

Operations & Maintenance Inc.

Riverview Business Park
1850 Route 57
Fulton, NY 13069

Gary Mullen, Jr.

Project Manager
gmullenomi@gmail.com
315-378-5088

May 27, 2020

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, 2019 – April 30, 2020*

Michael:

Enclosed are the following documents that make up the PRR submittal for the referenced Site for the 2019-2020 reporting period:

- a) PRR signed by the Site Owner, Riccelli Fulton, LLC (copy of original). Riccelli is certifying to the portion of the PRR that covers the Institutional Controls (ICs) associated with the Site;
- b) PRR signed by Patrick Martin, P.E. on behalf of the Remedial Party (RP), Miller Brewing Company (original signature). 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 Site¹; and
- c) Year 23 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

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In accordance with the directions provided under the Department's March 16, 2020 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
Project Manager

Enclosures

ecc: Margaret Sheen, Esq., NYSDEC Region 7
Harry Warner, NYSDEC Region 7
Eamonn O'Neil, NYSDOH
Maureen Schuck, NYSDOH
Greg Novitzki, Riccelli Fulton, LLC
Will Orton, Riccelli Fulton, LLC
Richard J. Riccelli, Riccelli Fulton, LLC
Jay Eversman, Esq. Anheuser-Busch Cos., LLC
William Buchan, OMI
Patrick Martin, P.E., Golder Associates



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, 2019 to April 30, 2020

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

Box 2

- | | YES | NO |
|--|-------------------------------------|--------------------------|
| 6. Is the current site use consistent with the use(s) listed below?
Commercial and Industrial | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Are all ICs/ ES in place and functioning as designed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

Description of Institutional Controls

Parcel

Owner

Riccelli Fulton, LLC

Institutional Control

Ground Water Use Restriction

Box 4

Description of Engineering Controls

Parcel

Engineering Control

Groundwater Treatment System
Air Sparging/Soil Vapor Extraction

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or ~~Engineering Control(s)~~ employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS

SITE NO. 738029

Box 6

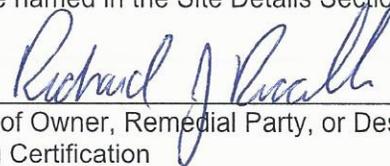
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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 Richard J. Riccelli at 6131 E. Taft Rd
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.


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

5-16-2020
Date

IC/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



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



Site Details

Site No. 738029

Box 1

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, 2019 to April 30, 2020

- | | YES | NO |
|--|-------------------------------------|-------------------------------------|
| 1. Is the information above correct?

If NO, include handwritten above or on a separate sheet. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Box 2

- | | YES | NO |
|--|-------------------------------------|--------------------------|
| 6. Is the current site use consistent with the use(s) listed below?
Commercial and Industrial | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Are all ICs/ECs in place and functioning as designed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

Description of Institutional Controls

Parcel

Owner

Institutional Control

Riccelli Fulton, 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 and Restrictions for the Site.

Description of Engineering Controls

Parcel Tax Map #

Engineering Control

254.00-05-04.01

Groundwater Treatment System

Air Sparging/Soil Vapor Extraction

Groundwater Extraction System

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 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 complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each ~~Institutional~~ or Engineering control listed in Boxes ~~3 and/or~~ 4, I certify by checking "YES" below that all of the following statements are true:

(a) the ~~Institutional Control and/or~~ Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) ~~access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;~~ *Site access is the responsibility of the Site Owner, not that of the Responsible 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

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
Rendering Certification

Date

IC/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 2430 N. FOREST RD, STE 100, GETZVILLE NY
print name print business address 14068

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

Patrick T. Martin



5/26/20

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

Stamp (Required for PE)

Date

Annual Groundwater Monitoring Report Year 23 (May 2019- April 2020)

**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 2020

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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, 2019 to April 30, 2020 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 Riccelli Fulton, LLC (Riccelli), 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 2019-2020 operating year.

April 30, 2019 - April 30, 2020

Well	Total (gallons)	GPD	GPM
RW-2	1181891	3238	2.25
RW-3	129539	355	0.25
RW-4	224685	616	0.43
RW-5R	1245086	3411	2.37
RW-8	1299134	3559	2.47
RW-9	66925	183	0.13
RW-11	490720	1344	0.93
RW-12	1330282	3645	2.53
RW-13	383178	1050	0.73
Totals	6,351,440	17,401	12.1

Based on the individual recovery well totalizers, a total of 6,351,440 gallons of groundwater were recovered during the reporting period at an average flow rate of 12.1 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 7,215,699 gallons of water were treated at the Groundwater Treatment Facility (GWTF). The readings from the ATS 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 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 $\mu\text{g/l}$:

RECOVERY WELLS - USEPA Method 8260c

WELL	Date	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride
RW-2	18-Jul-19	<0.5	6.3	66	100	5.6	37	7.2
	28-Oct-19	14	6.5	68	96	5.3	35	6.6
	20-Jan-20	17	7.3	65	110	7.1	37	8.8
	8-Apr-20	13	5.9	130	120	8.8	37	5.7
RW-3	18-Jul-19	<0.5	1.4	28	46	2.7	5.8	<0.5
	28-Oct-19	1.6	1.6	43	40	2.6	6.8	1.00
	20-Jan-20	2.2	2.4	53	52	4.5	11	1.5
	8-Apr-20	1.3	1.5	24	49	4.4	8.8	<0.5
RW-4	18-Jul-19	26	5.1	52	96	7.9	7.5	6.6
	28-Oct-19	12	3.6	57	73	6.2	6.3	6.0
	20-Jan-20	6.9	4.4	66	97	12	8.1	11
	8-Apr-20	4.8	4.9	70	110	15	8.7	10.0
RW-5R	18-Jul-19	2.0	2.6	10.0	90	2.3	7.3	<2
	28-Oct-19	<2	<2	10.0	82	<2	6.6	<2
	20-Jan-20	<2	<2	12	73	<2	7.2	<2
	8-Apr-20	2.2	<2	10.0	77	<2	6.3	<2
RW-8	18-Jul-19	7.1	3.8	56	16	3.0	3.4	3.4
	28-Oct-19	6.1	3.4	49	14	2.6	3.2	3.0
	20-Jan-20	6.4	3.1	48	11	2.9	3.2	3.7
	8-Apr-20	4.1	1.7	26	8.5	2.4	2.2	1.7
RW-9	18-Jul-19	<0.5	28	310	29	4.6	42	<0.5
	28-Oct-19	38	24	390	31	4.1	37	5.6
	20-Jan-20	54	29	520	32	5.7	50	8.9
	8-Apr-20	59	31	640	38	6.6	66	7.3
RW-11	18-Jul-19	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5
	28-Oct-19	<0.5	<0.5	0.65	1.8	<0.5	<0.5	<0.5
	20-Jan-20	<0.5	<0.5	1.00	1.6	<0.5	<0.5	<0.5
	8-Apr-20	<0.5	<0.5	0.77	1.7	<0.5	<0.5	<0.5
RW-12	18-Jul-19	0.61	<0.5	<0.5	2.0	0.56	<0.5	<0.5
	28-Oct-19	0.59	<0.5	<0.5	2.1	0.55	<0.5	<0.5
	20-Jan-20	0.70	0.50	<0.5	1.9	0.56	<0.5	<0.5
	8-Apr-20	0.77	<0.5	<0.5	2.0	<0.5	<0.5	<0.5
RW-13	18-Jul-19	2.2	1.9	2.2	0.82	0.6	3.1	<0.5
	28-Oct-19	3.4	3.8	5.1	5.0	2.0	3.8	<0.5
	20-Jan-20	3.7	4.0	2.6	2.6	2.3	5.7	<0.5
	8-Apr-20	4.1	4.3	2.4	4.5	3.1	5.2	<0.5

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 2.455 kg (5.41 lbs) of contaminants were removed from the groundwater recovered from the RWs. The following table summarizes the calculations. The readings are presented in grams:

Updated for
2019-2020

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	4473930	66	29	368	476	30	163	31.7	1164
RW-3	490357	0.8	0.8	18	23	1.7	4	0.6	49
RW-4	850523	11	3.8	52	80	8.7	6.5	7.1	169
RW-5R	4713149	10	12	49	379	11	32	0.0	494
RW-8	4917742	29	15	220	61	13	15	15	367
RW-9	253338	12.8	7	117.8	8	1.3	12.4	1.8	161
RW-11	1857571	0.0	0.0	0.0	3.1	0.0	0.0	0.0	3.1
RW-12	5035649	3.4	2.5	0.0	10.1	2.8	0.0	0.0	18.8
RW-13	1450482	4.9	5.1	4.5	5	2.9	6	0.0	28
Totals	24042741	137	75	830	1046	72	240	56	2455

The table below represents the calculated mass removal since the startup of the GWTF (1997). Using these figures, an estimated 681 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	5.4
2008-2009	6.8	Total	681

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 7,215,699 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.

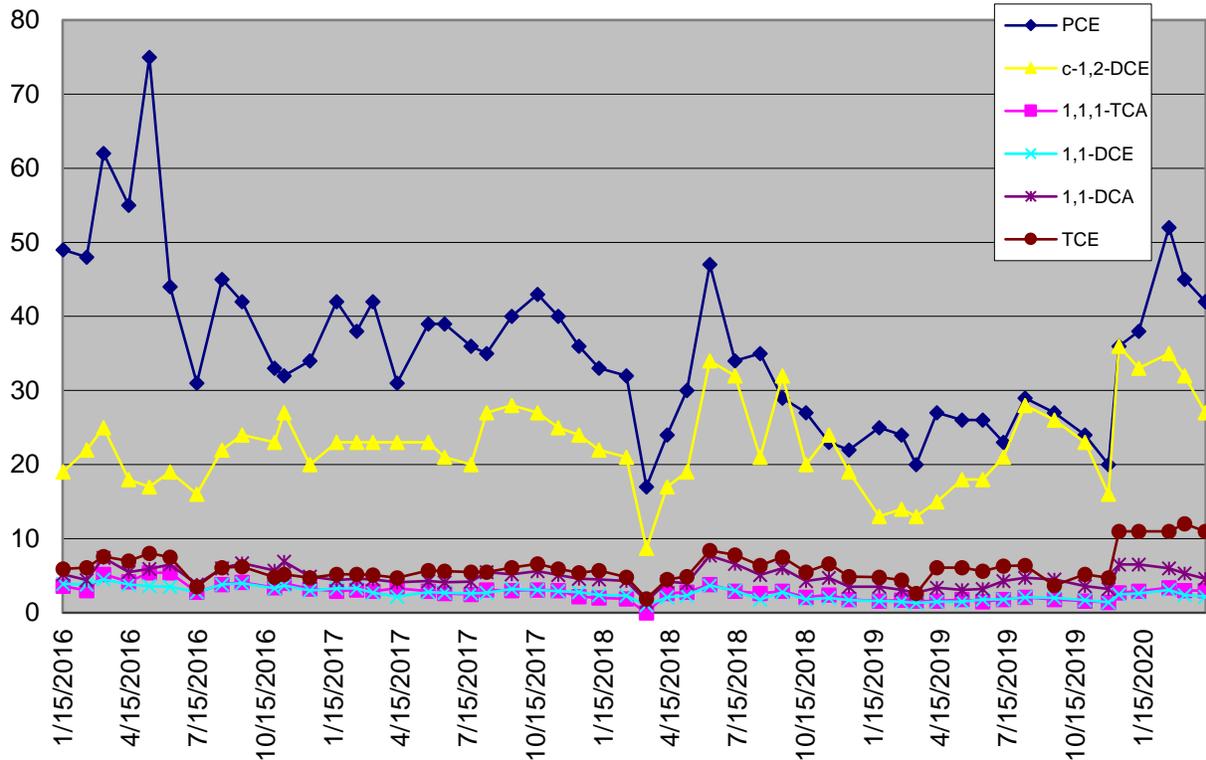
Individual VOCs were reported in the AST INF samples at concentrations in excess of the MDL. The highest reported concentrations were PCE ranging from 20µg/l to 52µg/l and its daughter product, cis-1,2-DCE from 16µg/l to 36µg/l. Graphical analysis of the data indicates that the concentrations of individual and total VOCs continue to demonstrate variability over time with an overall declining trend. The increase starting in December 2019 was due to increased volume being recovered from RW-2. A new pump with larger pumping capacity was installed to increase mass removal.

