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SPILL PREVENTION & RESPONSE REGION 7 - SYRACUSE

Syracuse Fire Training Center

Site No. 734039

2015 Periodic Review Report

Prepared by



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

January 2015

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SECTION 1 - EXECUTIVE SUMMARY

Brief Summary

The Syracuse Fire Training Center in Syracuse, New York is used by the City of Syracuse for training firefighters. As part of their training activities in the past, they used waste flammable liquids, solvents and PCB oils as fuels. 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 for excavation and disposal of contaminated soil left in place by these activities. Also required were asphalt, concrete, and/or soil caps over the residual contaminated soils left in place as well as a Deed Restriction filed with the Onondaga County clerk's office, to provide appropriate notice of any planned change in use and to maintain the site. A copy of the Deed Restriction is shown 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 cover over the residual contamination remains in good condition and the Deed Restriction remains in place then the remedy will remain effective.

Compliance

There were no areas of non-compliance 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 the tenants with regard to the site history and condition periodically as a means to preserve the effectiveness of the remedy.

SECTION 2 - SITE OVERVIEW

C&S Engineers, Inc., on behalf of our client, 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, shown on *FIGURE 1*. An aerial view of the site is shown on *FIGURE 2*. It is bounded by State Faire Boulevard to the west, private properties to the north, Interstate 690 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 groundwaters 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 during the Silurian geologic period, 425 million years ago. Brine wells were installed in the area to extract salt from the deeper groundwater and the Fire Training Center site was used for salt drying beds during the 1800's and early 1900's.

The Fire Training Center was constructed in 1948 over wetlands filled with materials from an unknown source. 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 construction debris from the construction of the Interstate 690 highway.

The Syracuse Fire Training Center site 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, to 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, thirteen contained between 50 and 500 ppm PCBs, thirty four contained between 1 and 50 ppm PCBs, and thirty 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, 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 *Alternative 3* was selected as the proposed remedial measure. This included:

- 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

Also, 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 thus 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.

