NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Boundary Modification Report

1/22/2014

Site Code:	738029	**Site Name:**	Former Miller Container Site
City:	Volney	**Town:**	Volney
Region:	7	**County:**	Oswego
Current Classification:	02	**Proposed Site Size:**	13.2
Current Site Size (acres):	50.20	**Extra Details:**	
Significant Threat:	Previously	**Site Type:**	
Priority ranking Score:	40	**Project Manager:**	John Grathwol

Summary of Approvals

Originator/Supervisor: James Moras	**12/10/2013**
Regional Hazardous Waste Remedial Engineer: Gregg Townsend:	**01/09/2014**
BEEI of NYSDOH:	**01/14/2014**
CO Bureau Director: Robert Cozzy, Director, BURB:	**12/20/2013**
Assistant Division Director: Michael J. Ryan, P.E.:	**1/21/2014**

Site Description

Location:
The former Miller Container site is located in a industrial park in the Town of Volney, Oswego County.

Site Features:
The main site features include a large warehouse facility and parking lot. The surrounding parcels are commercial. The municipal water supply wells for the City of Fulton are 0.7 miles east of the site.

Current Zoning:
The site property is zoned commercial.

Historic Use:
A concrete spill containment tank located adjacent to the north side of the Container complex cracked allowing organic solvents (chloromethanes, chloroethanes and chloroethenes) to leak out. It is not certain how long the leakage occurred. The tank was originally installed in 1976. Contaminants have also been detected at former drum storage areas on the north and south sides of the container plant building. Solvent contaminated oil was also found beneath the south corner of the building in the area where a sub-floor sump was being constructed.

The remedial investigation revealed a plume of contaminants at least 1300 feet in length. Two additional areas that are potential sources of contamination were identified in 1990, and they have been investigated. Since the contaminant plume reached the City of Fulton public water supply, a treatment system was constructed on the public water supply wells and began operation in July 1992.

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A Record of Decision (ROD) was signed for this site on March 20, 1995. The ROD specifies a remedy consisting of a groundwater collection system, soil vapor extraction (SVE) and treatment of the collected groundwater. Construction of the remedial action was completed in late 1996 and operation of it began in February 1997. In December 1999, Miller conducted a pilot test of a permeable reactive barrier (PRB) system, where iron filings are injected into subsurface soils to remediate the groundwater plume. Although the pilot test was successful, the construction of PRB system was terminated due to the subsurface geology (i.e. large rocks, non-uniform confining clay layer, etc.) which is not conducive for this remedial technique. Based on the 2007 pilot test results, Miller concluded that anaerobic bioremediation would also not be effective in enhancing groundwater remediation. A vapor intrusion evaluation was completed in 2006. To improve progress on the site remediation efforts, the PRP evaluated other enhanced groundwater remedial alternatives.

In August 2010, the NYSDEC approved the Remedial Design to address on-site soil vapor and implement an enhanced groundwater remedy. The PRP constructed a soil vapor extraction system and completed enhanced groundwater remedy in Summer 2011.

Operable Units:
The site was divided into two operable units.

An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

Operable Unit 01 consists of the remedial program at the site. Soil and groundwater contamination are being remediated by a soil vapor extraction and pump & treatment systems, respectively.

Operable Unit 02 pertains to the soil vapor intrusion (SVI) evaluation at the site. The soil vapor extraction system also addresses the SVI issue within the office space at the on-site building. Based on previous on-site soil vapor sampling, soil vapor intrusion is not a concern elsewhere on-site.

Site Geology and Hydrogeology:
The site is underlain by glacial and lake deposits consisting of a variety of sand, gravel, silt, and clay. These formations range in thickness from 20 feet east of the plant to near 90 feet in the center area of the site. These unconsolidated sediments are underlain by bedrock which consists of interbedded shale, sandstone, and mudstone.

Groundwater in the area of the site flows in a generally westward direction toward the Oswego River and is 15 to 17 below ground surface.

