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REMEDIAL ACTION REPORT

Record of Preparation, Review, and Approval

MOHONK ROAD INDUSTRIAL PLANT SUPERFUND SITE

HAMLET OF HIGH FALLS, ULSTER COUNTY, NEW YORK
Identification Number: NYD986950012

OPERABLE UNIT 1

POINT OF ENTRY TREATMENT SYSTEMS

RESIDENTIAL AND COMMERCIAL PROPERTIES

This report has been prepared in accordance with USEPA OSWER Directive 9320.2-09A and will be used as the basis for development of the site Final Close Out Report

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1. Introduction

This document presents the Remedial Action Report (RAR) for the Point of Entry Treatment (POET) systems installed and maintained in residential homes and businesses. These systems typically consisted of two granular activated carbon (GAC) units, particulate filters, and ultraviolet (UV) units for disinfection. The POET systems were installed as a result of drinking water wells containing volatile organic compounds (VOCs) exceeding the New York State (NYS) Maximum Contaminant Levels (MCLs) at the Mohonk Road Industrial Plant (MRIP) Superfund site (the Site) (Identification No. NYD986950012) located in the Hamlet of High Falls, New York. This report is consistent with the requirements of the U.S. Environmental Protection Agency (USEPA) guidance documents entitled, *Remedial Action Report: Documentation for Operable Unit Completion* (June 1992), and *Closeout Procedures for National Priorities List Sites (OSWER Directive 9320.2-09A-P, PB98-963223)* (January 2000).

This RAR documents the pre Record of Decision installation of the POET systems by New York State as well as the post Record of Decision operation and maintenance (O&M) of the POET systems undertaken by USEPA as a long term remedial action. The operation and maintenance was performed by USACE through an interagency agreement (IAG DW96941895) with USEPA from 25-September-2000 through December 2007. The POET systems were removed from service in December 2007 when the public water supply system became operational.

This RAR was developed by the U.S. Army Corps of Engineers (USACE) for USEPA Region 2 (USEPA R2) in consultation with the New York State Department of Environmental Conservation (NYSDEC).

2. Operable Unit Background

The MRIP site is located in the Hamlet of High Falls in Ulster County, New York, approximately 12 miles south-southwest of the city of Kingston and 7 miles north-northwest of the village of New Paltz. It is situated within the towns of Marbletown and Rosendale. The area is primarily residential. The MRIP site itself is located on Mohonk Road, south of High Falls (see Figure 1). The site consists of the MRIP property (186 Mohonk Road), as well as surrounding properties that have been impacted by a VOC contaminated groundwater plume originating from the MRIP property.

The MRIP site first came to the attention of state and local authorities in April 1994 when a resident near the MRIP site contacted the Ulster County Health Department (UCHD) concerning

the quality of her drinking water (Lawler, Matusky & Skelly Engineers LLP (LMS) (1998)). The analytical results for water samples collected from the private well by the UCHD indicated that water from the well contained elevated levels of VOCs. Additional sampling around the area was performed by the UCHD, the NYSDEC, and the USEPA. NYSDEC monitored, from July 1994 through 1998 and subsequent groundwater monitoring was conducted by the USEPA and/or USACE from 2000 to 2008.

Sampling results have shown the contaminated groundwater plume has an areal extent of approximately 170 acres and extends approximately 4,000 feet from the MRIP property. The total VOC concentrations are at least 10 parts per billion (ppb); in some cases the concentration is over 10,000 ppb. Total VOCs present in the plume consist mainly of 1,1,1-trichloroethane (TCA) and its degradation products (e.g., 1,1-dichloroethane [DCA] and 1,1-dichloroethene [DCE]), as well as trichloroethylene (TCE). In addition, 1,4-dioxane was detected in low concentrations at several locations within the plume. It should be noted that the POET systems do not effectively remove 1,4-dioxane.

The MRIP Site was added to the National Priorities List (NPL) on January 19, 1999 (USEPA 2000b) and on March 31, 2000 a Record of Decision (ROD) for the Site was completed.

One of the remedial action objectives (RAO) for the site was to "eliminate inhalation and ingestion of, and dermal contact with, contaminated groundwater associated with the Site that does not meet state and federal drinking water standards" (USEPA 2000b). Groundwater, drinking water, and surface water standards identified for the site are based on New York State Ambient Water Quality Standards and Guidance Values (NYSDEC 1998); New York State Sanitary Code, 10 NYCRR § 5 (1992); and the National Primary Drinking Water Regulations, 40 CFR § 141 (2007) as set forth by the Federal Safe Drinking Water Act.

The ROD concluded that a permanent, safe water supply for all the private well owners impacted or threatened by contamination from the site would be required to meet the RAO. Therefore the ROD determined a public water supply system to provide potable water to residences and businesses in the towns of Marbletown and Rosendale impacted or threatened by the contaminated groundwater plume would be required. The primary water supply for the system will be the Catskill Aqueduct, which runs approximately 100 feet south of the MRIP property. The individual POET systems in use would be operated and maintained until the new public water supply system became operational.

3. Construction Activities

As noted above, the MRIP site first came to the attention of state and local authorities in April 1994 when a resident near the MRIP site contacted the Ulster County Health Department (UCHD) concerning the quality of her drinking water (USEPA 2000b). The analytical results for water samples collected from the private well by the UCHD indicated that water from the well contained elevated levels of VOCs. Additional sampling around the area was performed by the UCHD, the NYSDEC, and the USEPA. NYSDEC, from July 1994 through 1998, installed 70 POET systems in residences and business and provided O&M services. In the spring of 2000, the USEPA Removal Action Branch conducted additional extensive testing of the water quality of homes in the surrounding area. The results of this testing showed that three more homes and/or businesses were in need of POET system installation. Therefore, in 2000 the USEPA's Removal Action Branch installed three additional POET systems for a total of 73 POET systems. The USACE through an interagency agreement (IAG) with USEPA (IAG DW96941895)

installed POET system number 74 in September 2002 and POET number 75 in June 2005. Note, both of these POET systems were within the identified plume boundaries and not indicative of spreading contamination.

