RocTerra

May 21, 2018

Stephanie Fitzgerald
Environmental Engineer
Div. of Remediation
NYSDEC Region 7
615 Erie Blvd. West, Syracuse, NY 13204-2400

Re: Annual Landfill Inspection Report (Year 14)
Syracuse China Landfill
Town of Salina, Onondaga County, New York
NYSDEC Site Number 7-34-053

Dear Ms. Fitzgerald:

Rocterra, LLC (Rocterra), on behalf of TPC-York Inc. (TPC-York), has prepared this letter report to summarize the required monitoring and maintenance activities completed at the Syracuse China Landfill site located in the Town of Salina, Onondaga County, New York (Site No. 7-34-053). In accordance with New York State Department of Environmental Conservation (NYSDEC) requirements, activities for the fourteenth year of Operation, Monitoring and Maintenance (OM&M) were performed at the site. In accordance with the OM&M Plan prepared by Remedial Engineering, PC dated September 25, 2003 and the schedule approved by NYSDEC, the following activities were performed:

- Inspection of key site features including the landfill surface, vegetation, fence, access road and drainage features such as rip rap swales and energy dissipaters;
- Maintenance activities; and
- Herbicide application.

Supporting figures and documentation are included at the end of this report.

LANDFILL MONITORING

Rocterra conducted an inspection of the landfill and surrounding site areas on August 7, 2017 and December 8, 2017. Rocterra personnel inspected site vegetation, the landfill cap surface and the northern wetlands for any signs of erosion or significant settlement.

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Rocterra also inspected the swales, drop chute, energy dissipation structures, monitoring wells MW-2, MW-5, MW-6, MW-8 and MW-10, permanent landfill gas vents GV-1 through GV-7, fencing, access road and Syracuse China signs for erosion, blockage or other damage. The results of Rocterra's inspection activities are summarized in the Site Monitoring, Inspection and Maintenance Forms, provided as Appendix A. Photographs showing the condition of key site features are provided as Appendix B. A site plan showing key site features is provided as Figure 2.

Rocterra's inspection indicated that the site was generally in good condition with no significant erosion or differential settlement at or around the landfill. The landfill surface was observed to be entirely stabilized with vegetation with the exception of two small animal burrows on the west slope of the landfill. The landfill drainage swales, drop chute and energy dissipation structures were observed to be in good condition, however, portions of the swales have become congested with vegetation. The permanent gas vents were also observed to be in good condition. The former trolley berm was observed to be generally clear of vegetation; rutting was observed due to wet conditions. The site fence was observed to be in good condition with the exception of approximately 100 feet of fencing along the northern border/Factory Avenue and approximately 40 feet near the Culvert along the southern border/train tracks (discussed further below in the Comments section). Vegetation overgrowth was observed periodically along the east, south and west fence line. Vegetation was cleared to assure the signs on the fence within the Factory Avenue right-of-way were unobstructed.

MAINTENANCE ACTIVITIES PERFORMED

Mowing and Weed-Whacking

Annual mowing and weed-whacking activities were completed by Lakeview Lawn and Landscape, Inc. on December 8, 2017. Mowing was conducted on the landfill surface, within the eastern portion of the site (outside of wetland areas) and along the access road. Mowing and weed-whacking were conducted within the landfill surface swales to remove woody growth. Photographs documenting the landscaping activities are included within Appendix B.

Herbicide Application

Portions of the swales have become congested with vegetation. Treatment with a widely used aquatic herbicide Rodeo was completed on August 7, 2017. Additional treatments will occur and are discussed further below.

PROPOSED YEAR 15 (2018) OM&M AND MAINTENANCE ACTIVITIES

Herbicide Application
Portions of the swales have become congested with vegetation. Treatment with a widely used aquatic herbicide Rodeo is proposed for Summer and Fall 2018.

Mowing and Weed-Whacking
In accordance with the OM&M Plan, the landfill will require annual mowing and weed-whacking in fall 2018 to prevent woody vegetation growth on the landfill cap and within the drainage swales.

