

January 30, 2018

Edward McAndrew Commissioner, Sullivan County Division of Public Works 100 North Street P.O. Box 5012 Monticello, New York 12701

**Re:** Records Search Report

**Sullivan County International Airport** 

Tax Map/Parcel Nos.: 18.-1-16.1, 18.-1-18.3, and 24.-1-1

75 County Rd 183A, Swan Lake, New York

Dear Mr. McAndrew:

EnSafe Inc. is pleased to provide the enclosed Records Search Report for the parcels of land identified above, and related to the Sullivan County International Airport. If you have any questions or require additional information, please contact me at 860-665-1140.

Respectfully Submitted,

EnSafe Inc.

By: Robert McCarthy, PE

Senior Project Manager

Enclosure

## **RECORDS SEARCH REPORT**

SULLIVAN COUNTY INTERNATIONAL AIRPORT Tax Map/Parcel Nos.: 18.-1-16.1, 18.-1-18.3, and 24.-1-1
75 COUNTY ROAD 183A
SWAN LAKE, NEW YORK 12783

EnSafe Project Number: 0888821949

**Prepared for:** 

Sullivan County Division of Public Works 100 North Street P.O. Box 5012 Monticello, New York 12701

Issue Date: January 30, 2018

1233 Silas Deane Highway Wethersfield, Connecticut 06109 860-665-1140 | 800-588-7962



## RECORDS SEARCH REPORT

SULLIVAN COUNTY INTERNATIONAL AIRPORT Tax Map/Parcel Nos.: 18.-1-16.1, 18.-1-18.3, and 24.-1-1
75 COUNTY ROAD 183A
SWAN LAKE, NEW YORK 12783

EnSafe Project Number: 0888821949

**Prepared for:** 

Sullivan County Division of Public Works 100 North Street P.O. Box 5012 Monticello, New York 12701

Issue Date: January 30, 2018

Michael Zobel
Environmental Scientist

Robert McCarthy

Senior Project Manager

## Prepared by:

EnSafe Inc. 1233 Silas Deane Highway Wethersfield, Connecticut 06109 860-665-1140 800-588-7962 www.ensafe.com



creative thinking. custom solutions. ®

## **TABLE OF CONTENTS**

ACRON	NYMS		l						
EXECU	TIVE SI	SUMMARY	iii						
1.0	TNITDO								
1.0		DDUCTION	<u>1</u>						
	1.1	Purpose							
	1.2	Scope of Services	2						
2.0	PHYSIC	ICAL SETTING	4						
3.0	SUB1F	ECT PROPERTY	5						
3.0	3.1	Interviews							
	3.2	Prior Environmental Assessments							
	3.3	Historical Development and Uses							
	3.3								
		3.3.1 Historical Development							
		3.3.2 Historical Uses and Operations							
	3.4	Current Uses							
		3.4.1 Terminal Building							
		3.4.2 Aircraft Rescue and Fire Fighting Building							
		3.4.3 Utility Building							
		3.4.4 Pump House	9						
		3.4.5 Hangars	10						
		3.4.6 E911 Building	11						
		3.4.7 Snow Removal Equipment Building	12						
		3.4.8 Generator Shed							
	3.5	Interior and Exterior Observations							
		3.5.1 Hazardous Substances and Petroleum Products							
		3.5.2 Firefighting Training Areas							
		3.5.3 Storage Tanks							
		3.5.4 Fill Areas							
		3.5.5 Solid Waste							
		3.5.6 Septic Systems and Storm Water							
		3.5.7 Wells							
	2.6	3.5.8 Electric Transformers							
	3.6	Environmental Records Review							
		3.6.1 Onsite Environmental Records							
		3.6.2 OffSite Environmental Records	32						
4.0	ARFA F	RECONNAISSANCE	34						
	4.1								
	4.2	Surrounding Area Properties							
	4.3	Unmapped Sites							
5.0	RESULTS OF THE ENVIRONMENTAL PROFESSIONAL INQUIRY								
	5.1 Summary of Findings and Conclusions								
	5.2	Environmental Professional Opinion							
	5.3 Limitations and Exceptions4								

	5.5	Significant Assumptions	. 46
6.0	REFER	ENCES	. 47
		TABLES	
Table 1 Table 2 Table 3 Table 4 Table 5 Table 6		Physical Setting Summary	
		APPENDICES	
Append Append Append Append Append	dix B dix C dix D	Figures Environmental Database Search Report Historical Documents Government Records Photo Log	

	5.4	Significant Assumptions		46		
6.0 REFERENCES						
		TABLES				
Table :		Physical Setting Summary				
Table 2		Summary of InterviewsSubject Property Observations	5			
Table 4		Summary of Petroleum Bulk Storage Tanks				
Table !		Summary of Identified PFAS Areas of Concern				
Table 6		Summary of Preliminary Areas of Concern	44			
		APPENDICES				
Append Append Append Append Append	dix B dix C dix D	Figures Environmental Database Search Report Historical Documents Government Records Photo Log				

#### **ACRONYMS**

-A-

ABANDONED MINES Surface Mining Reclamation and Enforcement Inventory

AFFF aqueous film forming foam

AOC Areas of Concern

ARFF Aircraft Rescue and Fire Fighting AST aboveground storage tanks

ASTM American Society of Testing and Materials

-B-

bgs below ground surface

-C-

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CR County Road CVI Cablevision

-F-

FAA Federal Aviation Administration

FBO Fixed Base Operations
FINDS Facility Index System
FTA firefighting training area

-H-

HA Health AdvisorY

HVFG Hudson Valley Foie Gras, LLC

-L-

LTANKS Leaking Storage Tanks Incident Reports

-N-

ng/l nanograms per liter
NY SPILLS NYSDEC Spills Database

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health

-0-

OWS oil/water separator

-P-

PBS Petroleum Bulk Storage

PFAS per- and polyfluoroalkyl substances

PFOA perfluorooctanoic acid PFOS perfluoroctane sulfonic acid

-R-

RSR Records Search Report

-S-

SCDPW Sullivan County Division of Public Works
SCETA Sullivan County Emergency Training Area
SCIA Sullivan County International Airport

SHSW State Hazardous Waste Sites
SRE snow removal equipment

SWF/LF Solid Waste Facilities/Landfill Sites

-T-

TANKS Tanks Database

-U-

U.S. EPA United States Environmental Protection Agency

US MINES Mines Master Index

UST underground storage tank

#### **EXECUTIVE SUMMARY**

EnSafe Inc. performed a Records Search Report (RSR) of Sullivan County International Airport (SCIA) located at 75 County Road 183A, in Swan Lake, New York (subject property) with a goal to identify Areas of Concern (AOC), as defined in the New York State Department of Environmental Conservation (NYSDEC) *Technical Guidance for Site Investigation and Remediation* (DER-10) (NYSDEC, May 3, 010). The findings, conclusions, and environmental professional opinion in this RSR report result from interviews, an environmental records search, historical and regulatory research, and a site visit performed on December 21, 2017.

The subject property is an irregularly shaped parcel consisting of the three tax map parcels (Tax Map/Parcel Nos.: 18.-1-16.1, 18.-1-18.3, and 24.-1-1), totaling approximately 603 acres, identified in the NYSDEC Consent Order executed on December 21, 2017. Three additional parcels totaling approximately 39 acres are associated with SCIA but are undeveloped and non-utilized areas, which were not included in the Consent Order. The subject property is mostly cleared land, with trees along the property boundaries. There is a paved runway and parallel taxiway that runs northwest to southeast through the center portion of the property. The land slopes downward along the property boundaries. A gravel roadway runs along the perimeter of the cleared portion of the property. Potable water is provided to SCIA from a supply well located on an abutting parcel of land owned by Sullivan County, and domestic wastewater is managed through an onsite septic system and leach field. Two un-named ponds are located on the subject property: one is located west of the southern end of the runway and the other is located at the northwest corner of the subject property. There are two streams adjacent to the property — Lybolt Brook to the west, which originates at the un-named pond on the subject property, and West Branch Mongaup River to the east.

The earliest useful historical information regarding land use at the subject property are the 1958 and 1965 aerial photographs, which show mostly cleared land used for agriculture, with several small buildings, presumably related to agricultural activities. Paved roads ran through the subject property in the 1958 and 1965 aerial photographs. SCIA was opened on the subject property in 1970. The 1985 aerial photograph is the first aerial showing the airport on the subject property as well as two small commercial buildings northwest of the subject property. Subsequent aerials show additional buildings as airport operations increased; there are currently 15 structures present at the SCIA.

The December 2017 NYSDEC Consent Order was issued in response to the discovery of per- and polyfluoroalkyl substances (PFAS) in a water supply well (non-potable) located on SCIA, and in a potable supply well located on the commercial property 13 County Road 183B (Silk City Textile Machine Company), which abuts SCIA to the northwest. Two specific PFAS compounds,

perfluorooctanoic acid and perfluorooctane sulfonic acid, either individually or in sum, are present at elevated concentrations at these two supply wells. The presence of PFAS compounds is suspected to be related to aqueous film forming foam, which is used and stored at the SCIA. The NYSDEC has issued Site No. 353016 to track response and investigation activities related to the presence of PFAS in groundwater.

The primary focus of this RSR was to identify potential sources of PFAS (PFAS AOCs); however, per requirements of DER-10, the entire subject property was assessed for presence of other contaminants that fall into the scope of the Comprehensive Environmental Response, Compensation, and Liability Act and petroleum products, and may warrant further consideration as an AOC (Preliminary AOCs). The following is a list of identified AOCs, grouped by type (PFAS AOC or Preliminary AOCs).

## PFAS AOCs

- AOC 1 Active Firefighting Training Area (Section 3.5.2)
- AOC 2 Former Firefighting Training Area (Section 3.5.2)
- AOC 3 Snow Removal Equipment Building (Section 3.5.2)
- AOC 4 Aircraft Rescue and Fire Fighting Building (Section 3.5.1)
- AOC 5 Terminal Building (former garage bay/former AFFF storage area) (Section 3.5.1)
- AOC 6 Leach field (Section 3.5.6)
- AOC 7 Hangar 71 Propane Fire (Section 3.5.2)

## Preliminary AOCs

- AOC 8 Former Leach Fields (Section 3.5.6)
- AOC 9 Former Fuel Farm (Section 3.5.3)
- AOC 10 Former UST at Utility Building (Section 3.5.3)
- AOC 11 Former UST at Fixed Base Operation Hangar (Section 3.5.3)
- AOC 12 Active UST at Cablevision Hangar (Section 3.5.3)
- AOC 13 Fill area north of runway (Section 3.5.4)
- AOC 14 AST/55-gallon drum at Solid Waste Accumulation Area (Section 3.5.5)
- AOC 15 Western Storm Water Drainage Channels (Section 3.5.6)
- AOC 16 Spill No. 9706633 (location unknown) (Section 3.7.1)
- AOC 17 Spill No. 0212684 (Section 3.5.7)

In addition, the following limitations were identified, which impeded the ability to either clarify details related to AOCs or identify potential AOCs.

 Limited information available regarding historical property use for agricultural purposes and previous subject property operations

- The Silk City Machine Company (13 CR 183B) manufactures textile equipment; however, PFAS are associated with certain products applied to textiles to improve performance. No information identified concerning the chemical inventory at the Silk City Machine Company property.
- The building located at 22 CR 183C was formerly utilized by Sutphen East, which maintained fire trucks at this location. It is unknown if AFFF was used or stored at this location, as part of equipment testing.
- Construction records for some on-site and off-site wells were not able to be located.
- Sanborn Maps for the subject property address were not available through commercial service.
- Limited City Directory information, only dating back to 2010, were available to identify historical surrounding property uses.

The following Preliminary AOCs may be able to be removed pending identification and review of historic reports and records: 9, 10, 11, 12, 16, and 17. A summary of the additional information that may be obtained via a Freedom of Information Law (FOIL) request that has been placed with the NYSDEC is provided as follows:

- Information related to Spill No. 9706633 or Spill No. 0212684; the location of Spill No 9706633 is unknown.
- Information concerning environmental assessment activities during UST removals, including at the former fuel farm area, at the utility building, and at the FBO Hangar.
- Compliance and monitoring details regarding the UST located at the CVI Hangar.

This executive summary is an excerpt of the detailed RSR that includes elements necessary for proper interpretation, including any limitations, exceptions, and deletions to the established scope of work. As such, the executive summary should not be used independent of the RSR and its supporting documentation.



#### 1.0 INTRODUCTION

EnSafe Inc. was retained by Sullivan County Division of Public Works (Client) to conduct a Records Search Report (RSR) of Sullivan County International Airport (SCIA), located at 75 County Road (CR) 183A, in Swan Lake, New York (subject property). The objective of this RSR was to identify Areas of Concern (AOCs), as defined in the New York State Department of Environmental Conservation (NYSDEC) *Technical Guidance for Site Investigation and Remediation*, (DER-10) (NYSDEC, May 3, 2010). The subject property is an irregularly shaped parcel of land consisting of three tax map parcels (Tax Map/Parcel Nos.: 18.-1-16.1, 18.-1-18.3, and 24.-1-1), totaling approximately 603 acres, and identified in the NYSDEC Consent Order executed December 21, 2017. Three additional parcels, totaling approximately 39 acres, are associated with SCIA but were not included in the Consent Order. The subject property location is shown in Figure 1 (note, all figures are included in Appendix A). The subject property is located in a rural mixed-use area that includes mostly residential use with limited commercial and agricultural use on, and immediately adjacent to, the subject property Figure 2 (Appendix A).