Therefore, 75 wells of residences and businesses down-gradient of the MRIP property had been determined to have VOC concentrations above NYS MCLs (5 ppb for individual VOCs). This was an interim action to address immediate health threats. These systems typically consisted of two GAC units to remove VOCs, as well as particulate filters for sediment removal, and UV units for disinfection. Some residential POET systems were equipped with water softeners – see Figure (2) for a typical POET system diagram.

4. Operation and Maintenance of Residential GAC Systems

Through an interagency agreement (IAG DW96941895) with the USEPA, the USACE was responsible for the O&M of USEPA's POET or GAC systems from 25-September-2000 through December 2007. Through a contract with USACE, Sevenson and Earth Tech (SES/ET) provided O&M, inspection, sampling, and reporting services for the 75 POET systems. Work was performed in accordance with SES/ET (2004a, b, c)

Sampling and Analysis

SES/ET performed bi-annual (twice per year) water sampling for VOCs at three locations per residence: raw water, intermediate water (between the two GAC units), and treated effluent. These sampling events were typically performed in December/January and June/July of each year. Samples for fecal coliform were also obtained after the treatment units during the same sampling event typically on a yearly basis. Additional samples were periodically obtained as requested by USEPA/USACE. Sample collection, handling, shipping, and QA/QC procedures are discussed in Section 4.0 within the Field Sampling Plan (FSP). The sampling frequency for each location was evaluated during the project by the USACE and USEPA. Changes to the sampling schedule were documented in the Monthly or Quarterly Reports filed at USEPA R2.

GAC Media Exchange

Chemical breakthrough was defined as the detection of any of the site-specific target compounds or their breakdown products in the intermediate or final water at greater than 1 part per billion (ppb). The project team reviewed analytical data and, based on the results, changed out carbon vessels as follows. Upon breakthrough, the primary vessel will be bypassed and the spent carbon media removed. The secondary GAC vessel will be disconnected and moved to the primary position. A vessel loaded with fresh, potable, National Science Foundation (NSF), and American Water Works Association (AWWA) certified virgin GAC will be installed in the secondary position. No GAC media or other debris will be left at the job site. Approximately 20 POET systems required carbon change out each year.

In 2001, approximately 8-drums of spent GAC were containerized in 55-gallon drums and stored at the Ground water Treatment System Plant (GWTS). On December 11, 2001, a composite sample of the spent carbon was collected and analyzed by an accredited laboratory for waste disposal characterization. The spent carbon was determined to be non-hazardous. Based on the analytical results, the USACE and USEPA approved of the disposal of the spent carbon at a municipal landfill. The carbon was placed in sealed disposable bags and then double bagged for disposal during January 2002. From this point on, spent carbon was disposed as it was

generated, eliminating the need for bulk storage. The disposal of spent carbon was documented in the Monthly or Quarterly Reports filed at USEPA R2.

UV Disinfection Unit Service

Ultraviolet disinfection bulbs have a rated life of 8,000 hours (about 48 weeks). Bulb replacement occurred after each 8,000 hours of operation based on the last known UV change-out. SES/ET maintained field log records of all UV bulb exchanges.

Based on the amount of deposition observed on the lamps' quartz sleeves due to minerals in the water, interim cleaning was required for some locations to provide full disinfection of the water. Replacement, cleaning, and servicing of the UV units was performed as necessary.

Water Softener Maintenance

Water softeners were installed at 25 of the 75 POET system locations to prevent scale buildup on the UV unit quartz sleeves due to high mineral and/or metal concentrations in well water. These locations had exhibited high rates of scale build-up, impeding the disinfection process. Water softeners provided an effective means of mitigating this problem. Servicing these units included general inspection on a bi-annual basis as well as replenishment of salt. Potassium chloride (KCl) was chosen as the regenerating agent (as opposed to sodium chloride) due to residents' concerns about sodium passing into their drinking water and affecting their health. Potassium chloride was periodically provided to homeowners during normal maintenance visits to the site. SES/ET maintained records of salt usage for each softener unit.

Installation of New GAC Units

Residential wells (not equipped with POET systems) suspected to be along the perimeter of the contaminant plume were routinely sampled to ensure that drinking water remained below maximum contaminant levels (MCLs). If residential analytical results reached action levels (NYS MCL of 5 ppb for any individual contaminant), a new POET system was installed. Typically, the POET systems consisted of a sediment filter (5-micron cartridge type), two GAC units operating in series, and a UV disinfection unit. The standard GAC tank size was 14 inches diameter and 47 inches high, with 3.3 cubic feet of carbon capacity. The systems were equipped with valves and appurtenant equipment to allow flexibility of operation, along with flow meters to track the volume of water treated and help determine carbon adsorption capacity (and thus breakthrough intervals) – see Figure (2) for a typical POET system diagram.

In addition to standard GAC treatment systems, at times it was necessary to provide pre-treatment for high iron and manganese in well water that resulted in precipitate buildup in the GAC tanks. Levels of iron and manganese at the site were within the range suitable for treatment using either an ion exchange resin water softener or manganese greensand filter.

Emergency Response

SES/ET Earth Tech periodically responded to emergency service calls from residents experiencing difficulty with their treatment systems, leaks, or other problems.