Current Status:
The soil vapor extraction and on-site groundwater treatment system continue to operate without problems. The shut down criteria were achieved for the treatment system on the public water supply. To insure the continued quality of the City's public water supply and the success of the on-site groundwater treatment system, the groundwater monitoring program remains in effect.

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Contaminants of Concern (Including Materials Disposed)	Quantity Disposed
OU 01	
POLYCHORETHYLENE	0.00
1,1,1-TRICHLOROETHANE (TCA)	0.00
TRICHLOROETHYLENE (TCE)	0.00
TETRACHLOROETHYLENE ("PERC")	0.00
TRICHLOROURETHANE	0.00
TRICHLOROETHENE (TCE)	0.00

Analytical Data Available for : Groundwater, Soil

Applicable Standards Exceeded for: Groundwater, Drinking Water

Site Environmental Assessment

The contaminants of concern are tetrachloroethylene (PCE), trichloroethane (1,1,1-TCA), and trichloroethylene (TCE). Several sources of soil contamination have been remediated. A soil vapor extraction system currently treats the final VOC soil source and addresses the soil vapor intrusion issue for the on-site structure.

There is a plume of VOC groundwater contamination contained on-site. Exceedances of standards, criteria, and guidance include VOCs above drinking water standards.

A groundwater treatment system was installed on the municipal water supply. Since the results of this groundwater sampling indicate achievement of the cleanup criteria, the supply well is currently not undergoing treatment. To insure the continued quality of the City's public water supply and the success of the on-site treatment system, the groundwater monitoring program remains in effect. The treatment system has been turned off but still is in place in case further treatment is necessary.

The groundwater plume is contained on-site and is being treated via soil vapor extraction and groundwater pump and treat.

Site Health Assessment

Since some contaminated soils remain at the site below concrete or buildings, people will not come in contact with contaminated soils unless they dig below the surface materials. People are not drinking the contaminated groundwater. Volatile organic compounds (VOCs) in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. A soil vapor extraction system installed on-site will minimize the potential for soil vapor intrusion to occur in the on-site building.

Remedy Description and Cost

Remedy Description for Operable Unit 01

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downgradient pumping wells to cut-off the plume, and an air stripper on the municipal well.
Jim Harrington's ROD Descriptions:
Groundwater Collection and treatement system. Soil vapor extraction system in souther sour

Total Cost $1,500,000

Remedy Description for Operable Unit 01A

Under an IRM Consent Order signed in November 1987, the PRP designed and constructed a groundwater collection and treatment system to address solvent contamination in site groundwater. The original system consisted of three recovery wells and an air stripper. The system went on-line in July 1988. This original system was marginally effective. The supplemental RI/FS lead to a comprehensive and successful remedy with ten additional extraction wells.

Total Cost $200,000

Remedy Description for Operable Unit 01B

The PRP planned to construct permeable reactive barriers to shorten the Site Management phase of the project. Although the iron filings pilot test was successful, the site geology was not conducive for implementation.

Total Cost

Remedy Description for Operable Unit 01C

Enhanced anaerobic biodegradation achieved through injections of food-grade, carbon-based solution as a remedial technology to treat the groundwater. A pilot test was conducted in 2007.

Total Cost

Remedy Description for Operable Unit 01D

The PRP using a Membrane Interface Probe performed a supplemental remedial investigation under and adjacent to VOC source areas. Another soil source area was found (now being remediated via soil vapor extraction) and the operation of the existing groundwater treatment system was enhanced.

Total Cost

Remedy Description for Operable Unit 02

Total Cost

Site Code: 738029 **Site Name:** Former Miller Container Site

Remedy Description for Operable Unit 02A

The PRP was required to install an active sub-slab depressurization system for the existing facility. An alternate remedy (Soil Vapor Extraction) was proposed and approved by the State, instead of the SSDS. The SVE will remediate contaminated soil and depressurize the sub-slab environment.