Annual Landfill Inspection
In accordance with the OM&M Plan, an inspection of the landfill is proposed for Year 15 of OM&M. The annual inspection is scheduled for October 2018.

SAMPLING EVENTS

Groundwater Monitoring
TPC-York was granted approval via email correspondence dated November 20, 2015 to amend the groundwater sampling period to every five years. The next sampling event is scheduled to be performed in December 2019.

COMMENTS

Rip Rap Rocks
40 or more rocks from the upper landfill swale were thrown onto the western slope of the landfill. All of rocks will be placed back into the swale prior to the 2018 mowing event.

Fencing
Approximately 100 feet of fencing along the northern border/Factory Ave has begun to deteriorate due to oxidation of the support posts. Fencing contractors have been contacted and repairs will be performed in 2018.

Animal Dens/Burrows
Two animal dens/burrows were observed in the west slope of the landfill (pictures are included within Appendix B). These areas will be observed for differential settling and/or erosion during the 2018 maintenance events.

Culvert
A culvert that runs beneath the CSX railroad tracks and exits along the southern border of the site has lost integrity due to erosion. There is approximately 40 feet of fencing in the vicinity of the culvert that is in danger of being destabilized as a result of the culvert deterioration (pictures have been included within Appendix B). Ownership of the culvert

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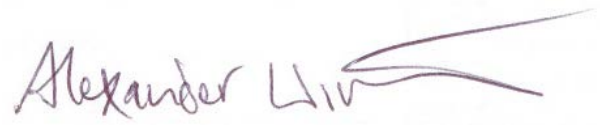
is being determined so that the appropriate party can be contacted to undertake the necessary repairs. As an alternative approach, an evaluation is being made of the feasibility of relocating the fence away from the culvert. However, relocation would either need to avoid the adjacent CSX railroad right-of-way or permission from CSX would need to be obtained. An update will be provided at the conclusion of the evaluation of these various alternatives.

Periodic Review Report

The last Periodic Review Report (PRR) was completed in December 2016. The Department approved a request to amend the PRR schedule to a five-year frequency in an email dated March 21, 2014. The site is not currently active and site maintenance/activities are limited to the items reported above. The institutional controls identified in the most recent 2016 PRR/Declaration of Covenants and Restrictions (groundwater use restrictions, soil management and site management) remain in place. The next PRR submission is scheduled to be submitted in December 2021.

Please call the undersigned with any questions regarding this report.

Attachments:	**Figure 1:**	Site Location Map
	Figure 2:	Site Plan
	Figure 3:	Groundwater Monitoring Well Map
	Appendix A:	Site Monitoring, Inspection and Maintenance Forms
	Appendix B:	Photographs