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	TOTAL
15-May-19	3.1	1.5	18	26	1.8	6.1	56.5
12-Jun-19	3.2	1.8	18	26	1.5	5.6	56.1
10-Jul-19	4.3	1.8	21	23	1.8	6.3	58.2
8-Aug-19	4.7	2.1	28	29	2.1	6.4	72.3
17-Sep-19	4.5	2	26	27	1.8	3.7	65.0
28-Oct-19	3.6	1.7	23	24	1.6	5.2	59.1
29-Nov-19	3.2	1.4	16	20	1.4	4.7	46.7
13-Dec-19	6.5	2.5	36	36	2.7	11	94.7
9-Jan-20	6.5	2.6	33	38	2.9	11	94.0
19-Feb-20	6.0	3.1	35	52	3.4	11	110.5
11-Mar-20	5.3	2.4	32	45	3.0	12	99.7
8-Apr-20	4.6	2.2	27	42	3.0	11	89.8

AST INF Concentrations 2016 through present



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 2300 mg/l as seen in the following table. A slight increase in the TDS was noted in the AST INF sample in December due to the increased flow from RW-2 as noted above.

DATE	2019-2020 TDS mg/l	2018-2019 TDS mg/l	2017-2018 TDS mg/l	2016-2017 TDS mg/l	2015-2016 TDS mg/l
June	1200	2000	2600	2200	2300
July	1300	1900	2600	2200	2200
August	2000	2000	2200	2500	2100
September	2100	2100	2200	2300	2000
October	1700	1800	2000	2200	2300
November	1200	1400	1900	1800	2300
December	2100	1700	2100	1800	2300
January	2100	1700	2100	2200	2100
February	2000	1500	2100	2000	2200
March	1800	1400	2100	2300	2400
April	2300	1500	2000	2000	2400
May		1300	2000	2100	2000

REMEDIAL SYSTEM PERFORMANCE

The following table represents the annual average pumping rate, in gallons per minute, for each of the recovery wells. A decreasing trend in the total average flow from recovery wells RW-3, RW-4, RW-5R, RW-8, RW-11 and RW-13 was noted over the past five years. Increases in the production rates were noted in RW-2, RW-9 and RW-12. Seasonal variability is noted corresponding to changes in precipitation/recharge rates. The GWTF experienced a fault with the AST blower electrical system causing one extended shut down of production for approximately 5 days in September 2019. The GWTF was off-line for a period of 7 days in March 2020 for influent tank cleaning. It is estimated that these two periods of down time lowered the overall annual production by approximately 250,000 gallons.

Well	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020
RW-2	1.87	2.36	1.40	1.45	2.24
RW-3	0.28	0.23	0.29	0.24	0.25
RW-4	0.50	0.57	0.65	0.45	0.43
RW-5R	2.99	2.49	2.65	2.30	2.36
RW-8	3.80	3.48	3.34	3.15	2.46
RW-9	0.11	0.16	0.11	0.10	0.13
RW-11	1.15	1.24	1.30	1.03	0.93
RW-12	2.09	1.57	2.50	2.35	2.52
RW-13	2.61	1.72	0.77	1.04	0.73
System Flow Average	15.54	13.82	13.01	12.91	12.82

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 and continues to be directed to the river under the 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, 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 (f), 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	f	Well	f	Well	F	Well	f	Well	f	Well	F
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	A					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 also 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 2017 sampling through the April 2020 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
10-Apr-17	<5	<5	350	29	<5.0	6.1	<5	385
23-Apr-18	<10	<10	650	45	<10	<10	14	709
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
MW-3D								
10-Apr-17	<2	<2	5.6	91	4.2	5.2	<2.0	106
23-Apr-18	<2	3.6	18	160	9.0	9.2	3.0	203
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
MW-16D								
10-Apr-17	9.6	1.7	3.9	13	6.0	4.1	1.5	40
23-Apr-18	4.2	5.0	8.0	28	15	1.3	2.8	64
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
MW-38S								
10-Apr-17	78	24	47	86	11	13	<2	259
23-Apr-18	72	23	41	78	8.1	10.0	<2	232
16-Apr-19	95	27	58	83	12	13	<2	288
16-Apr-20	150	60	160	120	21	16	<2	527

A review of the data for this reporting period along with the past five years of historic data for each of these wells is discussed below.

MW-2S and MW-3D have shown improvements in the water quality over the past seven years. Concentrations of certain compounds continue to fluctuate in these two wells. The increase in cis-1,2 DCE noted in MW-2S in past reports has not continued. PCE fluctuations previously noted

in MW-3D continue but do not appear to be trending upward. The remaining COCs in these two wells clearly demonstrate a declining trend as noted on the line graphs of the past 8-year data set (Appendix C). The Riccelli remedial action, which included the removal of the parking lot cover and impacted underlying soil, may be a contributing factor in these fluctuations. It is anticipated that the declining trends noted for the majority of the compounds will continue and the cis-1,2 DCE and PCE concentrations in MW-2S and MW-3D respectively, will eventually stabilize and decline as well. The VOC concentrations will continue to be monitored in these monitoring wells.

The VOC levels reported for the April 2020 sampling event for MW-38S and MW-16D were higher than the previous sampling event in 2019. The decreasing trend noted over the previous 8-year period has not continued, however; when compared to historical data, these increases are minimal. Additional samples will be collected from these wells in October 2020 to assist in establishing a trend to 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 2020 sampling event. The following table summarizes the results for these wells. All concentrations are presented in µg/l.

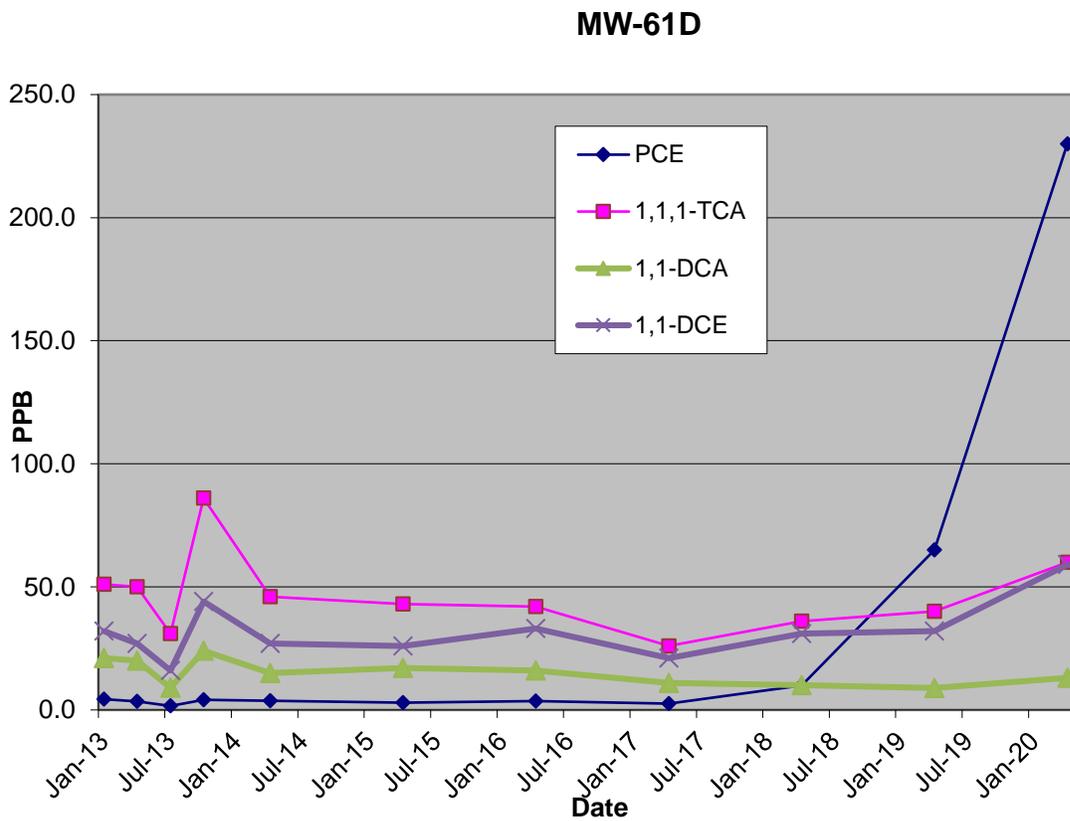
MW-8D	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	TOTAL
10-Apr-17	2.8	2.7	2.5	9.3	5.6	10.0	33
23-Apr-18	3.4	3.4	1.4	17	7.1	1.6	34
16-Apr-19	6.2	5.1	5.8	19	11	4.8	52
15-Apr-20	7.6	6.8	14	8.5	11	8.4	56
MW-17D	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	TOTAL
10-Apr-17	4.8	2.1	0.83	1.9	4.4	<0.5	14
23-Apr-18	6.4	2.7	1.3	2.0	6.0	<0.5	18
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
MW-61D	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	TOTAL
10-Apr-17	11	21	24	2.5	26	>0.5	85
23-Apr-18	10.0	31	28	9.9	36	1.00	116
16-Apr-19	8.9	32	29	65	40	3.3	178
15-Apr-20	13	59	41	230	60	6.9	410

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.

The slight increase in the contaminants reported for the samples collected from MW-8D and MW-17D are minimal when compared to historical values. An additional sample will be collected in October 2020 to assist in trend identification.

The following graph depicts VOCs in MW-61D for the past six years. MW-61D contaminant concentrations have increased slightly. Recently the pump in upgradient RW-2 was replaced to improve the VOC recovery rate and assist in lowering the contaminant load in MW-61D. An additional sample will be collected from this monitoring well in October 2020 to determine if additional recovery efforts are recommended for this area.



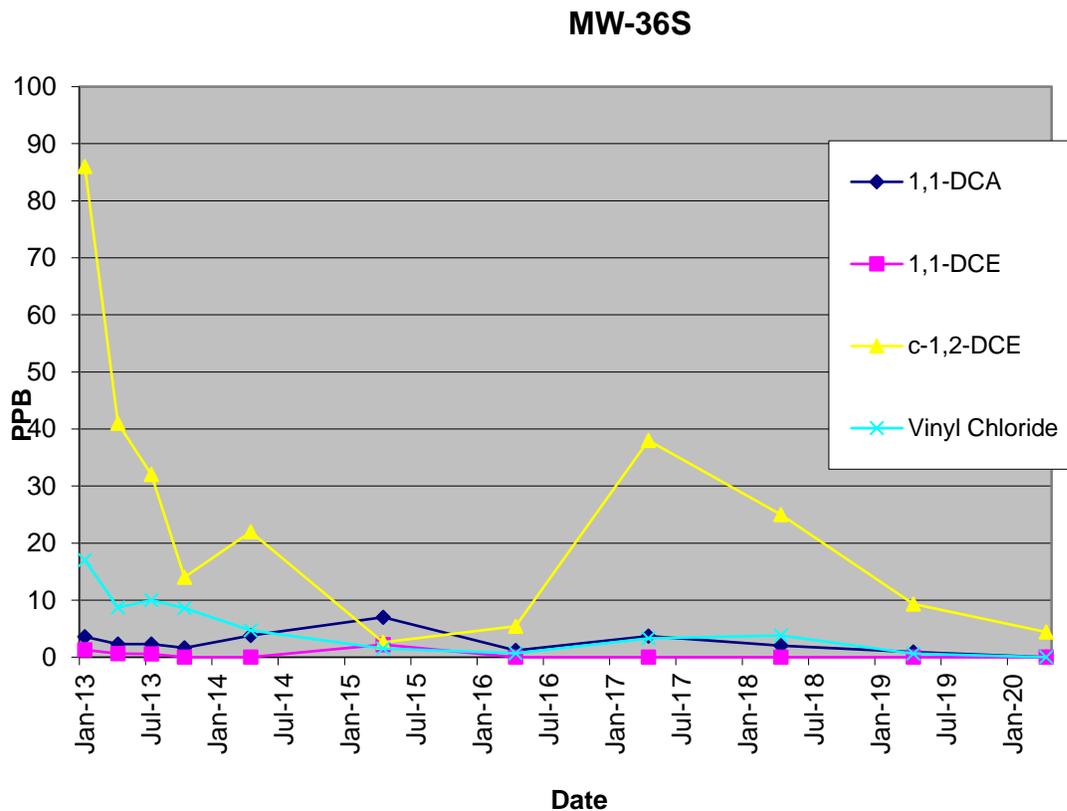
SOUTHERN OPERABLE UNIT

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
10-Apr-17	3.7	<0.5	38	0.87	0.50	0.86	3.3	47
23-Apr-18	2.0	<0.5	25	<0.5	<0.5	0.68	3.8	31
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

A review of the data for MW-36S for the past eight years (see line graph below) indicates that the concentration of individual VOCs in the groundwater at this location demonstrate an overall declining trend with some minor fluctuations in c-1,2-DCE concentrations.



