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

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

May 24, 2022

BY E-MAIL AND OVERNIGHT DELIVERY (For Original Signed PRR Only)

Michael Belveg, Assistant Engineer (Environmental)
New York State Department of Environmental Conservation
Division of Environmental Remediation
615 Erie Boulevard West
Syracuse, NY 13204
michael.belveg@dec.ny.gov

Re: Former Miller Container Site – Registry Site # 738029 (the "Site")
- Submission of Periodic Review Report (PRR)
Reporting Period: April 30, 2021 – April 30, 2022

Michael:

Enclosed are the following documents that make up the PRR submittal for the referenced Site for the 2021-2022 reporting period:

a) PRR signed by the new Site Owner, MLT Leasing LLC (copy of original). MLT Leasing LLC is certifying to the portion of the PRR that covers the Institutional Controls (ICs) associated with the Site. Included with the Site Owner submittal is the Change of Use, Transfer of Ownership Form submitted to NYSDEC by the Former Owner, Riccelli Fulton, LLC;
b) PRR signed by Patrick Martin, P.E. on behalf of the Remedial Party (RP), Miller Brewing Company (copy of original). This PRR reflects revisions made to the form PRR to reflect the division of certification responsibility between the Site Owner and the RP. As discussed with the Department, the RP is certifying the portion of the PRR that covers the Engineering Controls (ECs) associated with the Site[1]; and
c) Year 25 Annual Groundwater Monitoring Report. This is in the same format that we have used in the course of the remediation. We will continue to use this format for PRR purposes as provided in the Site Management Plan (SMP) (October 2016) (see section 5.3 of the SMP). Appendices will be sent as an electronic copy only.

[1] Note that Box 3 in the RP version of the PRR makes reference to the recorded Declaration of Covenants and Restrictions as containing the existing ICs because that reflects our understanding of the scope of the ICs that are in effect. However, the RP is making no certification as to the ICs because that is the obligation of the Site Owner

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

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

In accordance with the directions provided under the Department's March 15, 2022 email sent to Jay Eversman at the Anheuser-Busch Cos., LLC, all the enclosures will be forwarded to you by e-mail. In addition, the original paper copy of the PRR signed by Patrick Martin will be sent to you by overnight delivery.

Regards,
OPERATIONS & MAINTENANCE, INC.

Gary Mullen
Digitally signed by Gary Mullen
DN: cn=Gary Mullen, o=OMI, ou, email=gmullenomi@gmail.com, c=US
Date: 2022.05.24 12:44:34 -04'00'

Gary Mullen
Project Manager

Enclosures
ecc: Margaret Sheen, Esq., NYSDEC Region 7
Harry Warner, NYSDEC Region 7
Eamonn O'Neil, NYSDOH
Maureen Schuck, NYSDOH
Jay Eversman, Esq. Anheuser-Busch Cos.,.LLC
Kiera States, MLT Leasing
William Buchan, Operations & Maintenance Inc.
Patrick Martin, P.E., WSP USA

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. 738029

Site Name Former Miller Container Site

Site Address: NY Route 57 Zip Code: 13069
City/Town: Volney
County: Oswego
Site Acreage: 12.704

Reporting Period: April 30, 2021 to April 30, 2022

	YES	NO
1. Is the information above correct?	☑	☐
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?	☑	☐
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☑	☐
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 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?	☑	☐

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☑	☐
7. Are all ICs in place and functioning as designed?	☑	☐

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.

Signature of Owner, Remedial Party or Designated Representative _____ Date _____

SITE NO. 738029

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
	MLT Leasing LLC	Ground Water Use Restriction

Box 4

Description of Engineering Controls

Parcel	Engineering Control
	Groundwater Treatment System Air Sparging/Soil Vapor Extraction

Box 5

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 Engineering Control 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. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The 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

Date

IC CERTIFICATIONS
SITE NO. 738029

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 Michael Tormey at 8819 Caskin Rd, Clay N.Y.
print name print business address

am certifying as Owner (Owner or Remedial Party)

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

Michael Tormey 5/23/22
Signature of Owner, Remedial Party, ~~or Designated Representative~~ Date
Rendering Certification

EC CERTIFICATIONS

Box 7

Professional Engineer 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 _____ at _____,
print name print business address

am certifying as a Professional Engineer for the _____
(Owner or Remedial Party)

_____ _____ _____
Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification | Stamp (Required for PE) | Date

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

60-Day Advance Notification of Site Change of Use, Transfer of Certificate of Completion, and/or Ownership

Required by 6NYCRR Part 375-1.11(d) and 375-1.9(f)

To be submitted at least 60 days prior to change of use to:

Chief, Site Control Section
New York State Department of Environmental Conservation
Division of Environmental Remediation, 625 Broadway
Albany NY 12233-7020

I. Site Name: Former Miller Container Site **DEC Site ID No.** 738029

II. Contact Information of Person Submitting Notification:

Name: William Orton

Address1: 6131 E Taft Road

Address2: N. Syracuse, NY 13212

Phone: 315-433-5115 E-mail: Will.Orton@RiccelliEnterprises.com

III. Type of Change and Date: Indicate the Type of Change(s) (check all that apply):

- [x] Change in Ownership or Change in Remedial Party(ies)
- [ ] Transfer of Certificate of Completion (CoC)
- [ ] Other (e.g., any physical alteration or other change of use)

Proposed Date of Change (mm/dd/yyyy): 04/30/2021

IV. Description: Describe proposed change(s) indicated above and attach maps, drawings, and/or parcel information.

Riccelli is selling entire Property to MTL Leasing, LLC.

If "Other," the description must explain and advise the Department how such change may or may not affect the site's proposed, ongoing, or completed remedial program (attach additional sheets if needed).

V. **Certification Statement:** Where the change of use results in a change in ownership or in responsibility for the proposed, ongoing, or completed remedial program for the site, the following certification must be completed (by owner or designated representative; see §375-1.11(d)(3)(i)):

I hereby certify that the prospective purchaser and/or remedial party has been provided a copy of any order, agreement, Site Management Plan, or State Assistance Contract regarding the Site's remedial program as well as a copy of all approved remedial work plans and reports.

Name: _____ (Signature) 02/15/2022 (Date)

William Orton (Print Name)

Address1: 6131 E Taft Road

Address2: N. Syracuse, NY 13212

Phone: 315-433-5115 E-mail: Will.Orton@RiccelliEnterprises.com

VI. **Contact Information for New Owner, Remedial Party, or CoC Holder:** If the site will be sold or there will be a new remedial party, identify the prospective owner(s) or party(ies) along with contact information. If the site is subject to an Environmental Easement, Deed Restriction, or Site Management Plan requiring periodic certification of institutional controls/engineering controls (IC/ECs), indicate who will be the certifying party (attach additional sheets if needed).

☑ Prospective Owner ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: MLT Leasing, LLC.

Address1: 8819 Gaskin Road

Address2: Clay, NY 13041

Phone: 315-412-9721 E-mail: mt1@emeraldscreening.com

Certifying Party Name: MLT Leasing, LLC.

Address1: 8819 Gaskin Road

Address2: Clay, NY 13041

Phone: 315-412-9721 E-mail: mt1@emeraldscreening.com

VII. Agreement to Notify DEC after Transfer: If Section VI applies, and all or part of the site will be sold, a letter to notify the DEC of the completion of the transfer must be provided. If the current owner is also the holder of the CoC for the site, the CoC should be transferred to the new owner using DEC's form found at http://www.dec.ny.gov/chemical/54736.html. This form has its own filing requirements (see 6NYCRR Part 375-1.9(f)).

Signing below indicates that these notices will be provided to the DEC within the specified time frames. If the sale of the site also includes the transfer of a CoC, the DEC agrees to accept the notice given in VII.3 below in satisfaction of the notice required by VII.1 below (which normally must be submitted within 15 days of the sale of the site).

Within 30 days of the sale of the site, I agree to submit to the DEC:

1. the name and contact information for the new owner(s) (see §375-1.11(d)(3)(ii));
2. the name and contact information for any owner representative; and
3. a notice of transfer using the DEC's form found at http://www.dec.ny.gov/chemical/54736.html (see §375-1.9(f)).

Name: Michael Tormey (Signature) Jan 28, 2022 (Date)

Michael Tormey -MLT Leasing LLC (Print Name)

Address1: 8819 Gaskin Road

Address2: Clay, NY 13041

Phone: 315-412-9721 E-mail: mt1@emeraldscreening.com

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. **738029**

Site Name Former Miller Container Site

Site Address: NY Route 57 Zip Code: 13069
City/Town: Volney
County: Oswego
Site Acreage: 12.704

Reporting Period: April 30, 2021 to April 30, 2022

	YES	NO
1. Is the information above correct?	X	☐
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?	X	☐
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
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?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	X	☐
7. Are all ICs in place and functioning as designed?	X	☐

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.

Signature of Owner, Remedial Party or Designated Representative _____ Date _____

SITE NO. 738029 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
	MLT Leasing LLC	Ground Water Use Restriction

NOT APPLICABLE TO REMEDIAL PARTY, ICs ARE THE RESPONSIBILITY OF THE SITE OWNER AS RECORDED IN THE DECLARATION OF COVENANTS & RESTRICTIONS FOR THE SITE.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
TAX MAP # 254.00-05-04.01	Groundwater Treatment System Air Sparging/Soil Vapor Extraction GROUNDWATER EXTRACTION SYSTEM

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below ~~that~~: WITH THE EXCEPTION OF BOXES 1, 2 & 3 THAT:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control 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
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The 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;~~ SITE ACCESS IS THE RESPONSIBILITY OF THE SITE OWNER, NOT THAT OF THE REMEDIAL PARTY

   (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.

   (f) ALL ENGINEERING CONTROLS ARE IN PLACE AND FUNCTIONING AS DESIGNED.

YES	NO
X	☐

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

Date

IC CERTIFICATIONS
SITE NO. 738029

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 _____ at _____,
print name print business address

am certifying as _____(Owner or Remedial Party)

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

_____ _____
Signature of Owner, Remedial Party, or Designated Representative Date
Rendering Certification

EC CERTIFICATIONS

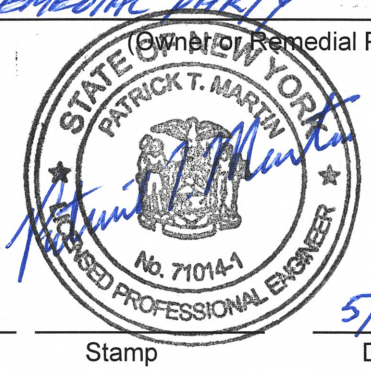
Box 7

Professional Engineer 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 PATRICK T. MARTIN at 455 COMMERCE DR, STE 8, BUFFALO NY 14228
print name print business address

am certifying as a Professional Engineer for the REMEDIAL PARTY
(Owner or Remedial Party)



Patrick T. Martin — 5/23/22

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification | Stamp (Required for PE) | Date

Annual Groundwater Monitoring Report Year 25 (May 2021- April 2022)

Miller Brewing Groundwater Recovery and Treatment System
NYSDEC Site # 7-38-029
Former Miller Container Site
Volney, New York

Submitted To:
New York State Department of Environmental Conservation
Division of Environmental Remediation
615 Erie Boulevard West
Syracuse, NY 13204

Prepared by:
Operations & Maintenance Inc.
1850 Route 57
Fulton, New York 13069

May 2022

Table of Contents

INTRODUCTION

Operations & Maintenance, Inc. (OMI) has prepared this Annual Groundwater Monitoring Report (AGWMR) on behalf of Miller Brewing Company (Remedial Party – RP) for submission to the New York State Department of Environmental Conservation (NYSDEC) for the Former Miller Container site (NYSDEC Site #7-38-029) located in Volney, NY. It reflects the progress made toward achieving the Remediation Goals identified at 6.0 of the Record of Decision (ROD) (dated March 1995) that was issued by NYSDEC for this Site and the associated Standards, Criteria, and Guidance (SCGs).

This report covers the period from April 30, 2021 to April 30, 2022 inclusive (operating year) and is organized in general accordance with the NYSDEC approved outline. This report is being submitted in conjunction with the completed "*Site Management Periodic Review Report Notice - Institutional and Engineering Controls Certification Form*" and the combined documents fulfill the requirements of the approved Site Management Plan (December 2016) for submittal of an annual Periodic Review Report (PRR).

The responsibilities for implementing the SMP are divided between the Site Owner and the RP, because the RP has no control over the Site Owner's activities on the Site. Therefore, as the RP, Miller Brewing Company is responsible for the three Engineering Controls (ECs) that are identified in the SMP (i.e., the Groundwater Extraction System, Groundwater Treatment Facility and Soil Vapor Extraction System). A detailed discussion of the RP responsibilities is included in Section 6.2 of the SMP. The Site Owner, currently MLT Leasing LLC, is responsible for the Institutional Controls (ICs). The ICs are defined in Section 2.3 of the approved SMP and in the Declaration of Covenants and Restrictions recorded June 26, 2015 in the Oswego County Clerk's office.

This report is focused on the reporting of all relevant operations, monitoring and data reporting associated with the ECs to assess and support the certification that they are functioning correctly and continue to address the Remediation Goals for the Site.

OVERALL SITE PROGRESS

Monitoring well and recovery well sampling demonstrates that the contaminant plume on the Former Miller Container site continues to shrink. The contaminant levels reported in the outlying monitoring wells continue to trend downward. The VOC levels reported from the sampling of the source recovery wells also continue to decline.

Since November of 2013, the City of Fulton Water Treatment Facility has been mothballed because its operation was no longer necessary due to the drop of contaminant levels in municipal production well, M-2A. The RP does not conduct sampling of M-2A because water from this well is not being used by the City as a source of drinking water. Currently, water is being pumped from M-2A to the Oswego River in accordance with a NYSDEC Consent Order with Riccelli Fulton, LLC.

The Soil Vapor Extraction system continues to accelerate the site remediation by providing mass removal in conjunction with the groundwater recovery system. The SVE system is also providing additional protection against Soil Vapor Intrusion into the on-site structure.

Progress made toward achieving the Remediation Goals identified in the ROD for this Site is discussed under the Conclusions section of this report.

REMEDIAL TREATMENT SYSTEM OPERATION

GROUNDWATER RECOVERY SYSTEM

The current groundwater recovery system consists of nine (9) groundwater Recovery Wells (RWs). The nine Recovery Wells were in operation for the entire reporting period with minor exceptions when the system was off for maintenance or offline due to equipment malfunction. Operation of recovery well RW-10 was halted on August 19, 2015. The lack of flow from this recovery well and its impact on the recovery system's ability to mitigate off site migration is discussed below.

The following table summarizes the flow rates for the nine Recovery Wells for the 2021-2022 operating year.

April 30, 2021 - April 29, 2022

Well	Total (gallons)	GPD	GPM
RW-2	1442497	3952	2.74
RW-3	93464	256	0.18
RW-4	300195	822	0.57
RW-5R	772175	2116	1.47
RW-8	1045215	2864	1.99
RW-9	74646	205	0.14
RW-11	277342	760	0.53
RW-12	1205475	3303	2.29
RW-13	307098	841	0.58
Totals	**5,518,107**	**15,118**	**10.5**

Based on the individual recovery well totalizers, a total of 5,518,107 gallons of groundwater were recovered during the reporting period at an average flow rate of 10.5 gallons per minute to the treatment system. The production rates are constantly monitored throughout the year and adjustments are made to improve the rates from individual wells.

The flow to the Air Stripper Treatment (AST) system is also monitored using an electromechanical flow meter. This meter indicated a total of 6,911,832 gallons of water were treated at the Groundwater Treatment Facility (GWTF). The readings from the AST influent flow meter are assumed to be more representative of the actual flow that passes through the treatment system. The daily totalizer readings from the AST flow meter are presented in Appendix A.

RECOVERY SYSTEM MONITORING RESULTS

The operating recovery wells were sampled four times (quarterly) during the reporting period. Samples were collected from the in-line taps and submitted for laboratory analysis. The results were reported to NYSDEC in the quarterly monitoring reports submitted for the site.

The following table summarizes the laboratory analytical results for the RW samples collected during the monitoring events this reporting period. The summary table includes all results for any compound reported at or above the Method Detection Limit (MDL) in any sample. All concentrations are presented in μg/l:

RECOVERY WELLS – USEPA Method 8260

WELL	Date	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride
RW-2	21-Jul-21	**10.0**	**9.3**	**48**	**82**	**9.1**	**27**	3.6
	26-Oct-21	**7.7**	**7.3**	**34**	**98**	**6.4**	**20**	3.8
	19-Jan-22	**7.9**	**7.5**	**37**	**120**	**8.1**	**29**	2.7
	13-Apr-22	**7.6**	**8.1**	**36**	**96**	**6.8**	**28**	3.0
RW-3	12-Jul-21	0.83	1.6	**9.2**	**78**	3.5	**6.9**	<0.5
	26-Oct-21	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5
	19-Jan-22	0.52	0.74	**7.1**	**55**	2.4	**6.7**	<0.5
	13-Apr-22	<1	<1	**5.4**	**42**	1.9	**6.1**	<1
RW-4	12-Jul-21	3.0	3.4	**51**	**73**	**9.3**	**10.0**	**5.1**
	26-Oct-21	1.6	1.6	**42**	**55**	4.0	**5.8**	2.9
	19-Jan-22	2.9	3.1	**36**	**110**	**11**	**12**	2.3
	13-Apr-22	2.4	3.0	**31**	**84**	**7.7**	**12**	3.0
RW-5R	12-Jul-21	1.6	1.5	**12**	**75**	1.5	4.5	<0.5
	26-Oct-21	1.6	1.7	**12**	**71**	1.6	4.7	<0.5
	19-Jan-22	1.4	1.2	**12**	**78**	1.6	**5.2**	<0.5
	13-Apr-22	1.4	1.3	**10.0**	**63**	1.3	4.6	<1
RW-8	12-Jul-21	1.8	0.91	**5.7**	3.9	1.00	0.85	0.58
	26-Oct-21	0.73	<0.5	2.2	1.5	<0.5	<0.5	<0.5
	19-Jan-22	1.5	0.63	**5.8**	**5.3**	1.00	0.88	<0.5
	13-Apr-22	1.8	1.2	**5.5**	2.2	1.1	<1	<1
RW-9	12-Jul-21	**20**	**13**	**150**	**23**	3.1	**39**	1.7
	26-Oct-21	**7.0**	**5.0**	**74**	**9.0**	1.1	**13**	2.6
	19-Jan-22	**21**	**11**	**170**	**20**	3.2	**38**	2.9
	13-Apr-22	**16**	**8.9**	**150**	**12**	2.1	**25**	2.8
RW-11	12-Jul-21	<0.5	<0.5	<0.5	1.7	<0.5	<0.5	<0.5
	26-Oct-21	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5
	19-Jan-22	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	<0.5
	13-Apr-22	<1	<1	<1	1.5	<1	<1	<1
RW-12	12-Jul-21	0.69	0.58	<0.5	2.0	0.51	<0.5	<0.5
	26-Oct-21	0.79	0.74	<0.5	1.8	0.53	<0.5	<0.5
	19-Jan-22	0.60	0.59	<0.5	2.1	0.63	<0.5	<0.5
	13-Apr-22	<1	<1	<1	1.9	<1	<1	<1
RW-13	12-Jul-21	3.9	4.6	**5.4**	0.69	2.1	3.8	<0.5
	19-Jan-22	4.2	4.5	4.6	2.3	2.3	**5.7**	<0.5
	13-Apr-22	2.5	3.5	2.1	1.6	<1	2.5	<1

An estimate of the mass-removal of site related contaminants of concern was calculated for the reporting period by multiplying the total gallons recovered from each well by the average concentration of each compound reported. Based on the calculation method, a total of 1.676 kg (3.7 lbs) of contaminants were removed from the groundwater recovered from the RWs. The following table summarizes the calculations. The readings are presented in grams:

WELL	Flow in Liters	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride	Total VOC
RW-2	5460428	45	44	212	541	41	142	18	1043
RW-3	353799	0.24	0.41	2.6	16	0.9	2.3	0.09	22
RW-4	1136358	2.8	3.2	45	91	9.1	11.3	3.8	167
RW-5R	2922991	4.4	4.2	34	210	4.4	14	0.0	270
RW-8	3956557	5.8	3.6	19	13	4.1	3.4	22.9	72
RW-9	282565	4.5	2.7	38.4	4.5	0.67	8.1	0.7	60
RW-11	1049850	0.0	0.0	0.3	1.8	0.0	0.0	0.0	2.0
RW-12	4563205	3.2	2.9	0.0	8.9	2.5	0.0	0.0	17.5
RW-13	1162489	4.1	4.9	4.7	1.8	2.6	5	0.3	23
Totals	20888242	70	66	356	887	66	186	46	1676

The table below represents the calculated mass removal since the startup of the GWTF (1997). Using these figures, an estimated 689 pounds of contaminants have been removed using the groundwater recovery well network.

Calculated Mass Removal (pounds)

Year	Calculated Mass	Year	Calculated Mass
1997-1998	180	2009-2010	7.9
1998-1999	100	2010-2011	16.8
1999-2000	50	2011-2012	30.8
2000-2001	35	2012-2013	24.6
2001-2002	47	2013-2014	16.5
2002-2003	37.4	2014-2015	17.3
2003-2004	27.9	2015-2016	8.9
2004-2005	32.4	2016-2017	7.6
2005-2006	10.4	2017-2018	6.1
2006-2007	3.7	2018-2019	4.6
2007-2008	3.5	2019-2020	3.7
2008-2009	6.8	2020-2021	6.0
		2021-2022	3.7
		Total	688.6

GROUNDWATER TREATMENT SYSTEM

The groundwater treatment system processes the combined influent of the Recovery Wells through the air stripper prior to discharge. The system was in continuous operation throughout the reporting period except for brief periods of system maintenance. Based on the in-line flow meter, a total of 6,911,832 gallons of recovered groundwater were discharged after treatment. The flow rate through the facility varies slightly throughout the year from seasonal fluctuation in production.

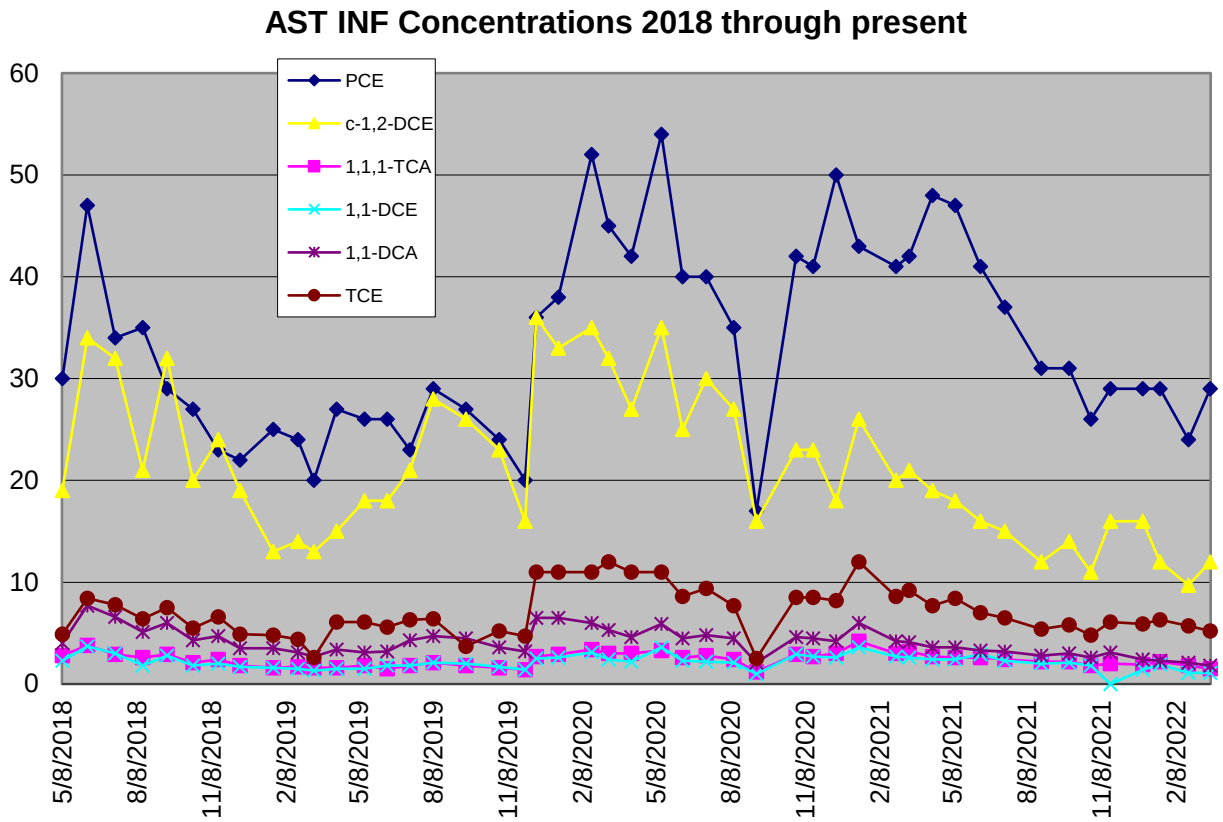
Influent and effluent samples from the Groundwater Treatment Facility (GWTF) are collected from the in-line sampling ports on a monthly basis and analyzed in accordance with the approved SMP. The influent sample is referred to as "AST INF" and the effluent is referred to as the "Final EFF." The results are reported to NYSDEC monthly.