SECTION 5 - MONITORING PLAN COMPLIANCE REPORT

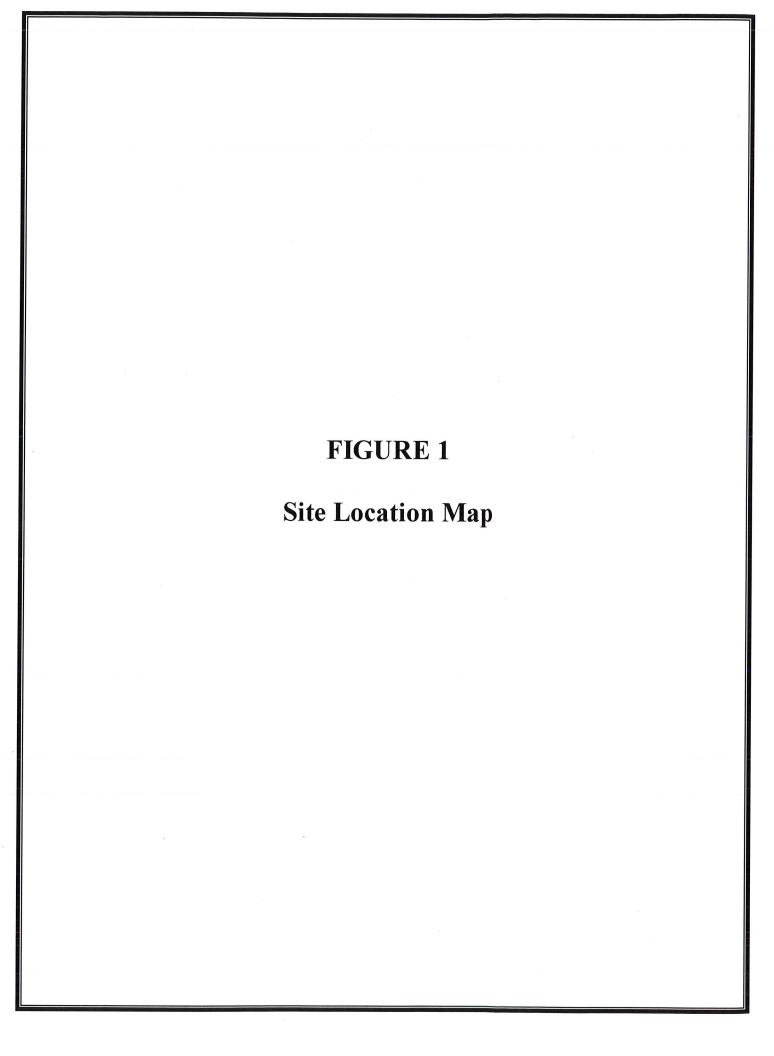
Not Applicable

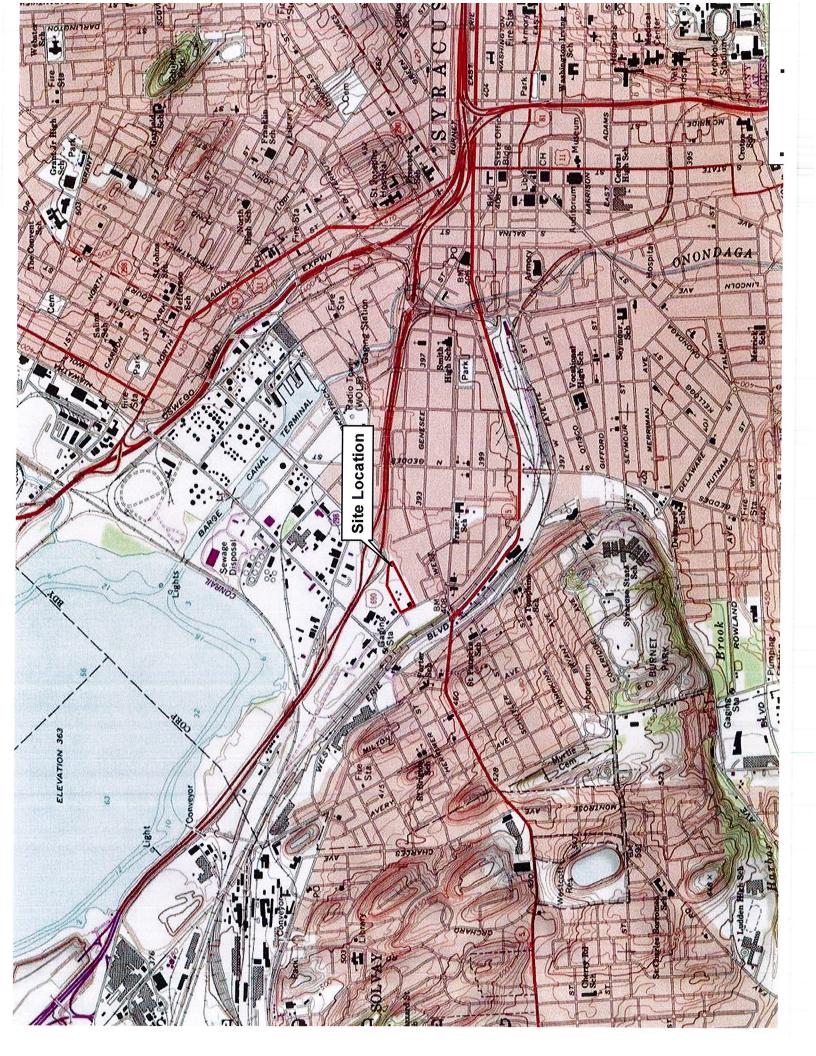
SECTION 6 - OPERATION AND MAINTENANCE PLAN

