

Syracuse Fire Training Center

Site No. 734039

2019 Periodic Review Report

December 2019



Prepared by:



C&S Engineers, Inc.
499 Colonel Eileen Collins Blvd.
Syracuse, New York 13212



Syracuse Fire Training Center
Site No. 734039
2019 Periodic Review Report

Prepared by



C&S Engineers, Inc.
499 Colonel Eileen Collins Blvd.
Syracuse, New York 13212

December 2019

TABLE OF CONTENTS

Section 1 - Executive Summary	1
Section 2 - Site Overview	2
Section 3 - Evaluation of Remedy Performance, Effectiveness, And Protectiveness....	4
Section 4 - IC/EC Plan Compliance Report.....	4
Section 5 - Monitoring Plan Compliance Report.....	4
Section 6 - Operation and Maintenance Plan	4
Section 7 - Overall PRR Conclusions and Recommendations.....	4

FIGURES

Figure 1 – Site Location Map on USGS Topographic Map

Figure 2 – Aerial Map

APPENDICES

Appendix A – Deed Restriction

Appendix B – Institutional and Engineering Controls Certification Form

Appendix C – Site Photographs

SECTION 1 - EXECUTIVE SUMMARY

Background

The Syracuse Fire Training Center (Site) in Syracuse, New York is used by the City of Syracuse for training firefighters. In the past, waste flammable liquids, solvents, and PCB oils were used as fuels for onsite training activities. This practice led to the release of contaminants including PCBs and heavy metals. On March 20, 1989, an Order of Consent was issued by NYSDEC to implement a remedial program for the Site. A Remedial Investigation / Feasibility study was completed for the Site, resulting in a Record of Decision that required the excavation and disposal of contaminated soil resulting from these activities. A cover system was also required for the contaminated soils left in place. The cover system consists of asphalt, concrete, and soil. A Deed Restriction filed with the Onondaga County clerk's office was also required, to provide appropriate notice of any planned change in use and to maintain the Site. A copy of the Deed Restriction is provided in **Appendix A**.

Effectiveness of the Remedial Program

The remedial work completed at the Syracuse Fire Training Center reduced the potential for exposure to contaminated soils and for migration of contaminants, thus preventing the potential for additional environmental problems. If the integrity of the asphalt, concrete, and vegetated soil cover over the residual contamination remains in good condition and the Deed Restriction remains in place, the remedy will remain effective.

Compliance

During our inspection and discussions with Site representatives on December 12, 2019, no areas of non-compliance were noted.

Recommendations

Relative to institutional controls and engineering controls (ICs/ECs) for the Site, no substantive changes are recommended. It is advisable to formally instruct personnel at the Site with regard to the Site history and condition periodically as a means to preserve the effectiveness of the remedy. In addition, some minor landscaping is required as detailed in Section 4.

SECTION 2 - SITE OVERVIEW

C&S Engineers, Inc., on behalf of our client, the City of Syracuse, has prepared this Periodic Review Report (PRR) for the Site known as Syracuse Fire Training Center - Site No. 734039.

The Syracuse Fire Training Center Site is located at 312 State Fair Boulevard in the City of Syracuse, Onondaga County, New York, as shown on **Figure 1**. An aerial view of the Site is shown on **Figure 2**. The Site is bounded by State Fair Boulevard to the west, private properties to the north, Route 690 ramp to the east, and a National Grid natural gas right-of-way to the south. A number of buildings are located on the Site including a five-story fire-training tower, a cold storage facility, and a live burn building. The Fire Training Center was built upon an industrial and urban fill area. The urban fill includes construction and demolition debris, broken pottery, concrete, slag, ash, cinder, bricks, and wood.

The Fire Training Center Site is located in the Onondaga Lake Basin, within a glacially formed valley. The area around the Site was originally a large bog encompassing the southeastern end of Onondaga Lake. The area was gradually filled in with wastes from local industries and municipalities.

Deep groundwater in the area of the Fire Training Center and the southern end of Onondaga Lake are saline as a result of salt deposited during the evaporation of a sea 425 million years ago, during the Silurian geologic period. During the 1800's and early 1900's, brine wells were installed in this area to extract salt from the deeper groundwater and was used for salt drying.