Individual VOCs were reported in the AST INF samples at concentrations in excess of the MDL. The highest reported concentrations were PCE ranging from 23μg/l to 47μg/l and its daughter product, cis-1,2-DCE from 9.7μg/l to 18μg/l. Graphical analysis from March 2018 through April 2022 of the data indicates that the concentrations of individual and total VOCs continue to demonstrate variability over time with an overall declining trend.

The following table summarizes the AST INF sampling results for this reporting period. The line graph that follows the table represents the past five years of AST INF analytical data. All concentrations are presented in μg/l.

AST INFLUENT SAMPLE RESULTS SUMMARY

DATE	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	VC	**TOTAL**
12-May-21	**3.6**	2.4	**18**	**47**	2.6	**8.4**	2.1	84.1
12-Jun-21	3.3	2.9	**16**	**41**	2.6	**7.0**	1.3	74.1
12-Jul-21	3.2	2.3	**15**	**37**	2.4	**6.5**	1.6	68.0
26-Aug-21	2.8	2.0	**12**	**31**	2.2	**5.4**	1.6	57.0
29-Sep-21	3.0	2.1	**14**	**31**	2.2	5.8	0.0	58.1
26-Oct-21	2.6	1.8	**11**	**26**	1.8	**4.8**	1.2	49.2
19-Nov-21	3.1	<0.5	**16**	**29**	2.0	**6.1**	1.3	57.8
29-Dec-21	2.4	1.4	**16**	**29**	1.9	**5.9**	0.9	57.5
19-Jan-22	**2.3**	1.9	**12**	**29**	2.2	**6.3**	1.7	55.4
23-Feb-22	2.1	1.1	**9.7**	**24**	1.8	**5.7**	1.2	45.6
22-Mar-22	1.8	1.1	**12**	**29**	1.5	**5.2**	1.3	51.9
13-Apr-22	2.0	1.5	**9.8**	**23**	1.5	**5.0**	<1	42.8



The treatment system continues to perform as intended. The VOCs in the recovered groundwater are removed by the air stripper prior to discharge. To date, there has been no reported concentration of any compound in excess of the discharge limits (see Appendix W of the SMP), for the Final EFF sample**.** The Air Stripper Treatment (AST) system continues to reduce the contaminant load to below the MDL of 1.0 μg/l from the recovered groundwater.

An additional requirement to monitor for Total Dissolved Solids (TDS) was placed on the Final EFF sample as part of the renewal of the substantive requirements of the SPDES program. Although listed as a limit on the substantive requirements, the requirement for TDS is one of monitor and report only. The GWTF does not have the ability to remove TDS from the recovered groundwater. The TDS, in mg/l, is reported to NYSDEC monthly. The TDS levels ranged from 1200 mg/l to 1800 mg/l as seen in the following table.

DATE	2021-2022 TDS mg/l	2020-2021 TDS mg/l	2019-2020 TDS mg/l	2018-2019 TDS mg/l	2017-2018 TDS mg/l
June	1800	2000	1200	2000	2600
July	1800	2000	1300	1900	2600
August	1500	2000	2000	2000	2200
September	1800	1700	2100	2100	2200
October	1500	2000	1700	1800	2000
November	1700	1900	1200	1400	1900
December	1700	2000	2100	1700	2100
January	1500	1900	2100	1700	2100
February	1200	1900	2000	1500	2100
March	1200	1800	1800	1400	2100
April	1400	1800	2300	1500	2000
May		1800	2000	1300	2000

REMEDIAL SYSTEM PERFORMANCE

The following table represents the annual average pumping rate, in gallons per minute, for each of the recovery wells. Production rates fluctuated slightly from previous reporting periods. The production from RW-5R is reduced to prevent impeller wear from excessive silt in the recovered groundwater. RW-2 reduction is also due to impeller wear and fouling. All wells are on a preventative maintenance schedule to maintain optimal production rate. The frequency of the maintenance schedule varies between wells and may be adjusted based on flow rate monitoring.

Average Annual Flow Rate (GPM)

Well	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
RW-2	1.40	1.45	2.24	3.51	2.74
RW-3	0.29	0.24	0.25	0.16	0.18
RW-4	0.65	0.45	0.43	0.57	0.57
RW-5R	2.65	2.30	2.36	1.57	1.47
RW-8	3.34	3.15	2.46	1.64	1.99
RW-9	0.11	0.10	0.13	0.10	0.14
RW-11	1.30	1.03	0.93	0.85	0.53
RW-12	2.50	2.35	2.52	2.30	2.29
RW-13	0.77	1.04	0.73	0.66	0.58
System Flow Average	13.01	12.11	12.05	11.36	10.49

CITY OF FULTON WATER TREATMENT FACILITY (WTF)

The City of Fulton WTF remained off throughout the reporting period. As noted in the previous annual reports, the treatment system was shut May 20, 2012. At the time of shut-down, the water from M-2A was directed to the Oswego River under a SPDES permit obtained by Riccelli Fulton, LLC. The City was given approval to use the water from K-1 without treatment on December 13, 2012.

The water from M-2A continued to be discharged directly to the Oswego River throughout this entire reporting period due to elevated chloride levels.

GROUNDWATER MONITORING RESULTS

Annual sampling of select groundwater monitoring wells, known as the Early Warning Network (EWN), and quarterly sampling of the active recovery wells is performed to evaluate the effectiveness of the groundwater recovery system.

For evaluation of the groundwater recovery system, the EWN and active RW wells are divided into six functional groups. They are the; Northern Operable Unit Source (NOU-S) and Plume (NOU-P) areas, the Southern Operable Unit Source (SOU-S) and Plume (SOU-P) areas, the Taylor Property (TP), and Municipal Well Field (MWF).

The following table lists the wells and their sampling frequency (ƒ), either annually (A) or quarterly (Q) in their functional monitoring groups.

FUNCTIONAL MONITORING GROUPS											
Northern Operable Unit				Southern Operable Unit				Taylor Property		Municipal Wells	
Source Area		Plume Area		Source Area		Plume Area					
Well	ƒ	Well	ƒ	Well	ƒ	Well	ƒ	Well	ƒ	Well	ƒ
MW-2S	A	MW-8I	A	MW-36S	A	MW-37I	A	MW-14D	A	MW-28S	A
MW-3D	A	MW-8D	A			MW-54I	A	MW-21S	A	MW-28I	A
MW-16D	A	MW-13D	A			RW-8	Q	MW-32D	A		
MW-38S	A	MW-17D	A			RW-9	Q	MW-33S	A		
RW-2	Q	MW-51D	A					MW-34D	A		
RW-3	Q	MW-56D	A					MW-35D	A		
RW-4	Q	MW-61D	A					RW-11	Q		
RW-5R	Q	RW-13	Q					RW-12	Q		

The laboratory analytical results for the sampling of the RWs were reported in previous sections. The results for the functional monitoring groups are reported below. Figure 2 has been included as a reference to the location of the functional monitoring well groups. The Taylor Property has been included in the NOU-P area. The NOU-S area is shown in orange and the NOU-P is yellow. The SOU-S is pink, and SOU-P is a lighter shade of pink. The Municipal Well Field is shaded green. Figure 1 depicts the location of monitoring and recovery wells referenced in this report with the exception of the replacement well RW-5R. Figure 3 depicts the location of the DPE wells, SVE wells and replacement RW-5R.

NORTHERN OPERABLE UNIT

NOU-Source Area

Four groundwater monitoring wells (MW-2S, MW-3D, MW-16D and MW-38S) are sampled annually and, three recovery wells (RW-3, RW-4, and RW-5R) are sampled quarterly to monitor and evaluate water quality in the NOU-Source area. The analytical data from the April 2019 sampling through the April 2022 sampling is summarized in the table below for trend assessment. All concentrations are presented in μg/l:

MW-2S	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride	TOTAL VOCs
16-Apr-19	<5	<5	**600**	**46**	<5	**6.5**	<5	653
15-Apr-20	<5	<5	**500**	**39**	<5	**5.2**	**6.5**	551
13-Apr-21	<5	<5	**190**	**38**	<5	<5	<5	228
13-Apr-22	<5	<5	**200**	**26**	<5	<5	<5	226
MW-3D								
16-Apr-19	<2	<2	2.8	**110**	<2	4.0	<2	117
15-Apr-20	1.1	2.1	**6.5**	**88**	**6.6**	**8.2**	<1	113
13-Apr-21	<1	<1	2.8	**35**	**1.8**	3.2	<1	43
13-Apr-22	<1	2.4	4.9	**98**	**6.1**	**12**	<1	123
MW-16D								
16-Apr-19	**6.4**	**4.9**	**19**	**55**	**17**	2.7	3.2	108
16-Apr-20	**6.9**	**9.0**	**58**	**81**	**24**	**11**	**9.0**	199
22-Oct-20	4.1	**6.5**	**41**	**100**	**18**	**5.4**	4.0	179
13-Apr-21	4.0	**6.7**	**38**	**90**	**19**	**5.4**	4.3	167
13-Apr-22	2.0	**5.7**	**17**	**79**	**13**	3.3	1.5	122
MW-38S								
16-Apr-19	**95**	**27**	**58**	**83**	**12**	**13**	<2	288
16-Apr-20	**150**	**60**	**160**	**120**	**21**	**16**	<2	527
13-Apr-21	**35**	**8.9**	**54**	**55**	**6.7**	**7.8**	<1	167
13-Apr-22	**86**	**34**	**120**	**90**	**14**	**16**	<1	360

MW-2S and MW-3D have shown improvements in the water quality over the past four years. Concentrations of certain compounds continue to fluctuate in these two wells. The COCs in these two wells clearly demonstrate a declining trend as noted on the line graphs of the past 5-year data set (Appendix C). The VOC concentrations will continue to be monitored in these monitoring wells.

The VOC levels reported for the April 2022 sampling event for MW-16D and MW-38S continue to fluctuate. Contaminant level monitoring will continue to determine any potential for improvement in these areas. Additional samples will be collected from these two wells in October 2022 to monitor trends and determine if adjustment to the remedial activities will be recommended.

NOU-Plume Area

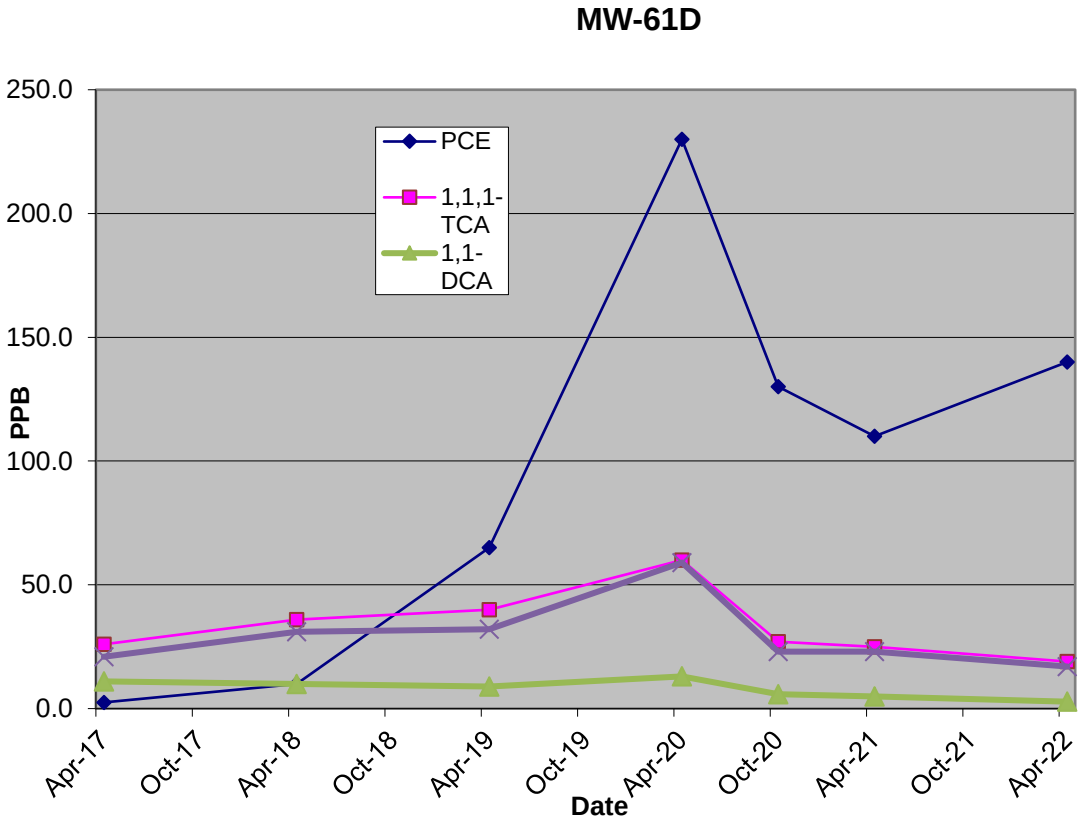
Seven groundwater monitoring wells (MW-8I, MW-8D, MW-13D, MW-17D, MW-51D, MW-56D, and MW-61D) are sampled annually and two recovery wells (RW-13 and RW-2) are sampled quarterly to monitor and evaluate water quality in NOU-P. No site related VOCs were detected at or above the SCG concentration of 5.0 µg/l during the reporting period in the samples collected from MW-8I, MW-13D, MW-51D, or MW-56D.

One or more VOCs were reported in samples collected from MW-8D, MW-17D and MW-61D at concentrations >5.0 µg/l for the April 2022 sampling event. The following table summarizes the results for these wells. All concentrations are presented in µg/l.

MW-8D	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	TOTAL
16-Apr-19	**6.2**	**5.1**	**5.8**	**19**	**11**	4.8	52
15-Apr-20	**7.6**	**6.8**	**14**	**8.5**	**11**	**8.4**	56
13-Apr-21	**6.0**	4.6	3.6	**13**	**8.5**	**8.2**	44
13-Apr-22	4.5	4.8	1.5	**16**	**6.3**	3.2	36
MW-17D	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	TOTAL
16-Apr-19	**5.8**	1.8	1.3	1.6	**5.2**	<0.5	16
15-Apr-20	**12**	**5.7**	3.2	2.2	**9.6**	<0.5	33
13-Apr-21	**7.8**	3.0	3.6	2.0	**5.0**	0.53	22
13-Apr-22	**11**	**6.7**	**5.4**	2.0	**7.3**	<1	32
MW-61D	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	TOTAL
16-Apr-19	**8.9**	**32**	**29**	**65**	**40**	3.3	178
15-Apr-20	**13**	**59**	**41**	**230**	**60**	**6.9**	410
13-Apr-21	4.6	**23**	**16**	**110**	**25**	**5.1**	184
13-Apr-22	2.8	**17**	**11**	**140**	**19**	**5.6**	195

The contaminant levels reported for the samples collected from MW-8D and MW-17D are consistent with historical values.

The following graph depicts VOCs in MW-61D for the past six years. MW-61D contaminant concentrations increased slightly in 2020 and have generally been decreasing over the past two years of monitoring. The recently upgraded pump in RW-2 may be the reason for this change in MW-61D. An additional sample will be collected from MW-61D in October 2022 to provide more information for better trending.



Monitoring wells, MW-8I, MW-13D, MW-51D and MW-56D in NOU-P continue to demonstrate variable concentrations of site related VOCs with slowly declining trends. These trends indicate that the recovery well network in this area is effectively reducing the overall VOC concentrations and, is achieving hydraulic control, preventing downgradient migration of the contaminants of concern.

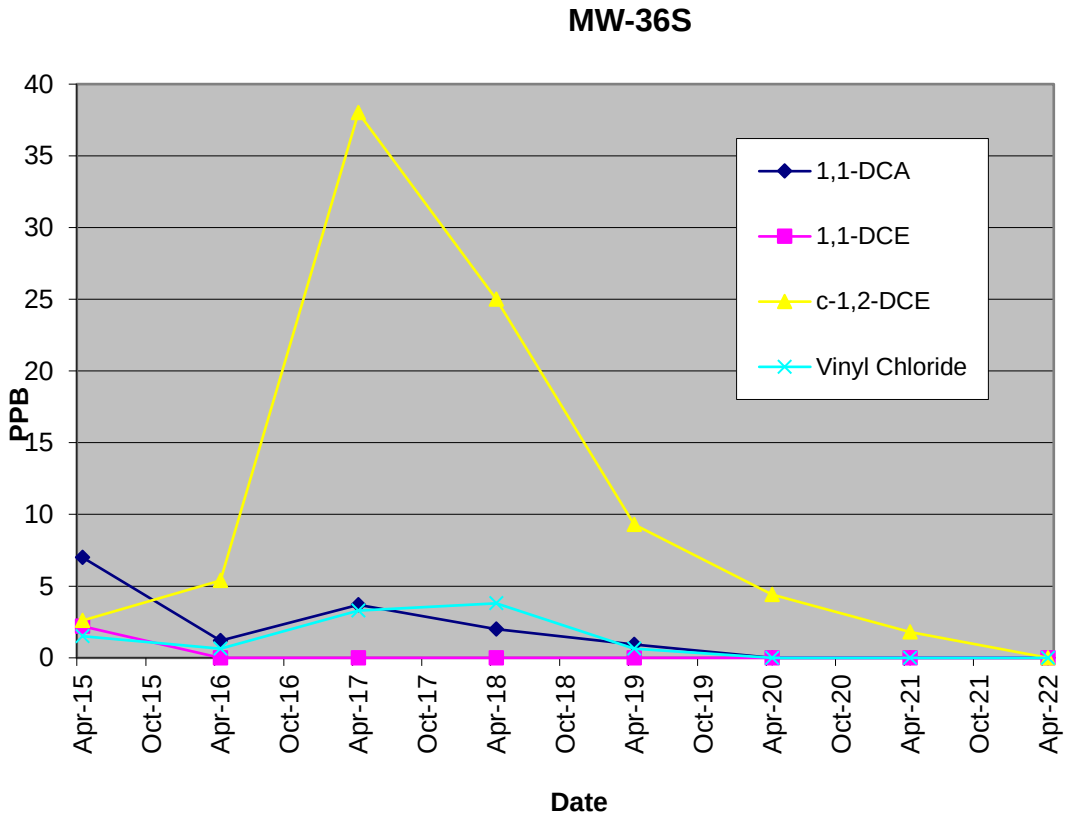
SOUTHERN OPERABLE UNIT

SOU-Source Area

SOU-S is evaluated by the annual sampling of MW-36S. A summary of the analytical results for samples collected from MW-36S is included in the following table. All concentrations are presented in μg/l.

MW-36S	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1 - TCA	TCE	Vinyl Chloride	TOTAL
16-Apr-19	0.92	<0.5	**9.3**	<0.5	<0.5	<0.5	0.63	**11**
15-Apr-20	<1	<1	4.4	<1	<1	<1	<1	**4.4**
13-Apr-21	<1	<1	1.8	<1	<1	<1	<1	**1.8**
13-Apr-22	<1	<1	<1	<1	<1	<1	<1	**0.0**

A review of the data for MW-36S for the past seven years (see line graph below) indicates that the concentration of individual VOCs in the groundwater at this location demonstrate that no detectable concentrations of CoC's remain in this source area.



SOU-Plume Area

SOU-P is monitored and evaluated by the annual sampling of MW-37I, MW-54I and the quarterly sampling of RW-8 and RW-9. No COCs were reported in the samples collected from MW-54I at concentrations above the MDL of 0.5 µg/l for the past 5 years. No site related VOCs were reported in the annual sample collected from MW-37I at a concentration greater than the SCG of 5.0 µg/l. The results for MW-37I, RW-8 and RW-9 are summarized in the table below. All concentrations are presented in µg/l.

MW-37I	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride	TOTAL
16-Apr-19	1.3	<0.5	2.4	**7.4**	0.58	0.50	<0.5	12.2
15-Apr-20	1.2	<0.5	1.6	3.8	<1	<1	<1	6.6
13-Apr-21	<1	<1	1.5	2.8	<1	<1	<1	4.3
13-Apr-22	1.1	<1	3.0	3.3	<1	<1	<1	7.4
RW-8	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride	TOTAL
14-Apr-21	1.2	0.74	4.0	3.4	0.97	0.81	<0.5	11
12-Jul-21	1.8	0.91	**5.7**	3.9	1.00	0.85	0.58	15
26-Oct-21	0.73	<0.5	**2.2**	1.5	<0.5	<1	<1	4.4
19-Jan-22	1.5	0.63	**5.8**	5.3	1.00	0.88	<1	15
14-Apr-22	1.8	1.2	**5.5**	2.2	1.1	<1	<1	12
RW-9	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride	TOTAL
14-Apr-21	**22**	**16**	**230**	**28**	3.2	**43**	2.3	345
12-Jul-21	**20**	**13**	**150**	**23**	3.1	**39**	1.7	250
26-Oct-21	**7.0**	**5.0**	**74**	**9.0**	1.1	**13**	2.6	112
19-Jan-22	**20**	**11**	**170**	**20**	3.2	**38**	2.9	265
14-Apr-22	**16**	**8.9**	**150**	**12**	2.1	**25**	2.8	217

The analytical data for MW-37I has shown a decreasing trend over the past 5 years as noted on the line graph in Appendix C. The analytical data from the sampling of RW-8 and RW-9 continues to demonstrate declining concentrations of all COCs.

FORMER TAYLOR PROPERTY

The Former Taylor Property Monitoring Well network is directly upgradient of the City of Fulton Municipal Well M-2A. Groundwater quality on the Taylor Property is monitored and evaluated by the collection and analysis of groundwater samples from six monitoring wells (MW-14D, MW-21S, MW-32D, MW-33S, MW-34D, and MW-35D) annually, and two recovery wells, RW-11, and RW-12 quarterly. The declining trends noted at these wells in the past Annual Reports continue and indicate that hydraulic control is being maintained in this area and the recovery well network is protective of the municipal well field.

The concentrations reported for all Taylor Property wells, except MW-34D, now meet SCGs for the identified COCs. The VOC concentrations reported in MW-34D increased slightly as noted in the table below and in the graph of analytical data from this well included in Appendix C.

As noted above, recovery operations from RW-10 were halted in August 2015 and the pump was allowed to remain off to determine if its operation is necessary to maintain the current downward trends noted in the surrounding monitoring wells (MW-21S, MW-33S, And MW-34D). Line graphs of the analytical data for the past 5 years from these wells are included in Appendix C. The data supports allowing RW-10 to remain off-line since the concentrations in these monitoring wells are consistently below the SCGs and the concentration of PCE in MW-34D is fluctuating around the SCG level for one compound. Continued monitoring of these wells on an annual basis will provide sufficient information to determine if resumption of pumping at RW-10 is required.

The results of the sampling of MW-34D are summarized in the following table. All concentrations are presented in μg/l.

MW-34D	1,1-DCA	1,1-DCE	PCE	1,1,1-TCA	TOTAL
23-Apr-18	0.67	0.81	**8.5**	2.6	13
16-Apr-19	0.70	0.68	**8.6**	3.0	13
15-Apr-20	<1	<1	**8.8**	3.0	12
13-Apr-21	<1	<1	**5.3**	1.6	6.9
13-Apr-22	<1	<1	**5.9**	2.3	8.2

CITY OF FULTON MUNICIPAL WELL FIELD

Early warning detection for the City of Fulton Well field is provided by the annual sampling of monitoring wells MW-28S and MW-28I. MW-28S has not reported any compounds above the MDL of 0.5 µg /l since October 2008 and no compounds were reported above the MDL in MW-28I since April 2017.