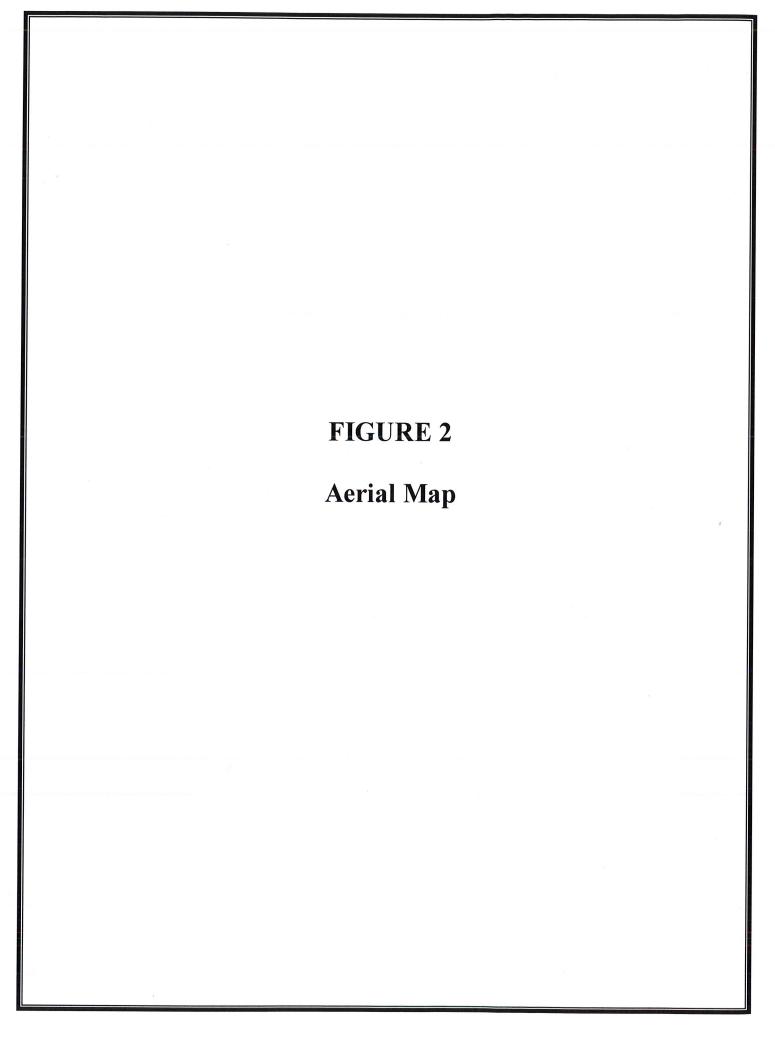
The site is maintained by the City of Syracuse Fire Department maintenance personnel such that the integrity of the asphalt and grass covered areas is preserved.

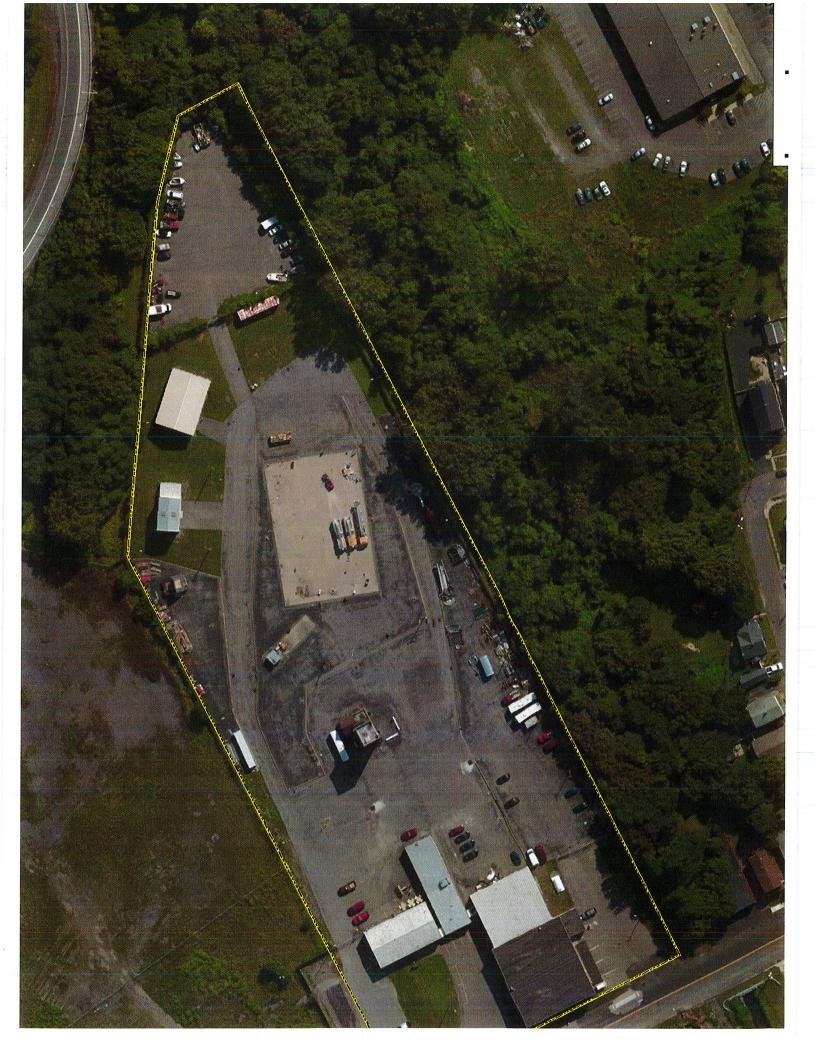
SECTION 7 - OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