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 3 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
19-Oct-17	2.8	<0.5	5.9	17	0.65	0.84	<0.5	27
23-Apr-18	1.2	<0.5	2.2	5.2	<0.5	<0.5	<0.5	8.6
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
RW-8	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride	TOTAL
18-Jul-19	7.1	3.8	56	16	3.0	3.4	3.4	93
28-Oct-19	6.1	3.4	49	14	2.6	3.2	3.0	79
20-Jan-20	6.4	3.1	48	11	2.9	3.2	3.7	78
8-Apr-20	4.1	1.7	26	8.5	2.4	2.2	1.7	47
RW-9	1,1-DCA	1,1-DCE	c-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride	TOTAL
18-Jul-19	<0.5	28	310	29	4.6	42	<0.5	414
28-Oct-19	38	24	390	31	4.1	37	5.6	530
20-Jan-20	54	29	520	32	5.7	50	8.9	700
8-Apr-20	59	31	640	38	6.6	66	7.3	848

The analytical data for MW-37I has shown a decreasing trend over the past 7 years as noted on the line graph in Appendix C. The analytical data from the sampling of RW-8 continues to demonstrate declining concentrations of all COCs. Concentrations of cis-1,2 DCE in RW-9 have continued to increase over the past 4 years.

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 VOCs. The VOC concentrations reported in MW-34D continue to decline 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, MW-34D and MW-35D). Line graphs of the analytical data for the past 8 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 stable and trending down. 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 $\mu\text{g/l}$.

MW-34D	1,1-DCA	1,1-DCE	PCE	1,1,1-TCA	TOTAL
10-Apr-17	0.58	0.77	7.8	2.7	12
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

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. No compounds were reported in either sample collected in the 2020 sampling event at a concentration greater than the MDL of 0.5 µg/l.

Concentrations of PCE and 1,1,1-TCA reported in the samples collected from MW-28I since April 2017 are presented in the following table. All concentrations are presented in µg/l.

MW-28I	PCE	1,1,1-TCA
10-Apr-17	0.51	0.60
23-Apr-18	<0.5	<0.5
16-Apr-19	<0.5	<0.5
14-Apr-20	<0.5	<0.5

SOIL VAPOR EXTRACTION SYSTEM

Two areas identified in a 2008 subsurface investigation have been under the influence of the SVE remedial system since February 2011. The operation of the SVE system is broken up into the Northern and Southern areas 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 2020.

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	04/30/20
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.

Soil Vapor Extraction Southern area (SVES)

Vacuum was not applied to any recovery points in the southern area this reporting period. Due to the elevated water table in this area vapor recovery rates are minimal or nonexistent throughout the year therefore extraction was not attempted.

Soil Vapor Extraction Northern area (SVEN)

Samples were collected from a select list of operating vapor extraction wells in the Northern SVE area during this reporting period. The analytical data collected from the SVEN and DPEN wells since August 2018 are 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 this reporting period. The data indicates continued operation is providing enhanced 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 0.54 pounds of VOC contaminants were removed. The calculated mass removal rate decreased significantly when compared to the previous reporting periods.

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 reported for DPEN-4 were 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.

Set forth below is a table of the data illustrating the downward trend of sub-slab vapor contaminant concentrations. The SVEN system will continue to be operated on a continuous basis.

DATE	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 $\mu\text{g}/\text{m}^3$	1000 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$	1000 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$	1000 $\mu\text{g}/\text{m}^3$	1000 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$
08/20/18	DPEN-1	8.4	5.4	2.6	0.36	21	0.38	120	8.7
11/20/18	DPEN-1	6.2	3.8	1.3	<1.1	33	<0.52	150	4.5
03/08/19	DPEN-1	5.9	3.7	0.56	<1.1	3.3	2.4	130	2.7
04/13/20	DPEN-1	2.9	1.4	0.67	<1.1	2.5	<0.52	40	2.1
08/20/18	DPEN-2	52	7.4	1.3	39	83	0.63	1900	19
11/20/18	DPEN-2	29	3.8	0.75	3.0	39	2.7	1600	15
03/08/19	DPEN-2	11	2.1	0.5	<1.1	7.2	0.7	350	1.2
04/13/20	DPEN-2	9.8	2.0	0.40	<1.1	1.9	0.59	42	0.70
08/20/18	DPEN-4	5400	450	57	0.75	4000	15	3900	1000
11/20/18	DPEN-4	5700	340	39	4.3	3600	5.4	3400	1000
03/08/19	DPEN-4	580	100	5	<1.1	510	2.5	920	140
04/13/20	DPEN-4	240	56	2.8	<1.1	170	0.76	160	30
08/20/18	SVEN-2	7.1	2.2	0.75	400	2.4	0.38	440	16
11/20/18	SVEN-2	5.1	<0.61	0.48	240	1.5	0.45	270	2.3
03/08/19	SVEN-2	1.4	<0.61	<0.59	94	0.59	0.59	170	0.59
04/13/20	SVEN-2	1.5	<0.61	<0.59	57	<0.59	0.59	29	<0.81

All readings in $\mu\text{g}/\text{m}^3$

* 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

Vapor Phase Carbon Treatment (VPC)

The VPC treatment system is utilized to reduce the VOC levels in the vapors recovered by the SVE system prior to discharge through the effluent stack. The system consists of two vessels with 10,000-pounds each of activated carbon, connected in series.

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 southeast 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 they apply 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-28l 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.

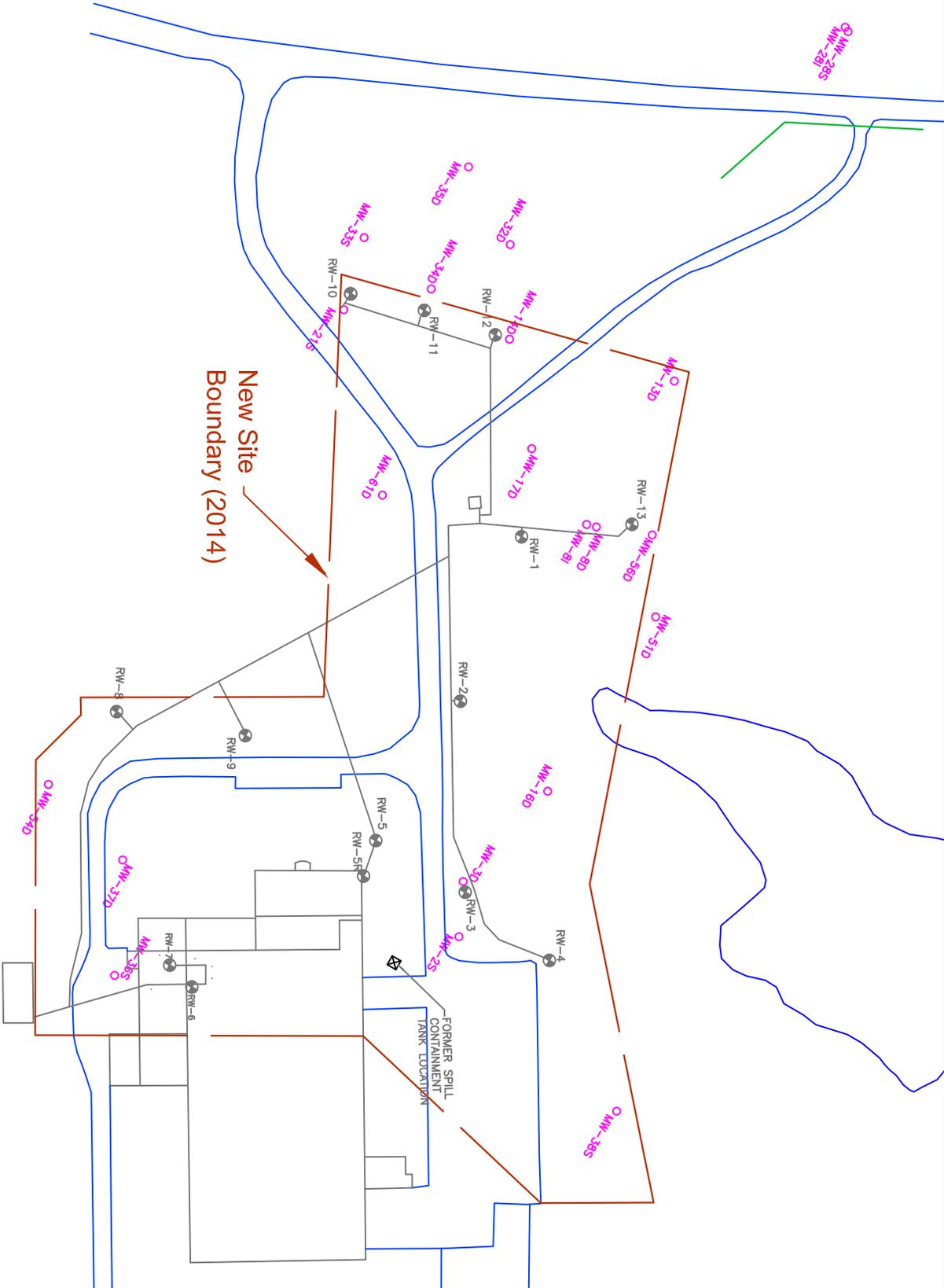
3. The operation of RW-2 continues to provide a benefit to the remedial effort. The calculated mass removal rate for this well increased significantly (approximately 68 percent) since the last reporting period due to the installation of a new pump (flow increased by approximately 55% from previous year) and is now 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, 111-TCA and 11-DCE in MW-16D and MW-61D appear to be increasing. Line graphs of the analytical data for these wells are included in Appendix C. This recovery well will continue to be utilized and monitoring of the surrounding wells will also continue. An additional sample will be collected from these two wells in October to more closely monitor these trends.
4. The production rate from RW-3 remained consistent from the previous year however the mass removal rate decreased due to the lower reported concentrations. 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. 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 in RW-8 continue to decline while concentrations in RW-9 continue to fluctuate from year to year but appear to be declining overall. 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.
8. The perimeter recovery well RW-10 operation was halted in August 2015. The VOC concentrations at the time were well below the SCG. Since that time, no water has been recovered from this well. The surrounding monitoring wells, MW-21S, MW-33S and MW-35D continue to be monitored to assess the need for recovery operations in this well. The contaminant levels reported for MW-21S, MW-33S and MW-35D during the groundwater sampling event in 2020 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 7 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 recently fallen below, 2.5 µg/l (50% of the SCGs for groundwater for all of the COCs other than benzene (1 µg/l) and chloroform (7 µg/l) (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 and TCE. The production rate from this well decreased slightly from 1.04 GPM to 0.73 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 again unexpectedly increased from the previous year. This slight rise does not invalidate the assumed downward trend when historical data is considered. 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 ineffective due to the elevated water table. 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 nine years of operation. The estimated mass removal rate calculated for the 365 days of operation this year is substantially below 2019 from 5.94 pounds to 0.54 pounds. This reduction in mass removal is due to the reduced concentration of the recovered vapors. 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.
3. RW-8 and RW-9 will continue to operate throughout the next reporting period. Downgradient monitoring wells MW-53I will be sampled in October 2020 and again in April 2021 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. Over the coming months samples will be collected from DPEN-4 only, to 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.