## 1.1 Purpose

The subject property was assessed with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), petroleum products, and for the New York State classified hazardous materials perfluoroctanoic acid (PFOA) and perfluoroctane sulfonic acid (PFOS).

The RSR was required as part of the Consent Order, executed December 21, 2017, and in response to the identification of PFOS and PFOA in both potable and non-potable supply wells at, and around, the SCIA.

PFOS and PFOA are compounds that are part of a larger class of chemicals known as per- and polyfluoroalkyl substances (PFAS). PFAS are anthropogenic fluorinated organic chemicals, with the 3M Company being the first to provide manufacturing-scale production of PFAS compounds in 1949 (3M Company, February 5, 1999). The chemical properties of PFAS — able to repel oil, grease, and water — are ideal for applications in manufacturing surfactants and surface active agents. For these reasons, PFAS have been used in many products including firefighting foams, plating mist-suppressant solutions, non-stick cookware, textiles and leather, paper and packaging, semiconductors, herbicides, insecticides, greases, lubricants, photograph imaging solutions, adhesives, rubber and plastics, aviation hydraulic fluids, landfill leachate, and personal care products (3M, February 5, 1999; Minnesota Pollution Control Agency, June 30, 2010).



In 2016, the New York State Department of Health (NYSDOH) identified the SCIA for sampling based on the potential presence of aqueous film forming foam (AFFF). PFAS-based AFFF was first developed in the early 1960s to improve aviation safety (United States Naval Research Laboratory, no date), and by the mid- to late-1960s, AFFF was in widespread use. Prior to 2000, AFFF contained 0.5% to 6% (by weight) PFOS or PFOS precursors (Stockholm Convention, January 2017). Following the phase out of PFOS production by 3M in 2000, fluorinated surfactants for AFFF have shifted to those synthesized by telomerization, which results in lower percentages of PFOA (Stockholm Convention, January 2017).

NYSDOH sampling activities identified both PFOS and PFOA at concentrations above the United States Environmental Protection Agency (U.S. EPA) Health Advisory (HA) guidance level for PFOS and PFOA in drinking water of 70 nanograms per liter (ng/l) in both potable and non-potable water supply wells, which prompted the Consent Order.

#### 1.2 Scope of Services

The Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-13 (ASTM International, 2013) (ASTM E1527-13) is the current industry standard used to define good commercial and customary practice for conducting an environmental site assessment of a commercial real estate parcel. ASTM E1527-13 is recognized by NYSDEC as meeting the intended goal of identifying AOCs, as specified in DER-10, and was utilized as a guideline in developing this RSR.

#### This RSR includes the following:

- Visual assessment of the subject property on December 21, 2017, by Michael Zobel.
- Interviews with personnel identified in Section 3.1.
- Review of federal, state, and local environmental records sources for the subject property and properties within ASTM E1527-13 approximate minimum search distances. Database search information is provided in Appendix B.
- Review of the following historical and land-use documents; select copies and printed information is provided in Appendix C:



- U.S. Geological Survey (USGS) topographic maps
- Aerial photographs
- City directories
- Review of the following regulatory information available from Sullivan County Division of Public Works (SCDPW), NYSDEC website(s), NYSDOH website(s), New York State Geographic Information System website(s), the National Transportation Safety Board website(s), and pertinent files at local municipal agencies. Select information is provided in Appendix D:
  - Sullivan County International Airport Overall Site Plan Update, Site Plan & Details,
     Sheet S-1, dated September 30, 1997, and revised March 14, 2003.
  - Sullivan County Property Tax Maps
  - New York State Orthos Online 1994 Aerial Photo
  - NYSDEC Spill Incidents Database Search Details
- Review of information from the websites listed in Section 6.0.



## 2.0 PHYSICAL SETTING

Table 1 summarizes information obtained from review of physical setting sources and other sources reviewed during the RSR.

	Table 1					
Physical Setting Summary						
Topography						
Elevation (feet above mean sea level)	1,300 – 1,400 (obtained from USGS topographic maps)					
Topography	Generally flat throughout the cleared area of the airport, sloping downward in all directions at the wooded boundaries  Fill material brought from an offsite source and spread over the					
Evidence of landfilling or excavation	area north of the runway.					
Adjoining — higher elevation	None					
Adjoining — lower elevation	North, south, east, and west					
Surface Water and subject property Drainag	ge					
Onsite surface water features	Un-named pond at the northwest corner and one un-named pond at the south end of the subject property					
Adjoining surface water features	The Western Branch Mongaup River, Lybolt Brook					
Nearest water body	Lybolt Brook					
Direction and approximate distance to nearest water body	Lybolt Brook originates at the un-named pond at the northwest corner of the subject property.					
Storm Water management	Storm water catch basins along western portion of property convey storm water west, to a drainage swale along North Road. Storm water catch basins in the central portion convey storm water east, under the runway, to a drainage channel that ultimately discharges to the Western Branch of the Mongaup River. Surface flow and infiltration in unpaved areas.					
Geology						
Soil types (and estimated depths/thickness)	Topsoil ranging from 1 to 2 feet below ground surface (bgs) underlain by glacial till consisting of mostly sand with varying amounts of silt, gravel, and clay from 1-20 bgs. (Clough Harbour & Associates LLP, November 12, 2001).					
Bedrock (depth and type)	Shale bedrock encountered from as shallow as 2.5 feet to 20 feet bgs. Siltstone and sandstone interbedded with the shale (Clough Harbour & Associates LLP, November 12, 2001).					
Hydrogeology						
Wells on subject property	One non-potable well (formerly potable), currently not in service.  Two former potable wells, both out of service. Four test wells.					
Approximate depth to groundwater (feet)	Groundwater not present in glacial till overlaying bedrock (Clough Harbour & Associates LLP, November 12, 2001). Primary aquifer is fractured bedrock. Approximate static water level at 100 feet bgs (O'Brien & Gere Engineers, Inc., June 1999).					
Reported direction of groundwater flow	West-northwest (O'Brien & Gere, Engineers, Inc., June 12, 2003)					
Relevant surrounding property wells	Surrounding properties presumed to be on private potable wells. Static depth to groundwater 40 – 150 (NYSDEC, January 10, 2018)					



#### 3.0 SUBJECT PROPERTY

Subject property information discussed below was obtained from interviews, sources identified in Section 1.2, and references in Section 6.0.

#### 3.1 Interviews

Table 2 lists personnel interviewed, indicates their association with the subject property, and summarizes topics discussed and information provided.

Table 2 Summary of Interviews								
Name	Affiliation	Association with subject property	Time <sup>(1)</sup>	Information Provided/Section Discussed				
Mike Lubniewski	SCIA	SCIA Maintenance	18 yrs	Site conditions, environmental conditions, historical conditions (Sections 3.1, 3.4, 3.5).				
Edward McAndrew	SCDPW	SCDPW Commissioner	20+ yrs	Site conditions, environmental conditions (Sections 3.2, 3.3, 3.5).				

#### Notes:

(1) Length of time or number of years the person has been affiliated or familiar with the subject property or surrounding area.

SCIA = Sullivan County International Airport

SCDPW = Sullivan County Division of Public Works

#### 3.2 Prior Environmental Assessments

Mr. Edward McAndrew, Commissioner, Sullivan County Division of Public Works, provided EnSafe with copies of laboratory reports associated with private water supply well sampling completed by the NYSDOH between October 2016 and March 2017 at SCIA, and select surrounding properties (Appendix D). The NYSDOH completed the sampling to screen for the potential presence of PFOS and PFOA.

The U.S. EPA has established a HA guidance level for PFOS and PFOA in drinking water of 70 ng/l. The U.S. EPA guidance also recommends that when both compounds are present in a drinking water sample, that the sum of PFOS and PFOA (PFOS+PFOA) also be compared against the 70 ng/l HA (U.S. EPA, May 2016a,b). Figure 3 presents water supply well sampling locations and identifies which wells exceeded the HA.

PFOA was present in the non-potable SCIA Well #3 at a concentration above the HA. The initial PFOA exceedance at Well #3 was discovered in October 2016 and confirmed via a January 2017 sampling event. According to Mr. McAndrew, Well #3 was a former potable supply well for the SCIA;



however, has only been used for non-potable purposes (vehicle cleaning and maintenance activities) since a new potable well (Well #5) was brought into service in 2013. Well #5 is located on a parcel of land owned by Sullivan County and abuts the subject property to the west. Additional details regarding potable wells at SCIA is provided in Section 3.5.7.

Due to the discovery of the PFOA HA exceedance at SCIA in October 2016, NYSDOH conducted additional sampling between January and March 2017 at properties that either abut, or are in close proximity to, the subject property. Based on the review of the NYSDOH laboratory data, the combined PFOS+PFOA concentrations were above the HA in one potable well which west-adjoins the subject property (located at 13 CR 183B). The HA exceedance at 13 CR 183B was initially discovered in January 2017 and confirmed via a February 2017 sampling event. Note, the NYSDOH incorrectly labeled samples from 13 CR 183B as 22 CR 183B. According to Mr. McAndrew, following discovery of the HA exceedance Sullivan County began providing bottled water to the property located at 13 CR 183B. The reported PFOS and PFOA results from the remaining offsite properties were all below the U.S. EPA HA.

Free-phase petroleum product was discovered in an onsite well in March 2003. Documents regarding the conditions and actions taken to address the free-phase petroleum product are further described in Section 3.5.7. Other technical documents provided by Sullivan County for this RSR were related to hydrogeologic investigations for water supply and a geotechnical investigation, are cited throughout and listed in Section 6.0.

#### 3.3 Historical Development and Uses

The historical document review and interviews were conducted to identify evidence of AOCs in connection with past uses of the subject property. Land use documents are presented in Appendix C.

#### 3.3.1 Historical Development

EnSafe reviewed historical topographic maps (from 1922 through 2013) and aerial photographs (from 1958 through 2015) depicting the subject property and surrounding area. Between 1922 and 1946, topographic maps indicate the majority of the subject property was undeveloped. Beginning with the 1942 historical topographic map, an un-named pond is evident approximately 1,500 feet south of the subject property. Several structures are located either on, or around, the subject property, with a road passing through the approximate center from south to north. The 1967 topographic map depicts a surface water body in the central area of the subject property named Zieglers Pond, which was not present on earlier maps. Several structures are present southwest of Zieglers Pond, including three larger structures, and are believed to be sited on the Ziegler Poultry Farm (McFarland-Johnson-

Records Search Report Sullivan County International Airport. 75 County Road 183A, Swan Lake, New York January 30, 2018



Gibbons Engineers, Inc., June 1975). The road that runs through the center of the subject property is identified as "North Road". The 1982 topographic map depicts SCIA, which shows the runway and has four structures on the west side; North Road has been bisected by the runway and re-routed to the west and Zieglers Pond is no longer evident; it is assumed that the pond was filled to allow for construction of the taxiway, hangars, and aprons. Several large buildings are located southwest of SCIA, and one large building to the west. The 2013 historic topographic map only presents the runway. Other than the apparent runway, property use cannot be determined based on the topographic maps.

The earliest useful historical resource for land use is the 1958 aerial photograph that shows the subject property as cleared fields indicative of agricultural activities with wooded areas; Zieglers Pond is evident. Several smaller buildings are also present on the subject property and are potentially related to agricultural activities, and North Road runs through the approximate center. Two larger, rectangular structures are evident south of Zieglers Pond, which appear related to the Ziegler Poultry Farm property. The un-named pond located approximately 1,500 feet south of the subject property is also evident, and land abutting the pond to the north appears to be used for agriculture, with several small structures. The site area appears similar in the 1965 aerial photo.

The 1985 aerial photograph is the first aerial showing SCIA on the subject property, which includes the paved runway and paralleling taxiway, paved tarmac areas, and four structures located on the west side of the runway. Zieglers Pond is not evident; as noted above, it is assumed that the pond was filled to allow for construction of the taxiway, hangars, and aprons. An un-named pond, not previously identified in earlier aerial photographs is now evident west of the south end of runway. A larger un-named pond is also now evident on an adjoining property west of the subject property, on land that was occupied by Zieglers Poultry Farm. It appears that this property is still used for poultry agriculture. The un-named pond located approximately 1,500 feet south is also evident, and previously noted structures appear to have been demolished; the land surrounding the immediate perimeter of the pond now appears wooded. North Road (renamed CR 183) now travels along the western side of SCIA and appears to have two access roads to the SCIA. The northern access road, known as CR 183A, travels east and terminates at an oval, where the SCIA terminal is located. A paved area, likely for vehicle parking, is located south of the oval. The southern access road, known as Industrial Park Road, travels east toward two larger structures that appear to be hangar buildings. Much of the surrounding area appears wooded, with some cleared land suggestive of agricultural use. There are several larger structures located on abutting properties southwest and west of SCIA, suggestive of commercial operations. The two larger structures west of SCIA are accessed via a road known as CR 183B, which is a dead-end road located northwest of CR 183A.



A second dead-end roadway, known as CR 183C, is located just north of CR 183B, although no buildings are present on this road.

The aerial photographs between 1997 and 2015 depict an increase in the number of buildings and paved tarmac space present at SCIA, as well as some additional development in the surrounding area. In the 1997 aerial photograph, an un-named pond, not previously visible, is apparent in the area west of CR 183C, and a newly-constructed commercial building is present along CR 183C. Based on the Sullivan County Tax Assessor's Map, the un-named pond adjacent to CR 183C is a part of the subject property Tax Map-Parcel 18.-1-16.1 (Sullivan County Real Property Tax Services, December 14, 2017).