The Fire Training Center was constructed in 1948. It consisted of a five-story brick fire training tower; an underground 20,000 gallon cistern, and an above-ground bermed burn pit. During its use, the unlined burn pit was filled with waste oil, fuel, or wasted solvents, ignited, and then extinguished by trainees using chemical or waste spray.

In 1969, the Fire Training Center was expanded eastward to its present size by filling in a wetland area with debris from the construction of Route 690.

The Syracuse Fire Training Center was used by the City of Syracuse and by Niagara-Mohawk to train and educate fire department personnel, introducing them to different types of firefighting techniques and situations. The fuels used for the fires varied from wood, mattresses, and furniture, and flammable liquids such as gasoline, diesel fuel, jet fuel, waste solvents and waste oils.

During various periods of the training facility's history, fire department personnel, along with Niagara Mohawk, stored waste oils and flammable liquids in 55-gallon drums at several locations throughout the Site.

In the fall of 1981, the 55-gallon drums that were stored along the northern fence line were removed by Niagara Mohawk, at the request of the City of Syracuse Fire Department and the NYSDEC. Each drum was analyzed by Niagara Mohawk personnel for PCBs. Of the eighty-five drums tested, five contained PCB concentrations in excess of 10,000 parts per million (ppm), three contained between 1,000 and 10,000 ppm PCBs, 13 contained between 50 and 500 ppm PCBs, 34 contained between 1 and 50 ppm PCBs, and 30 contained less than 1 ppm PCBs.

Previous soil sampling on-site occurred at the time of drum removal, which detected PCBs in the soil at 25 ppm. Subsequent sampling in 1982 detected PCBs in the soils ranging from <1 ppm to 400 ppm total PCBs (18 samples collected).

Concern from the union prompted sampling within the fire training tower and the smoke house. Wipe samples were collected from the walls of these buildings, however the analysis did not detect PCBs at significant levels.

On March 20, 1989, an Order of Consent from the NYSDEC was issued to implement a remedial program for the Site. C&S conducted the Remedial Investigation (RI) at the Site. The principal contaminants discovered included PCBs, lead, polycyclic aromatic hydrocarbons (PAHs), and mercury. Site investigation activities included over 250 soil samples, groundwater sampling, and surface water and sediment sampling of Harbor Brook. A Record of Decision (ROD) was signed on January 4, 1993.

Different alternatives were evaluated for the remedial goal at the Site and ultimately the following was selected as the remedial measure:

- Excavation and off-site disposal of higher contaminated PCB and mercury soils.
- Installation of an engineered asphalt cover over lead, PAH and mercury contaminated soils.
- Surface soil PCB contamination covered by an asphalt and/or vegetated topsoil barrier.

In addition, the ROD required a Deed Restriction (**Appendix A**), the implementation of Department approved institutional controls and the notification to, and approval, by the NYSDEC and NYSDOH of any physical alteration or construction constituting a substantial change of the use of the Site. The remedial construction began in October 1994 and was completed in the summer of 1995.

SECTION 3 - EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

The remedial work completed at the Syracuse Fire Training Center reduced the potential for exposure to contaminated soils and for migration of contaminants preventing the potential for additional environmental problems. If the integrity of the asphalt, concrete, and vegetated cover over the residual contamination remains in good condition and the Deed Restriction remains in place then the remedy will remain effective.

SECTION 4 - IC/EC PLAN COMPLIANCE REPORT

Engineering Controls consisting of engineered caps and covers were incorporated into the Site remedy to provide proper management of this contamination for protection of public health and the environment. A site-specific Restrictive Covenant has been recorded with the Onondaga County Clerk that provides an enforceable means for the continued and proper management of residual contamination and protection of public health and the environment. It requires strict adherence to ICs and ECs placed on this Site by NYSDEC, by the City of Syracuse, and any and all successors and assigns.