New Site Boundary (2014)

FORMER SPILL CONTAINMENT TANK LOCATION

General Notes

- RW-5 RECOVERY WELL
- MW-180 MONITORING WELL

No.	Revision/Issue	Date

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

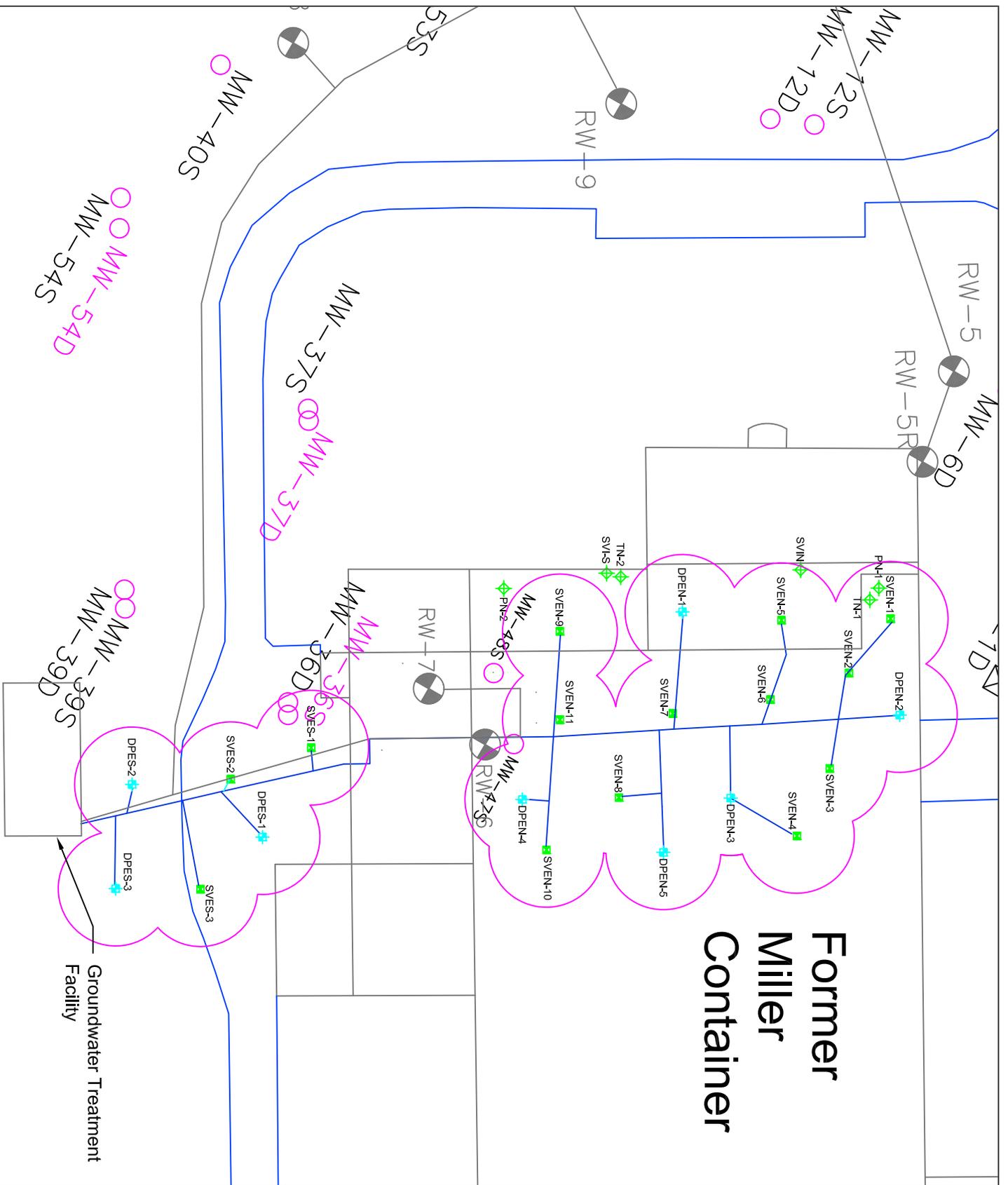
Project Name and Address
 MILLER BREWING CO.
 GROUNDWATER TREATMENT FACILITY
 1850 ROUTE 57
 FULTON, NY 13069
EWN WELLS

Date: 07-14-15
 Scale: 1"=200'
 Sheet: 1
FIGURE 1



Former Miller Container

- General Notes**
- RW-5 RECOVERY WELL
 - SVEN-5 SOIL VAPOR EXTRACTION WELL
 - DPEN-4 DUAL PHASE EXTRACTION WELL
 - SV-S SOIL VAPOR EXTRACTION MONITORING POINT



No.	Revision/Issue	Date

OMI
 OPERATIONS & MAINTENANCE INC.
 1350 ROUTE 57
 FULTON, NY 13069

Project Name and Address
 MILLER BREWING CO.
 GROUNDWATER TREATMENT FACILITY
 1650 ROUTE 57
 FULTON, NY 13069
2010 SVE SYSTEM

Date: 02-14-14
 Scale: 1"=70'
FIGURE 3

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

May 1, 2019 through April 30, 2020

May-19

Daily Gallons

1	34632586	19346
2	34651932	22743
3	34674675	18978
4	34693653	22770
5	34716423	18905
6	34735328	22629
7	34757957	18856
8	34776813	22587
9	34799400	18898
10	34818298	22696
11	34840994	18738
12	34859732	18802
13	34878534	22773
14	34901307	18891
15	34920198	18865
16	34939063	19771
17	34958834	22502
18	34981336	20065
19	35001401	22104
20	35023505	22979
21	35046484	19115
22	35065599	19183
23	35084782	23029
24	35107811	19140
25	35126951	22960
26	35149911	19180
27	35169091	22938
28	35192029	19145
29	35211174	22948
30	35234122	19106
31	35253228	22910

Jun-19

Daily Gallons

1	35276138	19132
2	35295270	22925
3	35318195	19082
4	35337277	21965
5	35359242	20011
6	35379253	22851
7	35402104	19029
8	35421133	19058
9	35440191	22900
10	35463091	19070
11	35482161	22894
12	35505055	19044
13	35524099	19124
14	35543223	22908
15	35566131	19094
16	35585225	22814
17	35608039	19028
18	35627067	19059
19	35646126	22999
20	35669125	19264
21	35688389	19253
22	35707642	19028
23	35726670	18807
24	35745477	19311
25	35764788	18770
26	35783558	21208
27	35804766	18910
28	35823676	18861
29	35842537	22459
30	35864996	19072

Total for Month	620642
Daily Average	20020.71
Average GPM	13.90

Total for Month	611768
Daily Average	20392.27
Average GPM	14.16

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

May 1, 2019 through April 30, 2020

Jul-19

Daily Gallons

1	35884068	18865
2	35902933	18829
3	35921762	19052
4	35940814	22355
5	35963169	18795
6	35981964	18931
7	36000895	19052
8	36019947	18982
9	36038929	19022
10	36057951	26574
11	36084525	18973
12	36103498	19010
13	36122508	19045
14	36141553	18964
15	36160517	18966
16	36179483	22709
17	36202192	14996
18	36217188	18894
19	36236082	18844
20	36254926	21034
21	36275960	20530
22	36296490	18966
23	36315456	18921
24	36334377	18900
25	36353277	18877
26	36372154	18876
27	36391030	18915
28	36409945	20207
29	36430152	20427
30	36450579	20007
31	36470586	18944

Total for Month	605590
Daily Average	19535.16
Average GPM	13.57

Aug-19

Daily Gallons

1	36489530	19167
2	36508697	18933
3	36527630	18970
4	36546600	18935
5	36565535	19047
6	36584582	22968
7	36607550	18619
8	36626169	19773
9	36645942	19181
10	36665123	19193
11	36684316	19191
12	36703507	19205
13	36722712	22419
14	36745131	19733
15	36764864	19083
16	36783947	19083
17	36803030	19129
18	36822159	19049
19	36841208	19523
20	36860731	22337
21	36883068	18967
22	36902035	18290
23	36920325	19748
24	36940073	19044
25	36959117	19008
26	36978125	19005
27	36997130	18972
28	37016102	18967
29	37035069	19978
30	37055047	40541
31	37075391	20197

Total for Month	604805
Daily Average	19509.84
Average GPM	13.55

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

May 1, 2019 through April 30, 2020

Sep-19

Daily Gallons

1	37095588	18992
2	37114580	18734
3	37133314	18725
4	37152039	18760
5	37170799	18723
6	37189522	18684
7	37208206	18656
8	37226862	16710
9	37243572	19444
10	37263016	13699
11	37276715	0
12	37276715	0
13	37276715	0
14	37276715	0
15	37276715	331
16	37277046	23121
17	37300167	18763
18	37318930	18734
19	37337664	18734
20	37356398	18725
21	37375123	18760
22	37393883	18723
23	37412606	18684
24	37431290	18656
25	37449946	18635
26	37468581	18670
27	37487251	18697
28	37505948	18682
29	37524630	18693
30	37543323	18715

Oct-19

Daily Gallons

1	37562038	18634
2	37580672	18519
3	37599191	18733
4	37617924	17811
5	37635735	15819
6	37651554	18672
7	37670226	18681
8	37688907	14936
9	37703843	18649
10	37722492	18639
11	37741131	15571
12	37756702	18002
13	37774704	18629
14	37793333	18631
15	37811964	18594
16	37830558	15038
17	37845596	18592
18	37864188	18582
19	37882770	18541
20	37901311	14796
21	37916107	18511
22	37934618	18696
23	37953314	18586
24	37971900	18565
25	37990465	17826
26	38008291	20035
27	38028326	18955
28	38047281	18246
29	38065527	18920
30	38084447	18935
31	38103382	21673

Total for Month	467932
Daily Average	15597.73
Average GPM	10.83

Total for Month	560059
Daily Average	18066.42
Average GPM	12.55

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

May 1, 2019 through April 30, 2020

Nov-19

Daily Gallons

1	38125055	16295
2	38141350	18797
3	38160147	18677
4	38178824	14973
5	38193797	18670
6	38212467	15423
7	38227890	18191
8	38246081	18714
9	38264795	14949
10	38279744	14813
11	38294557	18406
12	38312963	14772
13	38327735	14837
14	38342572	18490
15	38361062	14800
16	38375862	17832
17	38393694	15491
18	38409185	18584
19	38427769	14938
20	38442707	18726
21	38461433	18687
22	38480120	14942
23	38495062	18663
24	38513725	14892
25	38528617	18655
26	38547272	14919
27	38562191	18681
28	38580872	18677
29	38599549	14959
30	38614508	18654

Dec-19

Daily Gallons

1	38633162	14915
2	38648077	18760
3	38666837	18750
4	38685587	18833
5	38704420	16238
6	38720658	17645
7	38738303	18845
8	38757148	18837
9	38775985	24184
10	38800169	23655
11	38823824	23522
12	38847346	20342
13	38867688	22888
14	38890576	25119
15	38915695	22793
16	38938488	23702
17	38962190	23650
18	38985840	23664
19	39009504	20253
20	39029757	23058
21	39052815	23622
22	39076437	23624
23	39100061	23630
24	39123691	24044
25	39147735	24654
26	39172389	27282
27	39199671	24166
28	39223837	23951
29	39247788	23983
30	39271771	23701
31	39295472	21166

Total for Month	511126
Daily Average	17037.53
Average GPM	11.83

Total for Month	680964
Daily Average	21966.58
Average GPM	15.25

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

May 1, 2019 through April 30, 2020

Jan-20

Daily Gallons

1	39316638	21914
2	39338552	24199
3	39362751	26745
4	39389496	24679
5	39414175	23834
6	39438009	23698
7	39461707	23926
8	39485633	24594
9	39510227	24490
10	39534717	25163
11	39559880	23291
12	39583171	23211
13	39606382	23014
14	39629396	22837
15	39652233	22580
16	39674813	18736
17	39693549	22192
18	39715741	22348
19	39738089	25780
20	39763869	21791
21	39785660	21358
22	39807018	21035
23	39828053	20524
24	39848577	20440
25	39869017	20780
26	39889797	20797
27	39910594	22123
28	39932717	21106
29	39953823	19335
30	39973158	18730
31	39991888	17830