## 3.3.2 Historical Uses and Operations

No records for the subject property address 75 CR 183A were identified in city directories. Historical aerial photographs dated from 1958 through 1965 show cleared fields indicating potential agricultural use. The SCIA development project began in 1967 and the airport opened in July 1970 (McFarland-Johnson-Gibbons Engineers, Inc., June 1975).

At the time SCIA was developed, existing residential and agricultural structures on the 604 acre subject property were demolished and the first structures, the terminal and utility building, were constructed in 1967 (SCDPW, September 30, 1997). The SCIA has been in continuous operation as an airport since 1970 (McAndrews, November 13, 2017).

#### 3.4 Current Uses

The subject property was visually assessed on December 21, 2017, by Mr. Michael Zobel of EnSafe. The purpose of the site reconnaissance was to determine current uses and to identify evidence of AOCs, as related to DER-10, in connection with the subject property. Photographs taken during the site visit are provided in Appendix E. EnSafe personnel, accompanied by Mr. Mike Lubniewski of SCIA, inspected interior and exterior portions of the subject property. Adjacent and surrounding area properties were observed from the subject property boundaries and from nearby roads and driveways. Figure 2 (Appendix A) presents the surrounding area.

SCIA air traffic consists of private aircraft for personal use, as well as charter flights; commercial flights do not currently operate out of SCIA. Most of the subject property is open land and is covered with grass and sparse trees. The property borders are wooded. No unusual staining or vegetative stress was observed in the open areas. An approximately 6,300 foot long asphalt runway and paralleling aircraft taxiway, oriented northwest to southeast, are located in the approximate center



of the subject property. A gravel road is located along the perimeter of the cleared area surrounding the runway. There are 15 buildings present at SCIA, all of which are located west of the runway (Figure 4, Appendix A). The buildings present at SCIA include:

## 3.4.1 Terminal Building

The terminal building is the main building of SCIA and is located east of the oval terminus of CR 183A. The terminal building is a slab-on-grade, single-story structure, constructed in 1967 (SCDPW, March 14, 2003). The terminal building includes a seating area for passengers awaiting flights, a café, office space, bathrooms, cleaning supply closet, and a garage area with bay door. The terminal building is heated by a fuel oil-fired boiler, located in the utility building. An asphalt tarmac area for airplane parking is located east of the terminal. The terminal tarmac area is connected to the runway (east) and hangar area (south) by asphalt taxiways. An asphalt parking area for automotive vehicles is located southwest of the terminal.

Services provided by SCIA include the terminal for passengers, hangar space, and aircraft refueling operations. A rental car service, operated by The Hertz Corporation, is located at the terminal.

## 3.4.2 Aircraft Rescue and Fire Fighting Building

The Aircraft Rescue and Fire Fighting (ARFF) building is located northeast of the terminal, along the northwest edge of the terminal tarmac area, and was constructed in 2013 (Google Earth, January 3, 2018). The ARFF Building is a slab-on-grade, single-story structure, which is utilized as office space, including a breakroom kitchen with sink, bathrooms, conference room, supply closet, and garage with bay door. The garage area is used to store the SCIA fire truck and a personnel wash room is located off of the garage.

#### 3.4.3 Utility Building

The utility building is located south, and adjacent to, the terminal. The utility building is a slab-on-grade, single-story structure, built in 1967 (SCDPW, March 14, 2003). The utility building houses assorted heating/ventilation handling equipment, and a fuel oil-fired boiler to supply heat for the terminal.

## 3.4.4 Pump House

The pump house is located north of the terminal building and is a slab-on-grade, single-story structure, constructed in 2002 (SCDPW, March 14, 2003). The pump house is sited over the location of water supply Well #3 and contains a chlorination system, piping, six 460-gallon retention vessels for chlorine contact, and a 10,000 gallon underground storage tank (UST) for water. Currently,



Well #3 has been disconnected due to impacts from PFOA, discovered in 2016, and is out of service. Potable water is supplied by Well #5, located offsite, which is pumped through the chlorination system and retention vessels, before distribution to SCIA. Details regarding Well #3 and other supply wells associated with SCIA are provided in Section 3.5.7.

## 3.4.5 Hangars

There are eight hangars present at SCIA, all located in an area south-southwest of the terminal. The hangars are slab-on-grade structures, constructed between 1970 and 2003 (SCDPW, March 14, 2003). All hangars are owned by Sullivan County, four of which are leased to private tenants (Lubniewski, December 21, 2017). Asphalt taxiways are located along the south and east ends of the hangar area and allow aircraft access to the terminal tarmac area.

- 1. Cablevision (CVI) Hangar (Leased): Located south of the terminal. The CVI Hangar is a single-story structure with an asphalt aircraft parking area located east of the building. The aircraft parking area connects to the eastern taxiway that connects the terminal tarmac to the Fixed Base Operations (FBO) tarmac. The CVI Hangar is used for aircraft storage and limited aircraft maintenance (Lubniewski, December 21, 2017). Access was not granted to the CVI Hangar during the December 21, 2017 site visit.
- 2. Hangar 71 (Leased): Located directly south of the CVI Hangar. Hangar 71 is a single-story structure with an asphalt aircraft parking area located east of the building. The aircraft parking area connects to the eastern taxiway that connects the terminal tarmac to the FBO tarmac. Hangar 71 is used for aircraft storage and limited aircraft maintenance (Lubniewski, December 21, 2017). Access was not granted to Hangar 71 during the December 21, 2017 site visit.
- 3. FBO Hangar (Vacant): Located south end of the hangar area and is a two-story structure that includes both hangar and office space. The FBO Hangar was previously used for aircraft storage and limited aircraft maintenance (Lubniewski, December 21, 2017). The Sullivan County emergency 911 system previously utilized office space at the FBO Hangar. The FBO Hangar has an asphalt tarmac area for aircraft parking that extends east-southeast from the building. An asphalt taxiway allows airplane access to the FBO Hangar tarmac area from the south. Access was not granted to the FBO Hangar during the December 21, 2017 site visit.



- 4. 5-Bay Hangar: Located west of Hangar 71. The 5-Bay Hangar is used for aircraft storage and limited aircraft maintenance, and accesses the FBO Hangar tarmac area via a taxiway located south.
- 5. C. Tomkins Hangar (Leased): Located south of the E911 Building. The C. Tomkins Hangar is used for aircraft storage and limited aircraft maintenance, and accesses the FBO Hangar tarmac area via a taxiway located south. Access was not granted to the C. Tomkins Hangar during the December 21, 2017 site visit.
- 6. 10-Bay Hangar: Located west of the 5-Bay Hangar. The 10-Bay Hangar is used for aircraft storage and limited aircraft maintenance, and accesses the FBO Hangar tarmac area via a taxiway located south.
- 7. County Hangar: Located west of the C. Tomkins Hangar. The County Hangar is used for aircraft storage and limited aircraft maintenance, and accesses the FBO Hangar tarmac area via a taxiway located south.
- 8. 15-Bay Hangar (Leased): Located west of the 10-Bay Hangar. The 15-Bay Hangar is used for aircraft storage and aircraft maintenance (Lubniewski, December 21, 2017), and accesses the FBO Hangar tarmac area via a taxiway located south. Access was not granted to the 15-Bay Hangar during the December 21, 2017 site visit.

Utilities, including electric, telephone, water, and sewer, are provided to the CVI Hangar, Hangar 71, and the FBO Hangar. The water and sewer services are provided by onsite SCIA resources, while the electricity and telephone services are provided by offsite utility companies. Only electricity is provided to the other hangars, except the 15-Bay Hangar, which does not appear to have any utility services (SCDPW, March 14, 2003).

An asphalt covered automotive vehicle parking area is located north of the 5-Bay Hangar. An asphalt covered north-south driveway bisects the hangar area, allowing automobile traffic access to the E911 building and the parking areas adjacent to the CVI Hangar, Hangar 71, and the FBO Hangar.

## 3.4.6 E911 Building

The E911 building is located west of the FBO hangar, between the 5-Bay Hangar (north) and the C. Tomkins Hangar (south), and is a slab-on-grade, single-story structure, constructed in 1997 (SCDPW, March 14, 2003). The E911 building is utilized as office space for the Sullivan County 911



emergency service. Prior to 1997, Sullivan County 911 emergency services were located in office space at the FBO Hangar (Lubniewski, December 21, 2017). An asphalt automotive vehicle parking area is located on the east side of the E911 building. Access was not granted to the E911 building during the December 21, 2017 site visit.

## 3.4.7 Snow Removal Equipment Building

The snow removal equipment (SRE) building is located southwest of the other buildings present at SCIA, along the south side of Industrial Park Road. The SRE building is a slab-on-grade, single-story structure, constructed in 2007 (Lubniewski, December 21, 2017). The SRE building houses heavy equipment for managing snow removal at SCIA. Minor equipment maintenance occurs at the SRE building including greasing and oil changes. Major equipment maintenance activities are performed offsite at an SCDPW facility. No material storage occurs within the SRE (i.e. no salt or de-icing compounds).

#### 3.4.8 Generator Shed

The generator shed is located along the northwest corner of the FBO Hangar and is a slab-on-grade, single-story structure, constructed in 1984. Water and septic services are not provided to the generator shed (SCDPW, March 14, 2003). The generator shed houses an emergency back-up generator and formerly housed communications equipment for a radio tower. The back-up generator is fueled by propane, which is stored in a 1,000-gallon aboveground storage tank (AST) located along the southern exterior of the generator shed. The interior of the generator shed was not inspected during the December 21, 2017 site visit.

## 3.5 Interior and Exterior Observations

Table 3 lists environmental concerns and identifies those issues present or applicable to the subject property, based upon EnSafe's visual observations of the interior and exterior, interviews, review of environmental records sources, regulatory research, and other publicly available and reasonably ascertainable information. Each environmental issue present or applicable is discussed in sections as noted in the table.



Table 3 Subject Property Observations							
Current or Past Use	Present or Applicable	Comment/Report Section					
Hazardous Substances and Petroleum Products	Yes	Section 3.5.1					
Firefighting Training Areas	Yes	Section 3.5.2					
Storage Tanks	Yes	Sections 3.5.3, 3.5.5					
Odors (strong, pungent, or noxious)	No						
Pools of Liquids	No						
Drums (5 gallons and larger)	Yes	Sections 3.5.1; 3.5.5					
Unidentified Substance Containers	Yes	Section 3.5.1					
Polychlorinated Biphenyls (associated with electric or hydraulic equipment)	Yes	Section 3.5.8					
Fuel Source for Heating and Cooling Systems	Yes	Section 3.5.3					
Stains or Corrosion (on building walls, floor, and ceilings)	Yes	Sections 3.5.1					
Floor Drains, Sumps, and Pits	Yes	Sections 3.5.2; 3.5.6					
Pits, Ponds, or Lagoons	No						
Excavation and Fill Areas	Yes	Section 3.5.4					
Stained Soil or Pavement	No						
Stressed Vegetation	No						
Solid Waste	Yes	Section 3.5.5					
Hazardous Waste	No						
Wastewater	No						
Wells	Yes	Section 3.5.7					
Septic Systems or Cesspools	Yes	Section 3.5.6					
Storm Water	Yes	Section 3.5.6					

# 3.5.1 Hazardous Substances and Petroleum Products Terminal Building

The terminal building garage area is located at the northeast corner of the structure and is currently used to store landscaping equipment. The concrete floor of the terminal garage area appears in good condition with no noticeable evidence of staining. There are no floor drains in the garage area. Shelving units within the garage area are utilized for document storage and spare emergency response protective clothing. Other items observed in the garage area include: a push lawn mower and grass trimmer, old refrigerator and window air conditioning unit, retail-sized pest control products, a compressed nitrogen gas cylinder, and paints ranging in capacities up to 1 gallon. Prior to construction of the ARFF Building in 2013, the garage area of the terminal building was used to house the former SCIA fire truck and for storing 5-gallon buckets of AFFF. A common practice was to wash AFFF handling equipment outside the garage bay door, directly on the asphalt tarmac, where it was allowed to disperse with precipitation (Lubniewski, December 21, 2017). No catch basins were observed in the area of the terminal garage bay. Rain water landing on the asphalt surface in the



vicinity of the terminal garage appears to sheet flow to the edge of the asphalt, and onto the surrounding ground surface. No evidence of staining was observed in front of the terminal garage bay door.

The cleaning supply closet is located at the northeast corner of the terminal building and contains various liquid and aerosol cleaners including: stainless steel cleaner, baseboard cleaner, hard surface cleaner, disinfectant spray, liquid disinfectant cleaner, and liquid hand soap. Liquid cleaners are stored in various containers no greater than 1-gallon capacity. Aerosol cleaners are stored in 23 ounce containers. No evidence of staining was observed in the terminal building cleaning supply closet.

The café contains a food preparation area with a commercial grill. A dry-chemical fire suppression system provides fire protection to the grill area (McAndrew, November 13, 2017).

## Aircraft Rescue and Fire Fighting Building

The ARFF garage is located at the northeast corner of the ARFF building and is utilized to store the SCIA fire truck and other firefighting materials and equipment.

