operations and maintenance by Landmark Aviation. Past Use of Site: A 55 gallon drum of cleaner (primarily 1,1,1-Trichlorethane (1,1,1-TCA) and Tetrachloroethene (PCE) routinely used in the aircraft maintenance operations is known to have been spilled in the hangar bay close to the east/southeast wall of the bay, and has spread southward under the slab. Additionally, 1,1,1-TCA was also detected in soils under the aircraft pad and under the bay floor. Site Geology and Hydrogeology: Blind Brook is located 5,000 feet south of the site and flows south to Long Island Sound. Rye Lake, which is part of the Kensico Reservoir, is approximately 3,500 feet west of the Texaco Hangar site. Groundwater flow is to the southeast towards Blind Brook. Blind Brook runs through the lower portion of the site towards the Town of Rye. Soils are approximately 15 feet thick consisting of

mostly consolidated fill placed during the airport construction. A buried stream channel was encountered at 20 feet below ground surface, trending north-south, same as groundwater flow.

## Contaminants of Concern (Including Materials Disposed)

| Contaminant Name/Type |
| --- |
| 1,2-dichloroethane |
| trichloroethene (TCE) |
| vinyl chloride |
| tetrachloroethene (PCE) |
| 1,1 dichloroethene |
| 1,1,1-Trichloroethane(TCA) |
| 1,1-dichloroethane |
| chloroethane |

## Site Environmental Assessment

Nature and Extent of Contamination: Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were tetrachloroethene (PCE) and 1,1,1-Trichloroethane (1,1,1 TCA) in soil vapor and groundwater. Remedial actions have successfully achieved soil cleanup objectives for commercial use. Residual contamination in the soil vapor and groundwater is being managed under a Site Management Plan.

## Site Health Assessment

Investigations have shown that site-related groundwater contamination is not affecting the nearby Kensico Reservoir or any water supply wells. Direct exposure to contaminated soil beneath the building is unlikely. The remedy is addressing contaminated groundwater and soil. The potential for soil vapor intrusion at the site is being investigated.

For more Information: E-mail Us

Refine This Search

## Section VIII. #5

## Existing Cleanup Orders

## SECTION VIII PROPERTY ELIGIBILITY INFORMATION

### 5. Existing Cleanup Orders

In 2017 and 2018 PFAS including PFOA and PFOS were discovered in groundwater throughout the site as well as in surface water and sediment. In 2019 the County entered into an Order on Consent with the NYSDEC (Index No. 3-20180308-44). The order required the submission of several workplans including a Site Characterization Work Plan and two Interim Remedial Measure (IRM) workplans for groundwater and surface water at the Westchester County Airport. The required plans have been submitted and as of this time (December 2019) are under department review.

## Section IX

## Contact List Information

## SECTION IX – CONTACT LIST INFORMATION

### 1.Chief Executive Officers and Planning Board Chairpersons

George Latimer County Executive, Office of the County Executive
9th Floor, 148 Martine Ave, White Plains, NY 10601

Richard Hyman County Planning Board Chair, Westchester County Dept of Planning
Room 432, 148 Martine Ave, White Plains, NY 10601

Ron Belmont Town/Village of Harrison Mayor, Town/Village of Harrison
1 Heineman Place Harrison, New York, 10528

Thomas Heaslip Harrison Planning Board Chair Town/Village of Harrison
1 Heineman Place Harrison, New York, 10528

Paul Rosenberg Village of Rye Brook Mayor Village of Rye Brook
938 King Street Rye Brook, NY 1057

Robert Goodman Rye Brook Planning Board Chair Village of Rye Brook
938 King Street Rye Brook, NY 1057

Michael Schiliro Town of North Castle Supervisor Town of North Castle
15 Bedford Road Armonk, NY 10504

Christopher Carthy North Castle Planning Board Chair Town of North Castle
15 Bedford Road Armonk, NY 10504