Total Cost

Remedy Description for Operable Unit 02B

Two soil sources areas were identified during the PRP's membrane interface probe investigation. The PRP installed a soil vapor extraction/air sparging system to remediate this contamination and also address soil vapor intrusion.

Total Cost

OU 00 **Site Management Plan Approval: 07/01/1997** **Status: ACT**

Basis for Boundary Change

The original site boundary was based on the tax maps parcels that the PRP owned. The PRP sold these parcels, but continues to operate the soil vapor extraction and groundwater treatment systems at the site. This boundary modification from 50.2 to 13.2 acres will reduce the size of the site to only include the soil and groundwater source areas that existed or are currently being treated at this site; none of the area that is being proposed to be removed from the site was ever subject to remediation.

Deed restrictions prohibiting on-site groundwater use will be obtained from the site owner (not a PRP) upon approval of this boundary modification. Therefore, this boundary modification is the first step in reclassifying this site from Class 2 to 4.

NEW YORK
state department of
HEALTH

Nirav R. Shah, M.D., M.P.H.
Commissioner

Sue Kelly
Executive Deputy Commissioner

January 14, 2014

Mr. Robert Cozzy
NYS Dept. of Environmental Conservation
625 Broadway
Albany NY 12233

Re: **Site Boundary Modification Proposal**
Former Miller Container
Site #738029
Fulton, Oswego County

Dear Mr. Cozzy:

Per your request, we have reviewed the New York State Environmental Conservation's (NYSDEC) proposal to modify the boundary of the referenced site, which is on NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites. Based on this review, I understand the majority of the site was not impacted by the chlorinated solvent spills. The original site boundary was based on the tax map parcels that the responsible party owned. The responsible party sold these parcels in the past, but continues to operate a soil vapor extraction and groundwater treatment systems at the site. This boundary modification from 50.2 acres to 13.2 acres will reduce the size of the site to include only the soil and groundwater contamination source areas that existed or are currently being treated at this site. The area that is being proposed to be removed from the site was never subject to remediation.

Based on the information provided, I concur with the proposal to modify the boundary of the site. If you have any questions please call Maureen Schuck or me at 518-402-7860.

Sincerely,

Krista M. Anders

Krista M. Anders, Director
Bureau of Environmental Exposure Investigation

ec: A. Salame-Alfie, Ph.D.
M. Schuck / A. Demarco / e-File
J. Strepelis – NYSDOH CRO
N. Roy – OCHD
M. Ryan / K. Lewandowski / J. Moras / J. Grathwol – NYSDEC Central Office
H. Warner – NYSDEC Region 7

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Operations & Maintenance Inc.
Riverview Business Park
1850 Route 57
Fulton, NY 13069

Gary Mullen, Jr.
Project Manager
gmullenomi@gmail.com
Mobile 315-378-5088

December 9, 2013

Mr. John Grathwol
New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau C
625 Broadway
Albany, NY 12205

Subject: Former Miler Container Site 7-38-029

Dear John:

This letter is a follow up to our conversation on December 5, 2013 with respect to the pending Boundary Modification Request for the referenced site. Miller Brewing Company originally petitioned the NYSDEC in July 2010 for a modification to the listed site boundary in the Registry of Inactive Hazardous Waste Disposal Sites for the Former Miller Container Site #7-38-029 (the "Site"), located in Town of Volney, Oswego County, New York. The Site Location Map is included as **Figure 1**.

This site was listed in the Registry in 1994. At the time of the initial listing, the boundaries of the Site included the 50.2 acre parcel identified as Tax ID # 254.00-05-04.01. The existing Property Boundary and original Site Boundary are shown on **Figure 2** along with the Proposed Site Boundary.

Subsequent to the original listing of the Site, supplemental investigations, remedial actions, and groundwater monitoring have been performed. The results of these activities have been reported to NYSDEC. The information collected over the past 19 years demonstrates that the limits of residual impacts to soils and groundwater from historical spills are significantly less than the 50.2 acres included in the original site boundary.