The following items were observed stored in the garage area:

- Six 5-gallon buckets of National Foam Aer-O-Water 3EM 3% AFFF
- Multiple empty AFFF containers (stored for recycling) were observed:
  - Four empty 5-gallon buckets of Buckeye AFFF 3% MIL SPEC
  - Three empty 5-gallon buckets of Chemguard C301 MS 3% AFFF
  - Three empty 5-gallon buckets of Angus TRIDOL "S" 3% AFFF
- Seven 5-gallon buckets of Purple K dry chemical fire extinguishing agent
- Several small (<1 gallon) containers of general cleaners, petroleum-based lubricants, and vehicle fluids (antifreeze, brake fluid, windshield washer fluid)
- Compressed nitrogen canister



The current SCIA fire truck (purchased in 2013) has a 50-gallon AFFF tank onboard, and carries six additional 5-gallon AFFF buckets. The former SCIA fire truck had a 20-gallon AFFF tank onboard (Lubniewski, December 21, 2017). The current fire truck also has a 450-pound Purple K dry chemical tank and carries six 5-gallon buckets of Purple K dry chemical fire extinguishing agent. ARFF personnel have the option of pairing Purple K powder with foam (a twin agent system), as necessary (Lubniewski, December 21, 2017).

No staining was observed on floor surfaces in the garage area or other portions of the ARFF Building. There are no floor drains present in the garage and spills/water from this area would run to the asphalt terminal tarmac area to the east of the building. Vehicle (fire truck) maintenance, including oil changes, occurs offsite at the Sullivan County Division of Public Works garage. AFFF handling equipment has been periodically washed out on the asphalt surface outside the garage bay door and allowed to disperse through precipitation events; however, no staining was observed on asphalt surfaces in this area. No catch basins were observed in the area of the ARFF garage bay. Rain water landing on the asphalt surface in the vicinity of the ARFF garage is anticipated to sheet flow to the edge of the asphalt, and onto the surrounding ground surface. Currently, AFFF handling equipment is washed out at a utility sink in the storage closet (Lubniewski, December 21, 2017).

Other items identified at the ARFF Building include:

- Four 5-gallon buckets of paint (supply closet)
- One 5-gallon bucket of adhesive (supply closet)
- Four 1-gallon buckets of paint (supply closet)
- General cleaning supplies at capacities < 1-gallon (kitchen area)</li>

#### Utility Building

The utility building's interior perimeter is lined with metal shelves, predominantly used for storing miscellaneous parts. Approximately ten 1-gallon and 5-gallon containers were observed in the utility building and, based on labeling, appeared to contain miscellaneous cleaners, chlorinated detergents, petroleum lubricants, and mechanical fluids. Approximately five 5-gallon buckets, including two spent AFFF buckets, are used to store fluids inconsistent with package labeling (possible waste fluids); the contents of these 5-gallon buckets are unknown. There were no secondary containment measures in place at the liquid storage areas. No pooled fluids or chemical odors was noted in the utility building. Minor staining was observed on the floor and appeared consistent with the building's use.



## Pump House

A sodium hypochlorite-based chlorination system is present at the pump house for potable water treatment. One 20-gallon plastic drum and one 5-gallon plastic bucket of sodium hypochlorite are stored on a plastic spill-containment pallet, located at the northwest corner of the pump house. No other additional chemicals were observed in the pump house and no evidence of staining or chemical odors were noted. In addition, there are six 460-gallon retention vessels for chlorine contact in the pump house.

## Hangars

Hangars are owned by Sullivan County, four of which are leased (Lubniewski, December 21, 2017). Privately leased hangars were not accessible at the time of the December 21, 2017 site visit. All hangars have concrete floors and those hangars inspected generally contained varying amounts of hydraulic fluids, oils, lubricants, cleaners, and detergents stored in containers ranging from 1-gallon to 5-gallon capacities. Observed concrete floors in the hangars appeared to be in good condition and no evidence of staining was noted.

There are no central fire suppression systems present at any of the hangars. During the site visit, hand-held, dry chemical fire extinguishers were noted within hangar spaces.

#### Snow Removal Equipment Building

Although light equipment maintenance periodically occurs on snow removal equipment, no chemical storage was observed in the SRE building. The concrete floor appeared to be in good condition and no evidence of staining was noted. Seven empty 5-gallon buckets of Purple K fire extinguishing dry chemical were observed along with miscellaneous cardboard, chairs, and an overhead light at the northeast corner of the SRE building.

The SCIA fire truck periodically discharges AFFF on asphalt at the SRE building as part of required testing (Lubniewski, January 18, 2018); however AFFF is not stored at this location. Further details regarding the AFFF testing at the SRE building are provided in Section 3.5.2.

# 3.5.2 Firefighting Training Areas Active Firefighting Training Area

An active firefighting training area (FTA) is located at the southwest corner of the taxiway that parallels the runway, approximately 4,000 feet south of the terminal (Figure 2, Appendix A). The active FTA consists of a large diameter steel pipe, mimicking an airplane fuselage, which is set directly on the ground surface. The FTA is accessed by the gravel road that travels the perimeter of the

Records Search Report Sullivan County International Airport. 75 County Road 183A, Swan Lake, New York January 30, 2018



subject property. The FTA was developed at some point between November 2006 and October 2008 (Google Earth, January 3, 2018).

Firefighting training occurs semi-annually and during firefighting training activities wood and other solid combustible materials are placed within the steel pipe and used to ignite a fire.

During previous firefighting training activities, and as required by the Federal Aviation Administration (FAA), the fire truck would deploy AFFF during training operations. The use of AFFF was typically limited to a short discharge, lasting approximately 30 seconds (Lubniewski, December 21, 2017). As part of the AFFF discharge during firefighting training activities, a sample would also be collected to verify that the apparatus was supplying the correct mixture of water and AFFF onto the fire. However, the use of AFFF at the active FTA has been discontinued and water, provided by the SCIA fire truck, is now used to extinguish fires during training activities (Lubniewski, January 18, 2017).

The ground surface at the active FTA slopes to the west and water (including previous AFFF-laden water) used to extinguish fires would likely follow the surface topography until infiltrating into the subsurface. The un-named pond located at the south end of the subject property is approximately 250 feet west of the active FTA. A second un-named pond (offsite) is located approximately 1,500 feet south of the active FTA, and a third un-named pond (offsite) is located approximately 1,500 feet northwest of the active FTA, on property that appears to be used for poultry agriculture.

The FAA-required testing of the **fire truck's AFFF delivery** system is now conducted periodically at the SRE building. The fire truck will deploy to the SRE building and discharge AFFF to allow for collection of the sample to verify that the apparatus is supplying the correct mixture of water and AFFF. The AFFF discharge is short, estimated at less than 5 seconds, to allow for sample collection. The AFFF discharge occurs on the asphalt parking lot and the discharged AFFF is allowed to disperse with precipitation (Lubniewski, January 18, 2018). No staining of asphalt surfaces was observed at the SRE building during the December 21, 2017 site visit.

The SCIA purchases approximately 10 gallons of AFFF annually as a result of firefighting training exercises and FAA-required testing (Lubniewski, December 21, 2017).

## Former Firefighting Training Area

A former FTA was located in the grass area north of the terminal tarmac (Figure 2, Appendix A). The former FTA location was reportedly off the north end of the terminal tarmac, in the area where the expansion project was completed between 2006 and 2009. However, in a 1994 aerial photo obtained



from the New York State Orthos online database (NYS Orthos Online, December 19, 2017), what appears to be a burn pit is visible in the grass area approximately 800 feet north-northeast of the terminal. The tarmac expansion only extended approximately 450 feet north-northeast from the terminal. A copy of the 1994 aerial photograph is provided in Appendix D. The former FTA consisted of a shallow pit in the ground and accelerants, such as jet fuel would be poured in the pit, ignited, and then extinguished using either water or AFFF. In addition to SCIA personnel, surrounding communities also periodically used the former FTA for conducting firefighting training activities (Lubniewski, December 21, 2017). The area of the former FTA has been backfilled and the exact location is not evident due to regrading and grass cover.

It is thought that the former FTA was utilized from 1970 to the late 1990s (Malcome Pirnie, Inc., March 27, 2003); however, later aerial photographs suggest that the burn pit is still evident through at least October 2008 (Google Earth, January 3, 2018). Considering the active FTA was first evident at some point between November 2006 and October 2008, it is likely that use of the former FTA was halted at some point during that time period.

Following construction of the active FTA, surrounding communities were no longer permitted onto SCIA to conduct firefighting training exercises (Lubniewski, December 21, 2017).

#### Other Emergency Responses

In August 1998, a propane release occurred at one of the two propane USTs located southwest of Hangar 71 when paving equipment sheared off the filling port located above the ground surface. A fire subsequently ignited and the SCIA emergency response team responded to the propane fire. It is unknown if AFFF was used to address the propane fire. It is not common for AFFF to be applied to flammable gas fires, such as propane; however, it is possible that emergency response personnel initially used AFFF, in an effort to repel the flames. The former SCIA fire truck in use at the time of the 1998 incident had an onboard 20-gallon AFFF tank and if AFFF was deployed to address the propane fire, the volume of AFFF discharged was likely limited to no greater than 20 gallons (Lubniewski, December 21, 2017). The August 1998 propane release was reported to the NYSDEC (Section 3.7.1).

Between December 3, 1982 and April 28, 2003, there have been six incidents at the SCIA involving aircraft and investigated by the National Transportation Safety Board. According to the Aviation Accident Final Report for each incident investigated by the National Transportation Safety Board, none involved a response for a fire, most were minor in nature, and two were into treed areas



(National Transportation Safety Board, January 23, 2018). Of the two incidents to have occurred since 1999, none have required the use of AFFF (Lubniewski, December 21, 2017).

## 3.5.3 Storage Tanks

SCIA has multiple ASTs and USTs for storing petroleum products, propane, and water. Active petroleum storage tanks at SCIA, which are managed by Sullivan County, are registered with NYSDEC under Petroleum Bulk Storage (PBS) Certificate No. 3-016535 (expiration September 2, 2021).

Table 4 provides a summary of current and historic petroleum storage tanks located at SCIA. Figure 4 presents current and historic tank locations.



					Table	4	
			S	ummary of	f Petroleum E	Bulk Storage T	anks
Tank No.	Capacity (gallon)	Туре	Contents	Status	Install Date	Removal Date	Discussion
10	8,000	UST - Steel	No. 2 Fuel Oil	Closed	12/1968	10/1/1997	Both located on the south side of the utility building and use
10A	2,000	AST - Steel/DW	No. 2 Fuel Oil	Active	8/1/1996		to store fuel oil for onsite consumption (boiler to heat terminal building). No records concerning closeout of Tank 10 were identified during this RSR. Tank 10A is located on a concrete pad and no evidence of spills were noted. Runoff from the concrete pad drains to the surrounding ground surface.
11	5,000	UST - Steel	No. 2 Fuel Oil	Closed	12/1969	10/16/1997	Tank 11 was located at the northeast corner of the FBO
11A	2,000	AST - Steel/DW	No. 2 Fuel Oil	Active	10/1/1997		building. Tank 11A is located on the west side of the FBO building. Both tanks utilized to store fuel oil for onsite consumption (boiler to heat FBO building). No records concerning closeout of Tank 11 were identified during this RSR. Tank 11A is located on a concrete pad and no evidence of spills were noted. Runoff from the concrete pad drains to the surrounding ground surface.
101	12,000	UST - Steel	Aviation Gasoline	Closed	12/1970	9/30/1997	The former fuel farm was located along the north side of Industrial Park Road, southwest of the hangars (Figure 4,
102	12,000	UST - Steel	Aviation Gasoline	Closed	12/1970	9/30/1997	Appendix A). Tanks 101, 102, and 103 stored either aviation gasoline or jet fuel for refueling aircraft. Tanks 104 and 104A were used to refuel SCIA vehicles. In 1988, Tank 101 failed
103	12,000	UST - Steel	Jet Fuel	Closed	12/1970	9/30/1997	a tightness test, which was subsequently reported to the
104	275	AST-Steel	Gasoline	Closed	Unknown	Unknown	NYSDEC (Spill No. 8708522). Within 24 hours after discovery, Tank 101 was taken out of service and emptied (Wehr, R.,
104A	300	AST- Steel	Diesel	Closed	Unknown	Unknown	January 27, 1988). The remaining portions of the former further form was taken out of service in 1993 and Tanks 101, 10 and 103, were removed in 1997. No records concernic closeout of the USTs, or the removal of Tanks 104 and 104 were identified during this RSR.  The only visible remains of the former fuel farm a
							weathered pieces of a concrete pad and some debris. All tanks have been removed from this area. Runoff from the concrete pad drains over land surface to a wooded area to the southwest. A tanker truck was observed next to the former fuel farm; the tanker truck is described as not



					Table 4	1				
	Summary of Petroleum Bulk Storage Tanks									
Tank No.	Capacity (gallon)	Туре	Contents	Status	Install Date	Removal Date	Discussion			
							currently in use, not owned by SCIA, and is for sale by the owner (Lubniewski, December 21, 2017).			
101A	12,000	UST - FC Steel	Aviation Gasoline	Active	11/1993		The current fuel farm is located along the southern edge of the terminal tarmac area (Figure 4, Appendix A). Tank 101A			
102A	12,000	UST - FC Steel	Jet Fuel	Active	11/1993		and Tank 102A store aviation gasoline and jet fuel, respectively, for refueling aircraft. Both tanks have gauging and leak detection monitoring systems. Two fuel dispensers are located on the concrete pad above the USTs, one for aviation gas and one for jet fuel. Emergency fire suppression is provided by hand-held, dry-chemical fire extinguishers. No staining was observed on the concrete surface above the USTs. Runoff from the fuel farm pad drains onto the ground surface to the west.  A tanker truck (capacity <3,000 gallons), was observed at the north end of the terminal tarmac, adjacent to the ARFF building. The tanker truck is periodically used to transfer			
							fuels to aircraft. Several minor stains, measuring less than 1 foot in diameter, were observed on the asphalt surface around the tanker truck.			
104B	285	AST - Steel/DW	Gasoline	Active	2/01/1998		Tank 104B (gasoline) and Tank 104C (diesel), are located on the northern side of the SRE building. These tanks are used			
104C	285	AST - Steel/DW	Diesel	Active	2/01/1998		for refueling SCIA vehicles. Tanks 104B and 104C are loca on a concrete pad and no evidence of spills were not Runoff from the concrete pad drains to the surround ground surface.			
CVI	12,000	UST-FRP/DW	Jet Fuel	Active	Unknown		A 12,000 gallon jet fuel UST is located southeast of the CVI Hangar (SCDPW, March 14, 2003). Note: No tank number associated with SCIA PBS Certificate. The lessee for the CVI Hangar manages this UST under PBS No. 3-496472 (expiration December 8, 2019), issued to "Cablevision Air Facility, Inc." No further information was available regarding the CVI Hangar UST.			