5. Chronology of Events

PRE ROD:	
April 1994	The site first came to the attention of state and local authorities in April 1994 when a resident near the MRIP property contacted the UCHD concerning the quality of her drinking water.
June 1994 – December 1998	NYSDEC installed 70 POET systems in residences and business and provided O&M
Fall 1996	In the fall of 1996, NYSDEC contracted LMS to conduct an Immediate Investigation Work Assignment. Sludge samples collected from the northern septic tank system at the MRIP Property during the investigation were found to contain 26% 1,1,1-TCA at 260,000 milligrams/kilogram (mg/kg) and 1,1-DCE at 18,000 mg/kg. A sample collected from the monitoring well located near the underground septic tank was found to contain 82,000 micrograms/liter (µg/l) of 1,1,1-TCA and other VOCs.
March 1997	NYSDEC contracted LMS to conduct a RI and Feasibility Study (FS) for the Site.
September 1998	RI Report prepared by LMS for NYSDEC.
January 1999	Final listing of the MRIP Site on the NPL occurred on January 19, 1999.
March 1999	FS Report prepared by LMS for NYSDEC
March 2000	The ROD for comprehensive cleanup of the Site signed
POST ROD	
April 2000	Construction completed on NTCRA – Groundwater Pump and Treatment System (GWPT).
May 2000	Start of NTCRA GWPT system operation.
May 2000- June 2000	USEPA's Removal Action Branch installed three POET systems.
July 2000	The USEPA entered into an Interagency Agreement (IAG) with the USACE to prepare the Remedial Design (RD) of the potable water supply (Alternative AWS-3).
September 2000	USEPA and USACE enter into IAG for operation of NTCRA (GWPT) and POET systems as a remedial action.
October 2000	The USACE authorized Ecology and Environment Engineering, P.C. (E & E) to the design of the public water treatment and distribution systems (Alternative AWS-3).
October 2000 – December 2007	USACE via SES/ET provide O&M services for 75 POET systems in residences and business.
September 2002	USACE (via SES/ET) install one new POET system – 74 total systems. Note, was a new well in the plume, not indicative of spreading contamination
June 2005	USACE (via SES/ET) install one new POET system – 75 total systems; Note: groundwater did not meet the 5ppb criteria – special considerations by EPA for installation.
September 2005	Construction of drinking water treatment plant and distribution system started
September 2007	New York State Department of Health (NYSDOH)certifies Approval of Completed Works – starts POET system removal and hookups to new potable water system
December 2007	All POET systems removed and disposed of – all residences within the HFWD hooked up to new potable water system.

6. Performance Standards and Construction Quality Control

All POET system work was documented under Monthly or Quarterly Operations and Monitoring Reports, this includes laboratory analysis. These were prepared by SES/ET, reviewed by Sevenson, and approved by the USACE in conjunction with the USEPA. Primarily, the POET system issues are documented in Section 4 of the subject reports. Table (1) provides a GAC Database and Carbon Exchange Summary.

7. Final Inspection and Certifications

Residential potable water supply hookups began with the NYSDOH Approval of Completed Works in September 2007. From September 2007 through December 2007 all POET systems were removed from residences and business and delivered to NYSDEC for potential reuse. Table (2) provides a POET system listing of the disconnection dates from each residence. Attachment (1) from NYSDEC documents receipt of the POET systems.

8. Summary of Project Costs

Through the interagency agreement (IAG DW96941895) with the USACE, USEPA has obligated the sum of $1,805,000 between the years 2001and 2008 to operate and maintain the POET systems.

9. Observations and Lessons Learned

The resident POET systems required an extraordinary amount of community relations with regard to property access and a trust to be built up with residents. A great effort was involved with scheduling the regular maintenance visits and an emergency response for residential issues/problems/questions. Record keeping/tracking was also a large undertaking as well. All of the installations were unique to the respective property, each presenting their own challenges during O&M visits.

Relationship with homeowners is very important. Standard maintenance and sampling typically occur during the work day, when many residents are not at home. This requires a comfort level with the O&M team on the part of the residents, in order to allow home access when the homeowners are not present.

Standardization of POET systems is strongly recommended. Note that most of the systems were installed prior to the USACE IAG. Fortunately, all of the basic system components were standardized (UV, dual GAC), but some homes had larger/non-standard particulate filters, and some had water softeners. Maintenance responsibility for these items was not clearly defined, and in most cases if maintenance had been provided under NYSDEC contract, it continued under the USACE IAG. Based on the abilities of individual homeowners to load bags of potassium chloride in the softeners (many residents are elderly) and the involvement/interest of homeowners and tenants to perform the basic maintenance required (many simply did not replace particulate filters as required, regardless of the number of times they were told it was their responsibility), contractor maintenance/assistance was not applied consistently across the board. Suggest an initial fact sheet outlining equipment ownership (government vs. private) and maintenance responsibilities for each resident.

Semi-annual preventive maintenance (PM) performed during semi-annual sampling events seemed to work well. Filters were replaced as needed, UV bulbs changed based on a pre-determined schedule, and other maintenance was performed as needed. In many cases, the

resident did not call SES/ET for service/problems unless the UV alarm was blaring (and they often just unplugged the unit in that case), so having each system inspected and PM performed every six months was appropriate. This routine schedule also decreased instances of emergency service calls.

10. Operable Unit Contact Information

Sal Badalamenti, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th floor
New York, NY 10007
(212) 637-3314

Approved:

Doug Garbarini, Chief
New York Remediation Branch

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7. SES/ET. (2004b). *Long-Term Remedial Action and Remedial Action Quality Assurance Project Plan.*

8. SES/ET. (2004c). *Long-Term Remedial Action and Remedial Action Sampling and Analysis Plan.*

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10. United States Environmental Protection Agency (USEPA). (1992). *Remedial Action Report: Documentation for Operable Unit Completion (OSWER Directive 9355.0-39FS).* Office of Superfund Remediation and Technology Innovation.