Feb-20

Daily Gallons

1	40009718	17980
2	40027698	20716
3	40048414	17982
4	40066396	17803
5	40084199	18434
6	40102633	18442
7	40121075	18156
8	40139231	18160
9	40157391	17946
10	40175337	14974
11	40190311	23682
12	40213993	21514
13	40235507	22039
14	40257546	23725
15	40281271	23671
16	40304942	19736
17	40324678	23459
18	40348137	23547
19	40371684	21308
20	40392992	21895
21	40414887	23639
22	40438526	23745
23	40462271	23854
24	40486125	23819
25	40509944	23819
26	40533763	24725
27	40558488	24128
28	40582616	21627
29	40604243	22356

Total for Month	696416
Daily Average	22465.03
Average GPM	15.60

Total for Month	612355
Daily Average	21115.69
Average GPM	14.66

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

May 1, 2019 through April 30, 2020

Mar-20

Daily Gallons

1	40626599	24029
2	40650628	24492
3	40675120	24431
4	40699551	23909
5	40723460	19811
6	40743271	23768
7	40767039	19830
8	40786869	22639
9	40809508	21077
10	40830585	23780
11	40854365	19876
12	40874241	23643
13	40897884	20972
14	40918856	23545
15	40942401	24036
16	40966437	23950
17	40990387	23240
18	41013627	20491
19	41034118	27934
20	41062052	19926
21	41081978	23789
22	41105767	19777
23	41125544	2150
24	41127694	0
25	41127694	0
26	41127694	0
27	41127694	0
28	41127694	0
29	41127694	0
30	41127694	19439
31	41147133	22871

Total for Month	542890
Daily Average	17512.58
Average GPM	12.16

Apr-20

Daily Gallons

1	41170004	22897
2	41192901	22316
3	41215217	22324
4	41237541	23617
5	41261158	21493
6	41282651	21731
7	41304382	23632
8	41328014	23561
9	41351575	23609
10	41375184	23534
11	41398718	21493
12	41420211	21617
13	41441828	23569
14	41465397	27556
15	41492953	22628
16	41515581	20570
17	41536151	21597
18	41557748	23420
19	41581168	19552
20	41600720	23668
21	41624388	23341
22	41647729	19727
23	41667456	23584
24	41691040	23523
25	41714563	19616
26	41734179	23524
27	41757703	23478
28	41781181	23549
29	41804730	19699
30	41824429	23856