SOIL VAPOR EXTRACTION SYSTEM

The SVE system is currently targeting a large area under the former container facility. The operation of the SVE system is described below. The details of the installation can be found in the NYSDEC-approved Soil Vapor Extraction System Construction Completion Report prepared by AECOM (dated August 16, 2012) (Appendix T to the SMP).

The SVE system was in continuous operation this entire reporting period. Certain wells are utilized for extraction based on historical analytical data and physical location. The following table presents the previous cycling operation prior to September 2015. The final column denotes the wells in operation from September 2015 through April 2022.

Dates	01/14/15	03/13/15	04/14/15	06/03/15	07/01/15	08/14/15	09/29/15
Well	03/13/15	04/14/15	06/03/15	07/01/15	08/14/15	09/29/15	04/30/22
DPEN-1	**ON**	off	off	off	off	off	**ON**
DPEN-2	**ON**	off	**ON**	off	**ON**	off	**ON**
DPEN-3	**ON**	off	**ON**	off	**ON**	off	off
DPEN-4	**ON**	off	**ON**	off	**ON**	off	**ON**
DPEN-5	**ON**	off	**ON**	off	**ON**	off	off
SVEN-1	**ON**	off	**ON**	off	off	off	off
SVEN-2	**ON**	off	**ON**	off	**ON**	off	**ON**
SVEN-3	**ON**	off	---	off	off	off	off
SVEN-4	**ON**	off	---	off	off	off	off
SVEN-5	**ON**	off	off	off	off	off	off
SVEN-6	Off	off	off	off	off	off	**ON**
SVEN-7	**ON**	off	off	off	off	off	**ON**
SVEN-8	**ON**	off	**ON**	off	**ON**	off	**ON**
SVEN-9	---	off	---	off	**ON**	off	off
SVEN-10	Off	off	off	off	**ON**	off	**ON**
SVEN-11	Off	off	**ON**	off	**ON**	off	**ON**
DPES-1	**ON**	off	**ON**	off	**ON**	off	off
SVES-1	**ON**	off	**ON**	off	**ON**	off	off

Generally, the system is operated to provide between 3.0” Hg to 5.0” Hg vacuum to all the active recovery points. Operational data is collected from the active recovery points as well as the combined influent to provide flow information for calculating mass removal rates. The analytical data from the sampling of certain recovery points and the operational data collected are reviewed to determine the operating strategy of the SVE system. Tables of the analytical data collected throughout the reporting period and the mass removal calculation tables are included in Appendix D.

Samples were collected from a select list of operating vapor extraction wells during this reporting period. The analytical data collected from the Soil Vapor Extraction wells in the Northern area (SVEN) and the Dual Phase Extraction wells in the Northern area (DPEN) wells since March 2019 are summarized and presented in the following table. The selection of wells operated this reporting period remained the same as the previous reporting period and were selected based on historical analytical data and physical location. Wells are selected for operation based on the geographic location to limit mounding of the water table and to target the higher level of contamination noted in previous analytical data.

Samples of recovered vapors were collected from DPEN-1, DPEN-2, DPEN-4 and SVEN-2 once during this reporting period. The data indicates continued operation is providing minimal mass removal of VOCs and additional protection against vapor intrusion into the on-site structure.

The average total VOC concentrations from each sample, in conjunction with the vapor recovery rate from the specific well were used to estimate the mass removal. Throughout the reporting period, the SVE system was in operation for 365 days and an estimated total of 0.64 pounds of VOC contaminants were removed.

Under the current guidance provided by NYSDOH*, if sub-slab vapors exceed threshold levels for certain compounds, regardless of indoor air concentrations, mitigation is required. The levels of cis-1,2-DCE remain above the threshold levels established as noted in Table 1 at the end of this section. Once the levels of all VOC in the sub slab vapors being recovered drop below their respective levels, consideration will be given to moving the SVE system to a cyclical operation. If the cyclical operation of the SVE system indicates the levels of VOCs are remaining below the mitigation required levels for all compounds, indoor air quality samples will be collected as part of a Vapor Intrusion Investigation to determine if mitigation is required as directed by the DOH guidance.

DATE	Location	1,1,1-TCA	*1,1-DCA	1,1-DCE	*1,4-Dioxane	cis-1,2-DCE	Methylene Chloride	PCE	TCE	Total VOC
NYSDOH Matrix		B	N/A	A	N/A	A	B	B	A	
Mitigation Req'd Action Level		1000 µg/m^3	1000 µg/m^3	60 µg/m^3	1000 µg/m^3	60 µg/m^3	1000 µg/m^3	1000 µg/m^3	60 µg/m^3	
03/08/19	DPEN-1	5.9	3.7	0.56	<1.1	3.3	2.4	130	2.7	149
04/13/20	DPEN-1	2.9	1.4	0.67	<1.1	2.5	<0.52	40	2.1	50
07/22/20	DPEN-1	17	13	5.7	<1.1	54	0.42	83	6.1	179
04/20/21	DPEN-1	9.9	7.3	0.67	<1.1	28	0.76	40	2.4	89
03/07/22	DPEN-1	2.2	0.65	<0.59	<1.1	2.7	<0.52	31	1.4	38
03/08/19	DPEN-2	11	2.1	0.5	<1.1	7.2	0.7	350	1.2	373
04/13/20	DPEN-2	9.8	2.0	0.40	<1.1	1.9	0.59	42	0.70	57
07/22/20	DPEN-2	277	15.0	2.10	<1.1	41	0.56	280	11.00	627
04/20/21	DPEN-2	11	2.4	0.48	<1.1	15	1.50	420	3.30	454
03/07/22	DPEN-2	8.6	1.7	0.44	<1.1	11	0.49	61	1.10	84
03/08/19	DPEN-4	580	100	5	<1.1	510	2.5	920	140	2258
04/13/20	DPEN-4	240	56	2.8	<1.1	170	0.76	160	30	660
07/22/20	DPEN-4	3000	350	65	<1.1	3800	21	1200	510	8946
04/20/21	DPEN-4	2800	230	19	0.79	2700	4.9	1200	710	7665
03/07/22	DPEN-4	340	83	1.8	<1.1	180	0.38	130	31	766
03/08/19	SVEN-2	1.4	<0.61	<0.59	94	0.59	0.59	170	0.59	267
04/13/20	SVEN-2	1.5	<0.61	<0.59	57	<0.59	0.59	29	<0.81	88
07/22/20	SVEN-2	8.8	0.97	0.63	110	6.9	0.45	170	2.2	300
04/20/21	SVEN-2	4.6	0.65	<0.59	51	3.1	0.59	63	1.6	125
03/07/22	SVEN-2	1.9	<0.61	<0.59	22	1.3	10.00	33	3.3	72

All readings in µg/m^3

* NYSDOH Guidance Document is entitled "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (October 2006) (Revised May 2017)

** Matrix B is assumed for all compounds not specifically listed

CONCLUSIONS

1. The following is a list of the Remediation Goals presented in section 6 of the ROD and a brief discussion of the progress that has been made in meeting those goals and associated SCGs.

    - "Eliminate to the extent practicable the contamination present within the on-site soils/waste (reduce soil contaminant levels to levels protective of groundwater as indicated in soil tables in section 4.3 [of the ROD])".
        - Initially, this goal was met by the removal of the Spill Containment Tank and surrounding soils in 1986. The soils beneath the floor of the former wastewater treatment area located in the southwest corner of the facility were also identified in the Remedial Investigation (RI) to have contamination in excess of the Soil Cleanup Levels found in the ROD (ROD SCOs). The soils in this area were remediated with the operation of a SVE system from 1997 through 1999. Confirmatory soil samples were collected, and it was determined that the soils beneath the facility in this area were in conformance with the levels noted in the ROD.
        - A subsurface investigation in 2008 identified other areas beneath the floor of the facility and a small area outside the footprint of the facility to the south that could potentially exceed the contaminant levels set forth in the ROD SCOs. These two areas are referenced in the text above as: SVEN (a large area beneath the floor of the facility) and SVES (a small area beneath the roadway to the south of the facility). Additional equipment was installed in 2011 including a new vacuum extraction unit and new extraction wells located throughout both SVEN and SVES. The SVE system is still in operation addressing the soils in the SVEN area. The vacuum extraction in the SVES area is ineffective for most of the year due to the elevated water table.
        - There is currently no other area of potential soil contamination or waste materials requiring a remedial response that has been identified at the site.
        - **Status: Ongoing.** As of October 2017, the ROD SCOs have been replaced by the Soil Cleanup Objectives for Commercial and Industrial uses that are found at 6 NYCRR 375-6.8 (b) (Part 375 SCOs). Attached as Appendix E is a copy of the Part 375 SCOs and their applicability depending on the particular use.
    - "Eliminate the potential for direct human or animal contact with contaminated soils on-site"
        - The origination of the contamination on this site was below grade through leaking underground storage tanks and piping. With the removal of the Spill Containment Tank and surrounding soils, the threat of direct contact has been addressed.
        - With respect to the remaining impacted soils that are beneath the facility floor, an SMP has been prepared for implementation under the recorded Declaration of Covenants and Restrictions that requires the use of an excavation work plan for any excavations within a designated area and specifies the actions to be taken to address potential exposure to the contaminants at issue.
        - **Status: Complete with the approval of the SMP and reclassification of the Site from a Class 2 to a Class 4.**

- "Mitigate the impacts of contaminated groundwater to the environment"
    - The groundwater recovery system continues to effectively recover VOCs from the impacted aquifer and discharge of the treated groundwater has been in accordance with the substantive SPDES requirements developed by NYSDEC as shown in the monthly monitoring data submitted to NYSDEC during the reporting period.
    - **Status: Completed**
- "Prevent, to the extent practicable, migration of the contaminants in the source areas to groundwater"
    - The data indicates that the recovery well networks in the NOU and SOU source areas are effectively capturing the impacted groundwater at the source and preventing downgradient migration from those areas. Declining trends noted in the monitoring wells immediately downgradient of the source areas indicate successful hydraulic capture of the plume in the source areas.
    - The reduction in the concentrations noted in the outlying recovery wells and monitoring wells further downgradient indicate hydraulic control in the plume area. Residual concentrations in the plume area have dropped below SCGs in all monitoring wells, except MW-34D, downgradient from the perimeter recovery wells RW-10, RW-11 and RW-12 located adjacent to the former Taylor Property. Although one VOC reported for MW-34D remains above the SCGs, the declining trend noted supports the assumption of hydraulic control in this area. A copy of a graph of the VOC concentrations for MW-34D is included in Appendix C.
    - The installation in 2011 of the SVE system and subsequent operation is removing VOC mass from the vadose and fringe zones, thus preventing the migration of the contaminants from the source areas.
    - **Status: Completed**
- "To the extent practicable, provide for attainment of SGCs for groundwater quality at the limits of the area of concern (AOC). The AOC for the site is the area from the spill source locations to the Fulton municipal well field."
    - Using MW-28I as the "limit" of the AOC with respect to the plume's closest approach to the municipal wells, the concentration of each individual contaminant of concern has decreased steadily since operation of the remedial system began. No individual COC has been reported at the limit of the AOC at a concentration in excess of its respective SCG since February 2003. VOC concentrations within the AOC closer to the source areas continue to decline.
    - **Status: Ongoing**

2. The GWTF continues to perform as designed and is effectively removing the VOC contamination from the recovered groundwater to below the MDL of 1.0 μg/l. The current treatment process used includes the use of air stripping technology. The use of the Liquid Phase Carbon treatment is not necessary for the treatment of the groundwater.

3. The operation of RW-2 continues to provide a benefit to the remedial effort. The calculated mass removal rate for this well remains higher than all other recovery wells. The effects of the pumping at RW-2 appear to have a positive impact on downgradient monitoring wells MW-8D, MW-13D noted as declines in the contaminant concentrations. Trends for PCE in RW-16D steadily increased from April 2017 to a high in October 2020. The levels reported in April of 2022 dropped slightly. PCE concentrations in MW-61D have been trending downward since April 2020. Line graphs of the analytical data for these wells are included in Appendix C. This recovery well, RW-2, will continue to be utilized and monitoring of the surrounding wells will also continue. An additional sample will be collected from MW-16D and MW-61D in October 2022 to more closely monitor these trends.

4. The production rate from RW-3 increased when compared to the previous year. The VOC concentrations in this Recovery Well remain above SCGs. The declining trend noted in previous Annual Reports continues for many of the compounds. Continued operation and monitoring of this recovery well will provide a benefit to the remedial effort.

5. RW-4 production rate remained consistent when compared to the last reporting period. The levels of VOCs have shown variability over the past year. No definitive trends can be established at this time. Operation of this recovery well will continue, and the VOC concentrations will continue to be monitored.

6. Contaminant concentrations in replacement well RW-5R continue to trend downward. Concentration of COCs remain above the SCGs. The production rate decreased due to pump damage from the silt being drawn into the well's water column. This recovery well will remain on throughout the next operating year.

7. RW-8 and RW-9 continue to maintain hydraulic control of the SOU-P area. The VOC concentrations continue to decline in both recovery wells. The VOC concentrations in MW-54I, located within the cone of influence of RW-8, remain below the MDL of 0.5 μg/l. MW-37I is located between the SOU-S and RW-8 and RW-9. The decrease in contaminant levels experienced in MW-37I continued throughout this reporting period. Monitoring of MW-37I will continue as well as the operation of RW-8 and RW-9 over the next reporting period. Production rates from RW-8 increased with additional maintenance efforts over the past year. The maintenance frequency will remain at levels established after 2020-2021 AGWMR.

8. The perimeter recovery well RW-10 operation was halted in August 2015. The contaminant levels reported for MW-21S, MW-33S and MW-35D during the groundwater sampling event in 2021 remained consistent at levels below the SCG of 5.0 μg/l and support allowing RW-10 to remain off. Graphical presentation of the analytical data for these wells for the past 5 years are included in Appendix C.

9. The perimeter recovery wells (RW-11 and RW-12) located along the former Taylor Property boundary continue to function efficiently in preventing the migration of impacted ground water to the City of Fulton Well Field evidenced by the reducing trends experienced in all the monitoring wells located on the Former Taylor Property (MW-32D, MW-33S, MW-34D and MW-35D), and on the municipal well field property (MW-28I). The PCE concentration in both of these Recovery Wells is hovering around, and has recently fallen below, 2.5 μg/l (50% of the SCGs for groundwater for all of the COCs (see http://www.dec.ny.gov/dos/water_pdf/togs111.pdf). Only MW-34D, downgradient of these recovery wells, has reported concentrations of any COC above 5 μg/l. Analytical data from MW-34D is demonstrating a downward trend in contaminant levels. Line graphs of all the active Recovery Wells are in Appendix C.

10. RW-13 VOC concentrations continue to decline, VOC levels reported for the four sampling events were fluctuating near the SCG of 5.0 μg/l for PCE, 1,1-DCA, 1,1-DCE and TCE. The production rate from this well decreased slightly from 0.66 GPM to 0.58 GPM. The contaminant concentrations in the monitoring wells thought to be under the influence of RW-13 (MW-51D, MW-56D and MW-13D) continue to decline. MW-8D VOC levels appear to remain consistent from the previous reporting period. Continued operation of RW-13 will further reduce the contaminant load in this area of the site.

11. The City of Fulton Water Treatment Facility (WTF) has been shut down and mothballed according to the approved mothball procedures. If, in the future, the City determines the chloride levels in M-2A are acceptable and wishes to introduce the water from M-2A into the distribution system, quarterly monitoring will be required for 4 consecutive quarters. Should any one individual COC, as defined in the IRM Order on Consent, reach or exceed a level of 50% of the MCL, treatment and monitoring requirements will resume.

12. The Early Warning Network sampling schedule is annual based on the determination of NYSDEC. The annual sampling of these wells takes place in April so the data is available for the preparation of the annual reporting period that currently ends on April 30.

13. SVES Operation
    The operation of the SVE system in the southern area is ineffective due to the elevated water table in this area. No vapors were recovered from any extraction points in the southern area this reporting period.

14. SVEN operation
    The SVEN system removed a significant mass of VOC from the vadose and fringe zone beneath the former can plant building in the 12 years of operation. The estimated mass removal rate calculated for the 365 days of operation this year decreased from 5.4 pounds in 2021 to 0.64 pounds. Periodic monitoring is indicating an overall decreasing trend in the VOC concentrations being recovered. The results from the sampling of DPEN-4 indicate the system should remain in continuous operation. The SVE system is approaching contaminant levels when switching to cyclical operation will be considered.

RECOMMENDATIONS

1. RW-2, RW-3 and RW-4 will continue operation throughout the next reporting period. No changes are recommended to these wells.
2. RW-5R will continue to operate at the restricted flow rate to prevent the removal of silt and sand from the screened zone in this well. Effort will be made to improve the production rate in this well while still limiting the removal of silt.
3. RW-8 and RW-9 will continue to operate throughout the next reporting period. Downgradient monitoring wells MW-53I will be sampled in April 2022 to compare with historical data and verify ongoing hydraulic control of the aquifer in this area.
4. RW-10 will remain off and the analytical data from MW-21S, MW-33S and MW-35D will be evaluated periodically. If the contaminant levels in these monitoring wells show an increasing trend, RW-10 will be brought back on-line.
5. RW-11, RW-12 and RW-13 will continue operation throughout the next reporting period. The contaminant levels in RW-11 and RW-12 are below the SCGs noted above and are nearing 50% of the SCGs. Once VOC levels are shown to be below the 50% level of the SCGs for four consecutive quarters, a request to cease operation of these wells will be considered. PCE, 1,1-DCA and TCE levels in RW-13 continue to fluctuate around the SCG of 5.0 μg/l. No changes are recommended for this area.
6. The operation of the SVE system in the Northern area will continue. The areas around DPEN-4 and DPEN-2 will continue to be the focus of the extraction effort. The extraction wells used this entire reporting period will continue to be utilized. A more focused sampling effort will be implemented concentrating on DPEN-4. Future monitoring will determine if transitioning to cyclical operation or termination of the operation is warranted. Once it is determined the SVE systems have reached their useful life, a Work Plan will be developed to justify permanently stopping the operation. The Work Plan will include a Soil Vapor Intrusion investigation and confirmatory soil sampling plan.

FORMER MILLER CONTAINER SITE
NYSDEC Site # 7-38-029
GWTF TOTALIZER READINGS

May 1, 2021 through April 30, 2022

May-21		Daily Gallons
1	49088189	23594
2	49111783	21724
3	49133507	20957
4	49154464	16708
5	49171172	20929
6	49192101	20811
7	49212912	23087
8	49235999	23182
9	49259181	20813
10	49279994	20800
11	49300794	16625
12	49317419	6718
13	49324137	22706
14	49346843	20743
15	49367586	20736
16	49388322	20749
17	49409071	20783
18	49429854	20660
19	49450514	19863
20	49470377	19620
21	49489997	19654
22	49509651	20064
23	49529715	20787
24	49550502	29289
25	49579791	16808
26	49596599	21026
27	49617625	25366
28	49642991	21466
29	49664457	21283
30	49685740	25445
31	49711185	21203
Total for Month	622996	
Daily Average	20096.65	
Average GPM	13.96	

Jun-21		Daily Gallons
1	49732388	21221
2	49753609	21184
3	49774793	25461
4	49800254	21335
5	49821589	21296
6	49842885	25416
7	49868301	21173
8	49889474	21132
9	49910606	20981
10	49931587	23588
11	49955175	22668
12	49977843	21080
13	49998923	21143
14	50020066	25104
15	50045170	20928
16	50066098	21020
17	50087118	20944
18	50108062	24825
19	50132887	21420
20	50154307	21091
21	50175398	21110
22	50196508	25345
23	50221853	21091
24	50242944	21104
25	50264048	21054
26	50285102	21086
27	50306188	22134
28	50328322	19915
29	50348237	25137
30	50373374	21008
Total for Month	662189	
Daily Average	22072.97	
Average GPM	15.33	

FORMER MILLER CONTAINER SITE
NYSDEC Site # 7-38-029
GWTF TOTALIZER READINGS

May 1, 2021 through April 30, 2022

Jul-21		Daily Gallons
1	50394382	25151
2	50419533	20974
3	50440507	21026
4	50461533	20942
5	50482475	20964
6	50503439	22432
7	50525871	23770
8	50549641	20956
9	50570597	20998
10	50591595	20987
11	50612582	21015
12	50633597	21019
13	50654616	21002
14	50675618	23744
15	50699362	22689
16	50722051	21104
17	50743155	21627
18	50764782	22418
19	50787200	23986
20	50811186	21243
21	50832429	21083
22	50853512	25285
23	50878797	20912
24	50899709	21157
25	50920866	21022
26	50941888	21098
27	50962986	25323
28	50988309	21097
29	51009406	21105
30	51030511	21042
31	51051553	23283
Total for Month	678179	
Daily Average	21876.74	
Average GPM	15.19	

Aug-21		Daily Gallons
1	51074836	23191
2	51098027	21157
3	51119184	25409
4	51144593	21106
5	51165699	21136
6	51186835	0
7	51186835	0
8	51186835	0
9	51186835	0
10	51186835	0
11	51186835	0
12	51186835	0
13	51186835	0
14	51186835	0
15	51186835	0
16	51186835	0
17	51186835	0
18	51186835	0
19	51186835	484
20	51187319	25050
21	51212369	20778
22	51233147	18763
23	51251910	20546
24	51272456	25247
25	51297703	21051
26	51318754	25246
27	51344000	20990
28	51364990	25119
29	51390109	20988
30	51411097	25235
31	51436332	20906
Total for Month	384779	
Daily Average	12412.23	
Average GPM	8.62	

FORMER MILLER CONTAINER SITE
NYSDEC Site # 7-38-029
GWTF TOTALIZER READINGS

May 1, 2021 through April 30, 2022

Sep-21		Daily Gallons
1	51457238	20898
2	51478136	25030
3	51503166	16511
4	51519677	0
5	51519677	0
6	51519677	0
7	51519677	0
8	51519677	0
9	51519677	0
10	51519677	0
11	51519677	0
12	51519677	0
13	51519677	17419
14	51537096	24811
15	51561907	24594
16	51586501	21380
17	51607881	23165
18	51631046	22782
19	51653828	20948
20	51674776	25017
21	51699793	22303
22	51722096	23402
23	51745498	21034
24	51766532	25118
25	51791650	20898
26	51812548	22101
27	51834649	23750
28	51858399	20858
29	51879257	24614
30	51903871	21282
Total for Month	467539	
Daily Average	15584.63	
Average GPM	10.82	

Oct-21		Daily Gallons
1	51925153	20854
2	51946007	21281
3	51967288	24547
4	51991835	24156
5	52015991	16646
6	52032637	20857
7	52053494	24361
8	52077855	20248
9	52098103	20103
10	52118206	19765
11	52137971	19951
12	52157922	21912
13	52179834	18723
14	52198557	19863
15	52218420	20457
16	52238877	21167
17	52260044	25196
18	52285240	17606
19	52302846	23815
20	52326661	20814
21	52347475	20682
22	52368157	20747
23	52388904	20719
24	52409623	24804
25	52434427	24695
26	52459122	21300
27	52480422	20965
28	52501387	20873
29	52522260	25196
30	52547456	20499
31	52567955	16481
Total for Month	664084	
Daily Average	21422.06	
Average GPM	14.88	

FORMER MILLER CONTAINER SITE
NYSDEC Site # 7-38-029
GWTF TOTALIZER READINGS

May 1, 2021 through April 30, 2022

Nov-21		Daily Gallons
1	52584436	20537
2	52604973	20412
3	52625385	20706
4	52646091	20651
5	52666742	22706
6	52689448	22103
7	52711551	21268
8	52732819	20637
9	52753456	20921
10	52774377	23393
11	52797770	19097
12	52816867	23701
13	52840568	20079
14	52860647	21313
15	52881960	20676
16	52902636	21698
17	52924334	16608
18	52940942	20812
19	52961754	20921
20	52982675	28979
21	53011654	19569
22	53031223	17898
23	53049121	12245
24	53061366	20495
25	53081861	17081
26	53098942	19534
27	53118476	16125
28	53134601	16065
29	53150666	15998
30	53166664	20191
Total for Month	598709	
Daily Average	19956.97	
Average GPM	13.86	

Dec-21		Daily Gallons
1	53186855	15693
2	53202548	15863
3	53218411	15778
4	53234189	15728
5	53249917	14443
6	53264360	17490
7	53281850	11921
8	53293771	15896
9	53309667	15929
10	53325596	15992
11	53341588	7871
12	53349459	0
13	53349459	0
14	53349459	0
15	53349459	0
16	53349459	17178
17	53366637	15655
18	53382292	19015
19	53401307	16325
20	53417632	15691
21	53433323	18781
22	53452104	16580
23	53468684	20391
24	53489075	20661
25	53509736	20671
26	53530407	20597
27	53551004	20542
28	53571546	20529
29	53592075	20509
30	53612584	20481
31	53633065	20393
Total for Month	466401	
Daily Average	15045.19	
Average GPM	10.45	