May 21, 2018

Alexander Wirth
Principal, Senior Geologist

Date

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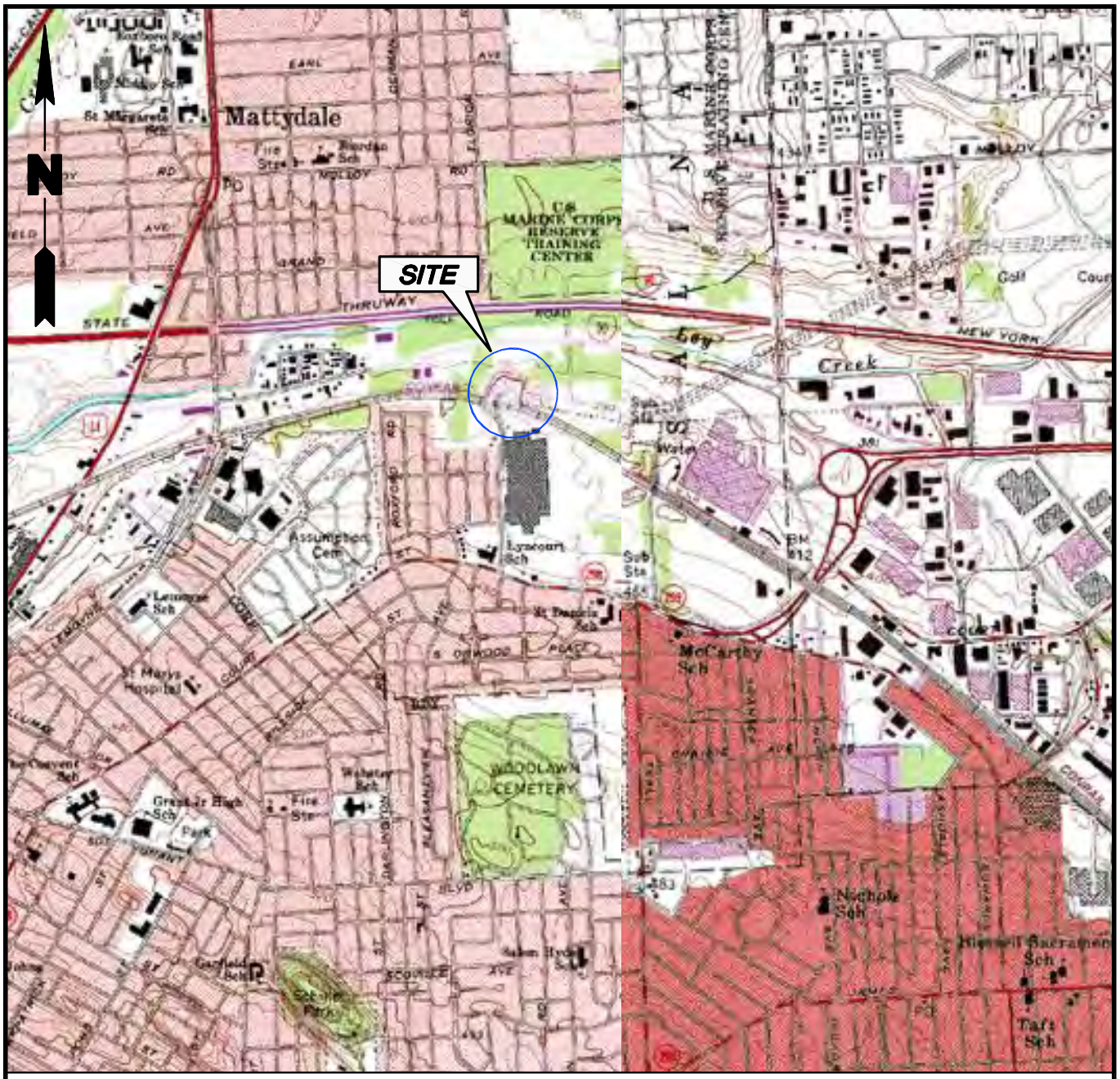
FIGURES



SOURCE

U.S.G.S. SYRCAUSE EAST AND WEST, NEW YORK QUADRANGLES
7.5 MINUTES SERIES (TOPOGRAPHIC)

Title:

SITE LOCATION MAP

SYRACUSE CHINA LANDFILL
TOWN OF SALINA, ONONDAGA COUNTY, NEW YORK

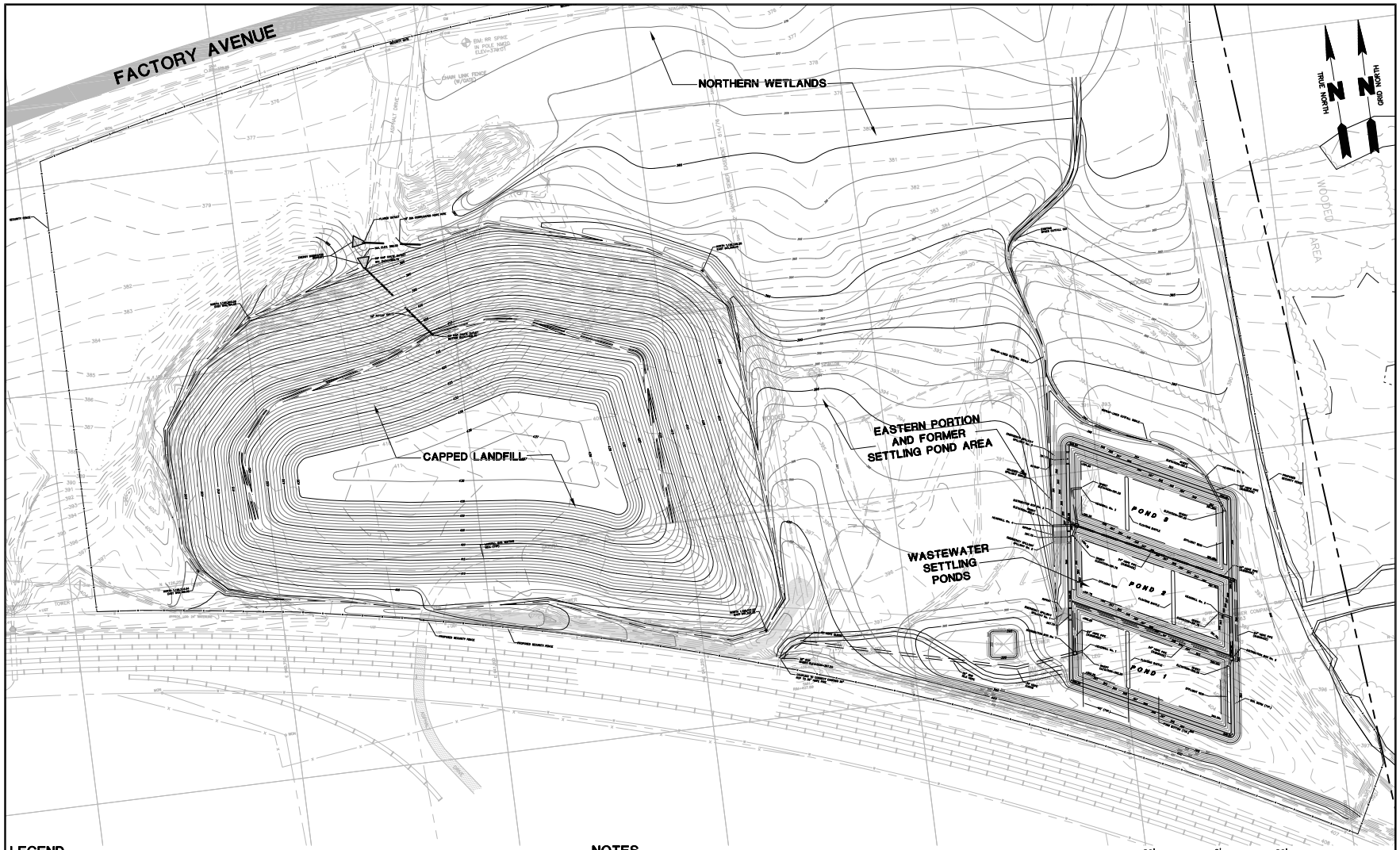
Prepared For:

PFALTZGRAFF CO.

RocTerra

Site Location Map

FIGURE
1



LEGEND

- EXISTING PROPERTY LINE
- APPROXIMATE LANDFILL LIMIT
- EXISTING EASEMENT
- 434 DESIGN 1 FOOT CONTOUR
- 435 DESIGN 5 FOOT CONTOUR
- x438 DESIGN SPOT ELEVATION
- 404 PRE-EXISTING 1 FOOT CONTOUR
- 405 PRE-EXISTING 5 FOOT CONTOUR
- EXISTING RAILROAD TRACKS
- OHW EXISTING OVERHEAD ELECTRICAL TRANSMISSION WIRES
- SAN EXISTING SUBSURFACE SANITARY SEWER WATERLINE
- EXISTING APPROXIMATE LOCATION 24" WATERLINE
- GAS EXISTING GAS LINE LOCATION
- UGT EXISTING UNDERGROUND TELEPHONE LINE (FIBER OPTIC) LOCATION
- DESIGN DOWN CHUTE
- FENCE
- RIM=397.41 EXISTING MANHOLE RIM ELEVATION
- EXISTING UTILITY POLE WITH OVERHEAD WIRES
- UGT EXISTING UNDERGROUND TELEPHONE CABLE MARKER
- GM EXISTING GAS MARKER
- 15" PVC EXISTING POLYVINYL CHLORIDE CHLORIDE PIPE WITH DIAMETER
- MON EXISTING SURVEY MONUMENT SET 3-8-1990 CAPPED IRON ROD SET IN CONCRETE)
- SMH EXISTING SANITARY SEWER MANHOLE
- INV.=36" EXISTING PIPE INVERT ELEVATION
- 36" CMP EXISTING CORRUGATED METAL PIPE WITH DIAMETER