Residual on-site soil impacts in excess of the Protection of Groundwater Standards in 6 NYCRR part 375-6.8(b) remain in two areas of the Site. These areas were fully delineated during the Supplemental Site Investigation performed in 2008. The total area of impacted soils was approximately 21,200 ft² (0.49 acres). The approximate limits of the remaining residually impacted soils are included on **Figure 3**. Since the time of the first Boundary Modification request a Soil Vapor Extraction system was implemented to remediate these impacted soils and is currently in operation. The area affected by the SVE System is within the new proposed Site Boundary shown on **Figure 2.**

Operations & Maintenance Inc.
Riverview Business Park
1850 Route 57
Fulton, NY 13069

Gary Mullen, Jr.
Project Manager
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Mobile 315-378-5088

The historical groundwater contaminant plume delineated in the RI extended from the source areas to the City of Fulton municipal well field. The composite plume from the source areas covered approximately 22.5 acres. Using the most current groundwater data available for the existing monitoring well network, the plume covers approximately 25% of the area of the plume when first delineated. Continued operation of the remedial system will cause the plume to further contract and the total area of plume to diminish.

The new proposed modification to the Site Boundary is included on **Figure 2**. The new Boundary was developed using the most recent analytical data collected from the monitoring wells. The individual contaminant levels in all site monitoring wells located outside the footprint of the new boundary are at or below the Ambient Water Quality Standard of 5.0 μg/l. The proposed area completely encompasses the areas of residual soil impacts as well as the associated groundwater plume.

The new proposed Site Boundary shown on **Figure 2** is within the legal boundaries of the Riccelli Fulton, LLC property (Tax ID # 254.00-05-04.01). A legal description (metes and bounds) of the new proposed Site boundary will be provided once approval of this proposal has been granted. The total area included within the new boundary is approximately 13.2 acres.

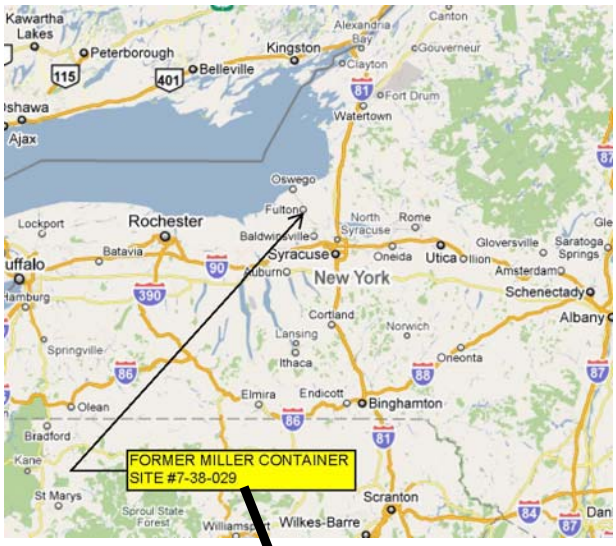
If you have any questions or require additional information please let me know