FORMER MILLER CONTAINER SITE
NYSDEC Site # 7-38-029
GWTF TOTALIZER READINGS

May 1, 2021 through April 30, 2022

Jan-22		Daily Gallons
1	53653458	20422
2	53673880	20471
3	53694351	20339
4	53714690	20400
5	53735090	20347
6	53755437	20281
7	53775718	20339
8	53796057	20292
9	53816349	20356
10	53836705	19633
11	53856338	17249
12	53873587	20245
13	53893832	20355
14	53914187	20396
15	53934583	20313
16	53954896	16239
17	53971135	20337
18	53991472	20285
19	54011757	16284
20	54028041	20350
21	54048391	20325
22	54068716	20324
23	54089040	16925
24	54105965	19648
25	54125613	20258
26	54145871	18211
27	54164082	18322
28	54182404	20332
29	54202736	20420
30	54223156	19333
31	54242489	17267
Total for Month	609424	
Daily Average	19658.84	
Average GPM	13.65	

Feb-22		Daily Gallons
1	54259756	20322
2	54280078	20306
3	54300384	20129
4	54320513	16310
5	54336823	20194
6	54357017	20230
7	54377247	16139
8	54393386	20175
9	54413561	17195
10	54430756	19132
11	54449888	20182
12	54470070	20299
13	54490369	16295
14	54506664	20310
15	54526974	20292
16	54547266	20727
17	54567993	21410
18	54589403	20031
19	54609434	17587
20	54627021	18714
21	54645735	20623
22	54666358	21228
23	54687586	16256
24	54703842	20266
25	54724108	16146
26	54740254	16073
27	54756327	20095
28	54776422	16223
Total for Month	533933	
Daily Average	19069.04	
Average GPM	13.24	

FORMER MILLER CONTAINER SITE
NYSDEC Site # 7-38-029
GWTF TOTALIZER READINGS

May 1, 2021 through April 30, 2022

Mar-22		Daily Gallons
1	54792645	20269
2	54812914	16215
3	54829129	19644
4	54848773	16736
5	54865509	16136
6	54881645	20330
7	54901975	15980
8	54917955	15889
9	54933844	16070
10	54949914	20064
11	54969978	16087
12	54986065	11628
13	54997693	11303
14	55008996	15995
15	55024991	16585
16	55041576	19175
17	55060751	15995
18	55076746	16120
19	55092866	20080
20	55112946	15999
21	55128945	20539
22	55149484	20586
23	55170070	28786
24	55198856	20523
25	55219379	20621
26	55240000	20623
27	55260623	20622
28	55281245	20416
29	55301661	12501
30	55314162	20538
31	55334700	20759
Total for Month	558278	
Daily Average	18008.97	
Average GPM	12.51	

Apr-22		Daily Gallons
1	55355459	20540
2	55375999	20493
3	55396492	20546
4	55417038	20644
5	55437682	20616
6	55458298	20549
7	55478847	21518
8	55500365	25172
9	55525537	20974
10	55546511	20853
11	55567364	25173
12	55592537	21044
13	55613581	20937
14	55634518	20895
15	55655413	25138
16	55680551	21026
17	55701577	20997
18	55722574	25246
19	55747820	25348
20	55773168	20864
21	55794032	20834
22	55814866	20736
23	55835602	20594
24	55856196	20938
25	55877134	20909
26	55898043	19924
27	55917967	20566
28	55938533	20497
29	55959030	20520
30	55979550	20471
5/1/2022	56000021	
Total for Month	665321	
Daily Average	21461.97	
Average GPM	14.90	

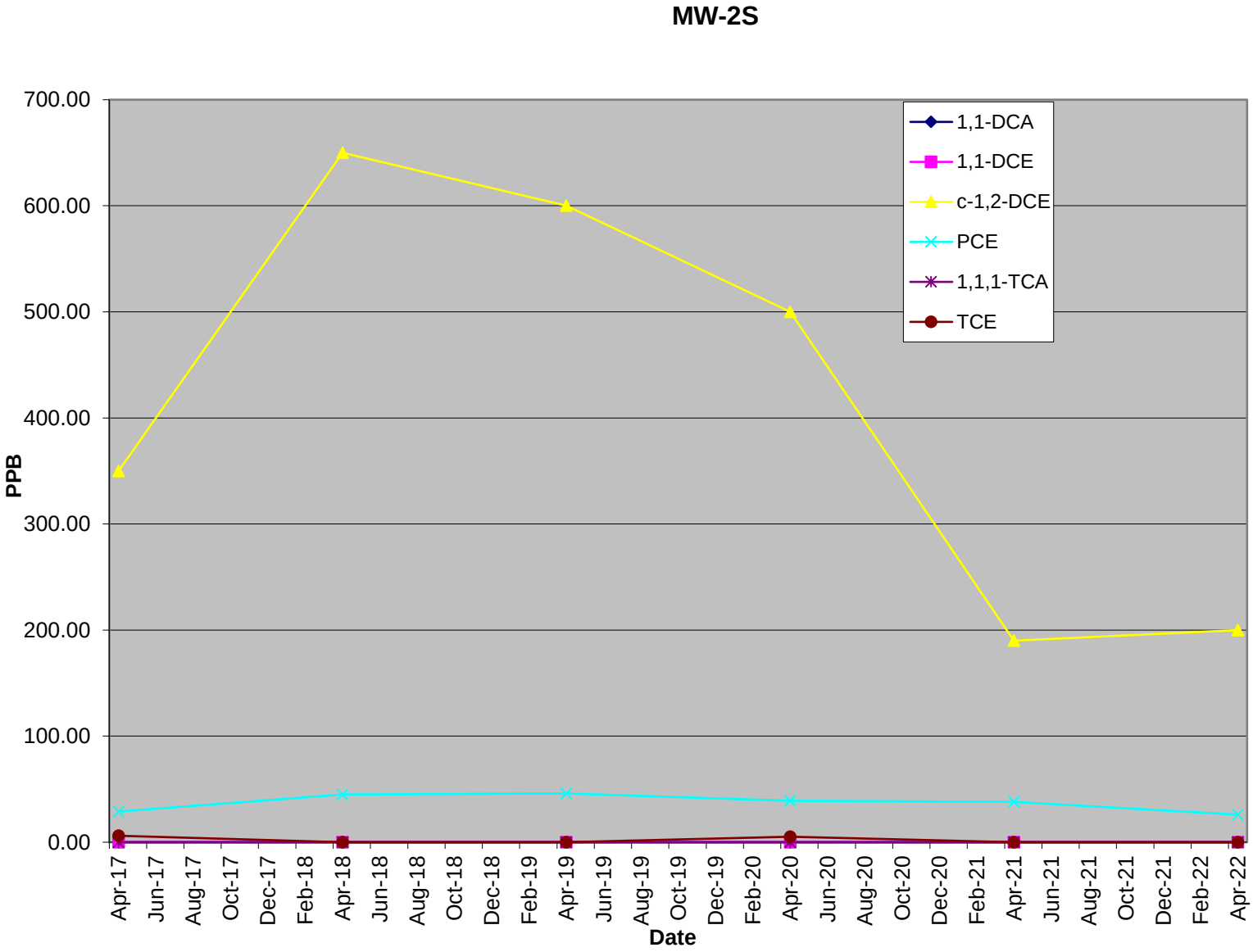
6911832

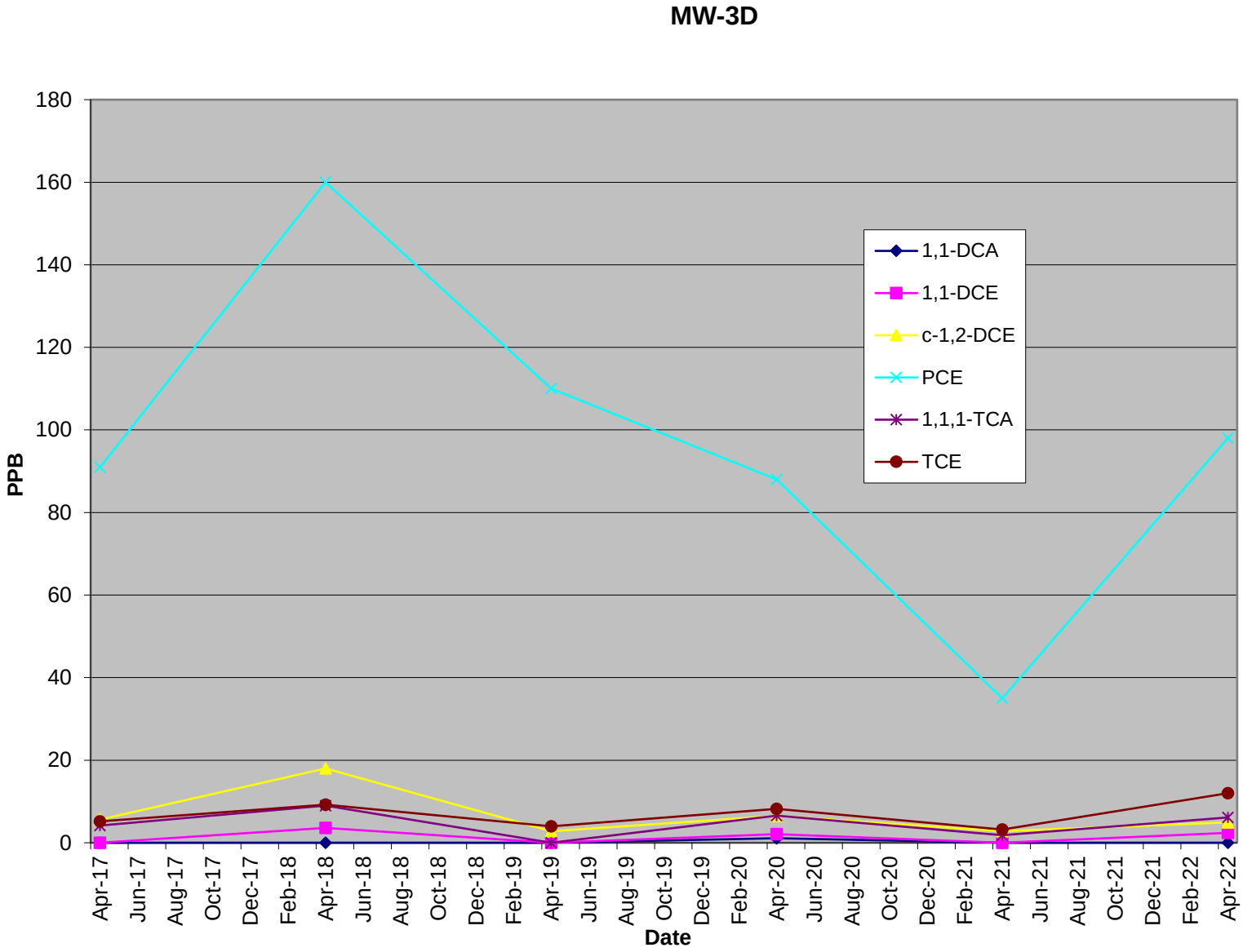
Miller Brewing Company

Fulton Can Plant Site Fulton, NY

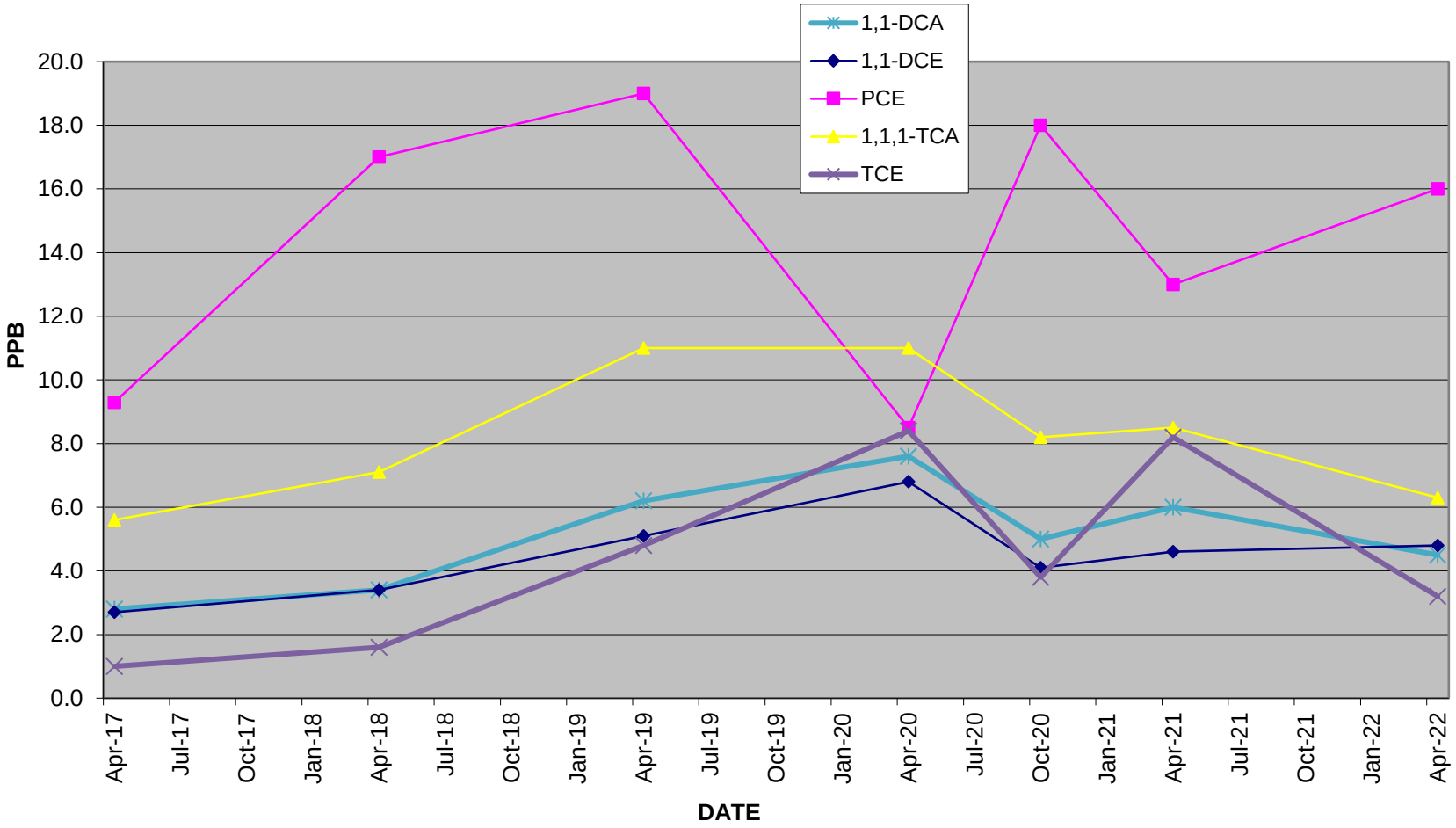
Early Warining Network July 2015

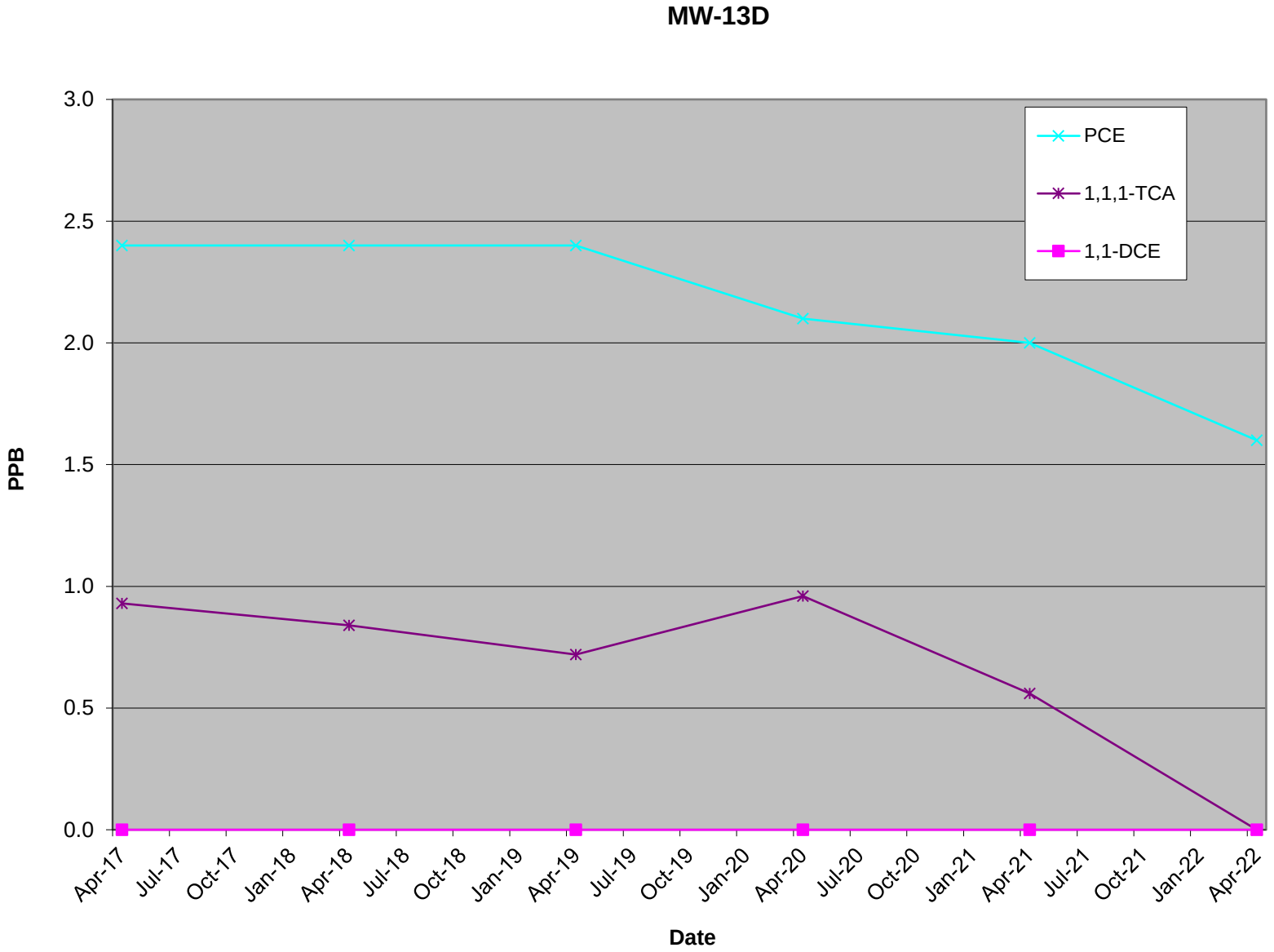
Well ID	Location	Elevation of Measuring Point	Date of Installation
MW-2S	Northern Unit	377.10	9/24/1986
MW-3D	Northern Unit	376.52	7/14/1986
MW-8I	West of Pond	368.12	11/15/1991
MW-8D	West of Pond	368.30	9/18/1986
MW-13D	West of Pond	365.27	12/17/1986
MW-14D	Taylor & Vicinity	380.19	12/18/1986
MW-16D	Northern Unit	366.29	12/12/1989
MW-17D	West of Pond	372.74	4/11/1990
MW-21S	Taylor & Vicinity	379.26	4/23/1990
MW-28S	M-2A	356.94	8/22/1990
MW-28I	M-2A	357.44	8/22/1990
MW-32D	Taylor & Vicinity	377.76	9/12/1990
MW-33S	Taylor & Vicinity	383.23	9/13/1990
MW-34D	Taylor & Vicinity	385.08	9/14/1990
MW-35D	Taylor & Vicinity	381.36	9/18/1990
MW-36S	Southern Unit	376.61	9/14/1990
MW-37I	Southern Unit	377.30	11/15/1990
MW-38S	Northern Unit	373.61	11/26/1990
MW-51D	West of Pond	367.37	11/5/1991
MW-54I	South of Road	372.45	10/31/1991
MW-56D	West of Pond	367.73	12/9/1991
MW-61D	South of Road	368.60	

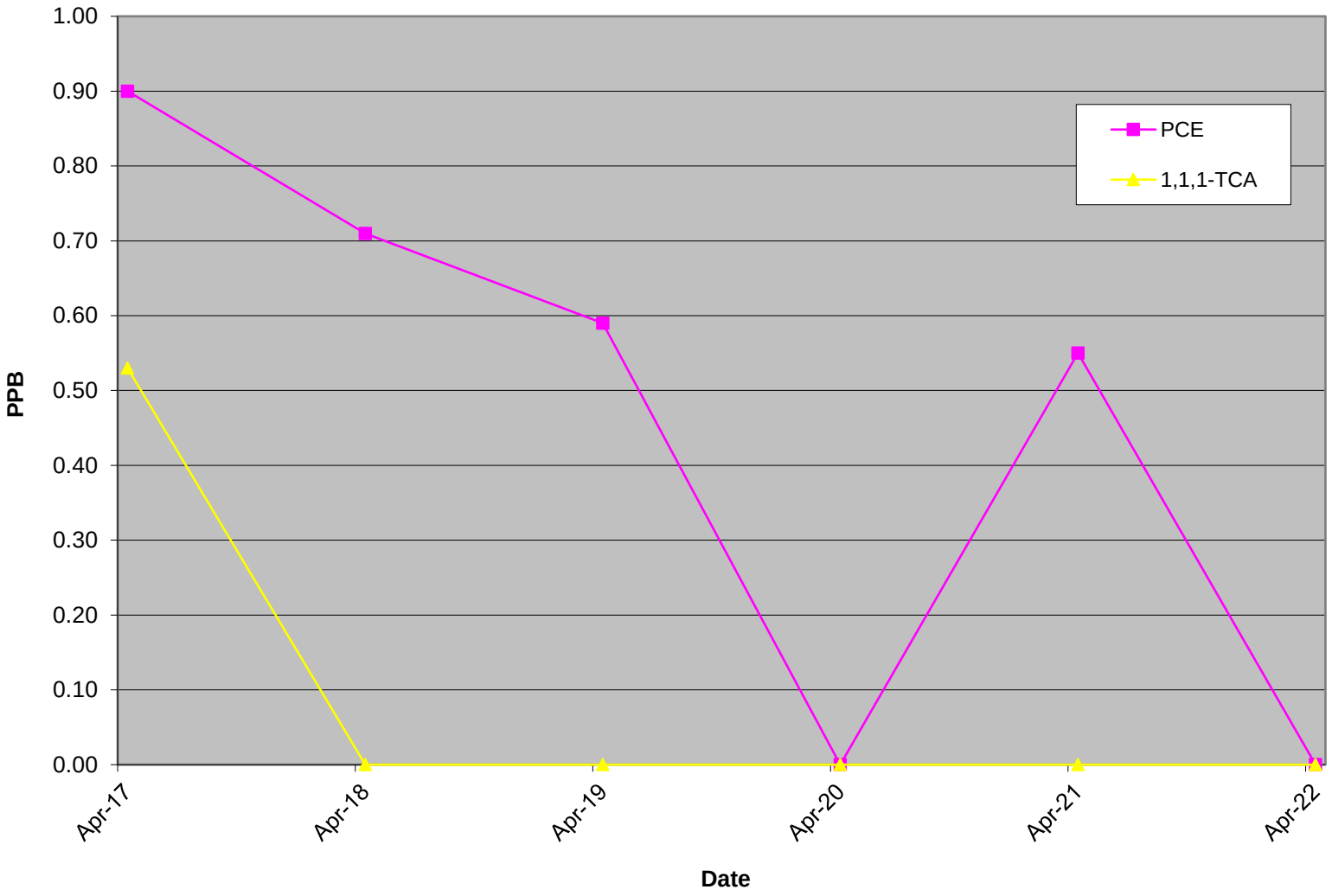

MW-2S
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
PPB
1,1-DCA
1,1-DCE
c-1,2-DCE
PCE
1,1,1-TCA
TCE
Apr-17
Jun-17
Aug-17
Oct-17
Dec-17
Feb-18
Apr-18
Jun-18
Aug-18
Oct-18
Dec-18
Feb-19
Apr-19
Jun-19
Aug-19
Oct-19
Dec-19
Feb-20
Apr-20
Jun-20
Aug-20
Oct-20
Dec-20
Feb-21
Apr-21
Jun-21
Aug-21
Oct-21
Dec-21
Feb-22
Apr-22
Date