#### Notes:

AST = Aboveground storage tank UST = Underground storage tank RSR = Records Search Report

DW = Double-walled

FBO = Fixed Base Operation

SCIA = Sullivan County International Airport

FC = Fiberglass coated

SRE = Snow removal equipment FRP = Fiberglass reinforced plastic

CVI = Cablevision Hangar.

PBS = Petroleum Bulk Storage

Records Search Report Sullivan County International Airport. 75 County Road 183A, Swan Lake, New York January 30, 2018



In addition to the petroleum storage tanks, other tanks were identified at SCIA. Four propane ASTs were identified: between the pump house and the ARFF building; south of the utility building, south of the generator shed, and south of the C. Tomkins Hangar. The propane ASTs are located on concrete pads. Five propane USTs were identified: one northeast of the CVI Hangar, one west of the CVI Hangar, two southwest of Hangar 71, and one southeast of the E911 building. All propane tanks are for supplying fuel to emergency backup generators.

Two water storage tanks are present at SCIA: one 10,000-gallon UST is located under the pump house building; and one 20,000-gallon AST is located west of the terminal. The 10,000-gallon UST was for excess potable water storage capacity to ensure sufficient supply during periods of high demand, however this tank is no longer in service. The 20,000-gallon AST is for fire suppression.

#### 3.5.4 Fill Areas

At some point between September 2012 and April 2016, an approximately 225,000 square foot area north of the runway was filled (Figure 2, Appendix A, Google Earth, January 3, 2018) to grade the northern part of the runway/airfield. The fill material was brought to SCIA as part of grading/leveling operations during development of the Monticello Casino, located approximately 5 miles southeast of SCIA. The exact source of the fill material on the Monticello Casino property is not known and Sullivan County did not have the fill material analyzed for contaminants prior to placement/grading at SCIA (Lubniewski, December 21, 2017).

#### 3.5.5 Solid Waste

A centralized solid waste collection area is located on the south side of Industrial Park Road, north of the SRE building (Figure 4, Appendix A). The solid waste collection area is characterized as an open area with sparse vegetation. A covered roll-off style dumpster is present in the solid waste collection area, and sits directly on the ground surface. The roll-off is removed from SCIA, as needed, for offsite disposal. A 275-gallon waste oil tank and unlabeled 55-gallon drum were also observed directly on ground surface at the solid waste collection area. The 275-gallon waste oil tank still contains product; however the 55-gallon drum is empty. The 275-gallon waste oil tank and the 55-gallon drum are reportedly from a hangar; however, the hangar of origin was able to be confirmed (Lubniewski, December 21, 2017). No staining was observed on the ground surface, either adjacent to the roll-off dumpster, the 275-gallon waste oil tank, or the 55-gallon drum. Disposal of both the 275-gallon waste oil tank and its contents, and the 55-gallon drum, is being coordinated.



## 3.5.6 Septic Systems and Storm Water

One active leach field is located in a grass area northwest of the terminal building (Figure 5, Appendix A), which accepts all discharges of sanitary wastewater at SCIA. Two former leach fields are also present at SCIA, one located west of the FBO building and one located northwest of the E911 building. The former leach fields are identified on the SCIA Site Plan (SCDPW, March 14, 2003) but are no longer utilized.

A series of storm water catch basins and drainage channels across SCIA collect storm water and convey it offsite. In general, storm water on the runway, taxiway, and eastern portions of the tarmac is conveyed east, under the runway, and ultimately discharging to the Western Branch of the Mongaup River; storm water west of the buildings is ultimately conveyed west to a drainage channel along CR 183; storm water immediately east of the buildings (terminal tarmac and ARFF driveway) runs by sheet flow into adjacent grass areas and is potentially conveyed to the western drainage system (Figure 5, Appendix A).

There are no airplane deicing activities occurring at SCIA. Runoff from runway and taxiways goes to ground surface and culverts, and ultimately conveyed east, to the Western Branch of the Mongaup River.

Individual building findings related to septic systems and storm water are summarized below.

## Terminal Building

The terminal building is connected to a 1,000 gallon septic tank, installed in 1984, which is located west of the terminal, in the grass area within the oval driveway (SCDPW, March 14, 2003). The terminal building septic tank then discharges to the active SCIA leach field located northwest of the terminal. Floor drains were not observed in the terminal building, including the garage area.

The terminal building roof drains are connected to the storm water system via subsurface piping to a catch basin located southwest of the terminal. This catch basin conveys water to a drainage swale located between the oval driveway and the automotive parking lot (SCDPW, March 14, 2003). Storm water in this drainage swale flows west, until reaching the drainage channel along CR 183. No catch basins were observed on the east side of the terminal, including the area by the garage where AFFF handling equipment was previously washed out. Rain water landing on the asphalt surface on the east side of the terminal appears to sheet flow to the edge of the asphalt, and onto the surrounding ground surface.

Records Search Report Sullivan County International Airport. 75 County Road 183A, Swan Lake, New York January 30, 2018



## Aircraft Rescue and Fire Fighting Building

The ARFF building is connected to a septic tank (size was not able to be verified), which discharges to the active SCIA leach field located northwest of the terminal. AFFF handling equipment is routinely washed out in a utility sink by the ARFF bathrooms, which ultimately drains to the SCIA leach field. The ARFF building has floor drains in the bathrooms and wash room off the garage area; however, their discharge location(s) was not able to be confirmed, either to the septic tank (and ultimately the SCIA leach field) or storm sewer system.

Building roof drains are connected to the storm water system; however it is not known which direction, east or west, the storm water from the ARFF roof drains is discharged (Lubniewski, December 21, 2017). No catch basins were observed on the east side of the ARFF, including in the area where AFFF handling equipment is washed out. Rain water landing on the asphalt surface on the east side of the ARFF appears to sheet flow to the edge of the asphalt, and onto the surrounding ground surface.

## Utility Building

The utility building does not connect to the SCIA septic system.

There are two floor drains present in the utility building and they appear to be connected to storm drains via a connection with the terminal building's subsurface roof drain line (SCDPW, March 14, 2003). Liquids entering the floor drains of the utility building would be discharged to the drainage swale located between the oval driveway and the automotive parking lot. Storm water in this drainage swale would flow west, until reaching the drainage channel along CR 183.

#### Cablevision Hangar

The CVI Hangar is connected to a septic tank of unknown size, which is located northwest of the CVI Hangar (SCDPW, March 14, 2003). This septic tank then discharges to the active SCIA leach field located northwest of the terminal.

It appears that the CVI Hangar has either a roof drain or foundation drain system connected to the storm water system (SCDPW, March 14, 2003). It is unknown if floor drains are present in the CVI hangar because access to this building was not granted during the December 21, 2017 site visit. Storm water collected by the drains at the CVI Hangar is conveyed via a subsurface line to a catch basin located at the northeast corner of the 5-Bay Hangar. Storm water in this catch basin is diverted west through a series of catch basins and subsurface piping, before discharging into a drainage swale



approximately 220 feet west of the hangars (SCDPW, March 14, 2003). Storm water in this drainage swale would flow west, until reaching the drainage channel along CR 183.

# Hangar 71

Hangar 71 is connected to a septic tank of unknown size, which is located northwest of Hangar 71 (SCDPW, March 14, 2003). This septic tank then discharges to the active SCIA leach field located northwest of the terminal.

Hangar 71 has a foundation drain system around the perimeter of the building and a floor drain system within the hangar. Water collected by the Hangar 71 foundation drain system is conveyed to a storm water catch basin located west of the hangar via a subsurface line. Storm water in this catch basin is conveyed north, and connects to the CVI Hangar drain line, which ultimately discharges to a drainage swale located approximately 220 feet west of the hangars (SCDPW, March 14, 2003).

The Hangar 71 floor drains are connected to a subsurface oil/water separator (OWS) located west of the building. The Hangar 71 OWS connects to the same catch basin **as the hangar's foundation drain** system (SCDPW, March 14, 2003). The current lessee of Hangar 71 was not available to interview regarding the OWS.

## Fixed Base Operations Hangar Building

The FBO Hangar building is connected to a 1,500-gallon septic tank, located northwest of the FBO Hangar, which was installed in 1982. This septic tank then discharges to the active SCIA leach field located northwest of the terminal. It appears that the FBO Hangar was previously connected to the two former leach fields located west of the FBO (SCDPW, March 14, 2003). It is presumed that the two former leach fields were taken out of service when the 1,500-gallon septic tank was installed in 1982.

The FBO Hangar has a foundation drain system around approximately three-quarters of the building's perimeter. The foundation drain system appear to be a split system with water collected along the north side of the building diverted to a catch basin located in the parking area north of the FBO Hangar. Water in this catch basin is conveyed east, via subsurface piping, to a series of catch basins that conveys storm water further east. Water captured along the south, east, and west sides of the FBO Hangar is diverted by two separate lines south. The two separate lines converge at a catch basin located south of the FBO Hangar and conveys storm water southeast (SCDPW, March 14, 2003).



The discharge points for storm water conveyed from the FBO Hangar was not identified during the December 21, 2017 site visit.

## E911 Building

The E911 building is connected to a 1,000 gallon septic tank, which is located northwest of the E911 building (SCDPW, March 14, 2003). Although the facility drawing is not clear regarding septic tank discharge piping, it appears to be in use to settle out solids before sanitary wastewater is pumped via a force main to the active leach field northwest of the terminal.

There does not appear to be any roof or foundation drain structures associated with the E911 building. A catch basin and drainage swale are located south of the E911 building, and convey water south, to a catch basin located at the southeast corner of the C. Tomkins Hangar (SCDPW, March 14, 2003). Storm water collected by this catch basin is diverted west by a series of catch basins, where it discharges to a drainage swale west of the hangars. Storm water in this drainage swale would flow west, until reaching the drainage channel along CR 183.

# Snow Removal Equipment Building

There are no plumbing fixtures, septic, or leach field associated with the SRE. Rain water on the east side of the building (in front of the bay doors) appears to sheet flow to the east where it runs onto the ground surface. A drainage channel is apparent off the east side of the asphalt, which conveys storm water to the north, where it joins a drainage channel that runs west, along the south side of Industrial Park Road. The drainage channel along the south side of Industrial Park Road is culverted under the SRE driveway and conveys water west, ultimately discharging to the drainage channel along CR 183. Storm water on the north side of the building (where the ASTs are located) appears to sheet flow to the ground surface toward the west, and ultimately captured by the drainage channel located along the south side of Industrial Park Road.

Periodically, the SCIA fire truck performs FAA-required testing of its AFFF delivery system at the SRE. During testing, a short discharge of AFFF (estimated at no greater than 5 seconds) is released onto the asphalt parking lot on the east side of the SRE building. Discharged AFFF is allowed to disperse with precipitation, presumably to the edge of the asphalt, and potentially into the drainage channel.

## 3.5.7 Wells

There are three (former) water supply wells located on the subject property (Figure 4, Appendix A).



#### Well #1

Located in a grass area approximately 50 feet southwest of the terminal building, Well #1 is a 6-inch diameter well advanced to approximately 415 feet below grade. Well #1 previously provided potable water to the terminal, the CVI Hangar, Hangar 71, the FBO Hangar, and the E911 building (SCDPW, March 14, 2003). No well construction details were identified for Well #1.

In March 2003, free-phase petroleum product was discovered floating on water within Well #1, which was subsequently taken out of service. The discovery of free-phase petroleum product in Well #1 was reported to the NYSDEC on March 24, 2003, who assigned Spill No. 0212684 to this release. Analytical testing of the free-phase petroleum product from Well #1 was identified as No. 2 fuel oil and considered "fresh" (less than 5 years old). The source of the free-phase product was not identified but two plausible explanations included residual impacts related to a leak in the former 8,000-gallon UST and associated piping at the utility building (removed in 1997) or an inadvertent fill at Well #1 by a fuel oil delivery company (Trotta, R., June 13, 2003; Weed., K, May 1, 2003). Response actions were performed that included recovery of free-phase product from Well #1, analytical testing of both impacted groundwater and the free-phase petroleum product, and removal of petroleum-impacted soil located by the utility building AST. A total of approximately 100 gallons of free-phase petroleum product was initially recovered from Well #1. According to the NYSDEC database, Spill No. 0212684 was closed on September 15, 2007 (NYSDEC, January 22, 2018). No additional records were identified related to the response actions performed to address the discovery of fuel oil at Well #1.

#### Well #2

Located south of the hangars. Well #2 provided non-potable water to the FBO Hangar. Well #2 was taken out of service several years ago (Lubniewski, December 21, 2017). No well construction details were identified for Well #2.