NOTES

1.) BASE MAP INFORMATION BASED ON PLAN ENTITLED:, "MAP OF PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY", PARCEL OF LAND, PART OF MILITARY LOT 19, TOWN OF SALINA, JANUARY 20, 1998, SCALE 1" = 50', PROJECT 90006, PREPARED BY RYAN SURVEY, PORTER BUILDING, NORTHERN LIGHTS OFFICE PARK, SYRACUSE, NY 13220-3225.

2.) BASIS OF BEARINGS: TRUE NORTH, BASED ON CONTROL ESTABLISHED BY N.Y.S.D.O.T.

3.) NORTH & EAST COORDINATES AND BEARINGS IN PARENTHESIS () ARE REFERENCED TO THE CENTRAL ZONE OF THE NEW YORK STATE COORDINATE SYSTEM AS ESTABLISHED BY DIFFERENTIAL GPS METHODS.

4.) ELEVATION DATUM IS MEAN SEA LEVEL, BASED ON CONTROL ESTABLISHED BY U.S.G.S. (NGVD 29).

5.) PLAN BASED ON DESIGN DRAWINGS, AS-BUILT DRAWINGS NOT AVAILABLE. ACTUAL SITE FEATURES AND ELEVATIONS WILL VARY.

Title:

Site Plan

TOWN OF SALINA, ONONDAGA COUNTY, NEW YORK

Prepared For:

THE PFALTZGRAFF CO.

RocTerra

FIGURE 2

Google Earth Pro

feet 1000
meters 400

RocTerra

Groundwater Monitoring Well Map

Figure
3

APPENDIX A

Table 1
MONITORING WELL GAUGING, GROUNDWATER ANALYTICAL AND MONITORING DATA

Annual Landfill Inspection Report
Syracuse China Landfill
Town of Salina, Onondaga County, New York
NYSDEC Site Number 7-34-053

Sample ID	Date	Sample Time	Depth to Water (Feet)	Depth to Bottom (Feet)	Top of Casing Elevation (Feet, Mean Sea Level)	Corrected Groundwater Elevation (Feet, Mean Sea Level)	Lead (mg/l)	Conductivity (mS/cm)	Dissolved Oxygen (PPM)	pH	Temperature (Celcius)	Turbidity (NTU's)
NYSDEC Standards							**0.025**					
MW-1	11/7/12	14:30	21.78	25.3	400.8	379.02	<0.010	0.95	6.55	7.16	11.4	13.2
	9/11/13	15:30	19.84	25.3	400.8	380.96	<0.010	1.01	6.99	7.10	15.3	11.0
	12/31/14	14:30	20.77	25.3	400.8	380.03	<0.010	0.98	6.54	7.11	12.2	9.8
MW-2	11/7/12	14:00	5.32	13.3	391.2	385.88	<0.010	1.04	2.01	7.30	12.3	2.89
	9/11/13	15:00	5.23	13.3	391.2	385.97	<0.010	1.00	2.57	7.20	14.6	3.33
	12/31/14	14:00	5.28	13.3	391.2	385.92	<0.010	1.11	2.32	7.25	13.8	3.01
MW-5	11/7/12	15:30	5.13	13.4	387.4	382.27	<0.010	1.11	5.65	7.33	10.1	7.21
	9/11/13	16:00	4.64	13.4	387.4	382.76	<0.010	1.21	6.11	7.21	12.3	5.03
	12/31/14	15:00	4.84	13.4	387.4	382.56	<0.010	1.17	6.77	7.22	11.8	4.99
MW-6	11/7/12	13:00	4.73	17.0	411.3	406.57	<0.010	0.69	4.62	7.42	12.0	13.1
	9/11/13	14:00	4.15	17.0	411.3	407.15	<0.010	0.88	4.89	7.32	13.3	10.01
	12/31/14	13:00	4.44	17.0	411.3	406.86	<0.010	0.77	4.92	7.44	12.8	9.98
MW-8	11/7/12	17:00	7.15	23.0	388.7*	381.55	<0.010	3.07	2.24	6.88	9.0	9.67
	9/11/13	17:30	4.43	23.0	388.7	384.27	<0.010	2.99	2.84	6.99	11.1	9.77
	12/31/14	16:30	6.63	23.0	388.7	382.07	<0.010	3.02	2.64	6.89	10.4	8.88
MW-10	11/7/12	16:30	3.30	17.0	379.1	375.80	<0.010	2.84	2.49	6.84	11.1	14.2
	9/11/13	17:00	3.28	17.0	379.1	375.82	<0.010	3.01	2.89	7.01	13.3	12.1
	12/31/14	16:00	3.33	17.0	379.1	375.77	<0.010	2.98	2.66	6.89	12.2	10.11