### 2.Residents, owners, and occupants of the property and properties adjacent to the property

| OWNER | OWNER ADDRESS | PROPERTY ADDRESS |
|---|---|---|
| AMMIRATO, BARBARA | 4282 Purchase St Purchase, NY 10577 | Same |
| SPREWELL, LATRELL F | 4340 Purchase St Purchase, NY 10577 | Same |
| HIRABAYASHI, KAZUKO | 4300Purchase St Purchase, NY 10577 | Same |
| HASHEM HASHEM J | 5 Renaissance Sq - Apt White Plains, NY 10601 | 4350 Purchase St Purchase, NY 10577 |
| SOCIETY OF FRIENDS | 4455 Purchase St West Harrison NY 10604 | Same |
| PRICE II, VIRGIL M | 6-10 Wolfe Ln Purchase, NY 10577 | Same |
| CITY OF NEW YORK | 465 Columbus Ave Valhalla NY 10595 | 4440 Purchase St Purchase, NY 10577 |
| VALENTINO ANTHONY A | 2 Palma Dr Harrison NY 10528 | 38 Wolfe Ln Purchase, NY 10577 |
| GJOKAJ, TONY T | 36 Hickory Ln Thornwood NY 10594 | 22 Wolfe Ln Purchase, NY 10577 |
| AMMIRATO, FULVIO | 4288 Purchase St Purchase, NY 10577 | Same |

| OWNER | OWNER ADDRESS | PROPERTY ADDRESS |
|---|---|---|
| BURTON, STEVEN | 4390 Purchase St Purchase, NY 10577 | Same |
| BILLONE, JOSEPH | 4443 Purchase St West Harrison NY 10604 | Same |
| VALENTINO ANTHONY A | 2 Palma Dr Harrison, NY 10528 | 34 Wolfe Ln Purchase, NY 10577 |
| WESTCHESTER JOINT WATER | 1625 Mamaroneck Ave Mamaroneck, NY 10543 | 12 Stone Ridge Rd Purchase NY 10577 |
| SUMMERHILL REALTY LLC | 4330 Purchase St Purchase, NY 10577 | Same |
| AMMIRATO, FULVIO | 4290 Purchase St Purchase, NY 10577 | Same |
| KANTER, MALCOLM J | 14 Wolfe Ln Purchase, NY 10577 | Same |
| SOCIETY OF FRIENDS | Purchase Meeting Purchase, NY 10577 | Purchase St Purchase, NY 10577 |
| REHMAN ABAID | 251 Bedford Pk Blvd Bronx, NY 10453 | 4 Kempner Ln Purchase, NY 10577 |
| STATE OF NEW YORK | A E Smith Office Bldg Albany, NY 12236 | 55 New King St West Harrison NY 10604 |
| KERN, HAL | 18 Wolfe Ln Purchase, NY 10577 | Same |
| NYS Housing Finance Agency | Lincoln Ave Purchase, NY 10577 | Same |
| United Cerebral Palsy | PO Box 555 Purchase, NY 10577 | 1186 King St Rye Brook NY 10573 |
| Safe Flight Inst Corp | 20 New King St West Harrison NY 10604 | Same |

3.Local News Media

LoHUD, 1133 Westchester Ave. Suite N110, White Plains, NY 10604

4.Public Water Supplier

Westchester Joint Water Works, 1625 Mamaroneck Ave, Mamaroneck, NY 10543

5.Other Persons

None

6.School Administrators

Thomas Phillip, Headmaster The Brunswick School
1275 King Street, Greenwich, CT 06831.

Linda Kuck, Executive Director Cerebral Palsy of Westchester
1186 King Street, Rye Brook, NY 10573.

7.Document Repository

Westchester County Airport Environmental Department

Main Terminal, Suite 202

240 Airport Rd White Plains, NY 10604

# Section X

# Land Use Factors

## SECTION X. LAND USE FACTORS

### 2. Current Use

The site is an active County, public airport which includes Fixed-base Operators and private corporate Hangars. Current business operations include the operation of public airlines, charter flight services, private corporate flight operations and associated support services.

In 1947, the NY Air National Guard leased the northeast section of the Airport from Westchester County. As part of its operations the Guard performed aircraft rescue and firefighting (ARFF) operations on a regular basis. These training activities were performed at a "burn pit" that was located near the Guards former hanger from approximately 1968 until their departure in 1983. As part of its firefighting exercises, the Guard used Class B Aqueous Film-Forming Foam (AFFF) which contained concentrations of various PFAS. The duration of AFFF use and the fact that the burn pit was unlined likely resulted in the release of VOCs, SVOCs and PFAS to the environment. From May to October 2000, approximately 2,800 tons of impacted soil over a 130-foot by 60-foot area, encompassing the former burn pit, were excavated to between 4 and 6 feet below grade. The former burn pit is considered the primary source area for the current PFAS contamination that has been detected in onsite groundwater, surface water and sediment.

### 3. Proposed Use

The reasonably anticipated proposed use for the site post remediation is the same as the current use, as a public airport.