### Well #3

Located approximately 100 feet north of the terminal. Well #3 was installed in May 1999 under the test well program discussed below (identified as TW-4); however, it was not brought into service until November 2002 (Weed, K., April 2, 2003). Well #3 was initially used to supply potable water for SCIA; however, since 2013 it has been used to provide non-potable water for fire suppression and maintenance activities. The pump house is constructed over the Well #3 location. The pump house contains a chlorination system (Section 3.5.1), piping, six 460-gallon retention vessels for chlorine contact, and a 10,000 gallon UST for storing water. The purpose of the 10,000-gallon UST



was to store potable water to help overcome water shortages during periods of peak demand when Well #3 was in operation. The TW-4 boring log indicates it is approximately 900 feet deep and according to labeling at the pump control panel, the pump is set at approximately 850 feet below grade. Although no well construction record was identified for Well #3 the boring log for TW-4 indicates that 40 feet of steel casing was installed and the remainder is an open rock borehole.

In March 2003, elevated concentrations of petroleum contaminants were discovered in water from Well #3. It was speculated that pumping at the newly installed Well #3 mobilized the petroleum impacts at Well #1 (discussed above), located approximately 250 feet south, to Well #3 (O'Brien & Gere, Engineers, Inc., June 12, 2003). Well #3 was re-sampled in May 2003, following recovery of oil at Well #1, and petroleum compounds were not reported as present (O'Brien & Gere, Engineers, Inc., June 12, 2003).

In October 2016, the NYSDOH sampled Well #3 for the presence of PFAS, including PFOA and PFOS. The reported concentration of PFOA exceeded the U.S. EPA HA, and the PFOA HA exceedance was confirmed through a second sampling event completed in January 2017. Following confirmation of the PFOA HA exceedance, SCIA removed Well #3 from operation and no longer used for either potable or non-potable supply.

### Test Wells

In 1998 and 1999, four test wells (TW-1 through TW-4) were installed at the subject property to evaluate suitability of development of a new potable water supply well for SCIA. Test wells were advanced to depths ranging between approximately 300 and 900 feet below grade; groundwater was encountered approximately 100 feet below grade at TW-1. Although water yields from the test wells were considered inadequate to meet SCIA demand (**O'Brien & Gere Engineers, Inc.**, June 1999), Sullivan County ultimately decided to bring TW-4 (renamed as Well #3) into service in November 2002. TW-1 was located approximately 800 feet south of the FBO hangar, and TW-2 and TW-3 were located off the north end of the runway, adjacent to State Route 55 (**O'Brien & Gere** Engineers, Inc., June 1999). With the exception of TW-4/Well #3, the test wells were not located during the December 21, 2017 site visit.

# Offsite Sullivan County Wells

In December 2010, two new wells, Well #4 and Well #5, were advanced on property owned by Sullivan County southwest of the subject property. Well #4 provides non-potable water to the 20,000 gallon fire suppression AST on the SCIA property (Lubniewski, December 21, 2017). Prior to



being taken out of service in 2017, Well #3 also provided water for fire suppression at SCIA. No well construction details were identified for Well #4.

Well #5 is constructed as an 8-inch diameter, open bore-hole well, advanced to approximately 450 feet below grade, with 100 feet of steel casing set in bedrock (Arcadis, January 2013). Well #5 is also identified as NYSDEC Well No. SV 3663. Well #5 was brought into service in 2013 and provides potable water to SCIA. Water from Well #5 is pumped to the pump house, where it receives chlorination treatment prior to distribution (Arcadis, January 2013).

In October 2016, the NYSDOH sampled Well #5, both raw and post-chlorination treatment, for the presence of PFAS, including PFOA and PFOS. All reported concentrations of PFOS and PFOA in water from Well #5 during the October 2016 sampling event were below the U.S. EPA HA. In January 2017, the NYSDOH re-sampled raw water from Well #5 for the presence of PFAS; during the confirmation sampling event, neither PFOS nor PFOA exceeded the U.S. EPA HA.

### 3.5.8 Electric Transformers

Pad-mounted electrical transformers were identified at the subject property, including adjacent to the utility building, adjacent to the ARFF building, and north of the 5-Bay Hangar. Pole-mounted transformers are also present, located at a utility pole southwest of the FBO Hangar and at a utility pole north of the 10-Bay Hangar (Figure 4, Appendix A). No evidence of staining was observed on concrete or ground surfaces around electric transformers, and a review of the NYSDEC online SPILLS database did not identify any records related to releases from transformers located on the subject property. Electricity is provided by New York State Electric and Gas (SCDPW, March 14, 2003).

### 3.6 Environmental Records Review

EnSafe obtained standard environmental record source information directly from a commercial service. A total of 15 environmental records were identified. Eight environmental records were identified for the subject property and the remaining seven environmental records were identified within the ASTM E1527-13 approximate minimum search distance. The environmental records, including a location map are provided in Appendix C.

### 3.6.1 Onsite Environmental Records

Eight environmental records were identified at four locations within the subject property boundaries.



# Facility Index System (FINDS)

The FINDS database returned two records. One record is related to two New York Spills numbers linked to SCIA, Spill No. 9706633 and Spill No. 9805533, both are discussed below. The other FINDS database listing is related to an unknown air emissions classification. No further information was available regarding the unknown air emissions classification.

## State Hazardous Waste Sites (SHWS)

The SHWS database returned one record, NYSDEC Site No. 345560, recorded April 18, 2017, related to the discovery of PFAS above HAs requiring further investigation. The SHWS record is related to findings from the NYSDOH sampling activities (Section 3.5.7, Section 4.1 and Section 4.2). Sullivan County executed a Consent Order with NYSDEC on December 21, 2017, to further investigate the presence of PFOS and PFOA at SCIA.

# Leaking Storage Tanks Incident Reports (LTANKS)

The LTANKS database returned one record, NYSDEC Spill No. 8708522, recorded January 5, 1988 due to a tank failure. The LTANKS record is related to the failed tightness test for Tank 101, an aviation gas UST located at the former Fuel Farm (Section 3.5.2). The NYSDEC Spill No. 8708522 is listed as "Closed" on August 8, 1989. A search of the NYSDEC online SPILLS database did not result in any additional information regarding this spill. The LTANKS listing was also included in the FINDS database listing, identified above.

## Tanks Database (TANKS)

The TANKS database returned two records.

- Facility ID of 3-016535 is related to the ASTs and USTs registered by SCIA under PBS program (Section 3.5.3). Note, the mapped location presented in the records report for the SCIA TANKS is shown as outside the subject property boundary, which is incorrect. All registered tanks under PBS Certificate No. 3-016535 are located on the subject property.
- Facility ID 3-496472 is **listed under the name "Cablevision Air Facility, Inc."**, related to the UST adjacent to the CVI Hangar, and registered with the PBS program (Section 3.5.2).

## NYSDEC Spills Database (NY SPILLS)

The NY SPILLS database returned two records.

• Spill No. 9706633, opened September 3, 1997 when an unknown volume of petroleum hydrocarbons was spilled to a pad and ground surface. Spill No. 9706633 is listed as "Closed" on October 30, 1997. A search of the NYSDEC online SPILLS database did not identify any



additional information regarding Spill No. 9706633. The location of Spill No. 9706633 is unknown. A Freedom of Information Law (FOIL) request has been submitted to the NYSDEC regarding Spill No. 9706633; however, a response has not yet been received.

Spill No. 9805533, opened August 4, 1998 due to a traffic accident that resulted in an approximately 1,000 gallon propane release (Section 3.5.2). Spill No. 9805533 is listed as "Closed" on August 31, 1998. A search of the NYSDEC online SPILLS database did not identify any additional information regarding Spill No. 9805533.

The environmental records report did not identify Spill No. 0212684, which is associated with the subject property, because the address is identified in the NYSDEC online SPILLS database as 100 North Street, Monticello, New York, which is the County Office Building. As discussed in Section 3.5.7, in March 2003, free-phase petroleum product was discovered in Well #1. The NYSDEC was notified of the presence of free-phase petroleum product on March 24, 2003. This spill is listed as "Closed" on September 15, 2007 (NYSDEC, January 22, 2018).

## 3.6.2 OffSite Environmental Records

Seven environmental records were identified within ASTM E1527-13 approximate minimum search distances from the subject property boundaries on the following databases: Mines Master Index (US MINES), Office of Surface Mining Reclamation and Enforcement Inventory (ABANDONED MINES), Solid Waste Facilities/Landfill Sites (SWF/LF), UST, AST, and NY SPILLS.

US MINES and ABANDONED MINES listings are related to the abandoned Town of Bethel Gravel Pit. The Town of Bethel Gravel Pit is located approximately 0.25 miles north of the subject property and listed as a "metals" mine. The Mines Master Index identified 26 violations issued between 2009 and 2012 for the Town of Bethel Gravel Pit; however, no information was provided regarding the nature of the violations. A search of the U.S. Department of Labor Mine Data Retrieval online system did not reveal any additional information.

There are two records under the SWF/LF database listing. One is related to the Town of Bethel Sanitary Landfill, which is listed as inactive. The second is related to the Town of Bethel Transfer Station, which is listed as active. Both the landfill and the transfer station are located approximately 0.25 miles north of the subject property. Wastes listed as received by the Town of Bethel Transfer Station include: waste oil, municipal solid waste, construction and demolition debris, tires, cardboard, paper, plastics, metals, and electronics. No further information was provided.

The UST, AST, and NY SPILLS database listings were all related to Hudson Valley Foie Gras, LLC (HVFG), which abuts the subject property to the south (374 Airport Road). HVFG is a PBS program



facility (3-601534). According to the UST database records, HVFG had 8 USTs located on the property, with capacities ranging from 500 to 15,000-gallons. All USTs were for storing No. 2 fuel oil, and were removed between July 1999 and April 2007. According to the AST database records, there are eight AST listings, four active and four inactive. The four active ASTs are all 330-gallon capacities and store either diesel or No. 2 fuel; the active ASTs were installed between May 2002 and April 2007. The four inactive ASTs were all of 275-gallon capacities for storing No. 2 fuel oil; all four inactive ASTs were closed on April 24, 2007. No further information was provided. A search of the NYSDEC online PBS database did not result in any additional information regarding the USTs and ASTs at HVFG.

The NY SPILLS database returned one record for HVFG, Spill ID: 0611072, which was related to a 1-gallon release of No. 2 fuel oil that was reported on January 4, 2007. The cause of the release was "human error" and Spill ID: 0611072 was closed January 4, 2007. No further information was provided. A search of the NYSDEC online SPILLS database did not result in any additional information regarding Spill ID: 0611072 at HVFG.



#### 4.0 AREA RECONNAISSANCE

The current and historical uses of adjoining properties, described below, are based upon visual observations during the site reconnaissance and information obtained from interviews, historical research, and regulatory research conducted for the subject property. A commercial environmental database company provided a database search report that made environmental records for surrounding area properties reasonably ascertainable.

# 4.1 Adjoining Properties

EnSafe's observation and evaluation of adjoining properties were limited to features and conditions that were visible from the subject property and public rights-of-way.

The Sullivan County Industrial Park adjoins the subject property to the northwest, which includes three commercial businesses:

- Silk City Textile Machine Company (13 CR 183B), which manufactures textile machines
- International Contractors Corporation (46 CR 183B), which provides sheet metal manufacturing, roofing, and crane services
- HVFG (22 CR 183C) utilizes this property, presumably related to poultry agriculture; however, the exact operations are not known

No information was identified concerning specific operations at these three businesses and none of the addresses are identified in the environmental records database report. The Sullivan County Industrial Park is first evident in a 1985 aerial photograph, with all three buildings present. PFAS are associated with certain products that are applied to textiles to improve product performance; however no information was identified concerning a chemical product inventory for the Silk City Textile Machine Company (13 CR 183B). At the HVFG facility, 22 CR 183C, a sign on the side of the building reads "Sutphen East." Sutphen manufactures and maintains fire trucks. According to the Sutphen website, the Sutphen East location was for the maintenance of fire trucks. No further information is available regarding how long the Sutphen East business operated at the 22 CR 183C location or if AFFF was used or stored as part of their operations. The un-named pond located on the SCIA parcel is located west of 22 CR 183C.

The water supply wells located on all three of the Sullivan County Industrial Park properties, which are in a presumed hydraulically downgradient direction from the subject property, were sampled by the NYSDOH in 2017 for the potential presence of PFOS and PFOA. The Silk City Textile Machine Company (22 CR 183B) had a reported combined PFOS+PFOA concentration above the U.S. EPA HA.



Although detected, PFOS and PFOA did not exceed the U.S. EPA HA at the other two properties (Figure 3, Appendix A). No well construction information was identified for the three supply wells located in the Sullivan County Industrial Park.

Other adjoining properties to the northwest include the Camp Toras Chesed campground/RV park (4044 State Route 55), small commercial businesses, residences, and wooded undeveloped land. The NYSDOH sampled water supply wells at select properties in this area in 2017 for the presence of PFOS and PFOA, and all reported concentrations were below the U.S. EPA HA (Figure 3, Appendix A). No well construction information was identified for the supply wells sampled in this area.

The Sullivan County Emergency Training Area (SCETA) (615 Old While Lake Road), residences, and wooded undeveloped land adjoin the subject property to the north and northeast. The SCETA was developed at some point after 1997 and is used by Sullivan County first responders as a training facility, which reportedly includes firefighting training. It is unknown if AFFF is present at the SCETA or if it has ever been used as part of training activities. The NYSDOH sampled water supply wells at the SCETA and select residential properties in 2017 for the presence of PFOS and PFOA, and all reported concentrations were below the U.S. EPA HA (Figure 3, Appendix A). No well construction information was identified for the supply wells sampled in this area.