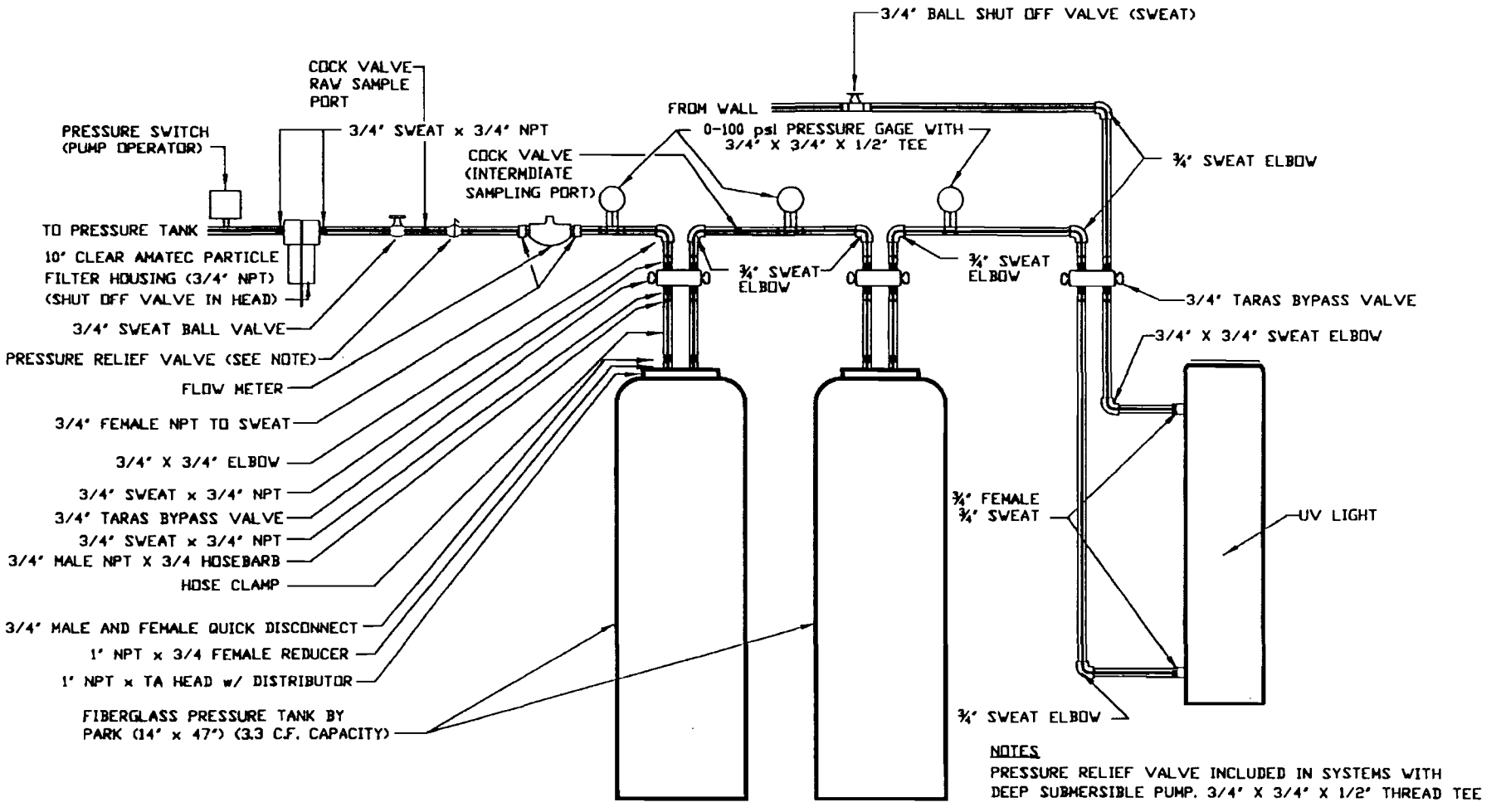
11. USEPA. (2000a). *Closeout Procedures for National Priorities List Sites, 540-R-98-016 (OSWER Directive 9320.2-09A-P).* Office of Emergency and Remedial Response.

12. USEPA. Region II. (2000b). *Record of Decision for the Mohonk Road Industrial Plant Site.*

13. USEPA. (2000c). *Mohonk Road Industrial Plant Site, Operation & Maintenance Manual, Vol. I and II.*

Figure (2): Typical POET System

FILE NAME: L:\WORK\45280\CADD\32272.DWGDATE: 3-5-2001



NOTES

PRESSURE RELIEF VALVE INCLUDED IN SYSTEMS WITH DEEP SUBMERSIBLE PUMP. 3/4" X 3/4" X 1/2" THREAD TEE

DIAGRAM SHOWS ALL MAJOR COMPONENTS (FILTER, PRESSURE TANK, UV LIGHT, EXT.) CONFIGURATION MAY VARY.

VALVE AND GAGE LOCATIONS MAY VARY.