Recommendations

No changes to the plan are recommended at this time. However, minor landscaping activities are suggested in the Spring of 2020, which includes filling of rodent holes, killing of vegetation that protrudes through the asphalt cover, and filling of a settled area of soil along the south side of the maintenance building. In each case, the underlying contaminated soil does not appear to be exposed. However, these precautionary measures should be conducted to eliminate future exposure.

SECTION 5 - MONITORING PLAN COMPLIANCE REPORT

Not Applicable.

SECTION 6 - OPERATION AND MAINTENANCE PLAN

The City of Syracuse Fire Department maintenance personnel maintain the Site such that the integrity of the asphalt and grass covered areas is preserved.

SECTION 7 - OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

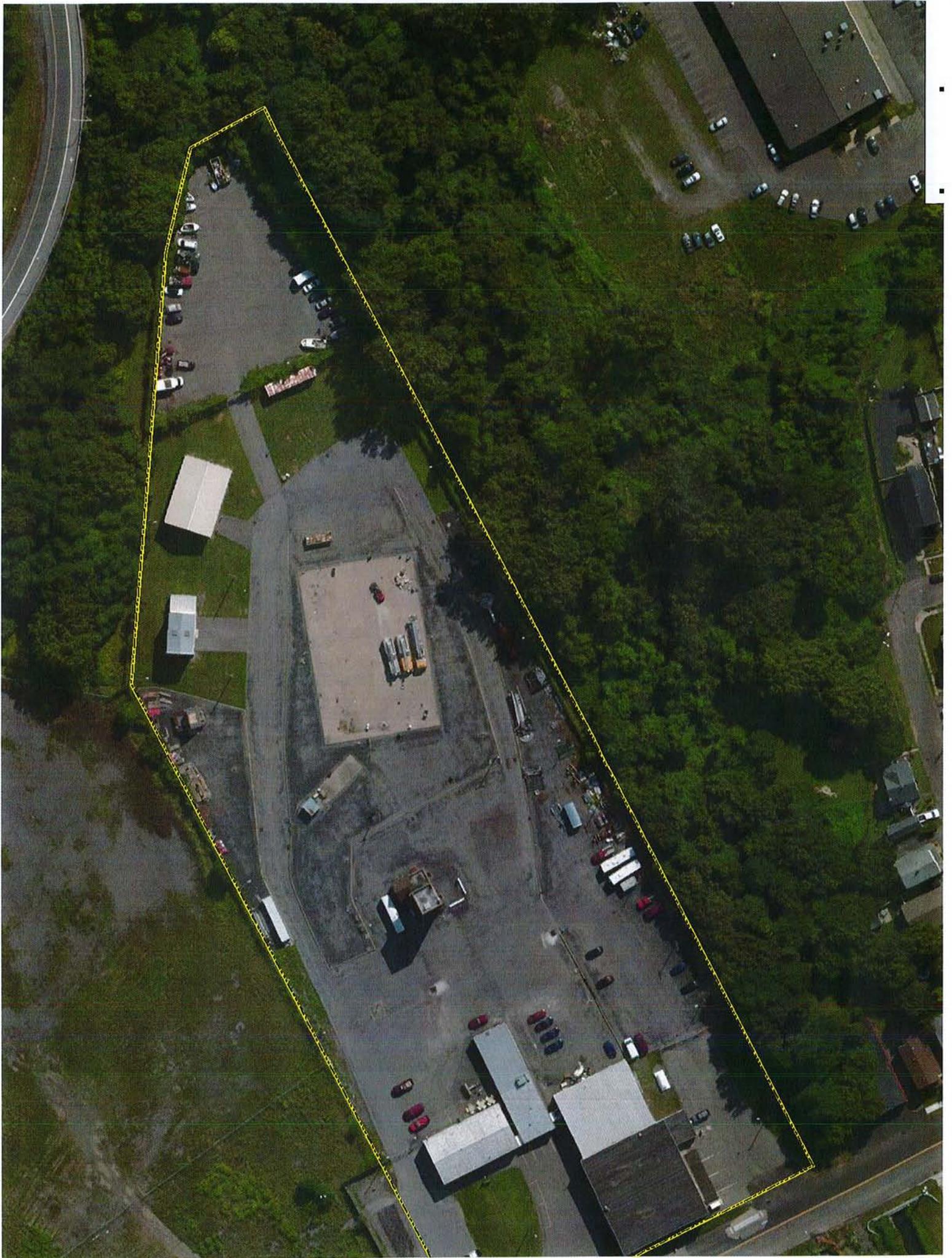
Based upon our inquiry of the persons responsible for oversight of the property, it appears that the City of Syracuse is maintaining the Site consistent with the intent of the Restrictive Covenant. No changes are recommended. Site photographs from December 12, 2019 are provided in **Appendix C**.