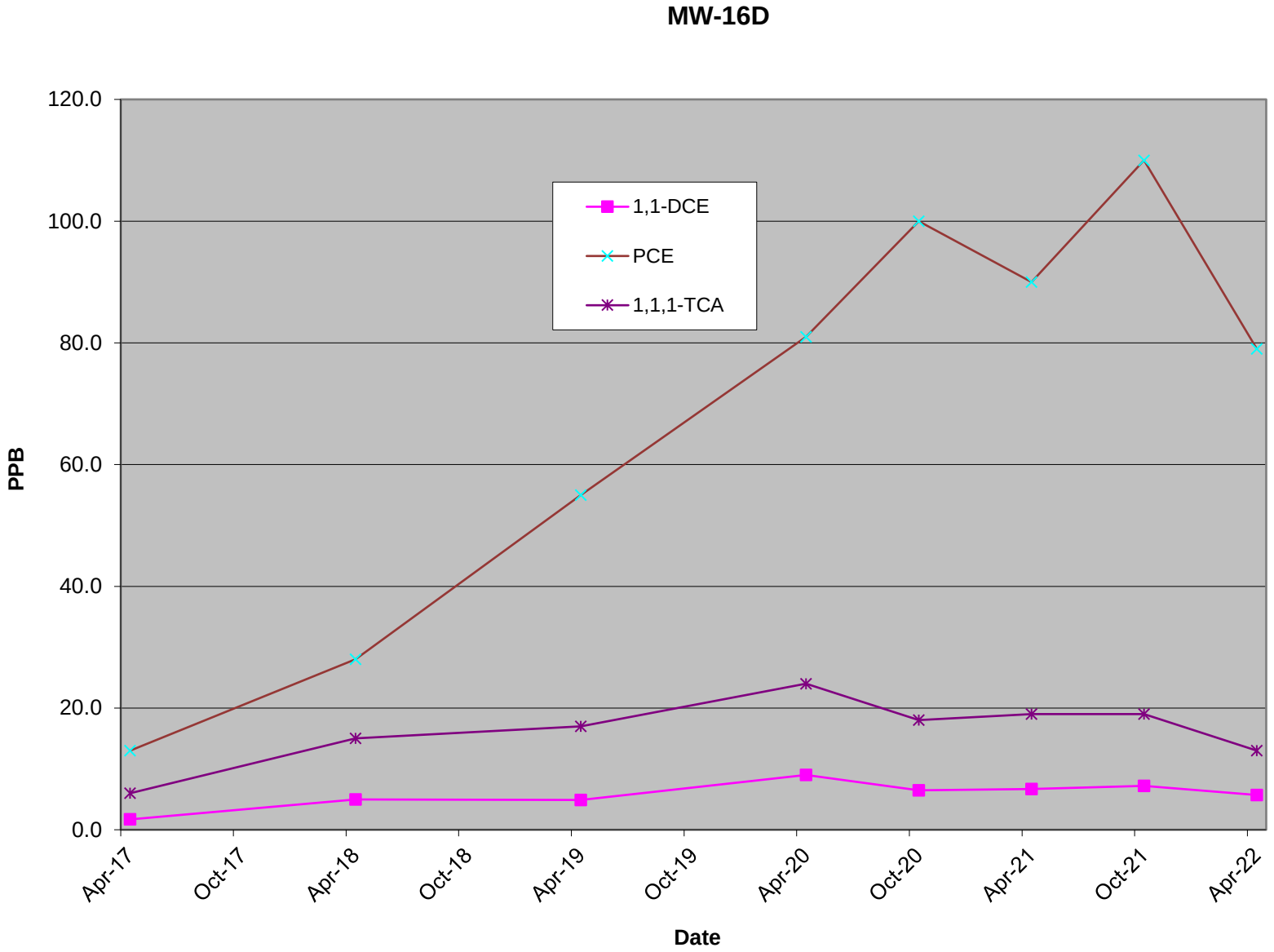

MW-3D
PPB
180
160
140
120
100
80
60
40
20
0
1,1-DCA
1,1-DCE
c-1,2-DCE
PCE
1,1,1-TCA
TCE
Apr-17
Jun-17
Aug-17
Oct-17
Dec-17
Feb-18
Apr-18
Jun-18
Aug-18
Oct-18
Dec-18
Feb-19
Apr-19
Jun-19
Aug-19
Oct-19
Dec-19
Feb-20
Apr-20
Jun-20
Aug-20
Oct-20
Dec-20
Feb-21
Apr-21
Jun-21
Aug-21
Oct-21
Dec-21
Feb-22
Apr-22
Date

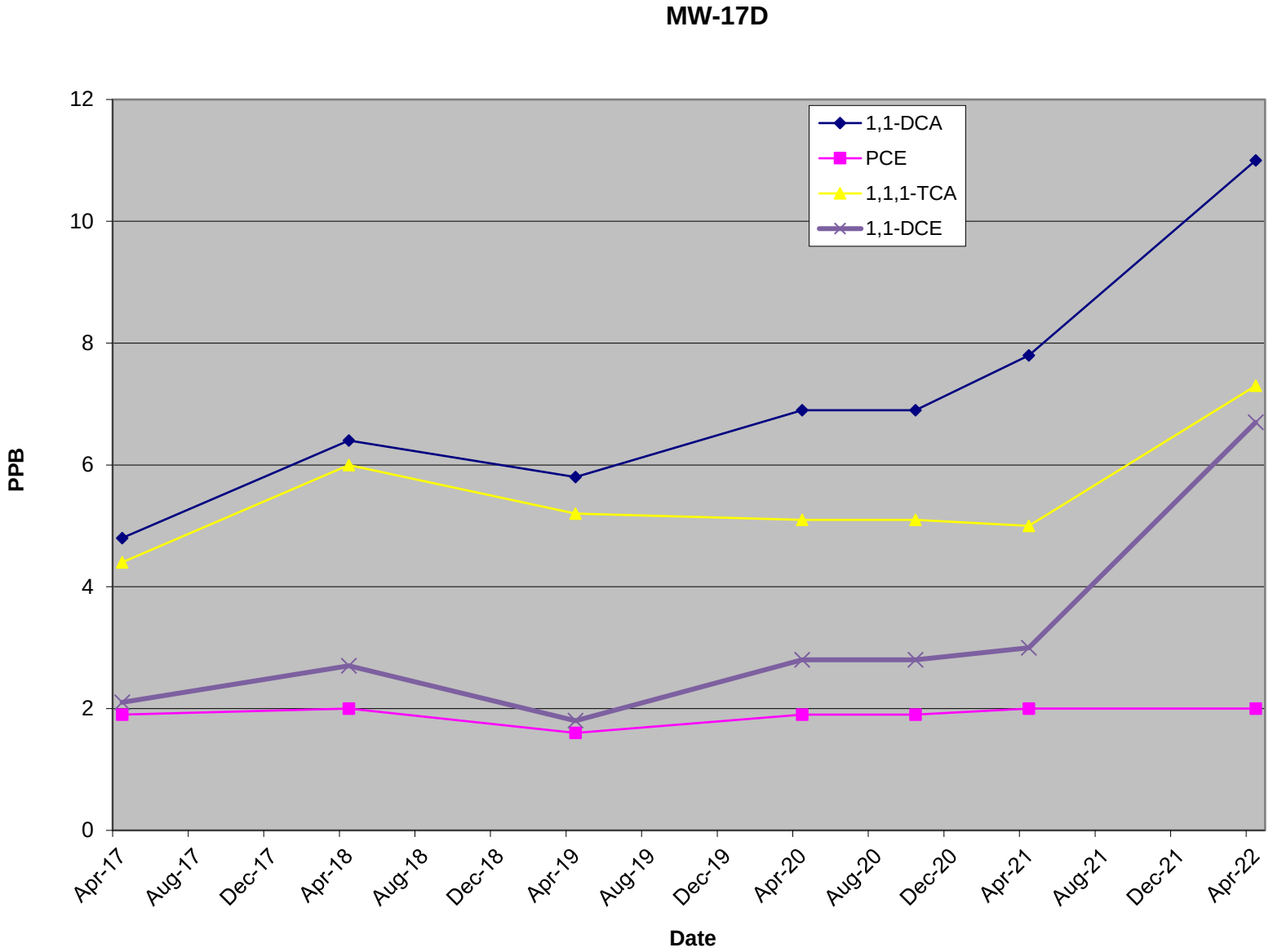
MW-8D
2017-Present

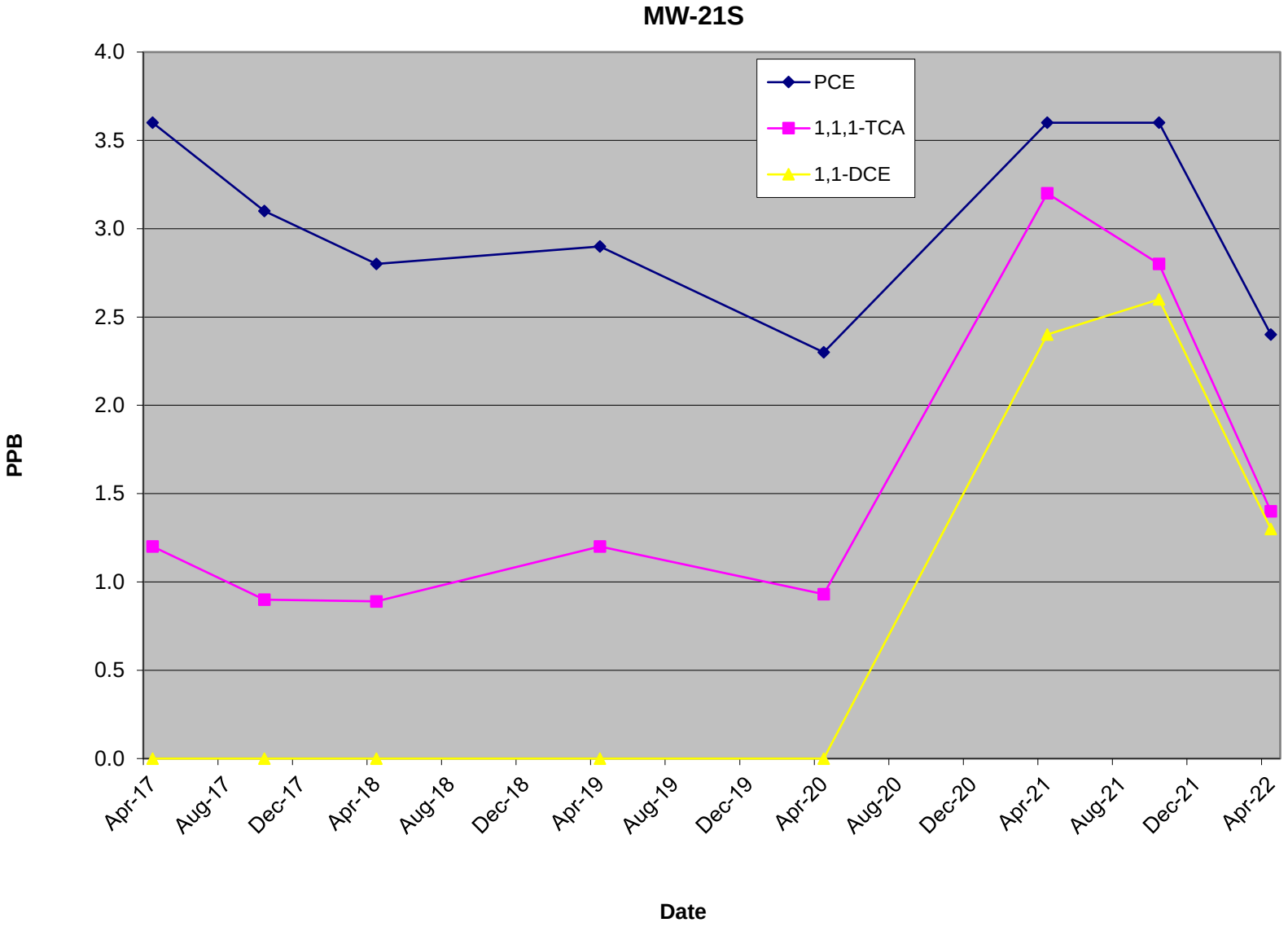


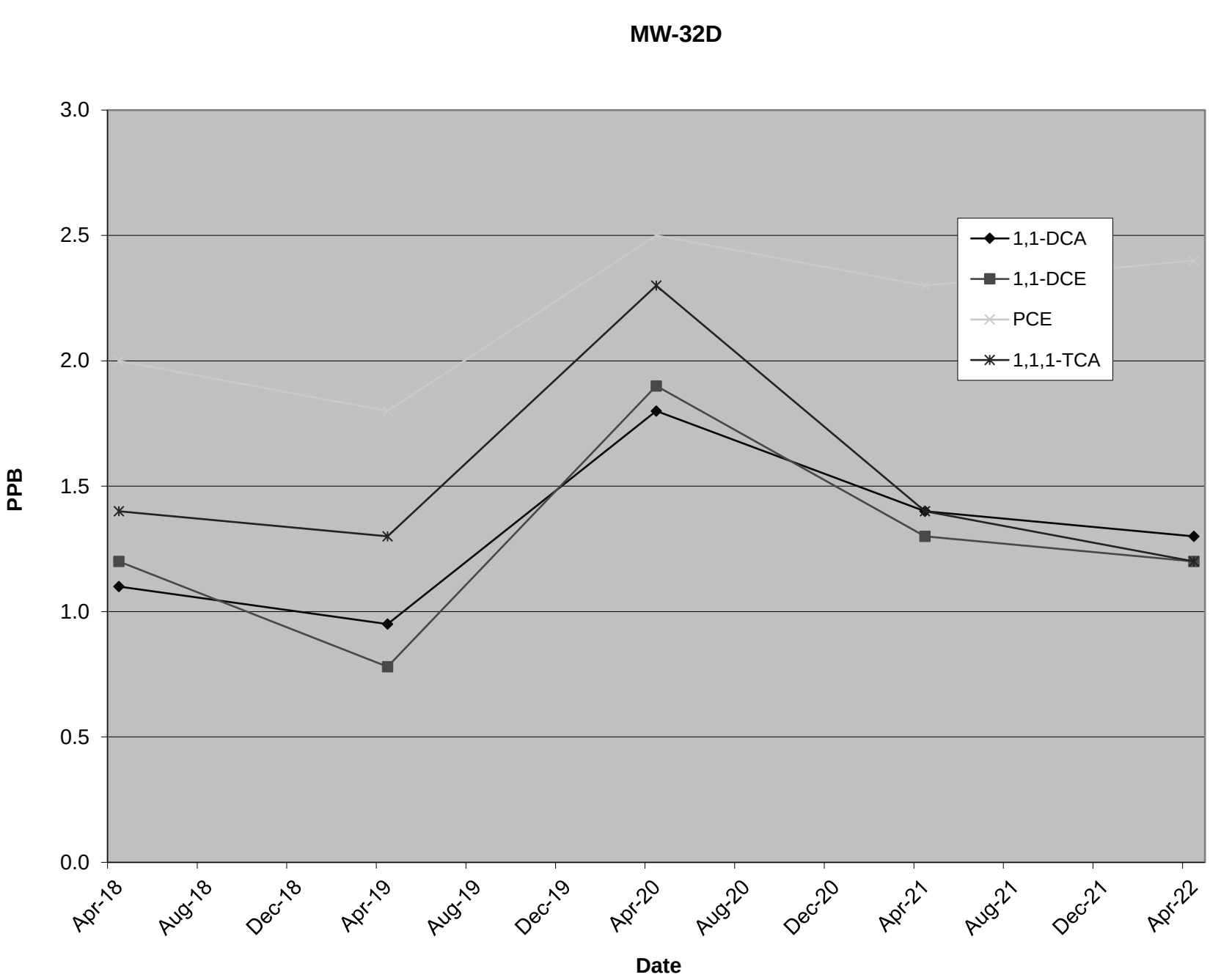

MW-13D
PPB
3.0
2.5
2.0
1.5
1.0
0.5
0.0
PCE
1,1,1-TCA
1,1-DCE
Apr-17
Jul-17
Oct-17
Jan-18
Apr-18
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22
Date

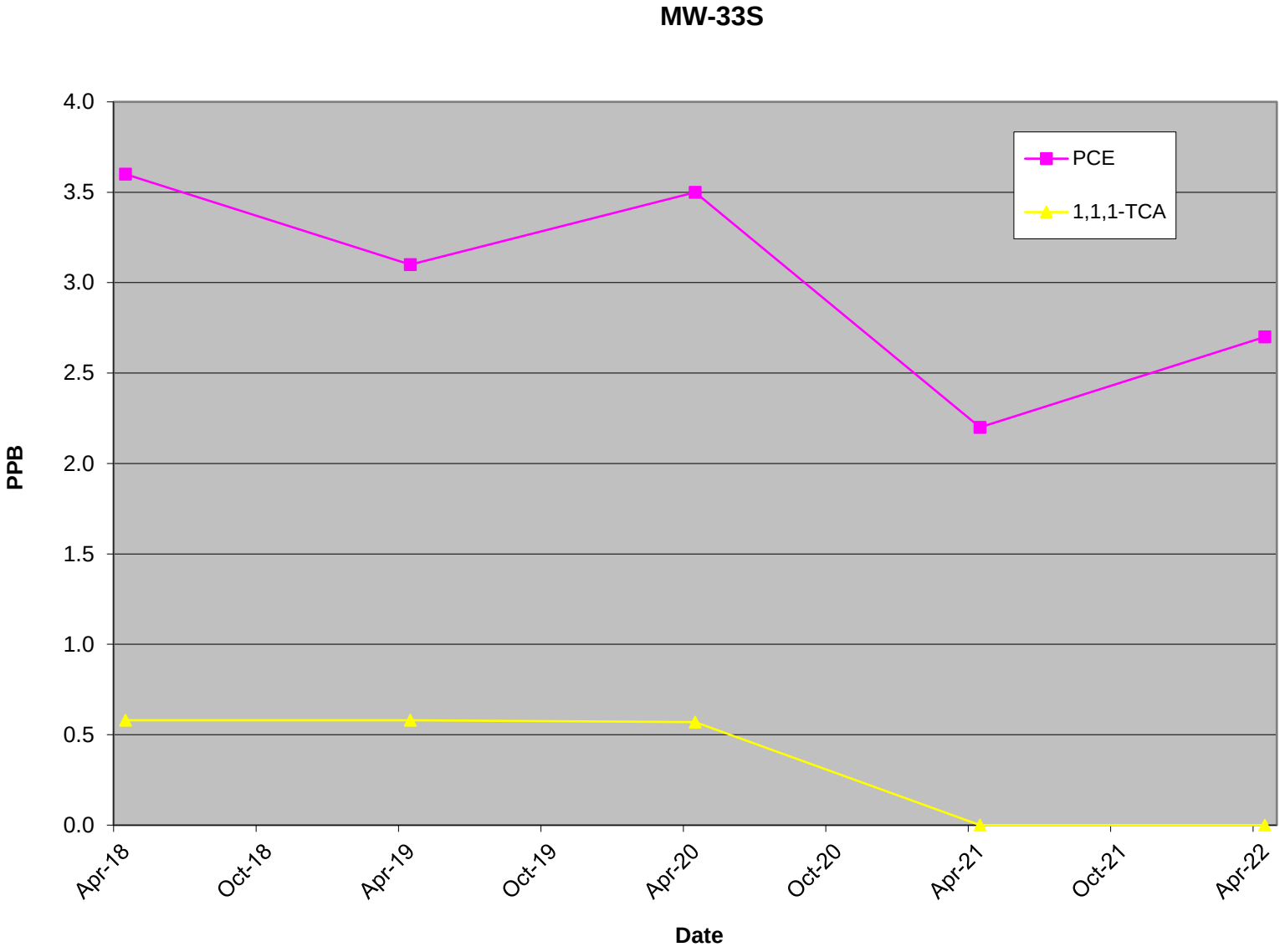

MW-14D 2017-Present
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
PPB
PCE
1,1,1-TCA
Apr-17
Apr-18
Apr-19
Apr-20
Apr-21
Apr-22
Date

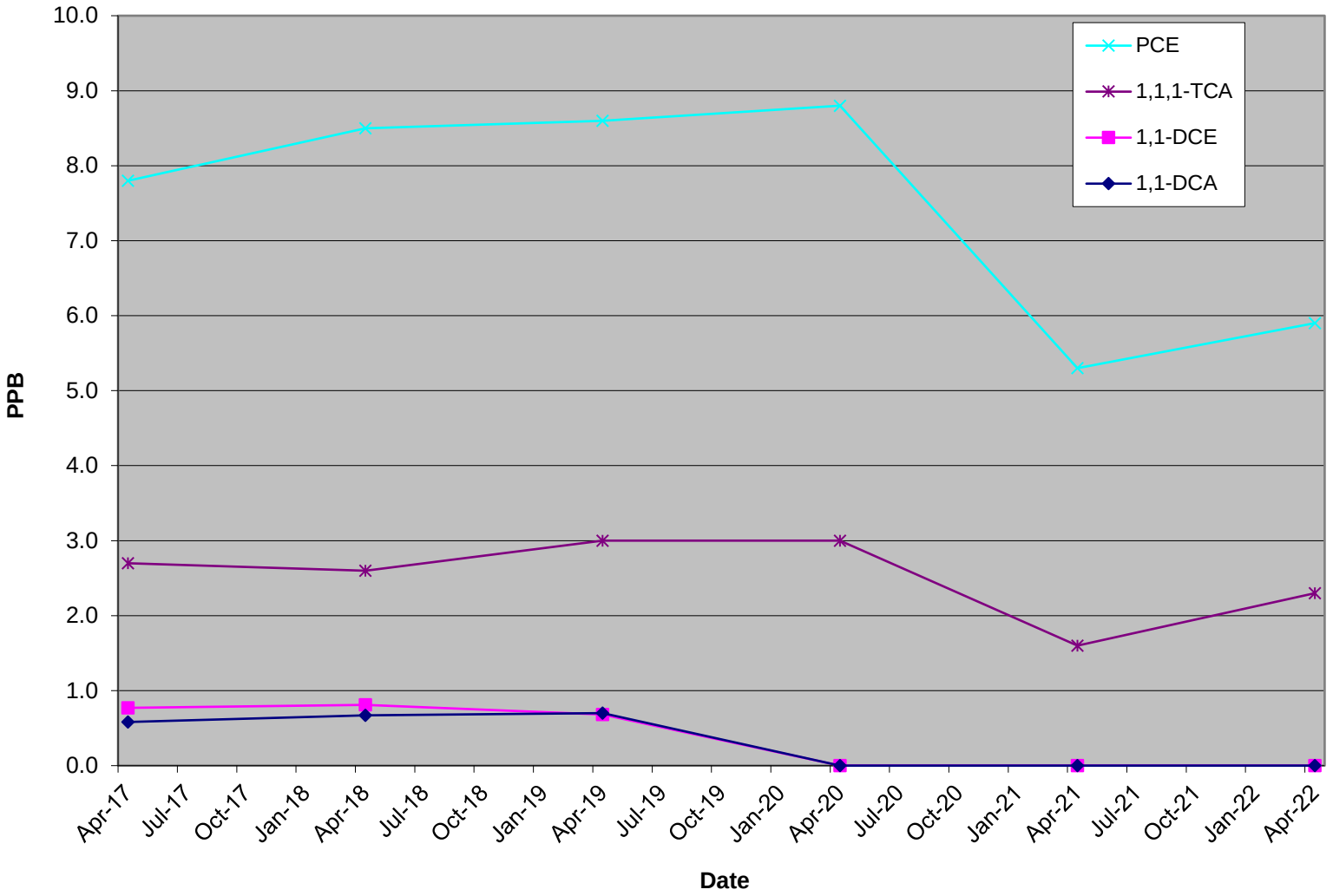

MW-16D
120.0
100.0
80.0
60.0
40.0
20.0
0.0
PPB
1,1-DCE
PCE
1,1,1-TCA
Apr-17
Oct-17
Apr-18
Oct-18
Apr-19
Oct-19
Apr-20
Oct-20
Apr-21
Oct-21
Apr-22
Date