5/1/2020 41848285

Total for Month	701152
Daily Average	22617.81
Average GPM	15.71

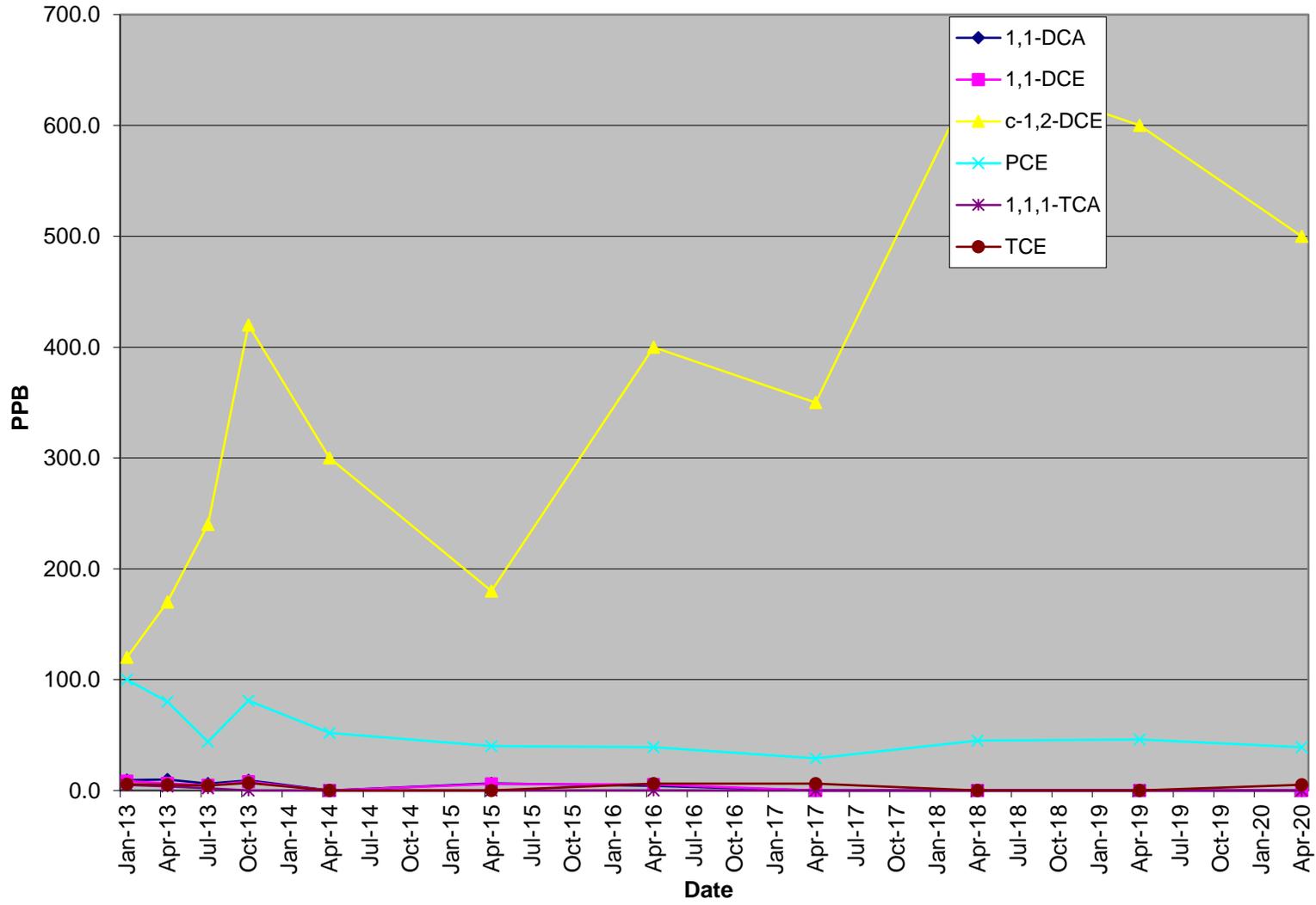
Miller Brewing Company

Fulton Can Plant Site Fulton, NY

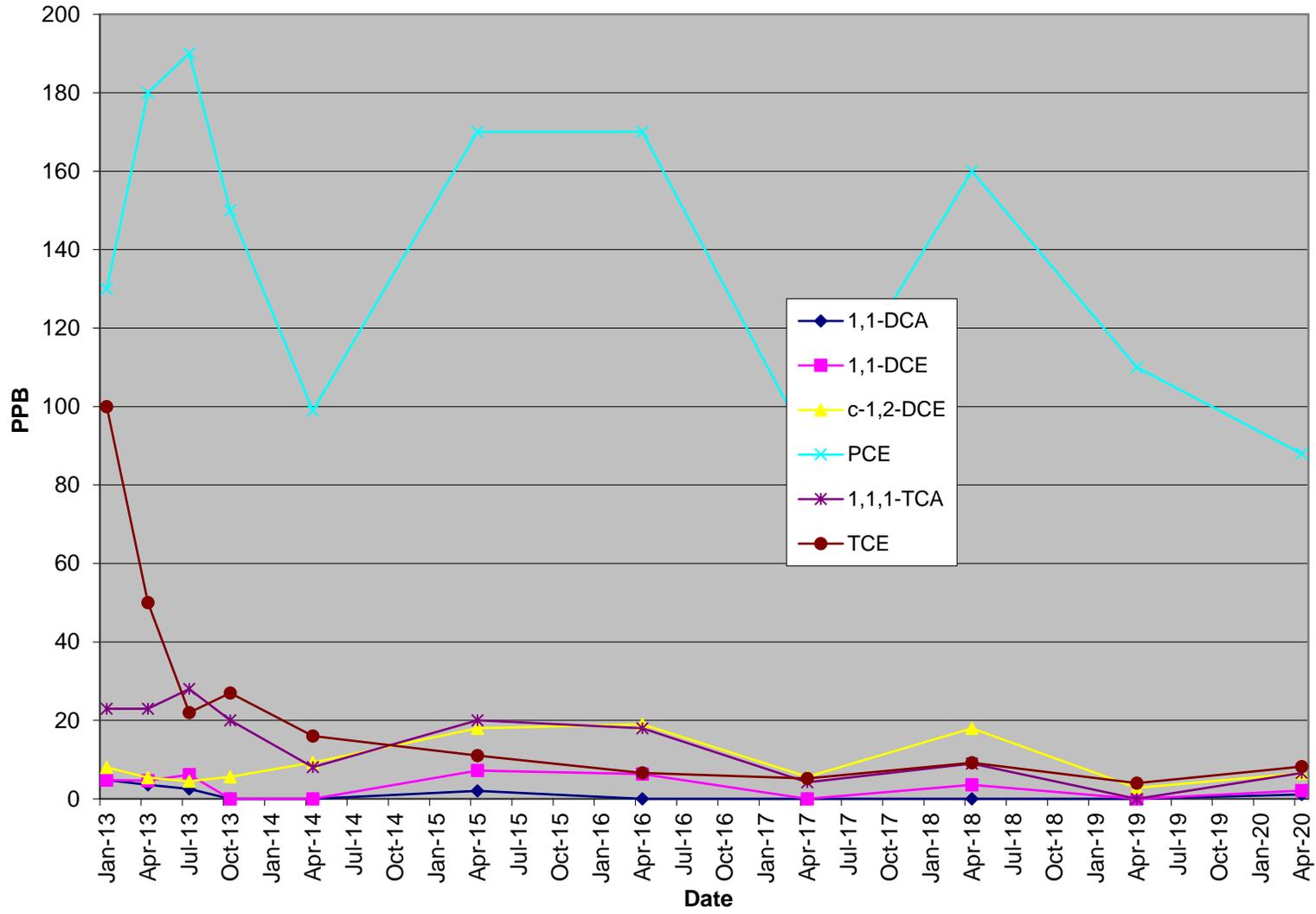
Early Warning Network July 2015

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	

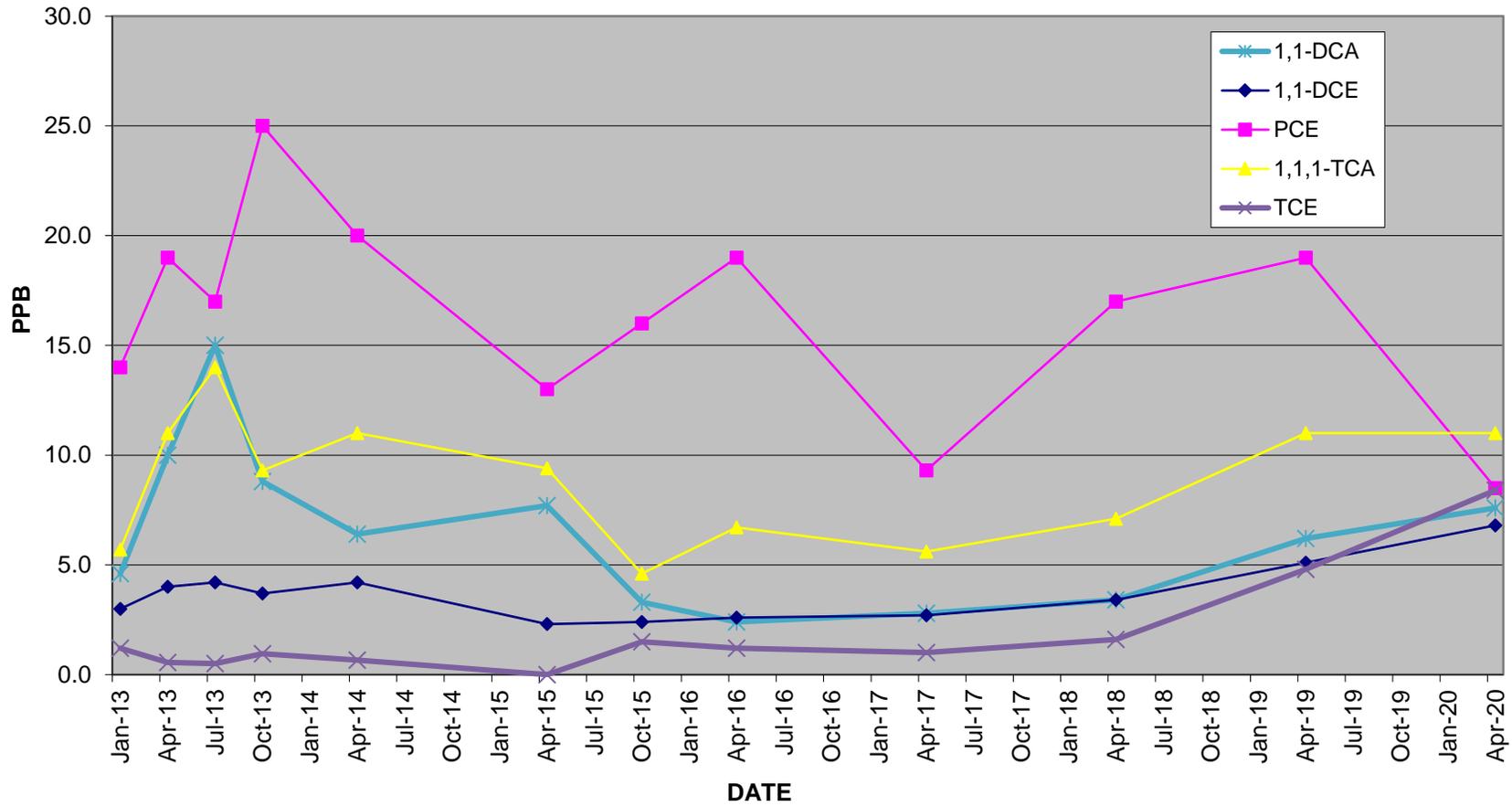
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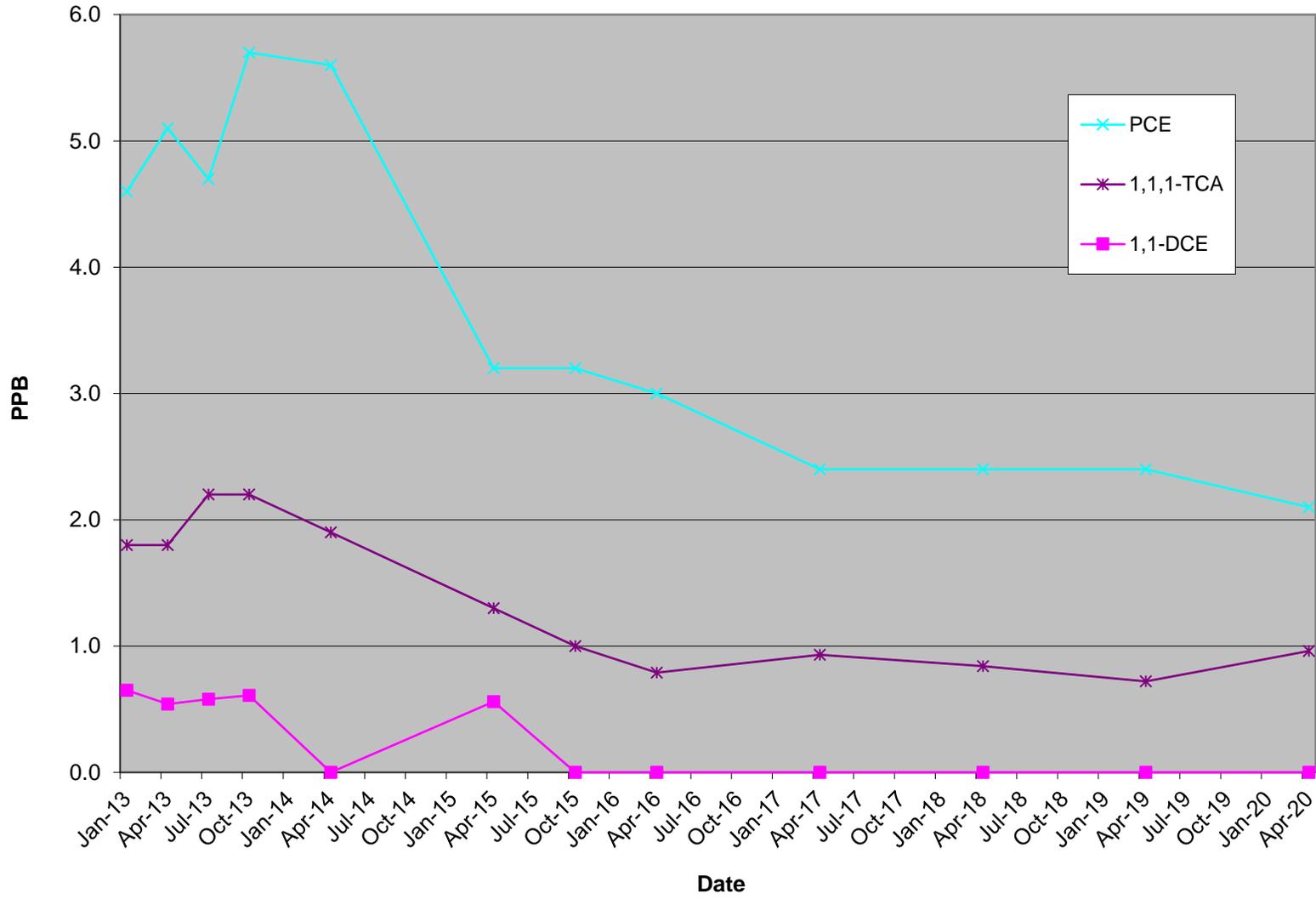
MW-3D