FIGURE 1

Site Location Map

FIGURE 2

Aerial Map



Appendix A

Deed Restriction

RESTRICTIVE COVENANT

CITY OF SYRACUSE LOT 88-94 INCLUSIVE,
TRACT HIAWATHA, k/a 312 STATE FAIR BOULEVARD

THIS COVENANT, made the ~~of~~ day of February 1995, by the CITY OF SYRACUSE, having an office at 233 East Washington Street, Syracuse, New York ("City"):

WHEREAS, the City and the New York State Department of Environmental Conservation ("DEC") entered into a Consent Order, Index #A601468803, on March 20, 1989, requiring the Remedial Investigation, Feasibility Study and implementation of a Remedial Program for an Inactive Hazardous Waste Disposal Site known as the Syracuse Fire Training Center, located at 312 State Fair Boulevard in Syracuse, NY, Site #734039 ("the Site"), and being more fully described as:

ALL THAT TRACT OR PARCEL OF LAND situated in the City of Syracuse, County of Onondaga and State of New York and being known and described as Lot Nos. 88-89-90-91-92-93 and 94 as shown on a Map entitled Hiawatha Tract on Farm Lots 291-292-293-294 and 324, Syracuse, N.Y. made by G.E. Higgins, C.E., dated August 30, 1917 and filed in the Onondaga County Clerk's Office on September 26, 1917 as Map No. 1606

WHEREAS, the City and the DEC have agreed, in the above referenced Consent Order, to file this Restrictive Covenant in the Office of the Onondaga County Clerk for the purpose of providing notice of the Consent Order and its property restrictions to all potential future purchasers of any portion of the Site.

NOW, THEREFORE, The City of Syracuse, for itself and its successors and/or assigns, covenants that:

1. Unless prior written approval by the Department of Environmental Conservation and Department of Health (or any subsequently delegated agencies) (all hereinafter referred to as "the relevant agencies") is first obtained, there shall be no construction, use or occupancy of the site which results in the disturbance or excavation of the waste materials on site, which threatens the integrity of the asphalt cap or soil cover materials, or which results in unacceptable human exposure to contaminated soils.

2. Unless prior written approval by the relevant agencies is obtained, there shall be no change in the use of the site in any way that is inconsistent with its use as a fire training center. If such a new use of the site is approved, any and all further remedial activities at the site deemed necessary and appropriate by the relevant agencies will be performed by the City of Syracuse, its successors and/or assigns.

3. The City of Syracuse, its successors and/or assigns will not disturb the site in any way, except to properly maintain the integrity of the remedial measures undertaken and maintained at the site pursuant to the terms of the attached Record of Decision which is incorporated herein and made a part hereof as if herein set forth at length.

4. This Declaration is and shall be deemed to be a covenant running with the land, binding the City of Syracuse, its successors and/or assigns, and any agent, lessor or invitee of the City of Syracuse, its successors and/or assigns in perpetuity or until such time that the relevant agencies determine these restrictions are no longer necessary for the protection of human health and the environment.

IN WITNESS WHEREOF, the City of Syracuse has caused its corporation seal to be hereunto affixed by its City Clerk and this Covenant to be subscribed by its Mayor on the date and year first above written.