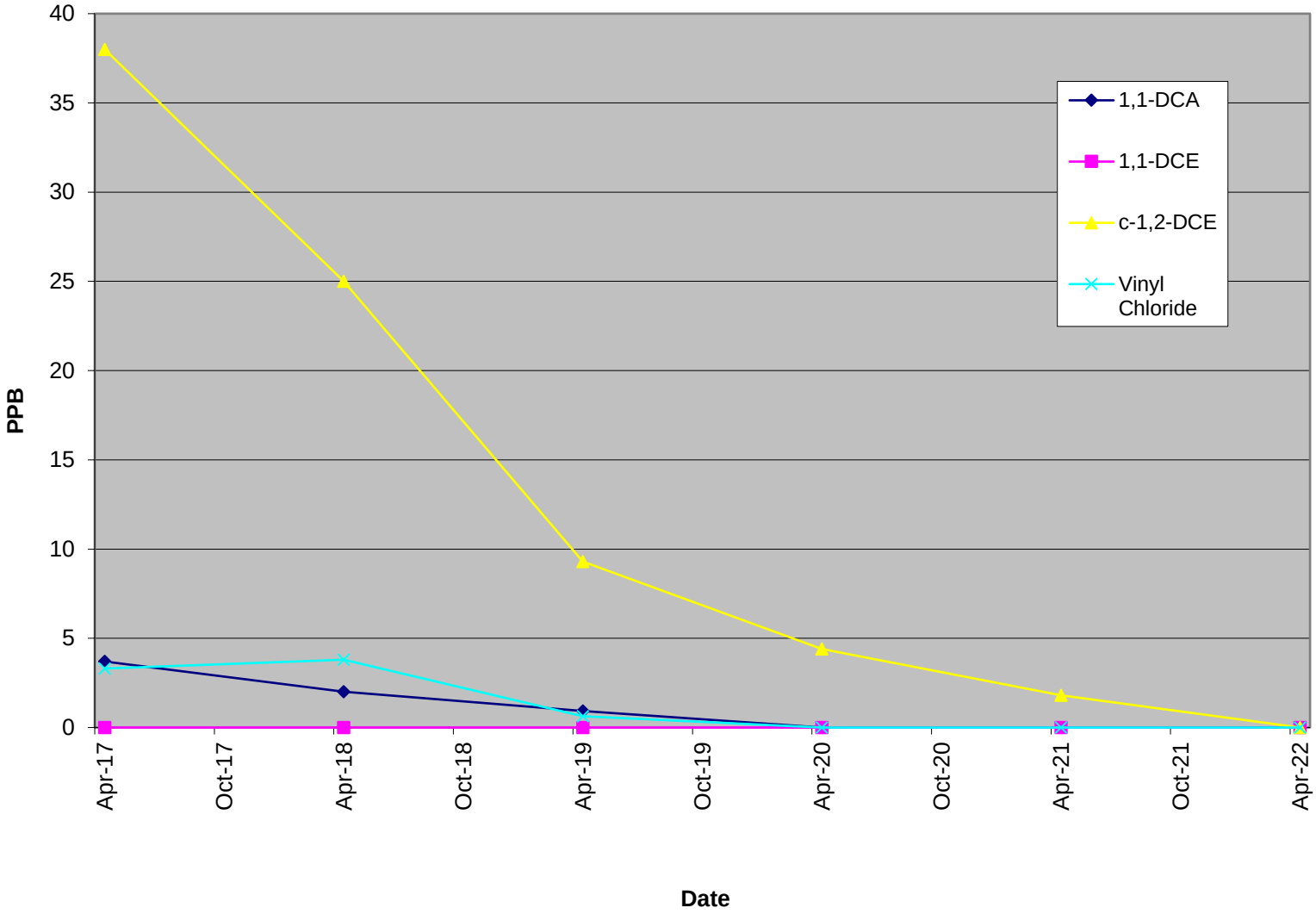

MW-17D
PPB
Date
1,1-DCA
PCE
1,1,1-TCA
1,1-DCE
0
2
4
6
8
10
12
Apr-17
Aug-17
Dec-17
Apr-18
Aug-18
Dec-18
Apr-19
Aug-19
Dec-19
Apr-20
Aug-20
Dec-20
Apr-21
Aug-21
Dec-21
Apr-22

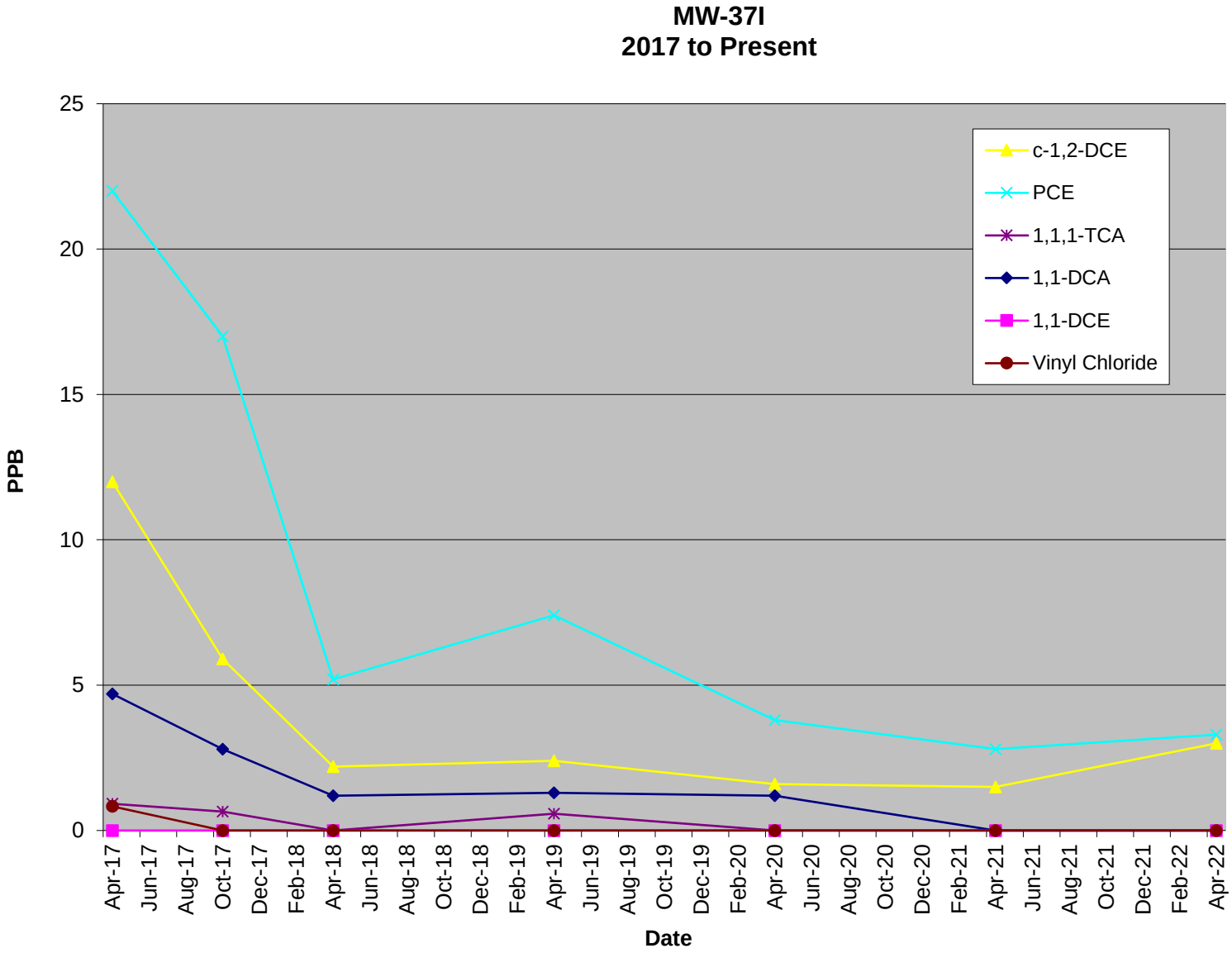

MW-21S
PCE
1,1,1-TCA
1,1-DCE
PPB
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Apr-17
Aug-17
Dec-17
Apr-18
Aug-18
Dec-18
Apr-19
Aug-19
Dec-19
Apr-20
Aug-20
Dec-20
Apr-21
Aug-21
Dec-21
Apr-22
Date

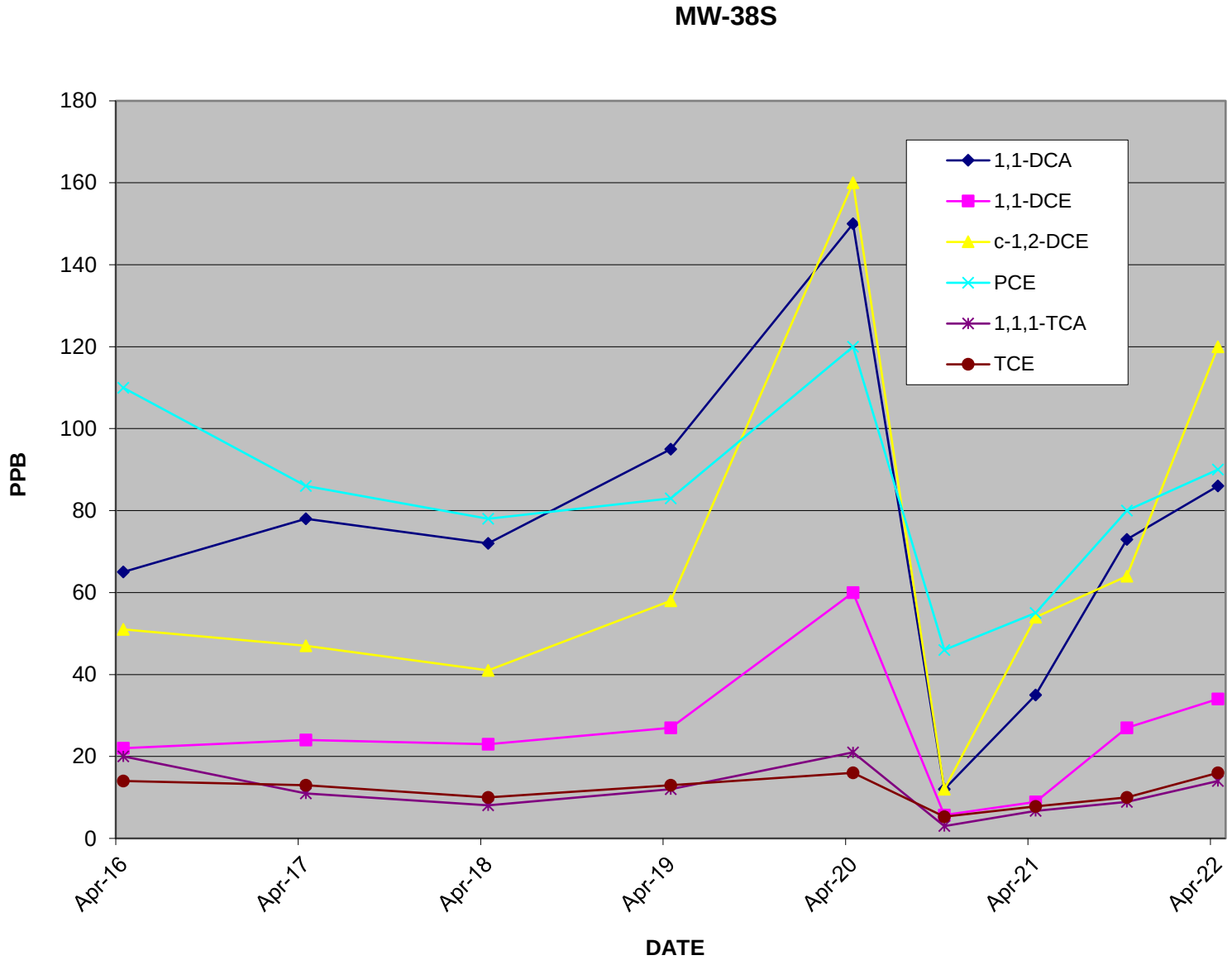

MW-32D
3.0
2.5
2.0
1.5
1.0
0.5
0.0
PPB
1,1-DCA
1,1-DCE
PCE
1,1,1-TCA
Apr-18
Aug-18
Dec-18
Apr-19
Aug-19
Dec-19
Apr-20
Aug-20
Dec-20
Apr-21
Aug-21
Dec-21
Apr-22
Date


MW-33S
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
PPB
PCE
1,1,1-TCA
Apr-18
Oct-18
Apr-19
Oct-19
Apr-20
Oct-20
Apr-21
Oct-21
Apr-22
Date

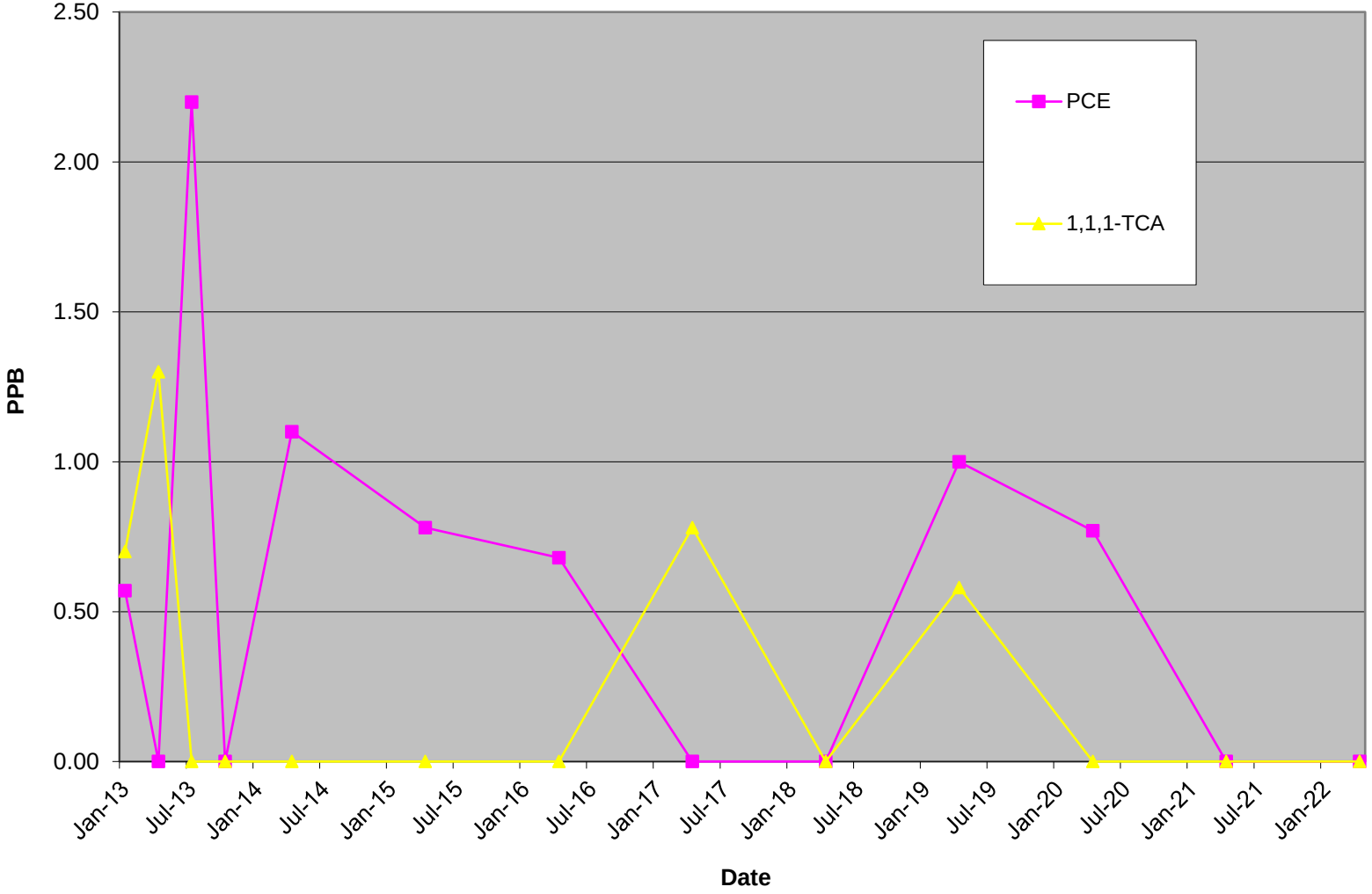

MW-34D
PPB
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
PCE
1,1,1-TCA
1,1-DCE
1,1-DCA
Apr-17
Jul-17
Oct-17
Jan-18
Apr-18
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22
Date

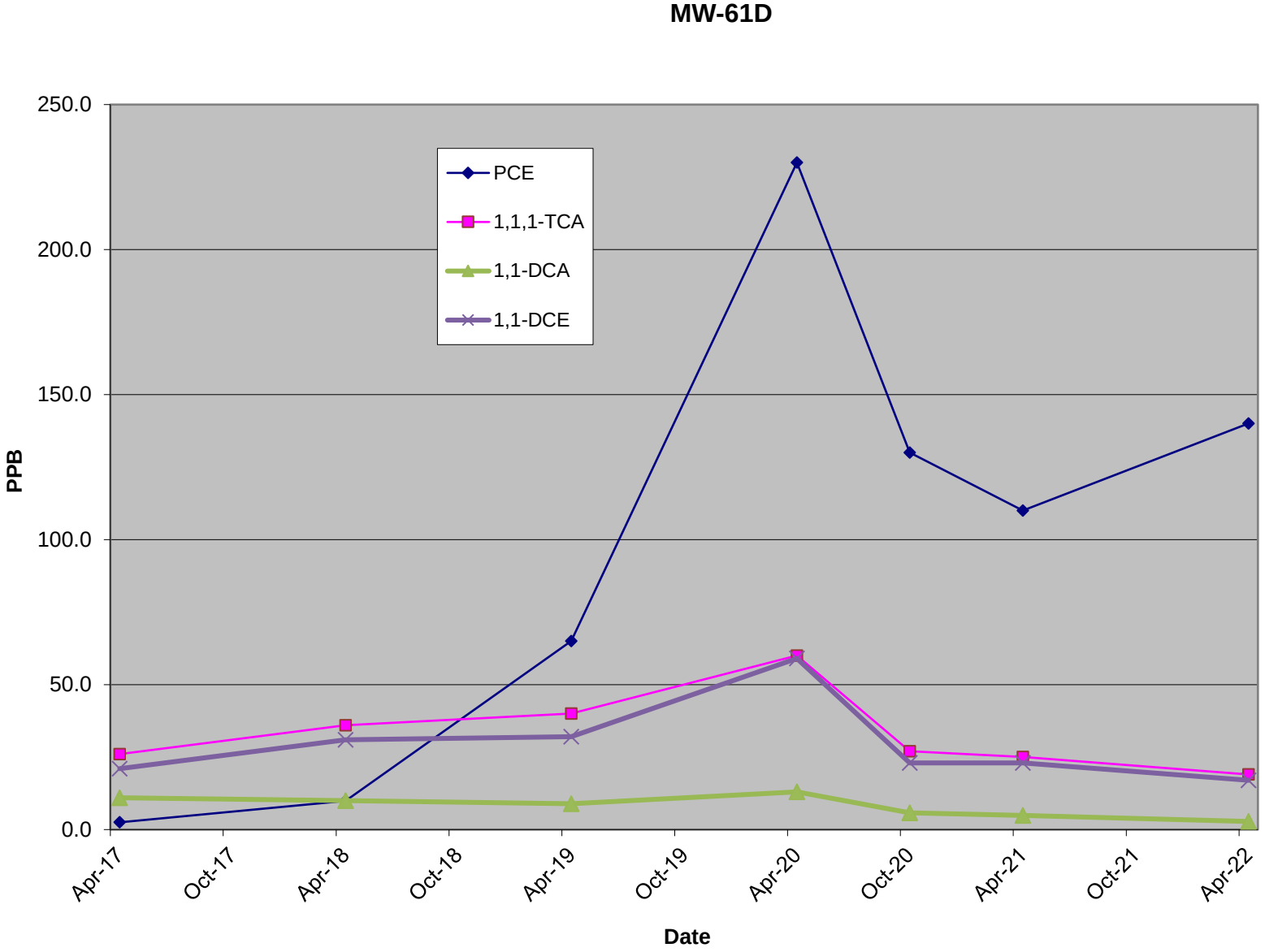

MW-36S
PPB
40
35
30
25
20
15
10
5
0
Apr-17
Oct-17
Apr-18
Oct-18
Apr-19
Oct-19
Apr-20
Oct-20
Apr-21
Oct-21
Apr-22
Date
1,1-DCA
1,1-DCE
c-1,2-DCE
Vinyl Chloride


MW-37I
2017 to Present
PPB
25
20
15
10
5
0
Apr-17
Jun-17
Aug-17
Oct-17
Dec-17
Feb-18
Apr-18
Jun-18
Aug-18
Oct-18
Dec-18
Feb-19
Apr-19
Jun-19
Aug-19
Oct-19
Dec-19
Feb-20
Apr-20
Jun-20
Aug-20
Oct-20
Dec-20
Feb-21
Apr-21
Jun-21
Aug-21
Oct-21
Dec-21
Feb-22
Apr-22
Date
c-1,2-DCE
PCE
1,1,1-TCA
1,1-DCA
1,1-DCE
Vinyl Chloride

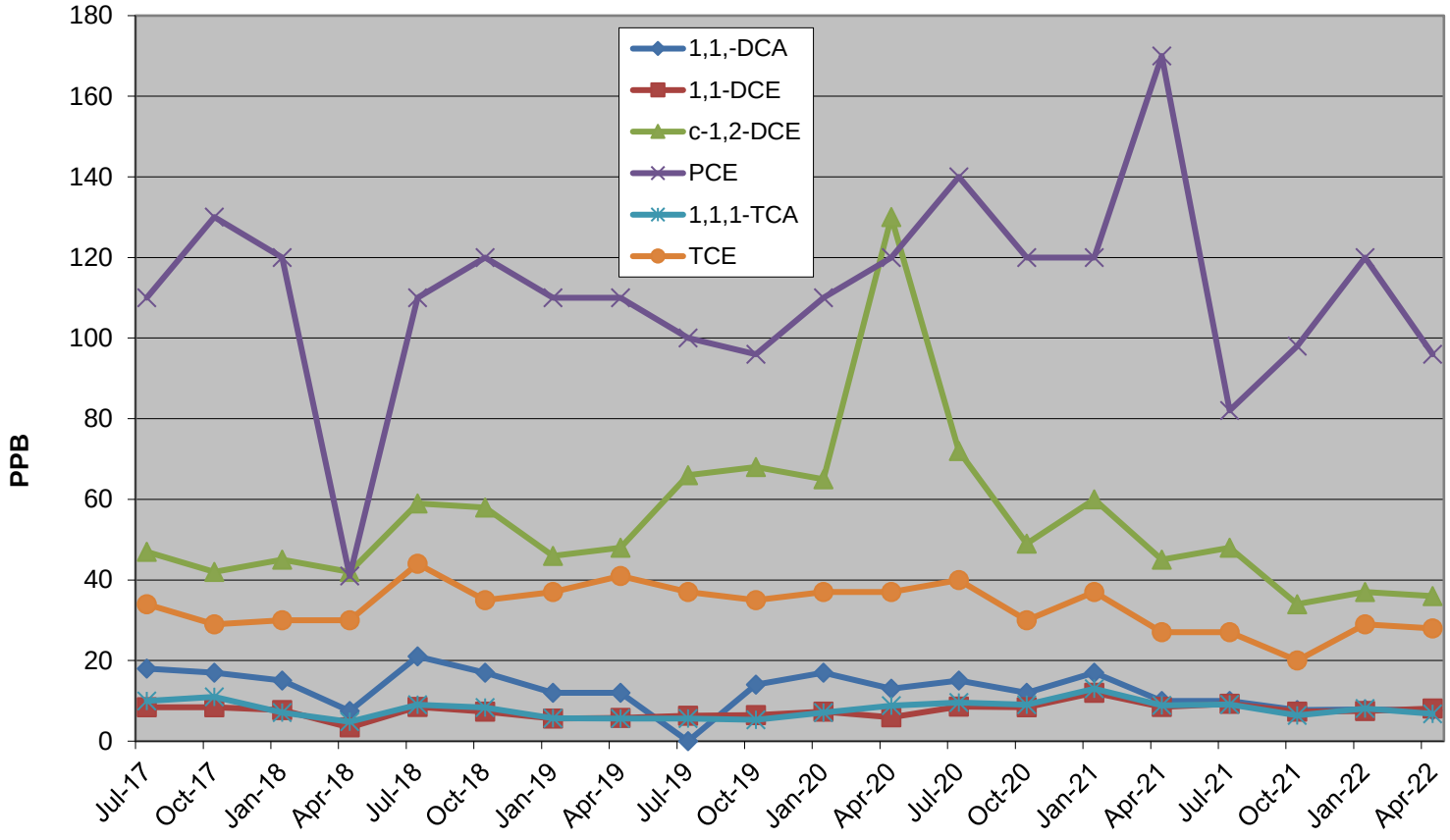

MW-38S
180
160
140
120
100
80
60
40
20
0
PPB
Apr-16
Apr-17
Apr-18
Apr-19
Apr-20
Apr-21
Apr-22
DATE
1,1-DCA
1,1-DCE
c-1,2-DCE
PCE
1,1,1-TCA
TCE