A poultry farm business, operated by HVFG, adjoins the subject property to the southwest. The address for the HVFG poultry farm property, 346 Airport Lane (CR 183), Mongaup Valley, New York, is identified on the NYSDEC PBS and SPILLS databases (Section 3.7.2). Adjoining the subject property to the west, across CR 183, is a building operated by the Sullivan County Department of Transportation. No further information was identified concerning the Sullivan County Department of Transportation building. Other adjoining properties include wooded undeveloped land and residences. The NYSDOH sampled water supply wells in 2016 and 2017, including the HVFG facility on CR 183 (address of 374 Airport Road but listed as 342 Airport Road by the NYSDOH), the Sullivan County Department of Transportation building, and other select properties for the presence of PFOS and PFOA, and all reported concentrations were below the U.S. EPA HA (Figure 3, Appendix A). The supply well located at 341 Airport Road and sampled by the NYSDOH has a total depth of 375 feet, cased to 38.5 feet below grade. Bedrock was encountered at 5 feet below grade and static groundwater elevation is 150 feet below grade (NYSDEC, January 10, 2018). No well construction information was identified for the other supply wells sampled in this area.

Adjoining properties to the south and east are predominantly wooded undeveloped land and few residences. The NYSDOH sampled select residential water supply wells in 2017 for the presence of PFOS and PFOA, and all reported concentrations were below the U.S. EPA HA (Figure 3, Appendix A). No well construction information was identified for the supply wells sampled in this area.



# 4.2 Surrounding Area Properties

Surrounding properties include a mix of undeveloped wooded land, agricultural, small businesses, residences, the abandoned Town of Bethel Gravel Pit, and the Town of Bethel former Landfill and active Transfer Station. Of the surrounding properties, only the Town of Bethel Gravel Pit and the Town of Bethel former Landfill and active Transfer Station were identified in the environmental records report (Section 3.7.2).

The NYSDOH sampled select residential, business, and the Town of Bethel Transfer Station (608 Old White Lake Road) water supply wells in 2017 for the presence of PFOS and PFOA, and all reported concentrations were below the U.S. EPA HA (Figure 3, Appendix A).

## 4.3 Unmapped Sites

The environmental records report identified 25 unmapped (orphan) sites. The list of orphan sites was reviewed and, based on given addresses, all locations are greater than one mile from the subject property. Based on the apparent distances, orphan sites are considered unlikely to pose an environmental threat to the subject property.



### 5.0 RESULTS OF THE ENVIRONMENTAL PROFESSIONAL INQUIRY

EnSafe performed a RSR of the 603 acres of subject property owned by Sullivan County International Airport at 75 CR 183A for the purpose of identifying AOCs, per DER-10.

## 5.1 Summary of Findings and Conclusions

Based on research performed, this RSR identified the following findings:

- Hazardous substances and petroleum products were observed onsite and include: the water-treatment chemical sodium hypochlorite; lubricants, oils and hydraulic oils for facility and aircraft maintenance; and small quantities of general cleaning products. In general, lubricants, oils, and hydraulic oils for aircraft maintenance were stored in containers no greater than 5-gallons; however, access was not granted to the interiors of the leased hangars (CVI Hangar, Hangar 71, C. Tomkins Hangar, and the 15-Bay Hangar). The sodium hypochlorite is stored on a secondary spill containment pallet, while other materials were not stored in secondary containment. No significant staining or evidence of releases were noted at storage areas for hazardous substances and small quantity petroleum and cleaning materials.
- AFFF, for use at the SCIA, is stored in the ARFF building. AFFF is stored in 5-gallon buckets in the garage area. The garage area is also used to store the SCIA Fire Truck, which has capacity to carry 80 gallons of AFFF. Prior to construction of the ARFF in 2013, AFFF and the fire truck were stored in the garage area located at the terminal. The dry-chemical Purple K fire extinguishing agent is also stored at the ARFF garage, as well as onboard the fire truck. Historical stocks of AFFF are considered likely to have contained PFAS. No significant staining or evidence of releases were noted at AFFF storage areas in the ARFF building or the terminal garage. Reportedly, the SCIA purchases approximately 10-gallons of AFFF annually.
- AFFF handling equipment at the ARFF is periodically washed out on the asphalt tarmac east
  of the garage. Released AFFF on the asphalt surface is allowed to disperse with precipitation
  events. Runoff from the asphalt area at the ARFF is anticipated to sheet flow into grass areas
  off the edge of the tarmac. No staining was observed on the asphalt in front of the garage
  door of the ARFF building.
- AFFF handling equipment historically used at the terminal garage was washed out on the asphalt driveway east of the garage. Released AFFF on the asphalt surface is allowed to disperse with precipitation events. Runoff from the asphalt area at the terminal garage is



anticipated to sheet flow into grass areas off the edge of the driveway. No staining was observed on the asphalt in front of the garage door of the terminal building.

- There is an active FTA located in a grass area at the southwest end of the runway. Firefighting
  training activities have been occurring at this location since approximately 2008. AFFF was
  historically discharged at this location; however application of AFFF in this location has been
  discontinued.
- There is a former FTA located in a grass area north of the terminal building. The historic FTA
  is believed to have been in operation from 1970 to approximately 2008, and AFFF was
  discharged at this location. Both the SCIA and surrounding communities conducted fire
  training activities at the former FTA.
- Testing of the SCIA fire truck AFFF delivery system periodically occurs on asphalt at the SRE building. During testing, a limited discharge of AFFF occurs (less than 5 seconds). Released AFFF on the asphalt surface is allowed to disperse with precipitation events. Runoff from the asphalt area at the SRE is anticipated to flow east, and into a drainage swale.
  - SCIA has two active 12,000 gallon USTs that store aviation gasoline and jet fuel. There are
    four active double-walled ASTs, with capacities ranging from 285 to 2,000-gallons. The two
    285-gallon ASTs store gasoline and diesel. The two 2,000 gallon ASTs store No. 2 fuel oil.
    No evidence of spills were noted around the ASTs. The USTs and ASTs are registered under
    the PBS program (PBS No. 3-016535, expiration September 2021). The two USTs have tank
    gauging and leak detection monitoring systems.
- A 12,000-gallon UST is located adjacent to the CVI Hangar and is registered with the PBS program to Cablevision Air Facility, Inc. (PBS No. 3-496472, expiration December 2019).
- Five USTs were formerly located on the subject property. Three 12,000-gallon USTs stored aviation gasoline and jet fuel, and were associated with the former fuel farm. One of the former fuel farm USTs failed a tightness test in 1988, which was reported to the NYSDEC (Spill No. 87085822). The three former fuel farm USTs were removed in 1997 and Spill No. 87085822 was listed as "Closed" on August 8, 1989. One former 8,000-gallon No. 2 fuel oil UST was located adjacent to the utility building, and was removed in October 1997. The final former UST was located adjacent to the FBO Hangar and had a 5,000-gallon capacity, used



to store No. 2 fuel oil, was also removed in October 1997. No records were reviewed concerning UST removal activities.

- Two former ASTs were located at the former fuel farm. One AST had a 300-gallon capacity and was utilized for storing diesel. The other AST had a 275-gallon capacity and was utilized for storing gasoline. No records were reviewed concerning AST removal activities.
- Nine propane tanks are present at SCIA, four ASTs and five USTs. The propane tanks supply fuel for emergency back-up generators.
- Between 2012 and 2016, an approximately 225,000 square foot area at the north end of the runway was filled with material from the Monticello Casino construction site, located approximately 5-miles southeast of the subject property. No testing was performed to verify there were no contaminants present in the fill material.
- A 275-gallon waste oil tank containing product and un-labeled, empty, 55-gallon drum are located at the solid waste collection area. No staining was observed on the ground surface around either container. The 275-gallon waste oil tank and 55-gallon drum were reportedly from a hangar; however the hangar of origin was not identified during this RSR. Disposal of both the 275-gallon waste oil and its contents, and the 55-gallon drum, are being coordinated.
- Approximately five 5-gallon buckets containing various amounts of unknown waste fluids are stored in the utility building. The waste fluids are stored in containers with packaging labels inconsistent with container contents, including the use of two former AFFF buckets. No secondary containment measures are in use.
- The SCIA has one leach field located northwest of the terminal that receives all sanitary wastewater generated on the subject property. Each building serviced by the SCIA septic system has a septic tank connected in-line prior to the leach field. Sanitary wastewater from the E911 building septic tank is pumped through a force main to a sewer manhole that connects to the leach field. The ARFF building is connected to the septic system and AFFF handling equipment is washed out at a utility sink located in the ARFF building.
- Two former leach fields are located west of the FBO Hangar. The FBO Hangar appears to have been connected to both leach fields; however, it is presumed they were taken out of service when the new FBO Hangar septic tank was installed in 1982.



- Floor drains are present in the ARFF building, utility building, and Hangar 71. The discharge location of the ARFF building floor drains, either to the septic tank (and ultimately the SCIA leach field) or the storm water system, was not identified during this RSR. The utility building floor drains connect to the storm water system (culverts and catch basins) that discharges to a drainage swale located southwest of the terminal, between the oval driveway and automobile parking lot. The Hangar 71 floor drains are connected to an OWS located west of the hangar. The OWS is connected to the storm water system, which conveys water west through a series of catch basins located between the hangar area and the automobile parking lot, and discharging into a drainage swale approximately 220 feet further south. No further information was available concerning the OWS located at Hangar 71.
- Three former potable wells are located on the subject property. Well #1, located near the terminal, was impacted by petroleum in March 2003, as evidenced by floating free-phase product, and was taken out of service. Well #2, located by the FBO Hangar, was reportedly taken out of service several years ago. Well #3, located north of the terminal, was installed as a test well (TW-4) in 1999 and brought into service as Well #3 in 2002. Well #3 remained in use as a potable water source until December 2013, when offsite Well #5 was brought into service to supply potable water to SCIA. Well #3 remained in-service to provide non-potable water for fire suppression and maintenance activities; however, it was removed from service in 2017 following discovery of PFOA above the U.S. EPA HA and is no longer used for either potable or non-potable purposes.
- Well #5 is located on property southwest of SCIA and owned by Sullivan County, and provides
  potable water to SCIA. In 2016 and 2017 Well #5 was sampled by the NYSDOH for potential
  presence of PFOS and PFOA, and all reported concentrations were below the U.S. EPA HA.
- There are four NYSDEC Spill Nos. related to SCIA (Spill No 87085822 was previously described in relation to the former USTs).
  - Spill No. 9706633 was opened on September 3, 1997, and related to an unknown volume of petroleum hydrocarbons released to a pad and ground surface. The NYSDEC Spill database lists Spill No. 9706633 as "Closed', effective October 30, 1997.
  - Spill No. 9805533 was opened on August 4, 1998, and related to a 1,000-gallon propane leak, due to a vehicle accident that struck the fill port for one of the propane USTs located by Hangar 71. The NYSDEC Spill database lists Spill No. 9805533 as "Closed', effective August 31, 1998.



- Spill No. 0212684 was opened on March 24, 2003, and is related to the discovery of free-phase floating petroleum in Well #1, identified as No 2 fuel oil. Approximately 100-gallons of oil was recovered from this well. The NYSDEC Spill database lists Spill No. 0212684 as "Closed", effective September 15, 2007.
- In 2016 and 2017, the NYSDOH sampled water supply wells on select surrounding properties to screen for the presence of PFOS and PFOA. One property, located in the Sullivan County Industrial Park, which abuts the SCIA to the northwest, had a reported combined PFOS+PFOA concentration above the U.S. EPA HA. The property with the U.S. EPA HA exceedance has an address of 13 CR183B and is used by The Silk City Textile Machine Company to manufacture textile handling equipment. Upon discovery of the U.S. EPA HA exceedance, Sullivan County began providing bottled water to The Silk City Textile Machine Company. No other reported PFOS and PFOA concentrations from samples collected by the NYSDOH from surrounding property wells were above the U.S. EPA HA. Certain products applied to textiles can contain PFAS, a chemical inventory for the Silk City Textile Machine Company was not available for review.
- The NYSDEC issued a Consent Order to the SCIA to investigate the presence of hazardous materials, including PFOS and PFOA. The Consent Order was executed on December 21 2017 and the investigation required by the Consent Order is tracked under NYSDEC Site No. 345560.
- A former tenant of the Sullivan County Industrial Park, with address 22 CR 183C, was Sutphen East. Sutphen East manufactured and maintained fire trucks at the 22 CR 183C location. It is unclear if AFFF was ever present during the time Sutphen East operated at this location, nor were any records identified concerning the tenure of Sutphen East. Currently, HVFG utilizes the 22 CR 183C property, presumably related to poultry agriculture; however, the exact operations are not known. The NYSDOH sampled the water supply well at the 22 CR 183C property for potential presence of PFOS and PFOA, and all reported concentrations were below the U.S. EPA HA.
- The SCETA abuts the subject property to the north and fire training activities occur at this location. The SCETA was initially developed at some point after 1997. It is not known if AFFF has been used or stored at this location. The NYSDOH sampled the water supply well at the SCETA property for potential presence of PFOS and PFOA, and all reported concentrations were below the U.S. EPA HA.