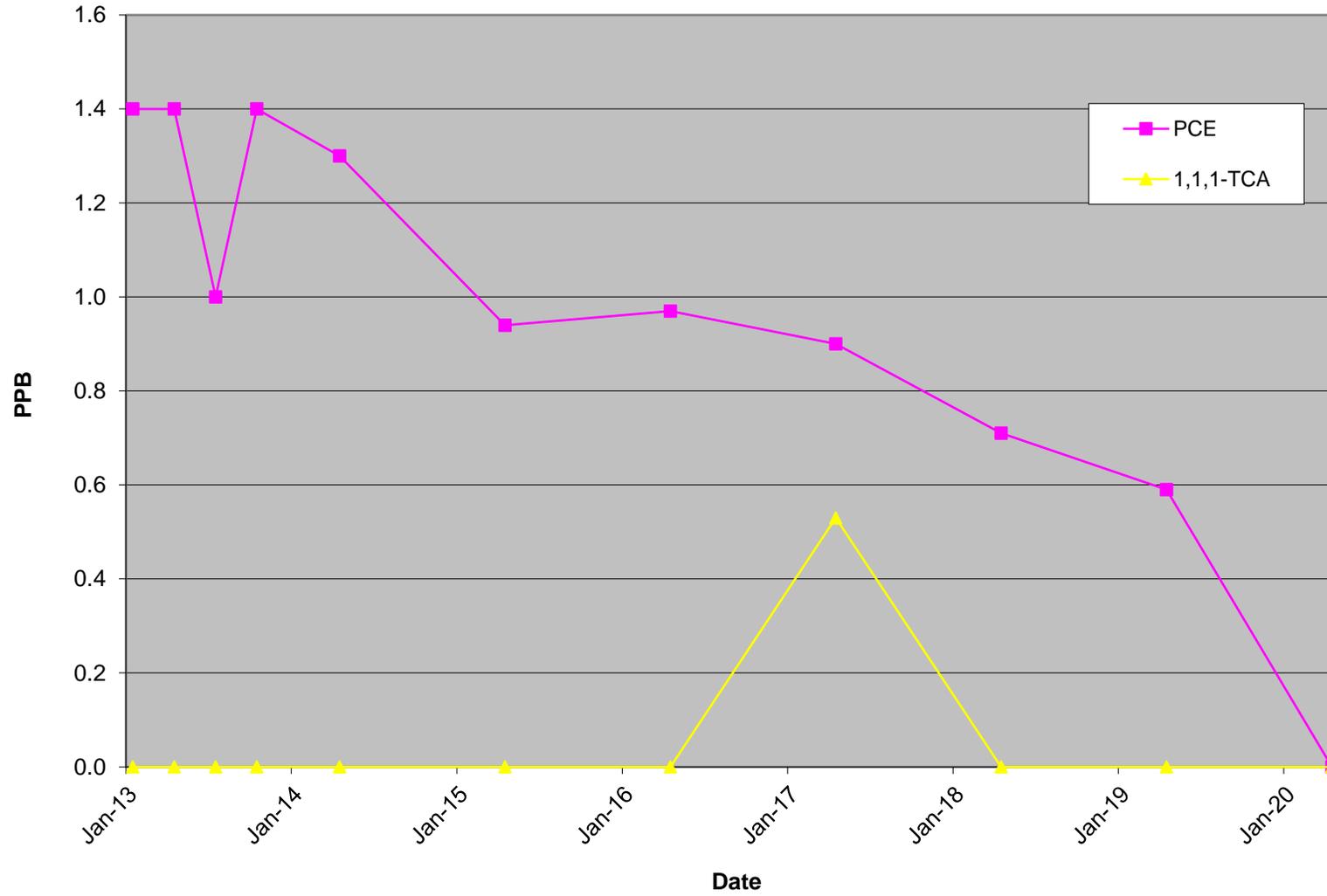
MW-8D
2013-Present



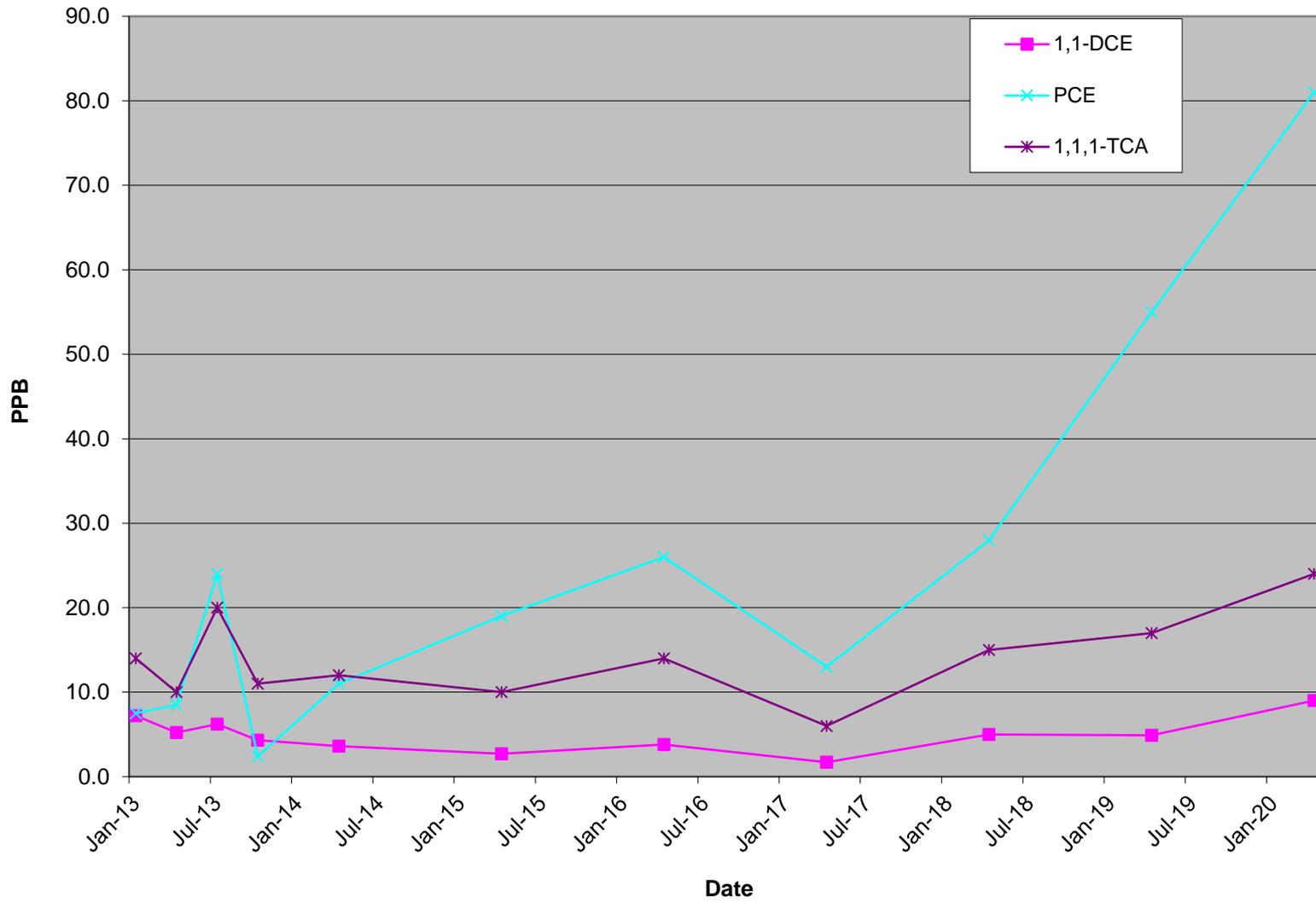
MW-13D



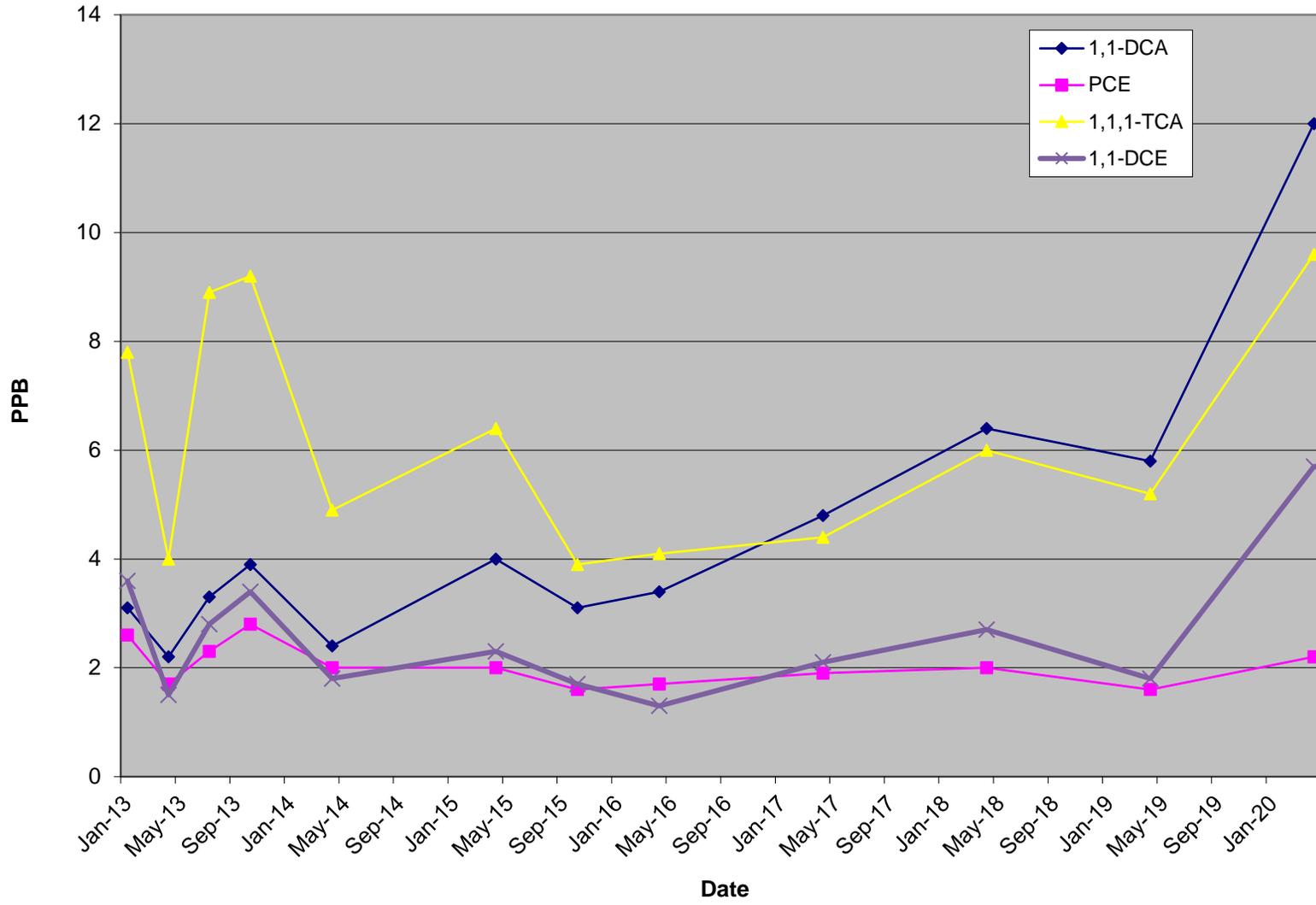
MW-14D 2013-Present



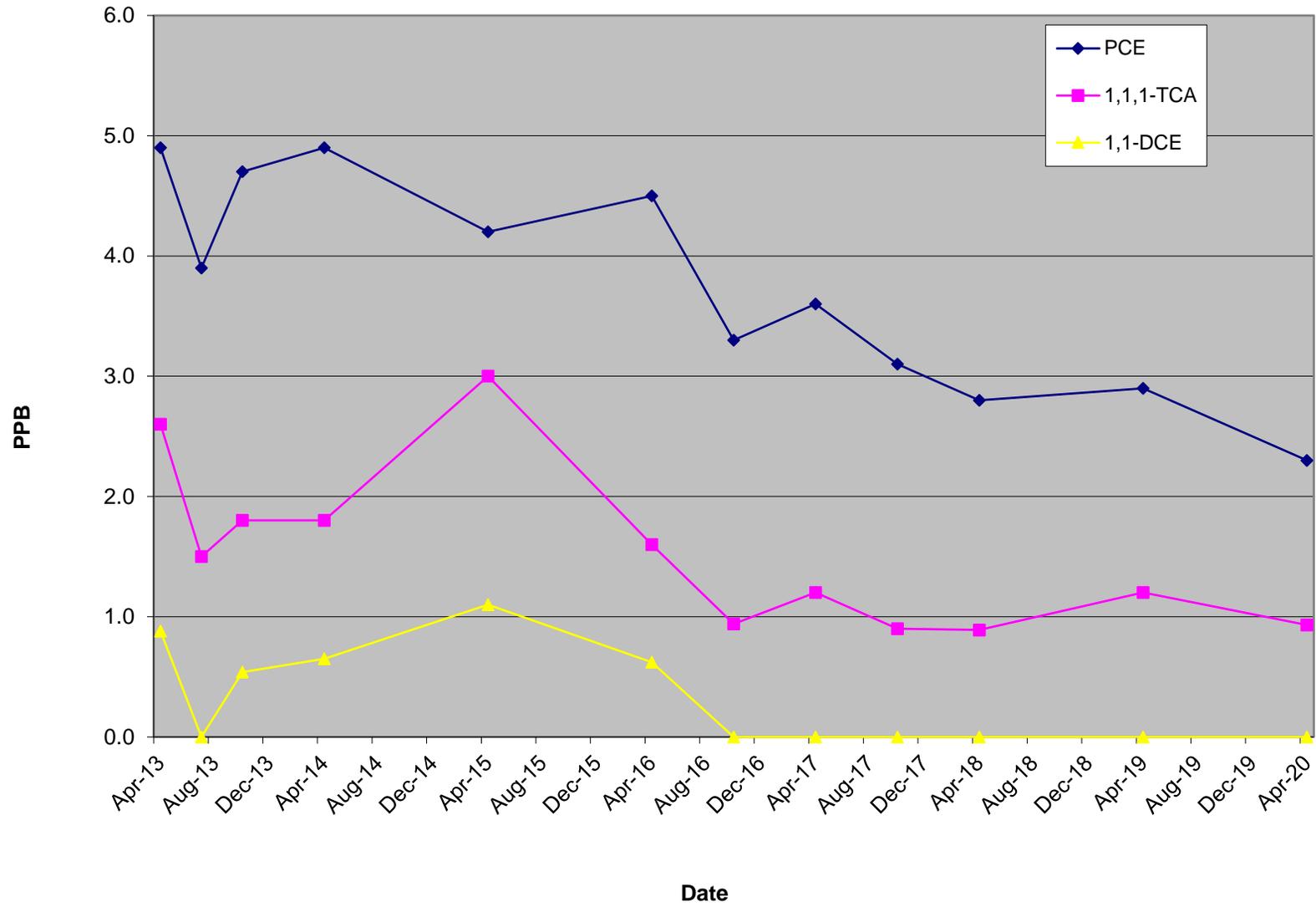
MW-16D