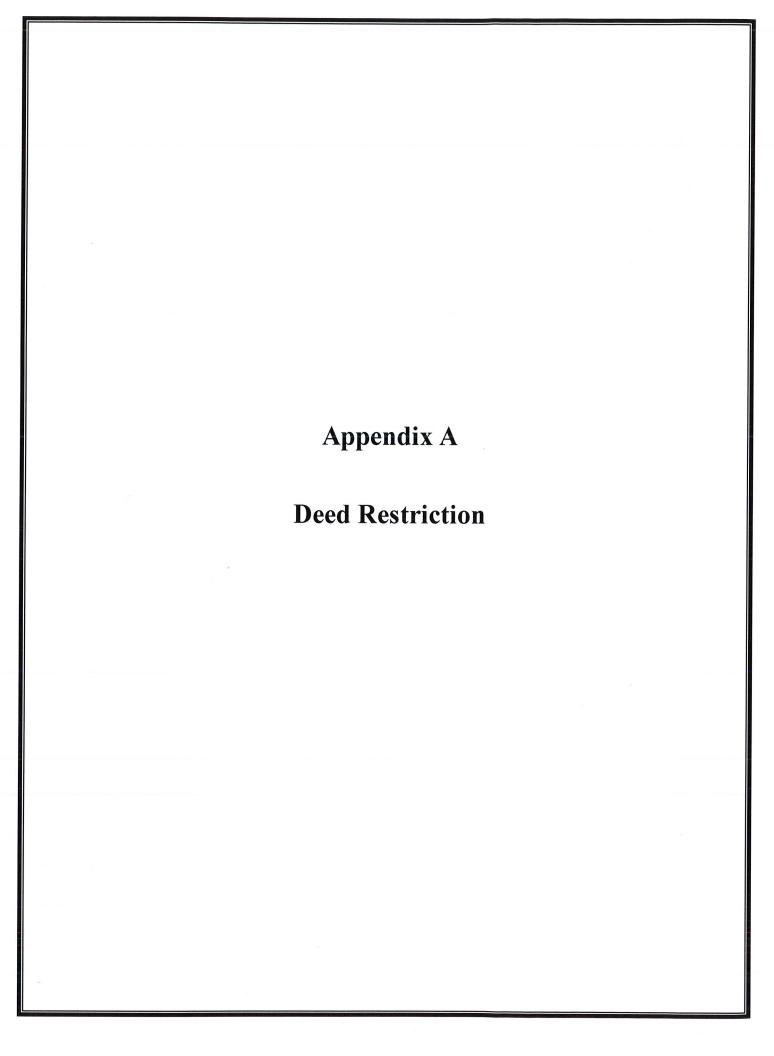
Based upon our inquiry of the persons responsible for oversight of the property, it appears that the City of Syracuse is maintaining the site consistent with the intent of the Restrictive Covenant. No changes are recommended. Recent site photographs are shown in Appendix C.











RESTRICTIVE COVENANT

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

THIS COVENANT, made the cinday 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