• The Town of Bethel operates a solid waste transfer station at the property of the former town landfill. The transfer station and landfill are approximately 0.25 miles north of the subject property. No further details were available concerning the transfer station or former landfill. The NYSDOH sampled the water supply well at the Town of Bethel Transfer Station (608 Old White Lake Road) for potential presence of PFOS and PFOA, and all reported concentrations were below the U.S. EPA HA

# 5.2 Environmental Professional Opinion

The subject property was assessed with respect to the range of contaminants within the scope of CERCLA, petroleum products, and for the New York State classified hazardous materials PFOS and PFOA. The RSR was required as part of the Consent Order, executed December 21, 2017, and in response to the identification of PFOS and PFOA in both potable and non-potable supply wells at concentrations above the U.S. EPA HA for PFOS and PFOA. Sources of PFOS and PFOA, as well as other PFAS compounds, has been linked to certain formulations of AFFF, metal plating, textile coatings, landfill leachate, among others. AFFF is commonly stored and used at airports due to its ability to quickly extinguish Class B (flammable liquid) fires.

In 2016 and 2017, the NYSDOH performed initial screening of water from potable and non-potable water supply wells located at, and around, the SCIA for the presence of PFOS and PFOA. The results of the NYSDOH screening activities identified PFOA above the U.S. EPA HA in a non-potable well on the SCIA, and a reported combined PFOS+PFOA concentration above the U.S. EPA HA at an adjoining property, located to the northwest of the subject property (13 CR 183B, The Silk City Textile Machine Company).

Evidence of AOCs was identified in connection with the subject property. The primary focus of this RSR was to identify potential sources of PFOS, PFOA, and other PFAS (PFAS AOCs); however, per requirements of DER-10, the entire subject property was assessed for presence of other contaminants that fall into the scope of CERCLA and petroleum products, and may warrant further consideration as an AOC (Preliminary AOCs). The following is a list of identified AOCs, grouped by type (PFAS AOC or Preliminary AOCs).



Table 5			
Summary of I dentified PFAS Areas of Concern			
Area of Concern	Name	Rationale	
AOC 1	Active FTA	Known use of AFFF during fire fighting training, located at	
		southwest end of runway (Section 3.5.2)	
AOC 2	Former FTA	Known use of AFFF during historical fire fighting training, located	
		north of terminal tarmac (Section 3.5.2)	
AOC 3	SRE Building	AFFF discharge to asphalt, located on east side of SRE building,	
		with run off to adjacent grass area (Section 3.5.2)	
AOC 4	ARFF Building	AFFF storage in garage and wash out of AFFF handling	
		equipment on asphalt along east side of building with run-off to	
		adjacent grass areas (section 3.5.2)	
AOC 5	Terminal Building	Former AFFF storage area and wash out of AFFF handling	
		equipment on asphalt along east side of building with run off to	
		adjacent grass areas (Section 3.5.2)	
AOC 6	Leach field	Receives AFFF rinse water from ARFF building, discharges to	
		subsurface in area northwest of terminal (Section 3.5.6)	
AOC 7	Hangar 71 Propane Fire	Potential discharge of up to 20-gallons of AFFF in August 1998	
		during an emergency response to a propane fire from a propane	
		UST located on the west side of Hangar 71(Section 3.5.2)	

#### Notes:

PFAS - per- and polyfluoroalkyl substances

AOC - Area of Concern

FTA - Firefighting Training Area

AFFF – Aqueous Film Forming Foam

SRE - Snow Removal Equipment Building

ARFF Aircraft Rescue and Fire Fighting Building

SCIA - Sullivan County International Airport

UST - Underground Storage Tank

In addition, suspected PFAS receptors were identified during this RSR and include the onsite pond located approximately 250 feet west of the active FTA, the onsite pond located west of 22 CR 183C (adjacent to the current HVFG facility and formerly Sutphen East), the offsite water supply well located at 13 CR 183B (The Silk City Machine Company), and the offsite un-named pond located approximately 1,500 feet south of the active FTA. The onsite Well #3, which has been impacted by PFAS, has been removed from service and is no longer considered a receptor.



Table 6 Summary of Preliminary Areas of Concern			
Area of Concern	Name	Rationale	
AOC 8	Former Leach Field	Unknown materials discharged to this leach field during an assumed timeframe of 1970 to 1982. Discharges of hazardous substances from sinks or drains is possible.	
AOC 9	Former Fuel Farm	Failed tightness test on a 12,000–gallon UST, no information regarding close-out of 12,000-gallon UST Nos. 101, 102, and 103, or 275 and 300-gallon AST Nos. 104 and 104A (Section 3.5.3)	
AOC 10	Utility Building - Former UST	No information regarding close-out of 8,000-gallon UST No. 10 (Section 3.5.3)	
AOC 11	FBO Hangar – Former UST	No information regarding close-out of 5,000-gallon UST No. 11 (Section 3.5.3)	
AOC 12	CVI Hangar – Active UST	No information regarding compliance monitoring of 12,000-gallon UST owned by Cablevision Air Facility, Inc., and located at the CVI Hangar (no tank number) (Section 3.5.3)	
		Fill material brought from offsite source that was not evaluated for potential contaminants and used for	
AOC 13	Fill Area – North End of Runway	grading/leveling at north end of runway (Section 3.5.4)  Partially filled 275-gallon waste oil AST and un-labeled empty 55-gallon drum being temporarily stored in this	
AOC 14	Solid Waste Accumulation Area	area, disposal being coordinated (Section 3.5.5)  Floor drains from utility building discharge to western drainage channel located between oval and terminal and automobile parking lot; floor drains from Hangar 71 discharge to western drainage channel located along north side of hangar area, after passing through an OWS leasted west of Hangar 71.	
AOC 15	Western Storm Water Drainage Channels	located west of Hangar 71. No information identified concerning the Hangar 71 OWS (Section 3.5.6)  Occurred in 1997 and identified as a "petroleum"	
AOC 16	NYSDEC Spill No. 9706633	hydrocarbons" release; no information identified concerning the magnitude or location of release (Section 3.7.1)	
AOC 17	NYSDEC Spill No. 0212684	Occurred on 2003 when free-phase petroleum product discovered floating on water in Well #1; no information identified concerning environmental investigation or close-out (Section 3.7.1)	





#### Notes:

AOC - Area of Concern

UST – Underground Storage Tank

AST – Aboveground Storage Tank

FBO - Fixed Base Operations

CVI - Cablevision

OWS - Oil/Water Separator

NYSDEC - New York State Department of Environmental Conservation

AOCs are presented on Figure 6 (Appendix A).

# **5.3** Limitations and Exceptions

EnSafe's RSR utilized ASTM E 1527-13 as a guideline to meet the requirements of DER-10. EnSafe did not sample soil, soil vapor, groundwater, or surface water as part of the RSR. Assessment of these items is based upon visual observations and sources as referenced throughout the report. This report should not be construed as verifying the present property owner or operator's compliance with federal, state, and local regulations. In addition, the following limitations were identified, which impeded the ability to either clarify details related to AOCs or identify potential AOCs.

- Limited information available regarding historical property use for agricultural purposes and previous subject property operations.
- The Silk City Machine Company (13 CR 183B) manufactures textile equipment; however, PFAS
  are associated with certain products applied to textiles to improve performance. No
  information identified concerning the chemical inventory at the Silk City Machine Company
  property.
- The building located at 22 CR 183C was formerly utilized by Sutphen East, which maintained fire trucks at this location. It is unclear if AFFF was used or stored at this location, as part of equipment testing.
- Construction records for some on-site and off-site wells were not able to be located.
- Sanborn Maps for the subject property address were not available through the commercial service.



 Limited City Directory information, only dating back to 2010, were available to identify historical surrounding property uses.

The following Preliminary AOCs may be able to be removed pending identification and review of historic reports and records: 9, 10, 11, 12, 16, and 17. A summary of the additional information that may be obtained via a Freedom of Information Law (FOIL) request that has been placed with the NYSDEC.

- Information related to Spill No. 9706633 or Spill No. 0212684; the location of Spill No 9706633 is unknown.
- Information concerning environmental assessment activities during UST removals, including at the former fuel farm area, at the utility building, and at the FBO Hangar.
- Compliance and monitoring details regarding the UST located at the CVI Hangar.

# **5.4 Significant Assumptions**

This report is a prudent, reasonable evaluation of the subject property's observed environmental condition. EnSafe assumes no responsibility for conditions or information not practically reviewable, or information not accurately disseminated by any party. The following significant assumptions were used to formulate the conclusions and opinions contained in this report:

- Environmental database information is accurate and complete.
- Conditions at the time of the site visit were representative of ordinary conditions at the subject property.
- The subject property boundaries depicted on figures and described herein are accurate.



### 6.0 REFERENCES

3M Company. The Science of Organic Fluorochemistry, OPPT-2002-0043-0006. February 5, 1999.

- Arcadis. Basis of Design Report, Groundwater Disinfection System, Sullivan County International Airport. October 2012, revised January 2013.
- ASTM International. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. (November 2013). Designation E1527-13. 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428.
- Clough Harbour & Associates LLP. *Geotechnical Engineering Report, Sullivan County Airport, Airport Runway Safety Areas, White Lake, New York.* November 12, 2001.
- Environmental Data Resources, Inc. *EDR DataMap Area Study*, Sullivan County International Airport, Swan Lake, NY 12783. Inquiry No. 5124144.1s. 6 Armstrong Road, 4<sup>th</sup> floor, Shelton, Connecticut. (800) 352-0050. December 1, 2017.
  - EDR Historical Topo Map Report, with QuadMatch. Inquiry No. 5121013.5. November 29, 2017.
  - The EDR Aerial Photo Decade Package. Inquiry No. 512103.6. November 30, 2017.
  - The EDR Aerial Photo Decade Package. Inquiry No. 512103.6. December 9, 2017.
  - The EDR-City Directory Image Report. Inquiry No. 5121013.7. November 29, 2017.
  - EDR Environmental Lien Search Report. Inquiry No. 5019964.34S. 2017, August 15.
- Google Earth software. (Website). Historical aerial imagery for years 1997, 2006, 2008, 2009, 2010, 2011, 2012, and 2016). Retrieved from: http://www.google.com/earth. January 3, 2018.
- Lubniewski, Mike. (interview). *Technician, Sullivan County International Airport.* 75 County Road 183A, Swan Lake, New York. December 21, 2017.
  - Interview (phone). January 18, 2018.



- Malcolm Pirnie, Inc. Proposal for Professional Engineering Consulting Services, Terminal Building Potable Water Well NYSDEC Spill Case, Sullivan County International Airport. March 27, 2003.
- McAndrew, Edward. (interview). *Commissioner, Sullivan County Division of Public Works.* 100 North Street, Monticello, New York. November 13, 2017.
- McFarland-Johnson-Gibbons Engineers, Inc. Sullivan County Airport Industrial Park Feasibility Study.

  June 1975.
- Minnesota Pollution Control Agency. *Perfluorocarbon (PFC) Containing Firefighting Foams and Their Use in Minnesota. Minnesota Pollution Control Agency.* June 30, 2010.
- National Transportation Safety Board (website). Accident Dockets. Retrieved from https://www.ntsb.gov/\_layouts/ntsb.aviation/Results.aspx?queryId=0d734ce5-746f-4d37-a952-628fc0472e62. January 23, 2018.
- New York State Department of Environmental Conservation. *DER-10 / Technical Guidance for Site Investigation and Remediation*. May 3, 2010.
  - Water Well Program Information Search Wizard (Website). NYS GIS Clearinghouse,
     Revised December 2016. Retrieved from:
     http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1203. January 10, 2018.
    - Spill Incidents Database Search Details (Website). Retrieved from: https://www.dec.ny.gov/cfmx/extapps/derexternal/spills/details.cfm?pageid=2.
       January 22, 2018.
- New York State Orthos Online (Website). https://orthos.dhses.ny.gov/#. Retrieved December 19, 2017.
- O'Brien & Gere Engineers, Inc. Sullivan County Airport Industrial Park Water Supply Feasibility Study, Sullivan County Department of Public Works. June 1999.
- **O'Brien & Gere Engineers, Inc.** (letter to Mr. Robert Trotta, Sullivan County Division of Public Works). Sullivan County Airport Ground Water Evaluation. June 12, 2003.



- Stockholm Convention. Guidance on Best Available Techniques and Best Environmental Practices for the Use of Perfluorooctane Sulfonic Acid (PFOS) and Related Chemicals Listed Under the Stockholm Convention on Persistent Organic Pollutants. January 2017.
- Sullivan County Division of Public Works. *Sullivan County International Airport, Site Plan & Details, Sheet No. S-1.* Dated September 30, 1997, and revised March 14, 2003.
- Sullivan County Real Property Tax Services. *Tax Map Town of Bethel, Map 18 & Map 24.* Retrieved from http://webapps. http://co.sullivan.ny.us/Departments/DepartmentsNZ/RealPropertyTaxServices/tabid/3319/d efault.aspx . December 14, 2017.
- Trotta, Robert A., Sullivan County International Airport Engineer (letter to Mr. Karl H. Weed, State of New York, Department of Health). *Remediation Proposal for Airport Water Supply*. June 12, 2003.
- United States Environmental Protection Agency, Office of Water. *Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS), EPA 822-R-12-004*. May 2016a.
  - Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA), EPA 822-R-12-005.
     May 2016b.
- United States Naval Research Laboratory. *Aqueous Film-Forming Foam.* (website) https://www.nrl.navy.mil/accomplishments/materials/aqueous-film-foam/ Accessed: December 4, 2017.
- Weed, Karl H. Senior Sanitary Engineer, State of New York, Department of Health. Handwritten notes from March 17, 2003, March 21, 2003, April 2, 2003, April 11, 2003, and May 1, 2003.
- Wehr, Roger H. Commissioner, Sullivan County Department of Public Works (letter to Mr. John Okeeson, New York State, Department of Environmental Conservation). *Tank Testing: Sullivan County International Airport, Sullivan County Infirmary.* January 27, 1988.

Appendix A Figures