Notes:
<1.0 - Not detected at or above the laboratory reporting limit shown.
NYSDEC Standards and Guidance Values - New York State Department of Environmental Conservation Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values, June 1998 and Addendum April 2000
* Revised elevation datum. Original TOC elevation= 387.9'

Table 2
INSPECTION AND MAINTENANCE FORM

Annual Landfill Inspection Report
Syracuse China Landfill
Town of Salina, Onondaga County, New York
NYSDEC Site Number 7-34-053

Item	Action	Notes	Corrective Action Suggested
MW-1	Groundwater sampling, inspect for damage	Damaged/destroyed	Abandoned November 2, 2016
MW-2	Groundwater sampling, inspect for damage	NA	None
MW-5	Groundwater sampling, inspect for damage	NA	None
MW-6	Groundwater sampling, inspect for damage	NA	None
MW-8	Groundwater sampling, inspect for damage	NA	None
MW-10	Groundwater sampling, inspect for damage	NA	None
GV-1	Inspect for damage	NA	Annual inspection scheduled for October 2018
GV-2	Inspect for damage	NA	Annual inspection scheduled for October 2018
GV-3	Inspect for damage	NA	Annual inspection scheduled for October 2018
GV-4	Inspect for damage	NA	Annual inspection scheduled for October 2018
GV-5	Inspect for damage	NA	Annual inspection scheduled for October 2018
GV-6	Inspect for damage	NA	Annual inspection scheduled for October 2018
GV-7	Inspect for damage	NA	Annual inspection scheduled for October 2018
Landfill Cap	Inspect vegetation, inspect for errosion, inspect for significant/differential settling, mowing	Animal dens/burrows observed	Landscaping/mowing scheduled for October 2018, monitor animal dens/burrows on western slope
Northern Wetland	Inspect vegetation	NA	Annual inspection scheduled for October 2018
Swales	Inspect for damage/blockage, weed wacking	Swales have significant vegetation	Herbicide application Spring/Summer/Fall 2018
Drop Chute	Inspect for damage/blockage, weed wacking	NA	Landscaping/weedwacking scheduled for October 2018
Former Trolley Berm (via Factory Ave)	Inspect for erosion, rutting, mowing	Low spot in southeast corner restricts access to the landfill by vehicle at times due to flooding/wet soils	Monitor for any significat erosion
Fence	Inspect integrity, inspect for significant vegetation	Vegetation observed along some areas of the fence	Annual inspection scheduled for October 2018, repairs to fence areas along the northern/southern borders scheduled for 2018
Signs	Inspect for vegetation/visual impairment	NA	Annual inspection scheduled for October 2018

Notes:
NA- Not Applicable

APPENDIX B

Site Photos

Cap: Facing South/East/North

Chute

Top Swale/Bottom Swale/Slope: Facing East

Former Trolley Berm: Facing North

Upper Swale/Slope: Facing Southwest

Upper Swale/Slope: Facing Northeast

Animal Den/Burrow #1

Animal Den/Burrow #2

Culvert Area