City Clerk

By: Nou A June 22 Roy A. Bernardi

Mayor

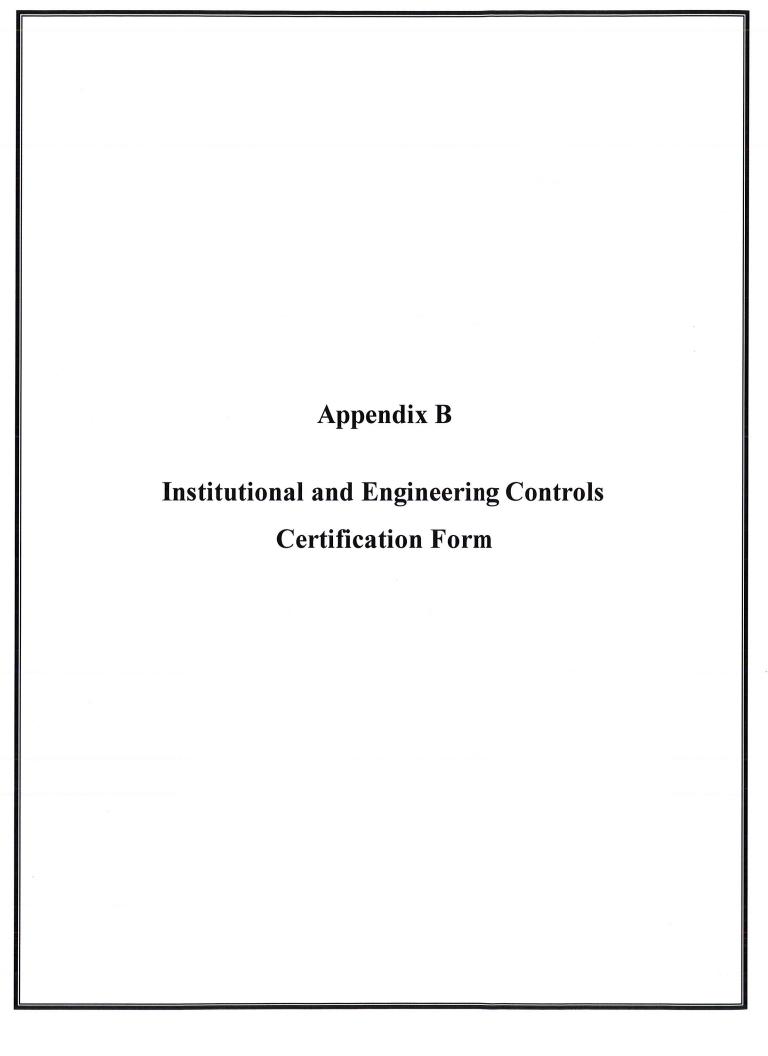
State of New York County of Onondaga City of Syracuse

ss:

On this day of 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

Notary Public

SUSAN M. CURRY
NOTARY PUBLIC, State of New York
No. 01CU6024990
Qualified in Onondage County
Commission Expires 03/21/96





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



Si	te No.	734039 .	Site Details	Box 1	
		racuse Fire Training Scho	ol		
SH	•	312 State Fair Boulevard racuse laga	Zip Code: 13204		
Re	eporting Peri	od: March 01, 2007 to Dece	mber 15, 2014		
				YES	NO
1.	is the infor	mation above correct?		×	
	If NO, inclu	ide handwritten above or on	a separate sheet.		
2.	Has some tax map an	or all of the site property been nendment during this Report	en sold, subdivided, merged, or undergone a ling Period?	0	×
3,	. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?			0	×
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?				×
	If you ans	wered YES to questions 2	thru 4, include documentation or evidence	•	
	that docur	nentation has been previo	usly submitted with this certification form.	•	
5.	that docur	nentation has been previo	usly submitted with this certification form.		×
5.	that docur	nentation has been previo	usly submitted with this certification form.	•	×
5.	that docur	nentation has been previo	usly submitted with this certification form.	D	NO NO
	Is the site of	nentation has been previo	usly submitted with this certification form	Box 2	
6.	Is the site of	nentation has been previourmently undergoing develor	usly submitted with this certification form. oment? ne use(s) listed below?	Box 2 YES	NO
6.	Is the site of the current Commercial Are all ICs/	nentation has been previourmently undergoing develor and site use consistent with the and industrial ECs in place and functioning	usly submitted with this certification form. oment? ne use(s) listed below?	Box 2 YES	NO 🗆
6.	is the curre Commercia Are all ICs/	entation has been previous currently undergoing developent site use consistent with the and industrial ECs in place and functioning the ANSWER TO EITHER QUEONOT COMPLETE THE RESERVED TO STATE THE RESERVED THE RESERVED TO STATE THE RESERVED THE RESERVED THE RESERVED TO STATE THE RESERVED T	usly submitted with this certification formoment? ne use(s) listed below? g as designed? ESTION 6 OR 7 IS NO, sign and date below a	Box 2 YES	NO
6. 7.	is the curre Commercia Are all ICs/	entation has been previous currently undergoing development site use consistent with the and industrial ECs in place and functioning the ANSWER TO EITHER QUIDO NOT COMPLETE THE Resources Work Plan must be CHTEF	usly submitted with this certification formoment? The use(s) listed below? The as designed? The estion of the estimate serior and data below a serior of this form. Otherwise continue.	Box 2 YES	NO

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

Engineering Control

0222000900

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 compete.

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.

Signature of Owner, Remedial Party or Designated Representative

CHIEF

3 JAN 15

Date

IC CERTIFICATIONS SITE NO. 734039

Box 6

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

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

am certifying as a Qualified Environmental Professional for the City of SYRACUST

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