ATTEST:

CITY OF SYRACUSE

John P. Copanas
John P. Copanas
City Clerk

By: Roy A. Bernardi
Roy A. Bernardi
Mayor

State of New York)
County of Onondaga) SS:
City of Syracuse)

On this 14th day of June 1995, before me personally came Roy A. Bernardi, who being duly sworn, deposes and says: that he resides in the City of Syracuse, is Mayor of the City of Syracuse, the corporation described in and which executed the within instrument; that he knows the corporate seal of said corporation; that the seal affixed to the foregoing instrument is such corporate seal; that it was so affixed pursuant to the provision of the of the Charter of the City of Syracuse by like authority; and the said Roy A. Bernardi, further says that he is acquainted with John P. Copanas and knows him to be the City Clerk of said City of Syracuse and that the signature of John P. Copanas was hereto subscribed pursuant to said Charter and in the presence of him, the said Roy A. Bernardi, Mayor

Susan M. Curry
Notary Public

SUSAN M. CURRY
NOTARY PUBLIC, State of New York
No. 01CU6024990
Qualified in Onondaga County
Commission Expires 03/21/98

Appendix B

**Institutional and Engineering Controls
Certification Form**



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



	Site Details	Box 1
Site No. 734039		
Site Name Syracuse Fire Training School		
Site Address: 312 State Fair Boulevard	Zip Code: 13204	
City/Town: Syracuse		
County: Onondaga		
Site Acreage: 6.200		
Reporting Period: December 15, 2014 to December 15, 2019		
		YES NO
1. Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Box 2
		YES NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.		
A Corrective Measures Work Plan must be submitted along with this form to address these issues.		
	DEPUTY CHIEF	12/12/19
Signature of Owner , Remedial Party or Designated Representative		Date

SITE NO. 734039

Box 3

Description of Institutional Controls

Parcel

0222000900

Owner

CITY OF SYRACUSE

Institutional Control

Landuse Restriction

NOW, THEREFORE, The city of Syracuse, for itself and its successors and/or assigns, covenants that:

1. Unless prior written approval by the Department of Environmental Conservation and Department of Health. (or any subsequently delegated agencies)(all hereinafter referred to as "the relevant agencies" is first obtained, there shall be no construction, use or occupancy of the site which results in the disturbance or excavation of the waste materials on site, which threatens the integrity of the asphalt cap or soil cover materials, or which results in unacceptable human exposure to contaminated soils.
2. Unless prior written approval by the relevant agencies is obtained, there shall be no change in the use of the site in any way that is inconsistent with its use as a fire training center. If such a new use of the site is approved, any and all further remedial activities at the site deemed necessary and appropriate by the relevant agencies will be performed by the City of Syracuse, its successors and/or assigns.
3. The City of Syracuse, its successors and/or assigns will not disturb the site in any way, except to properly maintain the integrity of the remedial measures undertaken and maintained at the site pursuant to the terms of the attached Record of Decision which is incorporated herein and made a part hereof as if herein set forth at length.
4. This Declaration is and shall be deemed to be a covenant running with the land, binding the City of Syracuse, its successors and/or assigns, and any agent, lessor or invitee of the City of Syracuse, its successors and/or assigns in perpetuity or until such time that the relevant agencies determine these restrictions are no longer necessary for the protection of human health and the environment.

Box 4

Description of Engineering Controls

Parcel

0222000900

Engineering Control

Cover System

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

 DEPUTY CHIEF
Signature of Owner, Remedial Party or Designated Representative

12/12/19
Date

IC CERTIFICATIONS
SITE NO. 734039

Box 6

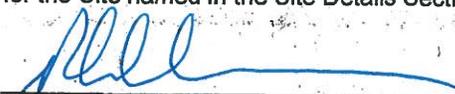
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I ROBERT S. CUSSEN at CITY OF SYRACUSE DEPARTMENT OF FIRE
print name print business address

am certifying as DEPUTY CHIEF OF FIRE (OWNER) (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.


Signature of **Owner**, Remedial Party, or Designated Representative
Rendering Certification

12/12/19
Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I John R. Trendowski at C&S Engineers, Inc.
print name 499 Col. Eileen Blvd
Syracuse, NY 13217
print business address

am certifying as a Qualified Environmental Professional for the City of Syracuse
(Owner or Remedial Party)

John R. Trendowski 12/18/19
Signature of Qualified Environmental Professional, for Stamp Date
the Owner or Remedial Party, Rendering Certification (Required for PE)

Appendix C

Site Photographs