EARTH TECH

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WHOLE HOUSE GAC WATER TREATMENT SYSTEM DETAIL

Table (1): MRIP POET Database

		Owner Information				GAC. Exchange Summary				Last Meter Reading			
WellName	Property Address	Owner Last Name	Owner First Name	GAC Install Date	Softner Install Date	Last Exch. Date	# Tanks	Meter Reading	Total Exch. To Date	Date	Meter Reading	Gals Treated Since Last Exch.	Months Since Last Exch.
GAC/RW-1	161 Mohonk Road	Harrington	Allen	22-Jun-94	13-Feb-96	Apr-06	1	911,680	5	Jan-07	946,110	34,430	82
GAC/RW-2	150 Mohonk Road	Feigenbaum	Andrew	6/28/94 (HVWR)		Feb-03	1	419,220	3	Jan-07	661,990	242,770	41
GAC/RW-3	138 Mohonk Road	Kemple	Patrick W.	11-Jul-94	7/11/1994 (p)	Apr-06	1	1,775,330	12	Jan-07	1,852,630	77,300	43
GAC/RW-4	31 Canal Road	Valdivia	Dianne	6/29/94 (HVWR)	1-Mar-96	Jun-06	1	1,304,680	14	Jan-07	1,403,630	52,600	13
GAC/RW-5	137 Mohonk Road	Daily	David K.	28-Jun-94		May-00	2	94,810	3	Jul-06	175,150	80,340	74
GAC/RW-6	50 Mohonk Road	Kaiser	Harvey & Rita	22-Jun-94		Nov-04	1	979,100	5	Jan-07	1,127,580	148,480	26
GAC/RW-7	41 Canal Road	Koehler	Martin	28-Jun-94	10-Oct-95	Apr-05	1	718,120	8	Jan-07	790,280	72,160	21
GAC/RW-8	14 Canal Road	Appleman	Richard	6/29/94 (HVWR)		Apr-00	2	60,160	1	Jan-07	193,020	132,860	81
GAC/RW-9	171 Mohonk Road	Harrington	Edward	28-Jun-94	8-Sep-95	Mar-04	1	653,250	6	Jan-07	825,480	172,230	34
GAC/RW-10	126 Mohonk Road	McDougall	James	30-Jun-94	26-Jun-95	Dec-06	1	542,250	7	Jan-07	547,210	4,960	2
GAC/RW-11	101 Mohonk Road	Wiser	Russel	23-Jun-94		Jan-07	1	490,080	5	Jan-07	737,390	247,310	0
GAC/RW-12	123 Mohonk Road	Werber	Euphemia G.	1-Jul-94	13-Feb-96	Jan-00	1	196,260	3	Jan-07	281,130	84,870	78
GAC/RW-13	186 Mohonk Road	Reiss	Sidney	13-Oct-94		Mar-04	1	310,200	4	Jan-07	441,920	131,720	28
GAC/RW-14	115 Mohonk Road	Oloffson	Egan E. & Renee L.	6/29/94 (HVWR)		May-06	1	312,430	5	Jan-07	368,360	55,930	7
GAC/RW-15	30 Canal Road	Crepet	Adaire	30-Jun-94		Nov-06	1	666,160	6	Jan-07	683,230	17,070	2
GAC/RW-16	49 Mohonk Road	Schneller	Robert F	20-Jul-94	15-Sep-95	Jun-06	2	1,280,180	5	Jan-07	1,399,410	119,230	1
GAC/RW-17	120 Mohonk Road	Brooks	William R. & Anna	6/28/94 (HVWR)		Sep-04	1	531,550	4	Jan-07	677,490	145,940	27
GAC/RW-18	24 Mohonk Road	Hamm	Wendy G, Robert	6-Jul-94		Nov-00	1	215,700	2	Jan-07	479,210	263,510	75
GAC/RW-19	4 Firehouse Road	Jackson	Ann L.	22-Jul-94		Apr-00	2	194,600	1	Jan-07	455,900	261,300	81
GAC/RW-20	44 Mohonk Road	Greenwald	Nancy	27-Jun-94	17-Apr-97	Apr-00	1	325,530	2	Jan-07	797,990	472,460	81
GAC/RW-21	17 Mohonk Road	Pastusak	Ed	12-Jul-94	1-Oct-95	Oct-02	1	134,510	4	Jan-07	214,890	80,380	51
GAC/RW-22	7 Second Street	Paterson	Suzanne	1-Jul-94		Dec-06	1	721,260	5	Jan-07	733,820	12,560	1
GAC/RW-23	7-11 Firehouse Road	C/o Jerry Lendvay	High Falls Fire Dept.	13-Jul-94		Mar-00	1	275,320	3	Jan-07	393,000	117,680	83
GAC/RW-24	8 Second Street	La Fera	Donald	6-Jul-94		Apr-04	1	575,630	3	Jan-07	638,000	62,370	33
GAC/RW-25	107 Mohonk Road	Maguire	Kenneth	23-Jun-94		Jul-98	1	81,760	2	Jan-07	223,310	141,550	102
GAC/RW-26	159 Canal Road	Jasinski	Mike	14-Jul-94		Apr-06	1	360,340	3	Jan-07	1,010,090	649,750	74
GAC/RW-27	32 Mohonk Road	O'connell	Jan, Warren	6-Jul-94		Jun-00	1	372,550	2	Jan-07	630,520	257,970	79
GAC/RW-28	36 Mohonk Road	Mcgrath	Richard K.	27-Jun-94	13-Oct-95	Apr-06	1	459,640	4	Jan-07	1,461,920	1,002,280	93
GAC/RW-29	53 Mohonk Road	Buhalis	Electra	15-Jul-94	1-Nov-95	Mar-04	1	559,780	3	Jan-07	742,800	183,020	28
GAC/RW-30	130 Mohonk Road	Madden	Katiellen	13-Jul-94		Aug-01	1	226,780	3	Jan-07	353,480	126,700	65
GAC/RW-31	20 Canal Road	Appleman	Richard	7-Jul-94	8-Jan-98	Aug-00	1	453,190	3	Jan-07	760,440	307,250	77
GAC/RW-32	40 Canal Road	Reed	Gretchen	13-Jul-94		Apr-05	1	347,040	4	Jan-07	392,050	45,010	21
GAC/RW-33	52 Canal Road	Ellyn	Maura	12-Jul-94	5/2/1995 (p)	Apr-02	2	371,880	5	Jan-07	558,500	186,620	58
GAC/RW-34	113 Main Street	Ruhl/Serouya	Larry/Jeff	29-Jun-94		Apr-05	2	907,380	4	Jan-07	979,650	72,270	20
GAC/RW-35	Rt. 213	Novi	John	19-Jul-94		Jan-06	2	3,374,920	8	Jan-07	3,611,890	236,970	12
GAC/RW-36	28 Mohonk Road	Gittens	Sonia T	14-Jul-94		Jan-01	2	369,740	1	Jan-07	657,900	288,160	72
GAC/RW-37	58 Mohonk Road	Mitty	Lizbeth, James	20-Jul-94	26-Apr-95	Nov-06	1	778,580	4	Jan-07	780,620	2,040	2
GAC/RW-38	117 Mohonk Road	Jansen	Harry	3-Aug-94		Feb-01	1	167,990	3	Jan-07	365,260	197,270	71
GAC/RW-39	121 Main Street	Midgley	James	25-Jul-94	30-May-95	Sept. 06	1	424,770	2	Jan-07	441,210	16,440	70
GAC/RW-40	1304 State Route 213 E	Murphy	Richard G	22-Jul-94		May-00	2	266,080	2	Jan-07	530,910	264,830	80