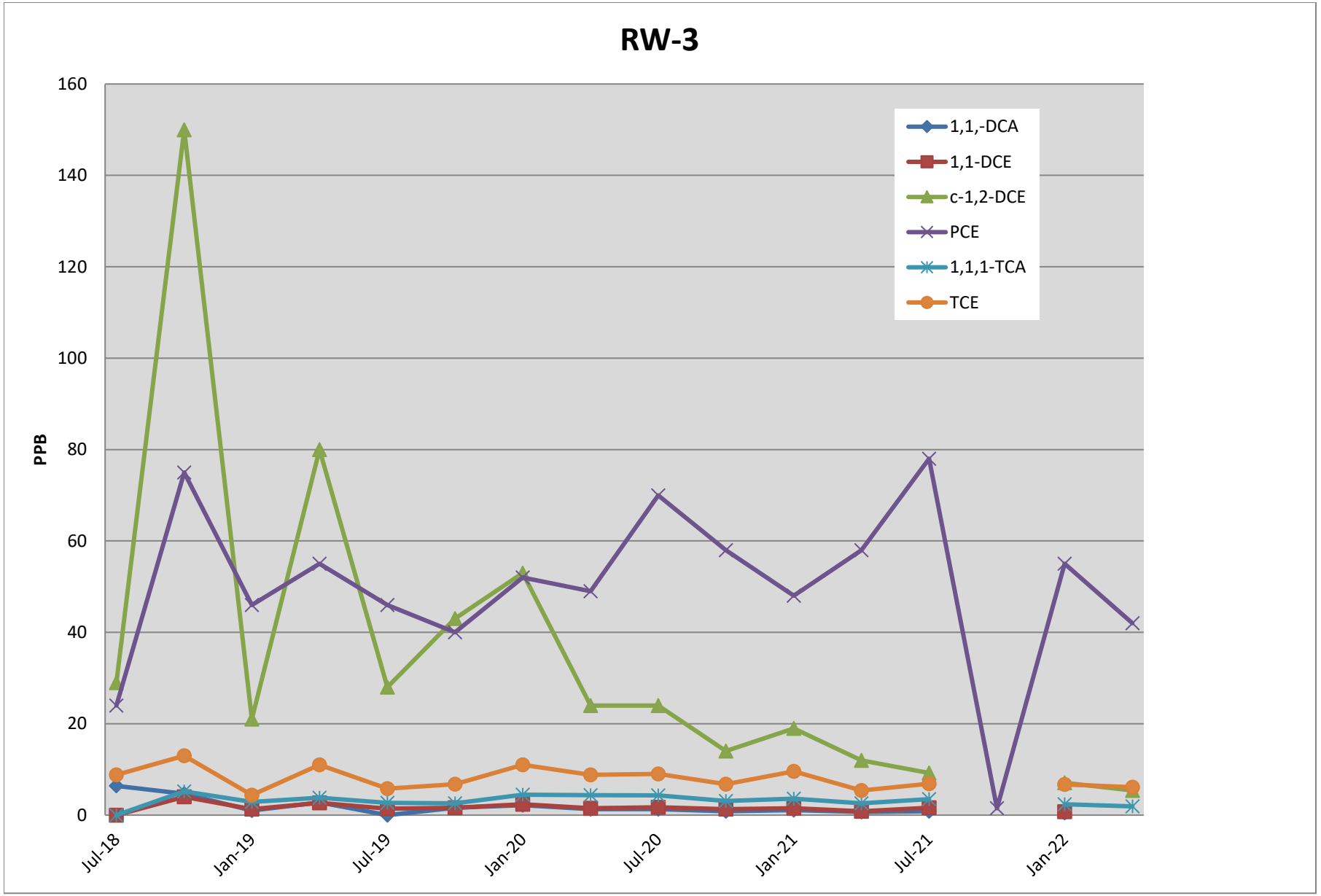
MW-56D
2013-Current

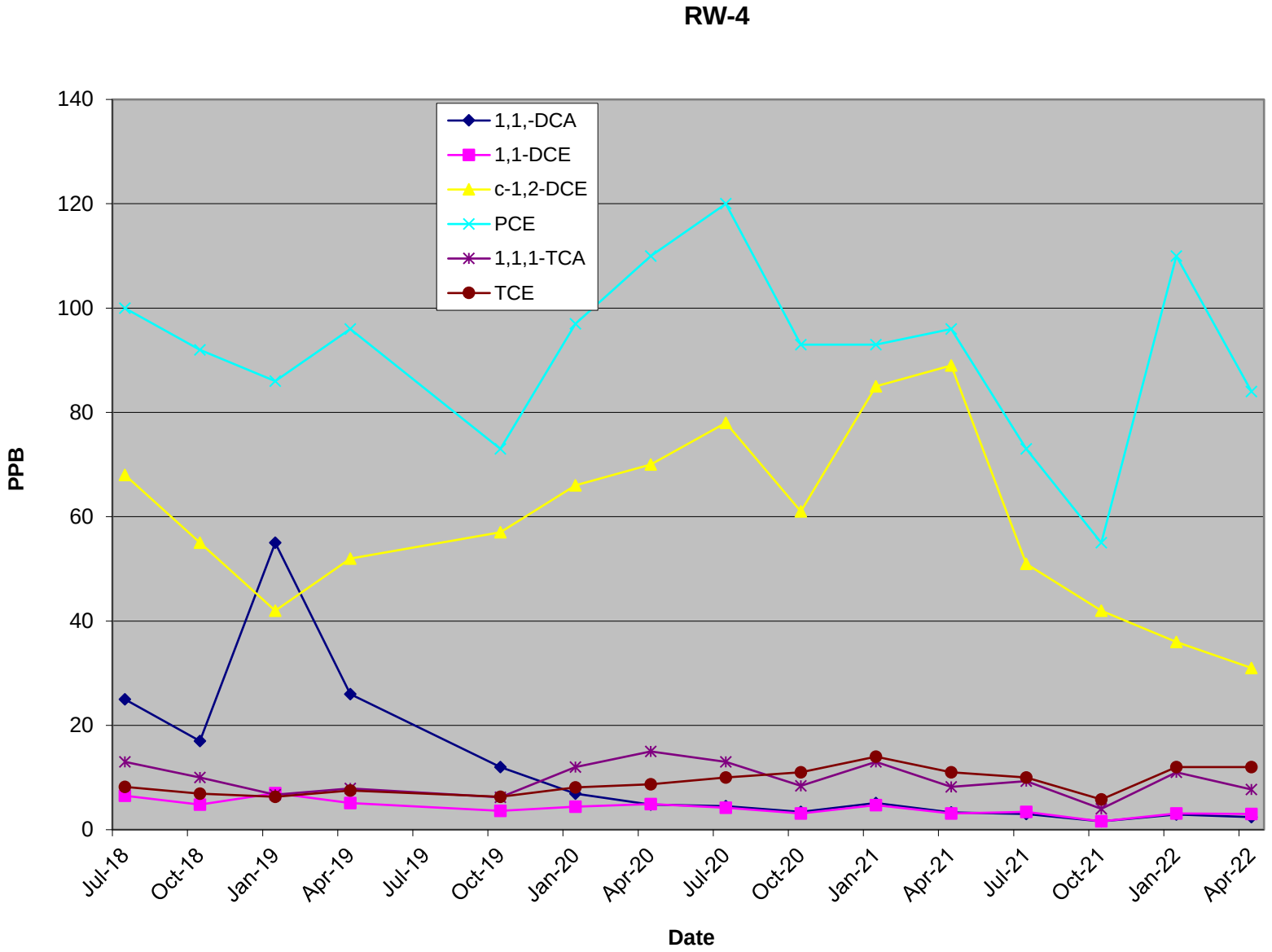


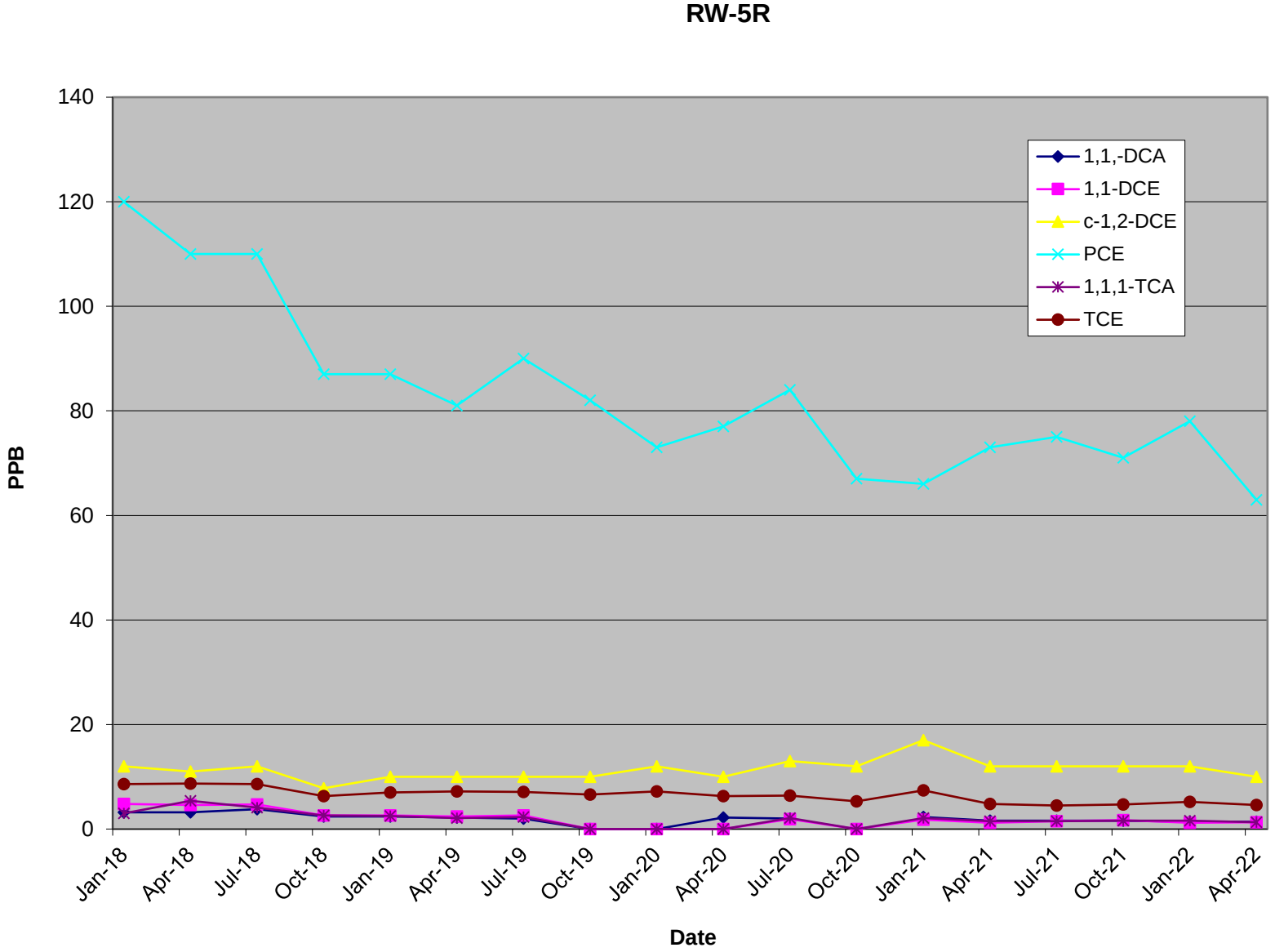

MW-61D
250.0
200.0
150.0
100.0
50.0
0.0
PPB
PCE
1,1,1-TCA
1,1-DCA
1,1-DCE
Apr-17
Oct-17
Apr-18
Oct-18
Apr-19
Oct-19
Apr-20
Oct-20
Apr-21
Oct-21
Apr-22
Date

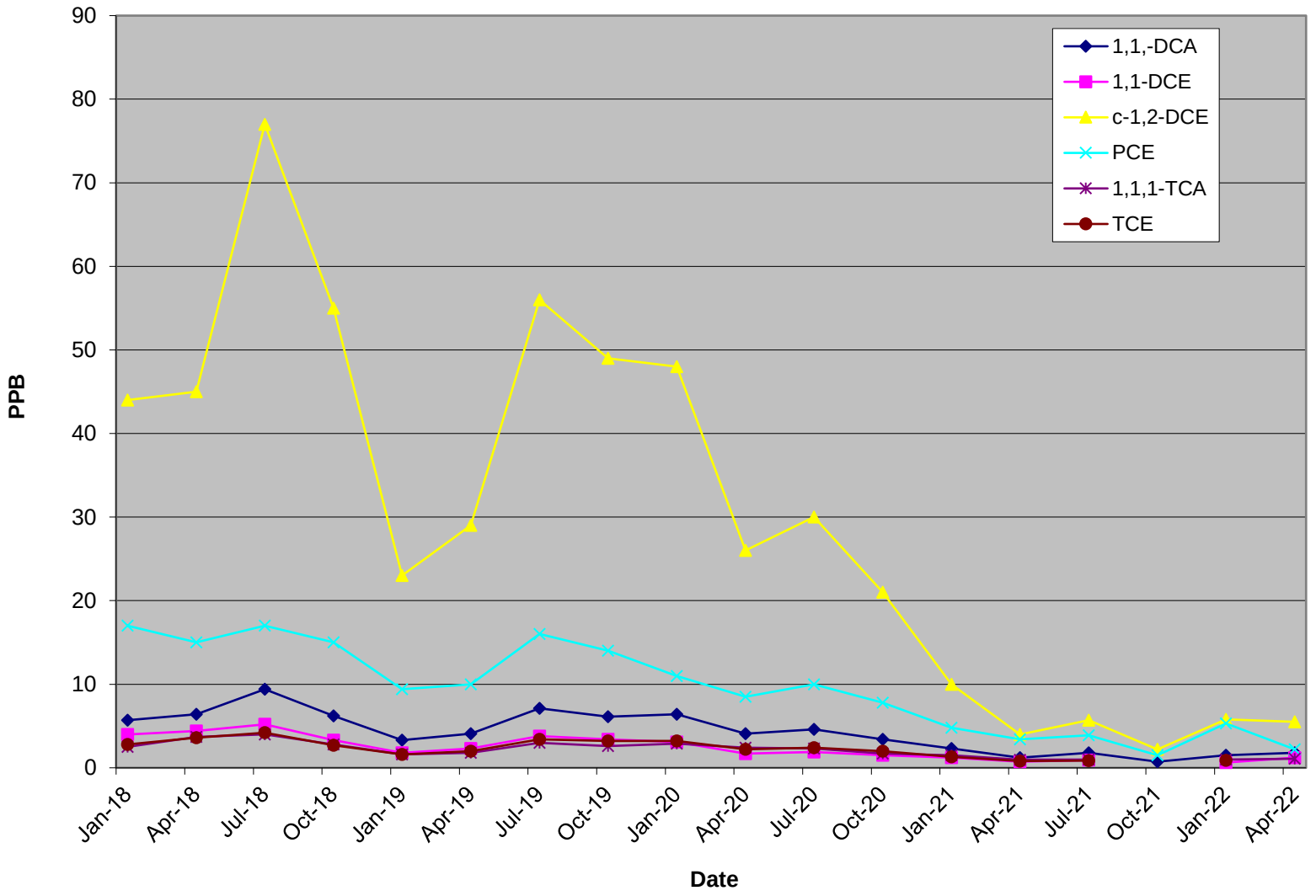
RW-2

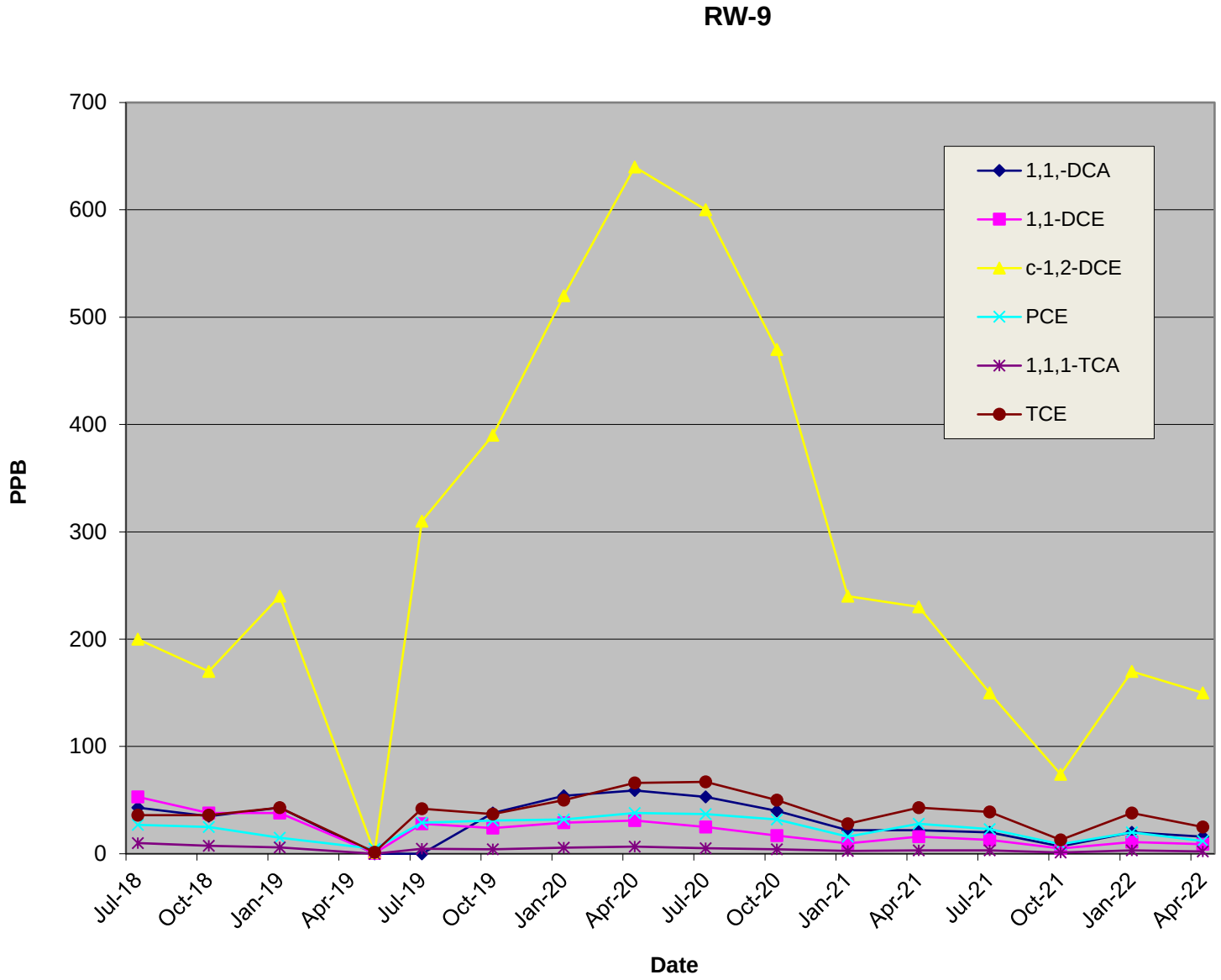

PPB
180
160
140
120
100
80
60
40
20
0
1,1,-DCA
1,1-DCE
c-1,2-DCE
PCE
1,1,1-TCA
TCE
Jul-17
Oct-17
Jan-18
Apr-18
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22

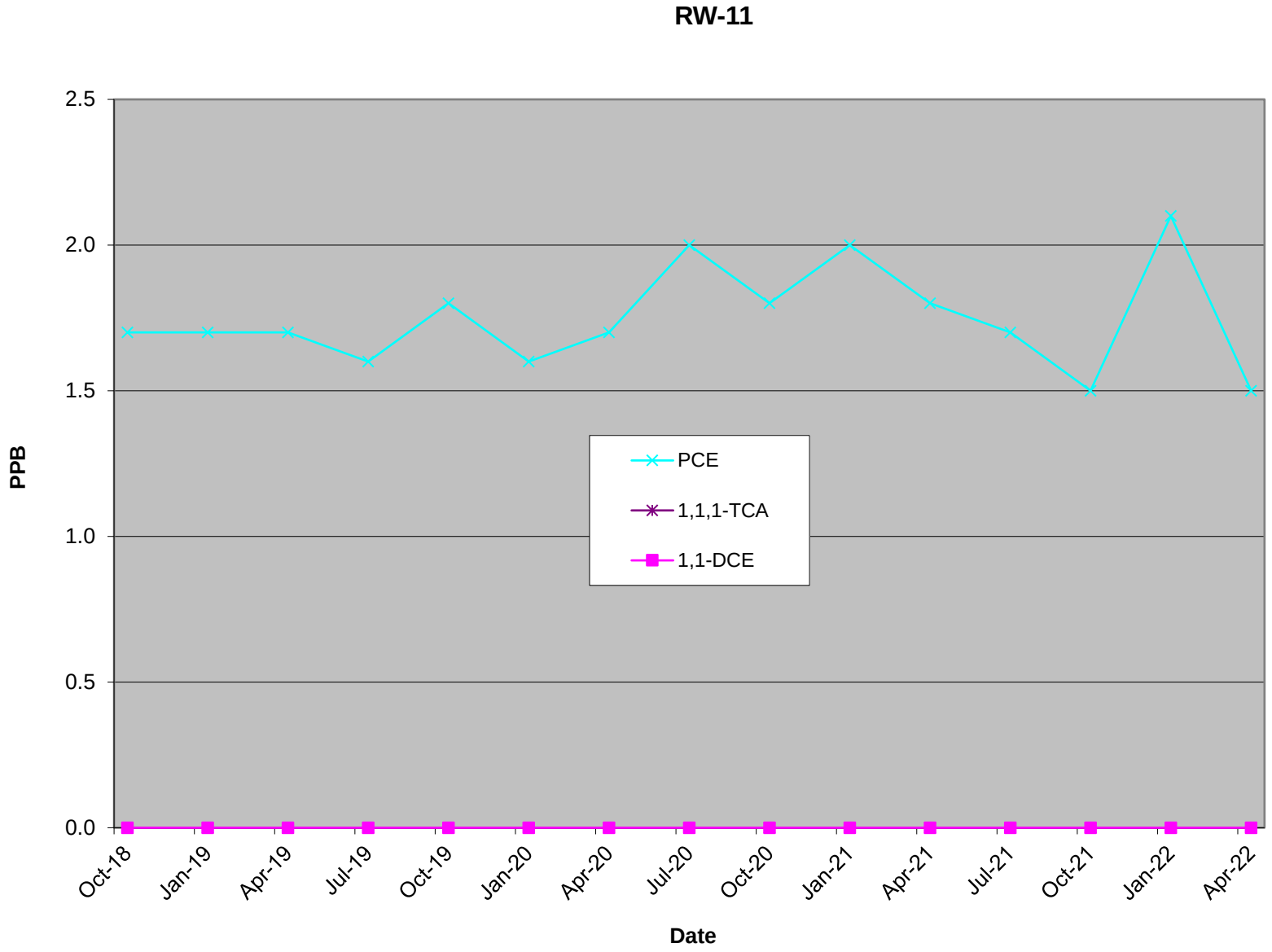

RW-3
PPB
160
140
120
100
80
60
40
20
0
Jul-18
Jan-19
Jul-19
Jan-20
Jul-20
Jan-21
Jul-21
Jan-22
1,1,-DCA
1,1-DCE
c-1,2-DCE
PCE
1,1,1-TCA
TCE


RW-4
PPB
Date
1,1,-DCA
1,1-DCE
c-1,2-DCE
PCE
1,1,1-TCA
TCE
0
20
40
60
80
100
120
140
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22