Sincerely,

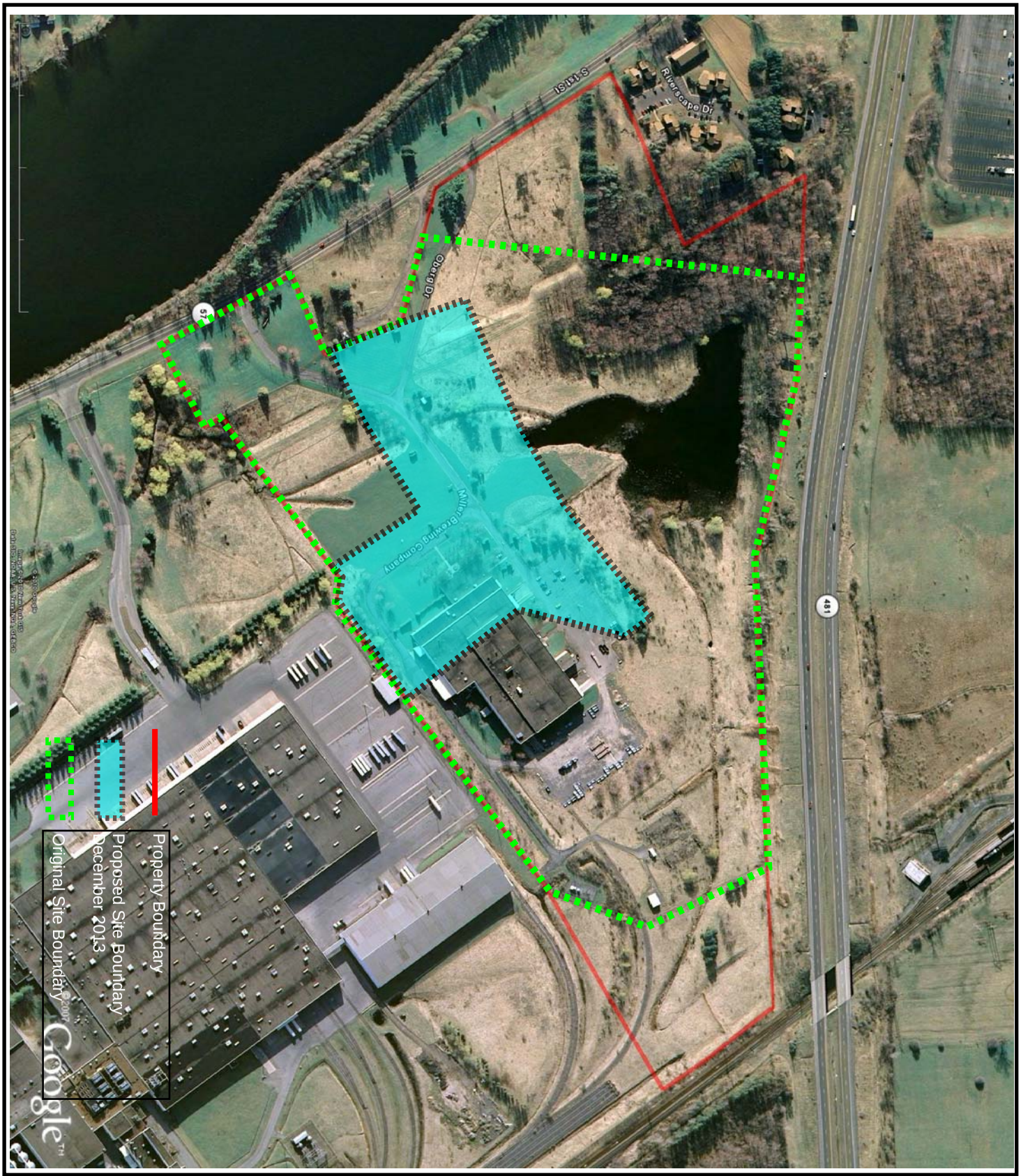
Gary Mullen, Jr.
Operations & Maintenance Inc.

cc: Audrey Templeton, MillerCoors, LLC, Milwaukee, WI
Steve Rogers, Miller Brewing Co., Milwaukee, WI
Margret Sheen, NYSDEC
Jim Moras, NYSDEC
Barry Kogut, Bond Schoeneck & King
William Buchan, OMI, Constantia, NY
Dean Merritt, OMI, Syracuse, NY

Attachments:



FORMER MILLER CONTAINER SITE
#7-38-029
Boundary Modification October 2013
FIGURE 1
Site Location Map



FORMER MILLER CONTAINER SITE
#7-38-029
Boundary Modification October 2013
FIGURE 2
Current Property Boundary
Proposed Site Boundary

FORMER MILLER CONTAINER SITE
#7-38-029
Boundary Modification October 2013
FIGURE 3
Residual Impacted Soil