Table (1): MRIP POET Database

		Owner Information				GAC. Exchange Summary				Last Meter Reading			
WellName	Property Address	Owner Last Name	Owner First Name	GAC Install Date	Softner Install Date	Last Exch. Date	# Tanks	Meter Reading	Total Exch. To Date	Date	Meter Reading	Gals Treated Since Last Exch.	Months Since Last Exch.
GAC/RW-41	125 Mohonk Road	Johnson Jr.	Harold W.	1-Aug-94	8/18/94 (p)	Jul-00	2	114,660	1	Jan-07	304,510	189,850	78
GAC/RW-42	107 Main Street	Harrington	Elizabeth	19-Jul-94		Jul-00	1	374,070	2	Jan-07	710,130	336,060	78
GAC/RW-43	11 Forth St.	Hunt	Douglas	20-Jul-94	25-Jun-98	Jul-05	1	872,300	4	Jan-07	1,117,120	244,820	12
GAC/RW-44	9 Fourth Street	Hunt	Douglas	21-Jul-94	1-Oct-94	Jan-07	1	No meter	3	Jan-07	no meter		0
GAC/RW-45	14 Fourth Street	Alter	Beth Nina	28-Jul-94	6-Mar-96	Sep-00	2	225,170	1	Jan-07	491,130	265,960	76
GAC/RW-46	22 Fourth Street	Levine	Amy	25-Jul-94		Jan-06	1	215,610	2	Jan-07	550,130	334,520	12
GAC/RW-47	18 Fourth Street	Finn	Louisa, Josh	18-Jul-94		Jan-00	1	138,790	2	Jan-07	333,700	194,910	84
GAC/RW-48	20 Fourth Street	Chapin	Gabe	18-Jul-94	7-Sep-00	Nov-06	1	622,540	3	Jan-07	627,970	5,430	2
GAC/RW-49	16 Fourth Street	Alter	Bruce S	22-Jul-94	10-Oct-94	Mar-00	2	277,380	1	Jan-07	525,530	248,150	82
GAC/RW-50	30 School Hill Road	Lynch	Larry	2-Jul-94		Jun-05	1	794,510	3	Jan-07	837,830	43,320	13
GAC/RW-51	103 Main Street	Novi	John	21-Jul-94		Mar-02	1	1,057,350	4	Jan-07	1,694,890	637,540	58
GAC/RW-52	20 Mohonk Road	Hamm	Wendy G, John	2-Aug-94		Nov-00	2	201,300	1	Jan-07	386,340	185,040	75
GAC/RW-53	51 Depew Road	Reeni	Golden	5-Aug-94		Nov-06	1	1,546,070	2	Jan-07	1,583,180	37,110	2
GAC/RW-54	16 School Hill Road	Rones	Robert & Gillian	5-Aug-94		Nov-06	1	466,590	2	Jan-07	472,160	5,570	2
GAC/RW-55	7 Steep Hill Road	Prystal	Wendy H.	11-Oct-94	8-May-96	Aug-99	1	184,620	2	Jan-07	517,970	333,350	89
GAC/RW-56	39 Mohonk Road	Horwitz	Alex	5-Jan-95	7-Nov-95	May-00	1	238,980	3	Jan-07	571,320	332,340	80
GAC/RW-57	1203 State Route 213 E	Parkin-hines	Susan	1-Feb-95		Mar-04	1	132,200	4	Jul-06	178,820	46,620	27
GAC/RW-58	35 Mohonk Road	Tintori	Marco & Patricia	26-Jan-95		Jan-07	1	847,430	4	Jan-07	848,560	1,130	0
GAC/RW-59	112 Steep Hill Road	Woods	Alison	28-Feb-95		Nov-00	2	132,540	1	Jan-07	295,560	163,020	74
GAC/RW-60	11 Mohonk Road	Horwitz	Alex	16-Mar-95		Mar-00	1	312,320	2	Jan-07	486,350	174,030	82
GAC/RW-61	23 Mohonk Road	Bollendorf	Jeanne	15-Mar-95		Oct-00	1	212,630	2	Jan-07	302,520	89,890	75
GAC/RW-62	183 Mohonk Road	Nicholls	Michael J.	3-May-95		Sep-99	1	13,540	2	Jan-07	346,050	332,510	88
GAC/RW-63	1219 State Route 213 E	Ruger	Michael F	7-Sep-95	16-Nov-95	Oct-02	1	1,457,080	5	Jan-07	2,461,900	1,004,820	50
GAC/RW-64	31 Mohonk Road	Rask	David J.	13-Nov-95		Apr-06	1	417,460	3	Jan-07	453,290	35,830	68
GAC/RW-65	186 Mohonk Road	Reiss	Sidney	18-Dec-97		Feb-99	1	6,190	1	Jan-07	67,720	61,530	95
GAC/RW-66	5 Second Street	C/o Suzanne Paterson	Barking Dog Antiques Ltd	14-Apr-98		Jun-05	1	145,910	2	Jan-07	184,050	38,140	13
GAC/RW-67	17 School Hill Road	Stokes	Richard	27-Aug-98		Jun-05	2	347,980	2	Jan-07	399,030	51,050	13
GAC/RW-68	45 School Hill Road	Jackson	Ann L.	8-Dec-98		none	0		0	Jan-07	326,090	326,090	98
GAC/RW-69	4 Fourth Street	Herman	Joyce E	19-Nov-98		none	0		0	Jan-07	183,220	183,220	98
GAC/RW-70	1 Fourth Street	Fraser	Donald P	8-Dec-98		Jun-06	1	174,640	1	Jan-07	196,800	22,160	97
GAC/RW-71	1300 State Route 213 E	Murphy	Richard	26-May-00		Apr-05	2	2,273,900	4	Jan-07	3,163,220	889,320	21
GAC/RW-72	11 Canal Road	Horwitz	Dorothy & Alex	1-Jun-00		Feb-01	1	20,840	1	Jan-07	189,950	169,110	72
GAC/RW-73	79 Mohonk Road	Allen	Kelly	6-Jun-00		Nov-04	1	264,330	1	Jan-07	362,000	97,670	26
GAC/RW-74	112 Mohonk Road	Protoss	Fordham & Eileen	27-Sep-02	16-Dec-02	none	0		0	Jan-07	158,630	106,920	52
GAC/RW-75	1048 Berme Road	James	Shelley	7-Jun-05		none			0	Jan-07	20,550	1,170	NA