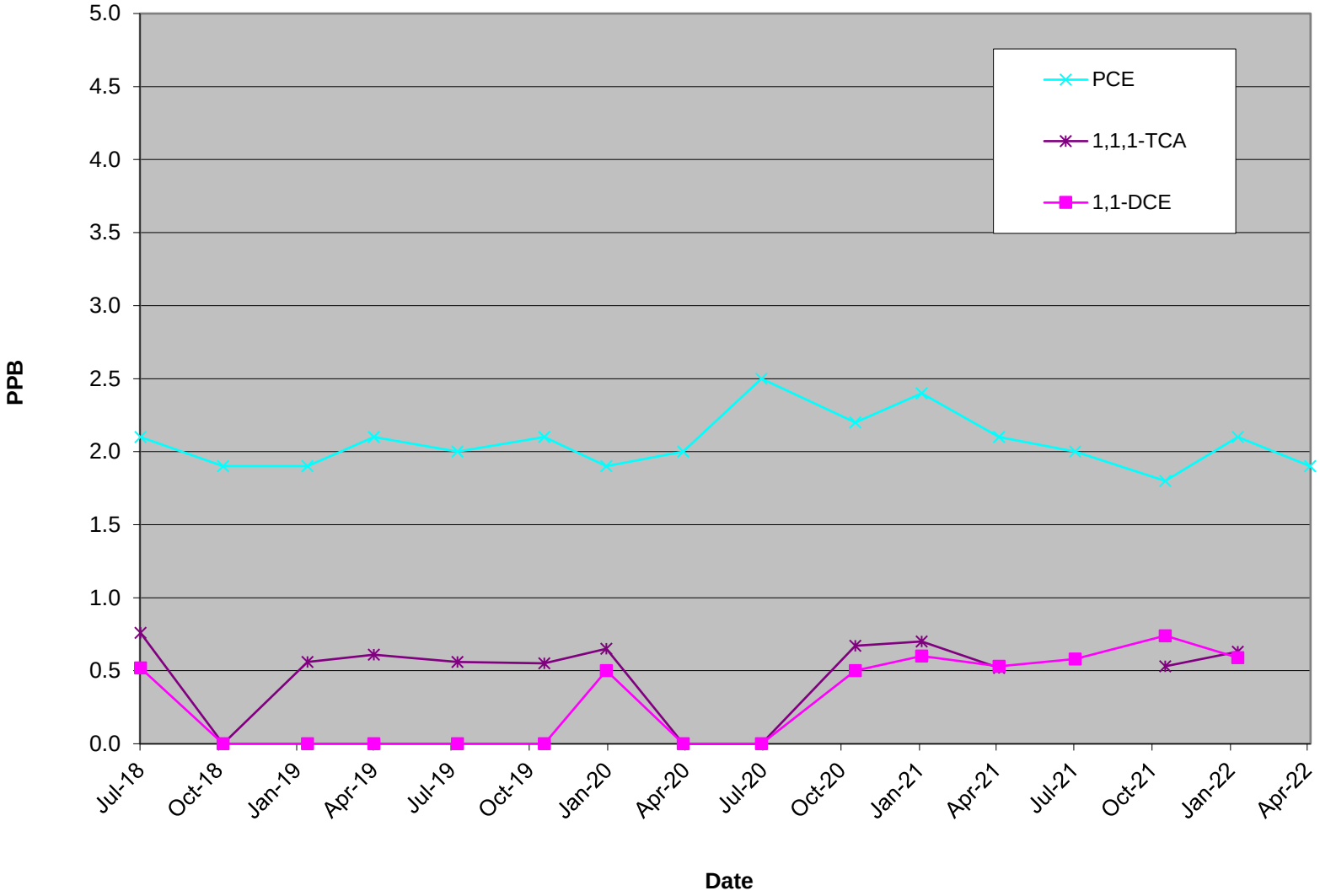

RW-5R
140
120
100
80
60
40
20
0
PPB
1,1,-DCA
1,1-DCE
c-1,2-DCE
PCE
1,1,1-TCA
TCE
Jan-18
Apr-18
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22
Date


RW-8
PPB
90
80
70
60
50
40
30
20
10
0
Jan-18
Apr-18
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22
Date
1,1,-DCA
1,1-DCE
c-1,2-DCE
PCE
1,1,1-TCA
TCE


RW-9
700
600
500
400
300
200
100
0
PPB
1,1,-DCA
1,1-DCE
c-1,2-DCE
PCE
1,1,1-TCA
TCE
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22
Date


RW-11
2.5
2.0
1.5
1.0
0.5
0.0
PPB
PCE
1,1,1-TCA
1,1-DCE
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22
Date

RW-12


5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
PPB
PCE
1,1,1-TCA
1,1-DCE
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22
Date

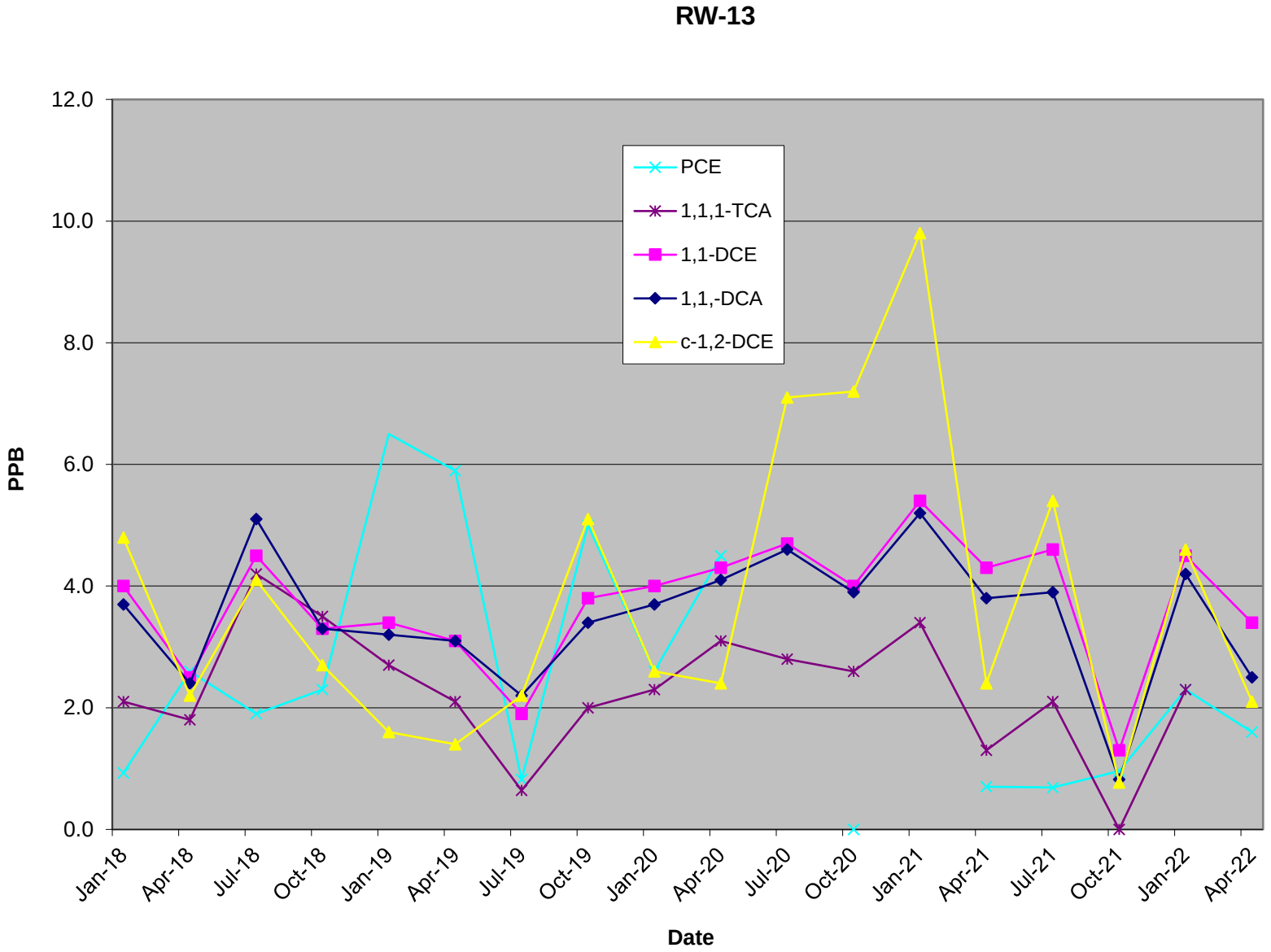

RW-13
12.0
10.0
8.0
6.0
4.0
2.0
0.0
PPB
PCE
1,1,1-TCA
1,1-DCE
1,1,-DCA
c-1,2-DCE
Jan-18
Apr-18
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22
Date

Table-1
Soil Vapor Extraction Sampling
FORMER MILLER CONTAINER FACILITY

NYSDEC SITE # 7-38-029
DATE: March 7, 2022
Centek Report No.: C2203020

Location	1,1,1-TCA	*1,1-DCA	1,1-DCE	*1,4-Dioxane	cis-1,2-DCE	Methylene Chloride	PCE	TCE
NYSDOH Matrix	B	N/A	A	N/A	A	B	B	A
Mitigation Req'd Action Level	1000 $\mu g/m^3$	1000 $\mu g/m^3$	60 $\mu g/m^3$	1000 $\mu g/m^3$	60 $\mu g/m^3$	1000 $\mu g/m^3$	1000 $\mu g/m^3$	60 $\mu g/m^3$
DPEN-1	2.2	0.65	<0.59	<1.1	2.7	<0.52	31	1.4
DPEN-2	8.6	1.7	0.44	<1.1	11	0.49	61	1.1
DPEN-4	340	83	2	<1.1	180	0.38	130	31
SVEN-2	1.9	<0.61	<0.59	22	1.3	10.00	33	3.3

All readings in $\mu g/m^3$

* Matrix B is assumed for all compounds not specifically listed

TABLE-2
FORMER MILLER CONTAINER FACILITY
SVE SYSTEM MONITORING
March 7, 2022

Well	Delta p	SCFM	Cu M/day	Total VOC ug/m3	ug/day	g/day
DPEN-1	0.25	27.7	1130	38	42956	0.04
DPEN-2	1.33	63.9	2607	84	219015	0.22
DPEN-4	0.08	15.7	639	766	489827	0.49
SVEN-2	0.06	13.6	554	72	39873	0.04
SVEN-6	0.01	5.5	226		0	0.00
SVEN-7	0.02	7.8	320		0	0.00
SVEN-8	0.00	0.0	0		0	0.00
SVEN-10	0.05	12.4	506		0	0.00
SVEN-11	0.00	0.0	0		0	0.00
Total Cubic meters per day			5982.34		Grams per day	0.79
					Pounds per day	0.002
					Pounds per month	0.05
					Pounds per year	0.64

Flow rates are calculated using the formula $Q(SCFM)=128.8*K*D^2*SQRT(P*DP/(T+460*S_s))$ from Dwyer where k is flow coeficient for standard Operating ranges

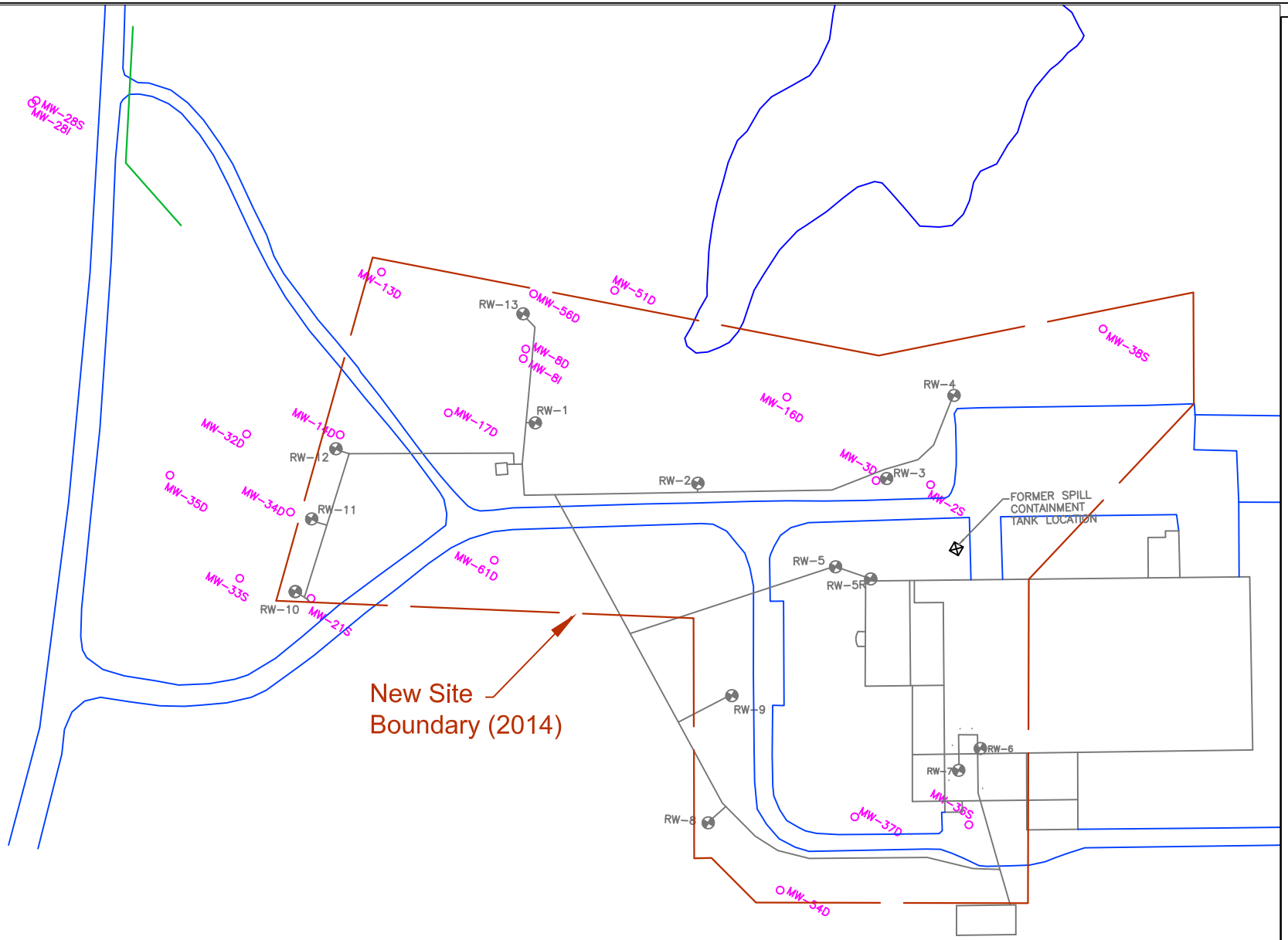
K values	1-Inch	1.5-Inch	2-Inch	3-Inch	4-Inch	6-inch
	0.52	0.58	0.64	0.67	0.67	0.71

Dp differential pressure expressed in inches of Water Column
D inside diameter of pipe expressed in inches
P static line pressure expressed in (psia)
S_s $S_p G_r$ at 60 deg F
The above table applies only to air flowing under standard atmospheric conditions

Appendix E

6 NYCRR PART 375		
Environmental Remediation Programs		
Table 375-6.8 (b)		
	Soil Clean-up Levels (PPM)	
Compound	Commercial	Industrial
1,1-Dichloroethane	240	480
Acetone	500	1000
1,1-Dichloroethene	500	1000
1.2-Dichloroethene (cis-1,2-Dichloroethene)	500	1000
1,1,1-Trichloroethane	150	300
Tetrachloroethylene	150	300
Methylene Chloride	500	1000
Trichloroethylene	200	400
Benzene	44	89
Toluene	500	1000
Xylenes	500	1000
Methyl Isobutyl Ketone	NS	NS
Methyl Butyl Ketone	NS	NS
Methyl Amyl Ketone	NS	NS
4-Methyl-2-Pentanol	NS	NS
alpha-Pinene	NS	NS
Phenanthrene	NS	NS
2-Octanone	NS	NS
Ethylbenzene	390	780

NS - Not Specified



General Notes

RW-5 RECOVERY WELL

MW-16D MONITORING WELL

No.	Revision/Issue	Date

OMI

OPERATIONS & MAINTENANCE INC.
1850 ROUTE 57
FULTON, NY 13069

Project Name and Address

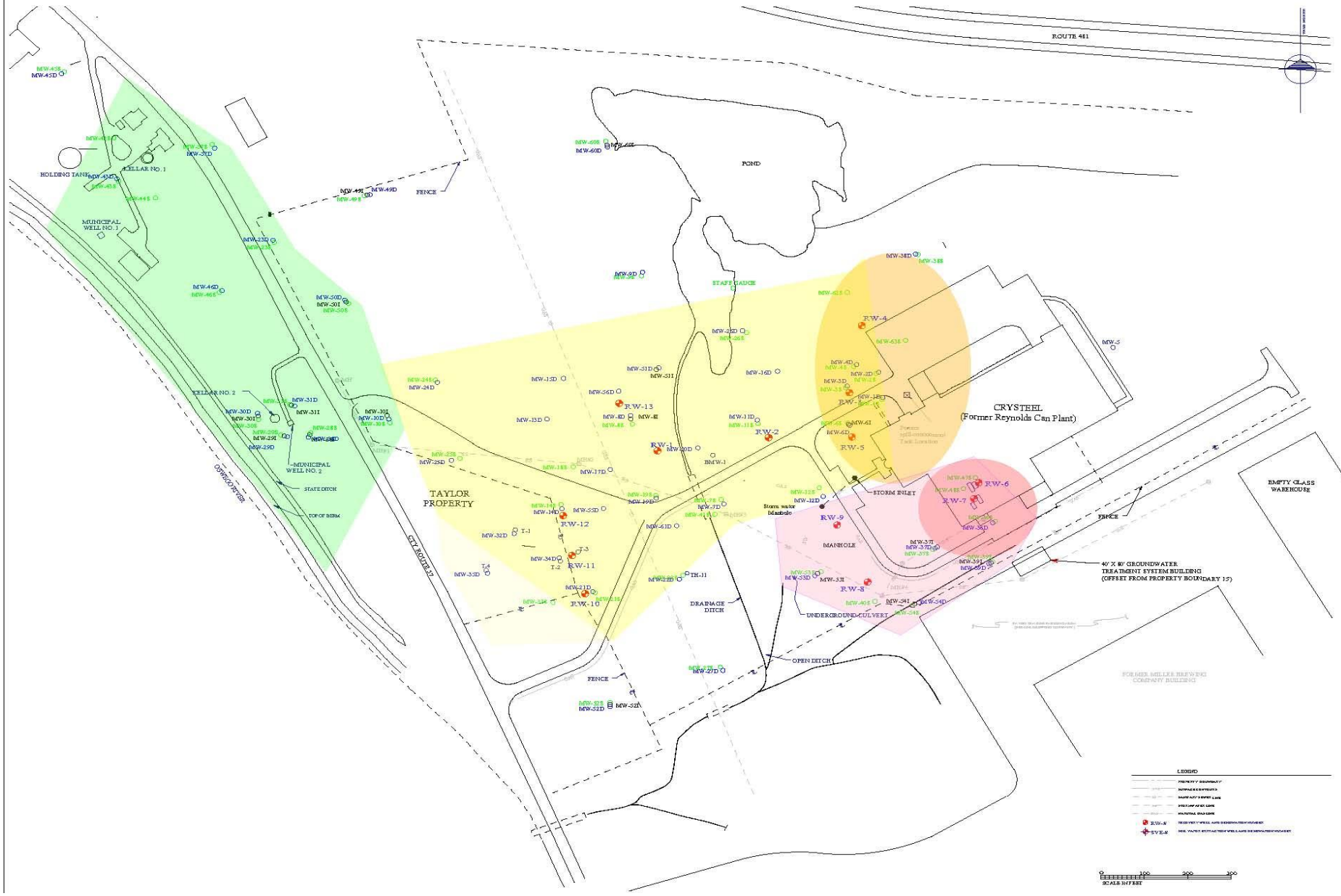
MILLER BREWING CO.
GROUNDWATER TREATMENT FACILITY
1850 ROUTE 57
FULTON, NY 13069

EWN WELLS

Date 07-14-15

Scale 1"=200'

Sheet FIGURE 1

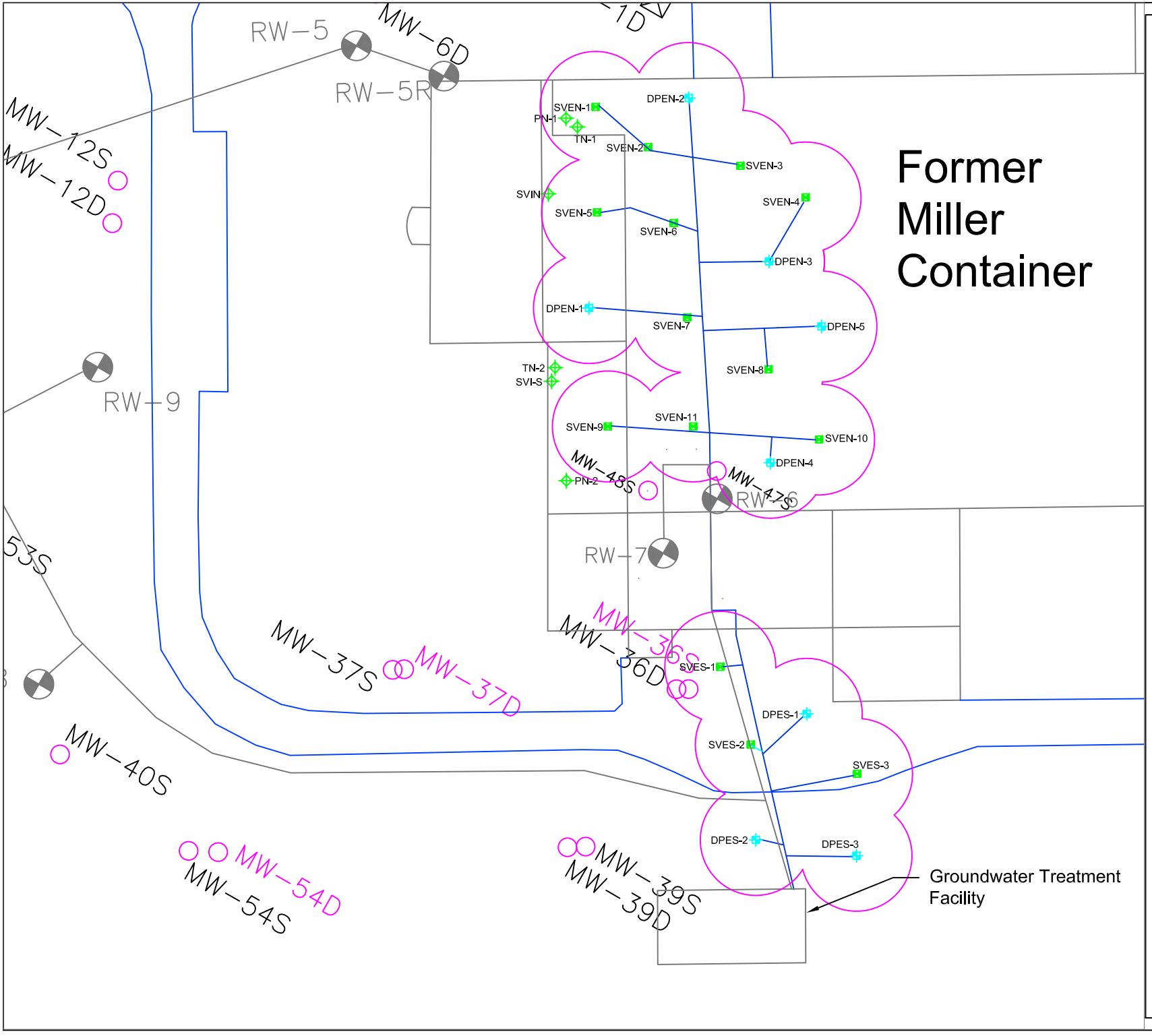


2019-2020 Annual Report

Functional Monitoring Groups
Figure 1

2012-2013 Annual Report

SVE and DPE Layout
Figure 2



General Notes

RW-5 RECOVERY WELL

SVEN-5 SOIL VAPOR EXTRACTION WELL

DPEN-1 DUAL PHASE EXTRACTION WELL

SVI-S SOIL VAPOR EXTRACTION MONITORING POINT

No.	Revision/Issue	Date

OMI
OPERATIONS & MAINTENANCE INC.
1850 ROUTE 57
FULTON, NY 13069

Project Name and Address

MILLER BREWING CO.
GROUNDWATER TREATMENT FACILITY
1850 ROUTE 57
FULTON, NY 13069

2010 SVE SYSTEM

Date 02-14-14

Scale 1"=70'

Sheet FIGURE 3