Table (2)
MRIP POET Disconnection Log

House #	Road	Well Terminated/ Capped/ POET Disconnected	Meter #/Comments	POET REMOVED	House Presssure (psi)
1048	Berme Road	15-Nov-08	5477241/4734297	yes	45
Egg's Nest	Bruceville Road	24-Oct-07	5477085	yes	40
11	Canal Road	09-Oct	5477121	yes	50
16	Canal Road	2-Nov-07	5477182	yes	40
20	Canal Road	2-Nov-07	5477225	yes	49
30	Canal Road	27-Sep-07	5477111	yes	50
31	Canal Road	09-Oct	5477181	yes	50
40	Canal Road	10-Oct	547110	yes	50
43	Canal Road	28-Sep	5477110	yes	46
52	Canal Road	26-Sep-07	5477162	yes	48
1028	Canal Road	13-Nov-08	547203	yes	50
55	Depew Road	16-Nov-08	5477213	yes	50
7	Firehouse Road	17-Oct	5477172	yes	50
8	Firehouse Road	15-Nov-08	5672207	yes	50
9	Firehouse Road	17-Oct	5477230	yes	50
4 Church	Firehouse Road	23-Sep-07	5477161	yes	50
Firehouse - 1"	Firehouse Road	7-Nov-07	5477156	yes	50
1	Fourth Street	16-Nov-08	5477137	yes	50
9	Fourth Street	8-Nov-07	5477141	yes	50
16	Fourth Street	1-Nov-07	5477123	yes	50
18	Fourth Street	6-Nov-07	5477199	yes	35
20	Fourth Street	7-Nov-08	5477104	yes	50
22	Fourth Street	1-Nov-07	5477105	yes	50
11 b1	Fourth Street	8-Nov-07	5477123	yes	50
11 b2	Fourth Street	8-Nov-07	5477202	yes	50
11	Mohonk Road	5-Nov-07	5477224	yes	50
17	Mohonk Road	5-Nov-07	5477116	yes	50
20	Mohonk Road	17-Nov-08	5477226	yes	50
24	Mohonk Road	17-Nov-08	5477227	yes	50
28	Mohonk Road	17-Nov-08	5477228	yes	50
32	Mohonk Road	6-Nov-07	5477096	yes	45
39	Mohonk Road	1-Nov-07	5477156	yes	45
49	Mohonk Road	1-Nov-07	5477097	yes	50
50	Mohonk Road	8-Nov-07	5477228	yes	50
53	Mohonk Road	8-Nov-07	5477158	yes	50
58	Mohonk Road	18-Oct	5477228	yes	50
79	Mohonk Road	26-Oct-07	5477093	yes	50
101	Mohonk Road	25-Oct-07	5477186	yes	50
107	Mohonk Road	30-Oct-07	5477117	yes	50
115	Mohonk Road	16-Oct	5477144	yes	50
117	Mohonk Road	16-Oct	5477117	yes	50
120	Mohonk Road	30-Jul-07	5477113	yes	50
123	Mohonk Road	23-Oct-07	5477223	yes	44
125	Mohonk Road	17-Oct	5477118	yes	50
126	Mohonk Road	7-Nov-07	5477190	yes	50
130	Mohonk Road	17-Oct	5672188	yes	50
137	Mohonk Road	1-Nov-07	5477085	yes	50
138	Mohonk Road	10-Nov-07	5477155	yes	48

Table (2)
MRIP POET Disconnection Log

House #	Road	Well Terminated/ Capped/ POET Disconnected	Meter #/Comments	POET REMOVED	House Presssure (psi)
150	Mohonk Road	1-Nov-07	5477091	yes	50
171	Mohonk Road	7-Nov-07	5672203	yes	35
183	Mohonk Road	7-Nov-07	5477165	yes	50
186	Mohonk Road	14-Nov-08	5477094	yes	50
1209 Clove Café	Mohonk Road	2-Nov-07	5477146	yes	50
23 Museum	Mohonk Road	5-Nov-07	5477092	yes	36
31a	Mohonk Road	18-Oct	5477100	yes	50
159 B	Mountain View Road	16-Nov-08	5477122	yes	50
55	Old Rt 220	03-Oct	5477150	yes	50
121	Route 213	8-Nov-07	5477123	yes	50
1315	Route 213	29-Oct-07	5477227	yes	50
103 NY Store	Route 213	10-Nov-07	5477176	yes	50
107 Post Office	Route 213	26-Oct-07	5477177	yes	50
113 Town Pantry	Route 213	25-Oct-07	5477178	yes	50
1314 LT C	Route 213	25-Sep	5477163	yes	50
16	School Hill Road	6-Nov-07	5477138	yes	45
17	School Hill Road	6-Nov-07	5477165	yes	50
207	School Hill Road	8-Nov-07	5477141	yes	50
30 Ambulance	School Hill Road	6-Nov-07	5477139	yes	50
30 Rescue Unit	School Hill Road	6-Nov-07	5477123	yes	50
4	Steep Hill	1-Nov-07	5477149	yes	50
9	Steep Hill	05-Oct	5477205	yes	34
10	Steep Hill	19-Nov-08	5477148	yes	50
14	Steep Hill	1-Nov-07	5477163	yes	50
44	Steep Hill	16-Nov-08	5477142	yes	50
107	Steep Hill	20-Nov-08	5477156	yes	50
112	Steep Hill	5-Nov-07	5477140	yes	50

Attachment (1)

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau E, 12th Floor
625 Broadway, Albany, New York 12233-7017
Phone: (518) 402-9814 • **FAX:** (518) 402-9819
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

MAY 13 2008

Mr. Frank Townsend
Conti Federal Services
1 Cragwood Drive
South Plainfield, New Jersey 07080

RE: Site No. 3-56-023, Mohonk Road Industrial Plant
Highfalls, New York

Dear Mr. Townsend:

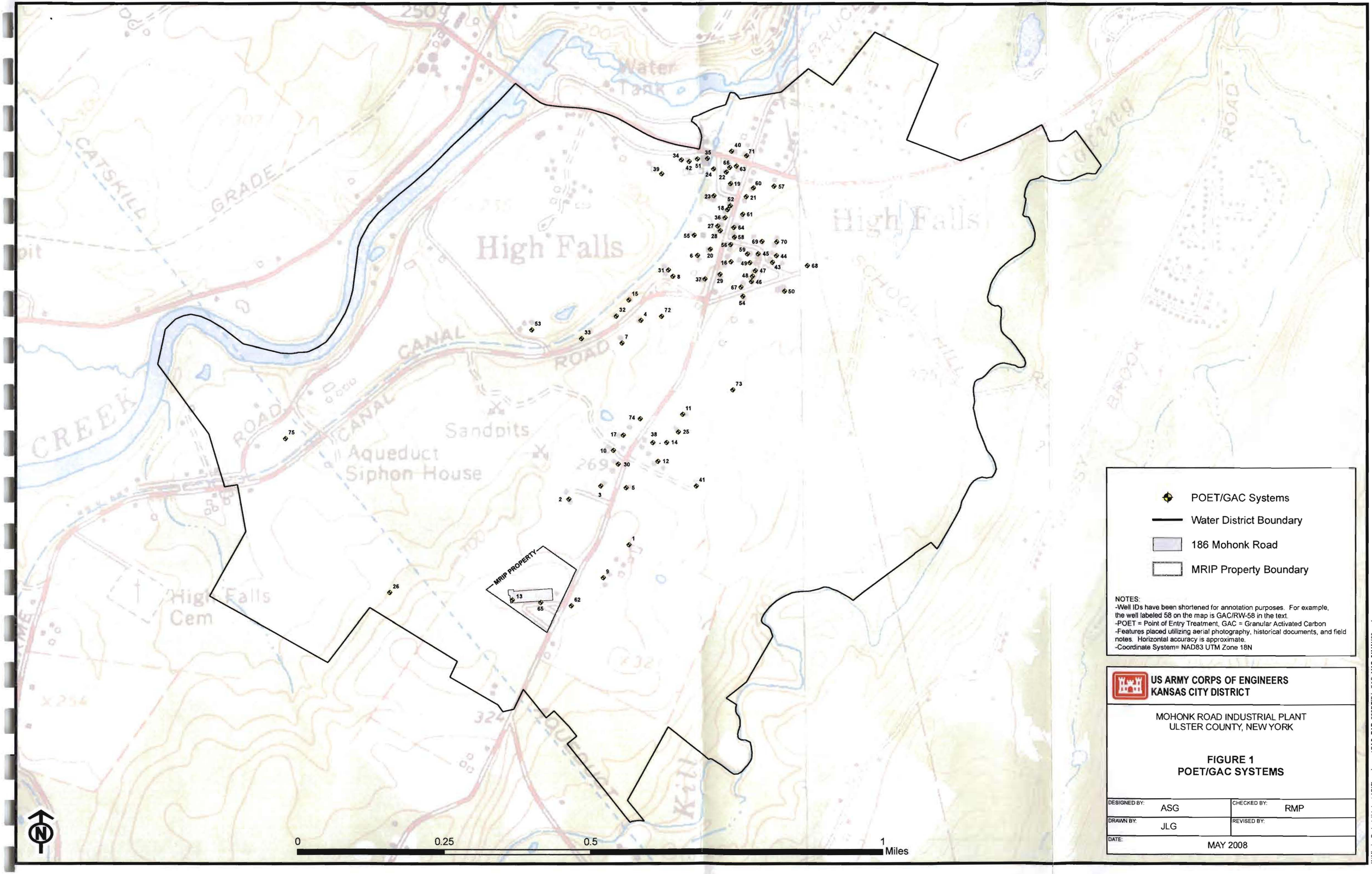
This correspondence is provided to document the receipt, by the New York State Department of Environmental Conservation (NYSDEC), of 70 surplus GAC point of entry treatment (POET) systems.

These systems were initially installed to provide potable water to residences where contamination from the Mohonk Road Industrial Plant (NYS Site ID No. 3-56-023) had contaminated the private water supply well. Following the connection of these impacted residences to public water, USEPA has removed the GAC systems and returned them to NYSDEC.

These systems were received by NYSDEC on March 12, 2008. If you need any further documentation, please do not hesitate to contact me by phone at (518) 402-9814 or by email at gfmomber@gw.dec.state.ny.us.

Sincerely,

George F. Momberger, P.E.
Project Manager
Remedial Section A, Remedial Bureau E
Division of Environmental Remediation



POET/GAC Systems

Water District Boundary

186 Mohonk Road

MRIP Property Boundary

NOTES:
-Well IDs have been shortened for annotation purposes. For example, the well labeled 58 on the map is GAC/RW-58 in the text.
-POET = Point of Entry Treatment, GAC = Granular Activated Carbon
-Features placed utilizing aerial photography, historical documents, and field notes. Horizontal accuracy is approximate.
-Coordinate System= NAD83 UTM Zone 18N

US ARMY CORPS OF ENGINEERS
KANSAS CITY DISTRICT

MOHONK ROAD INDUSTRIAL PLANT
ULSTER COUNTY, NEW YORK

FIGURE 1
POET/GAC SYSTEMS

DESIGNED BY: ASG	CHECKED BY: RMP
DRAWN BY: JLG	REVISED BY:
DATE: MAY 2008	

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