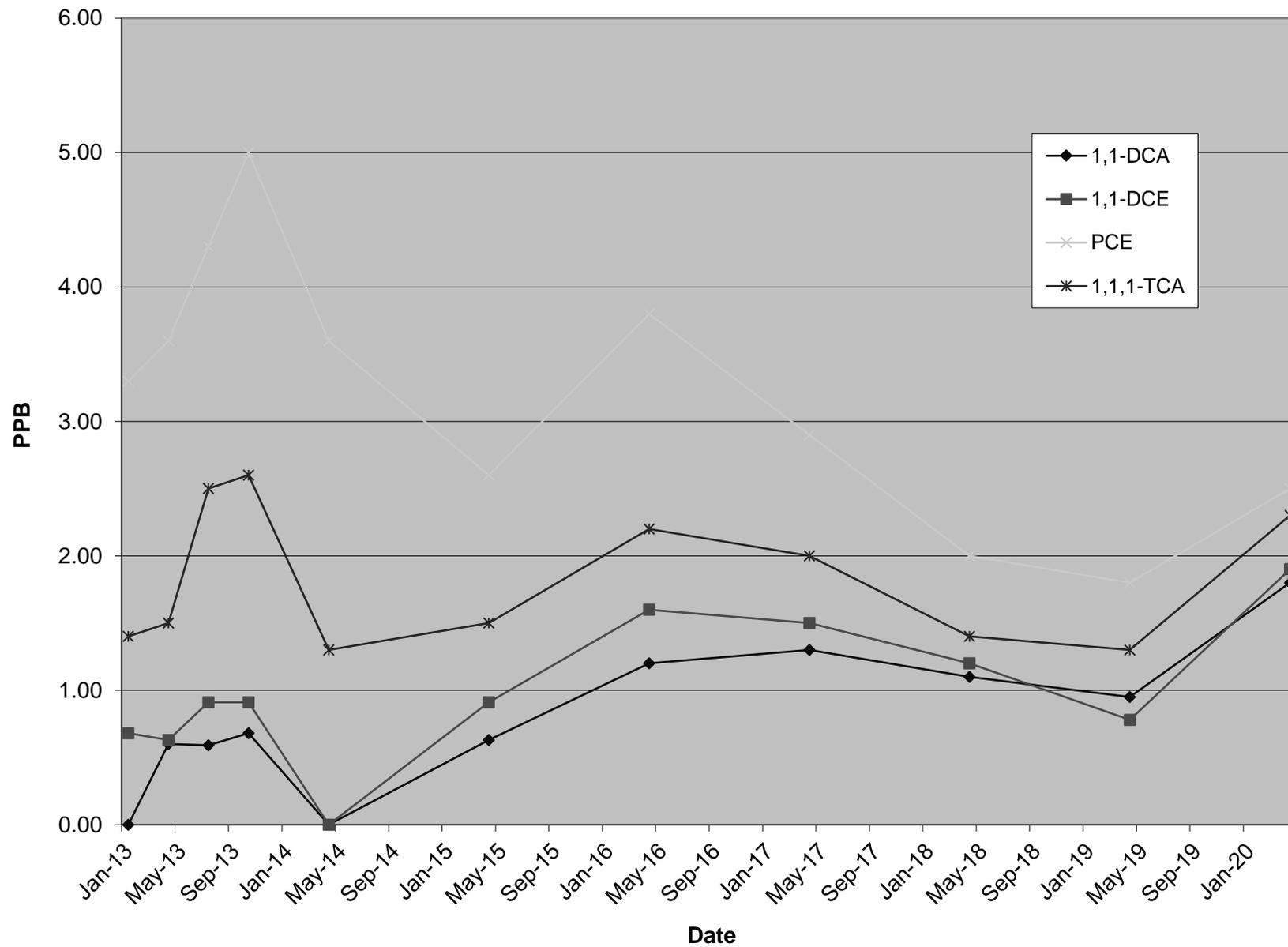
MW-17D



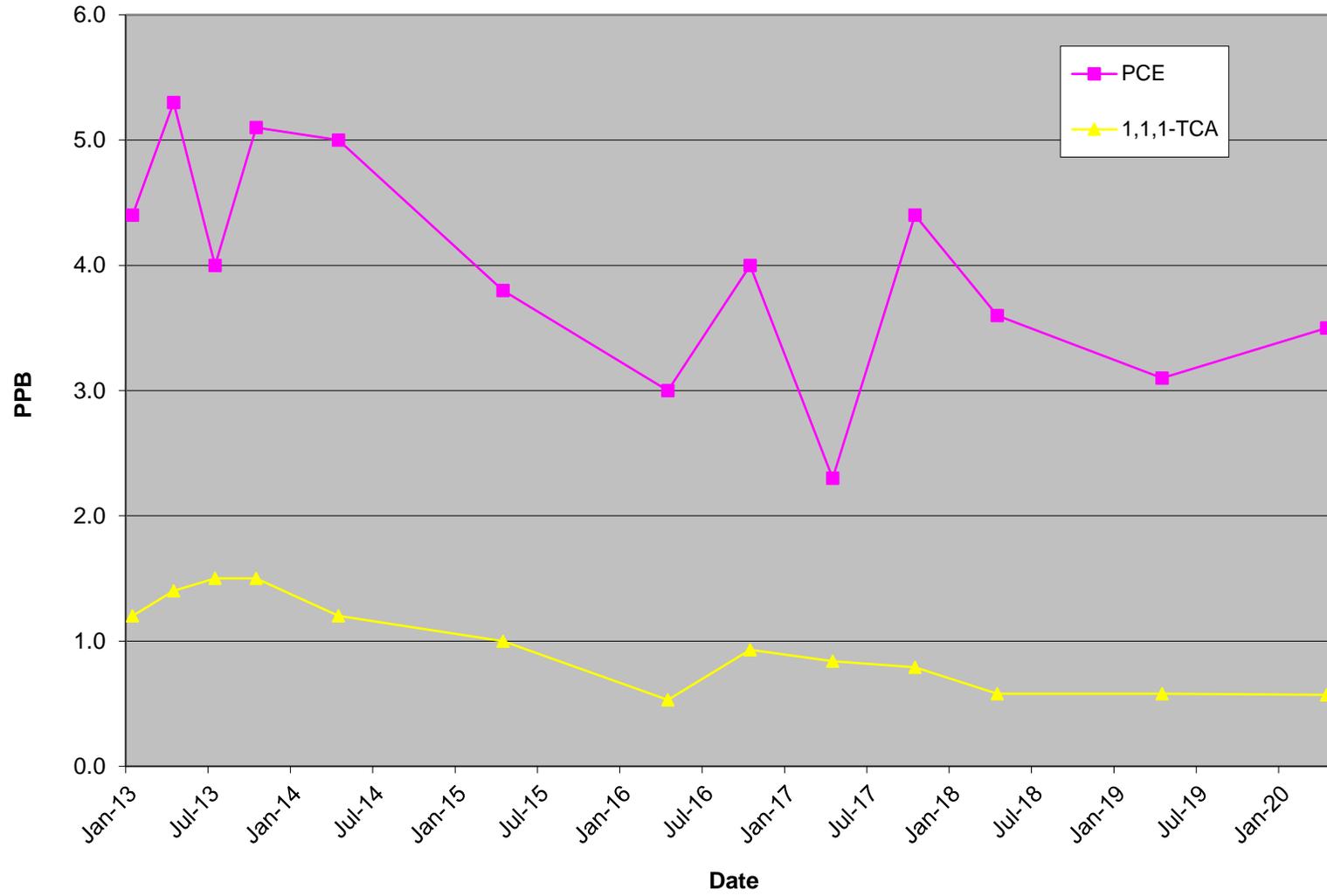
MW-21S



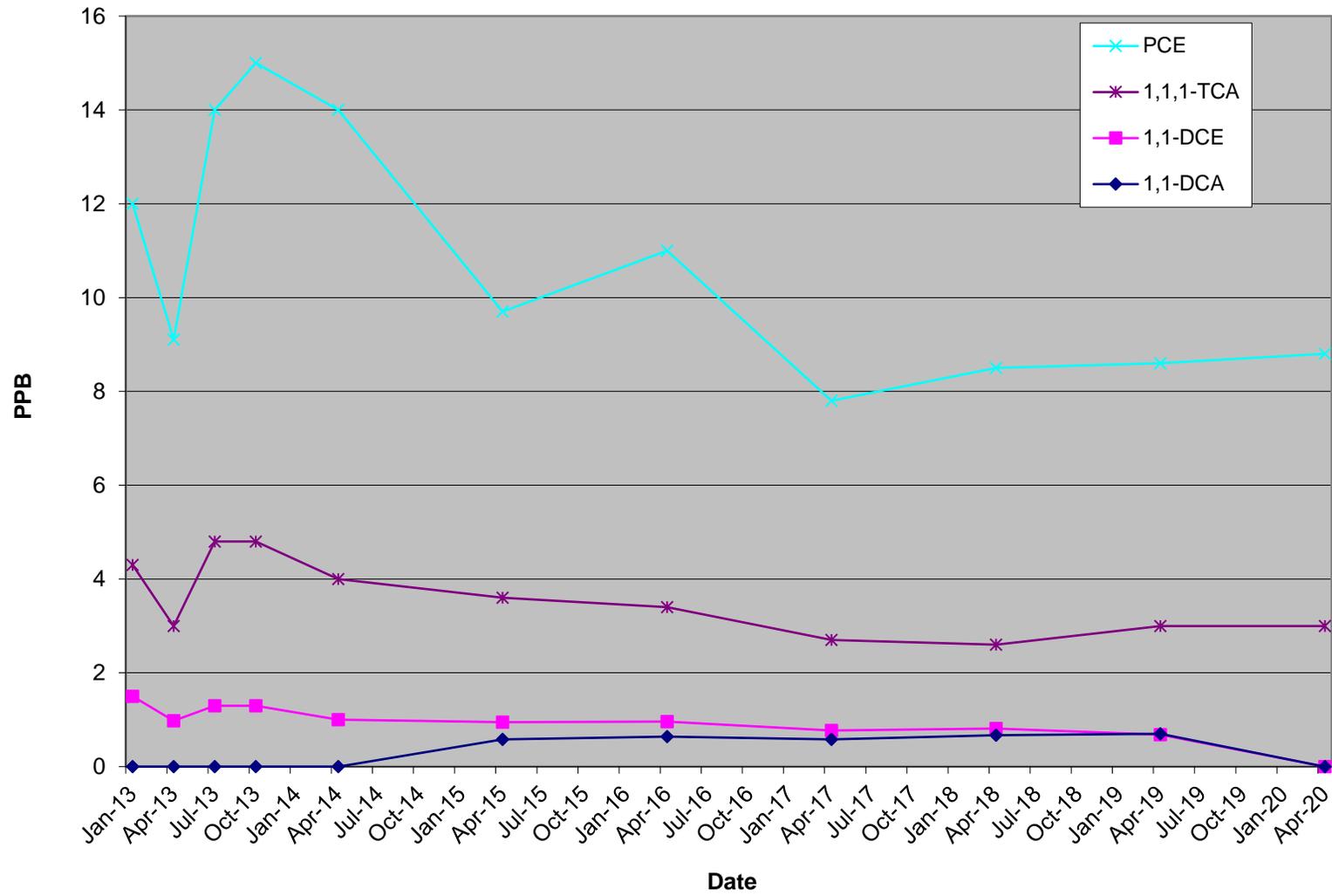
MW-32D



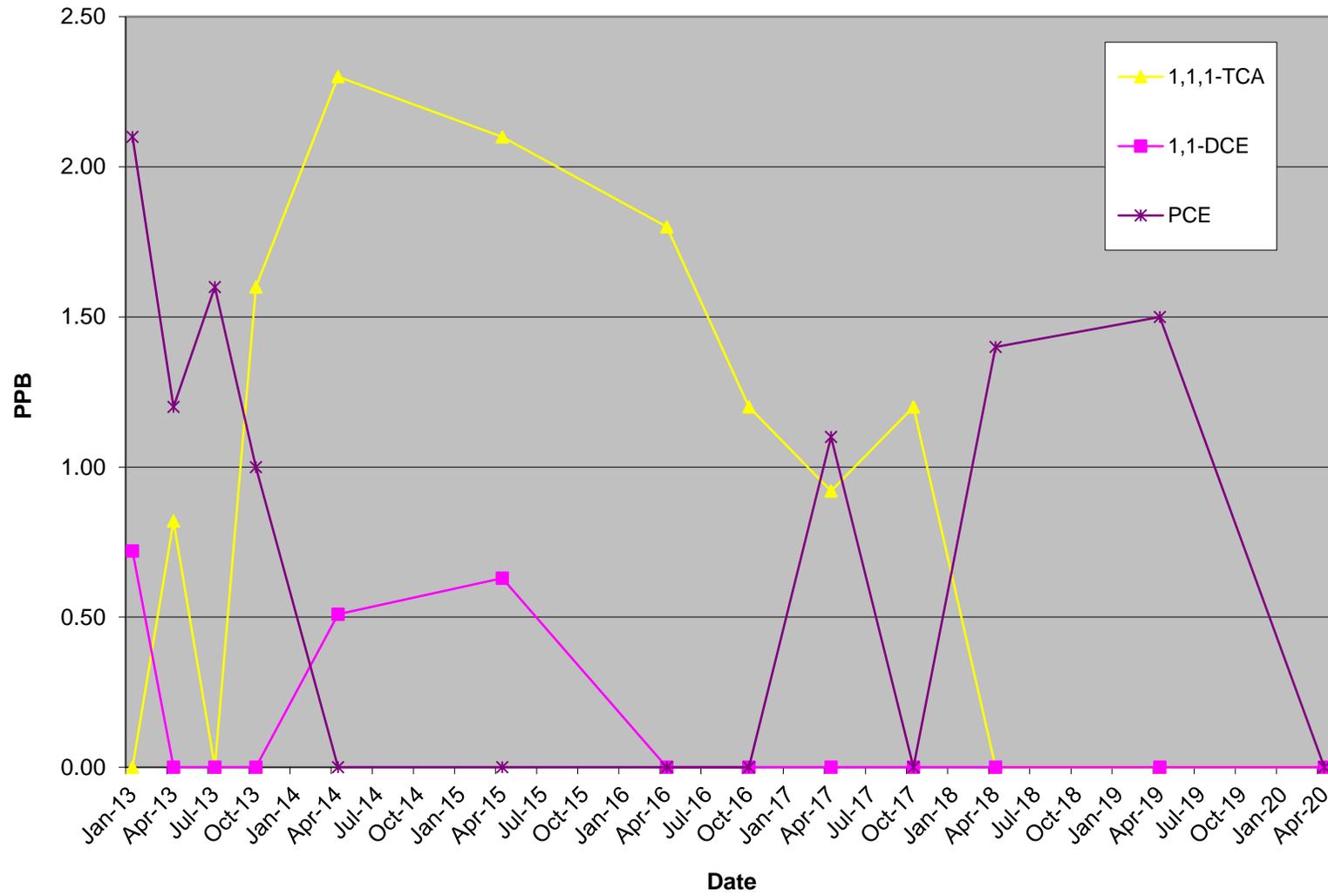
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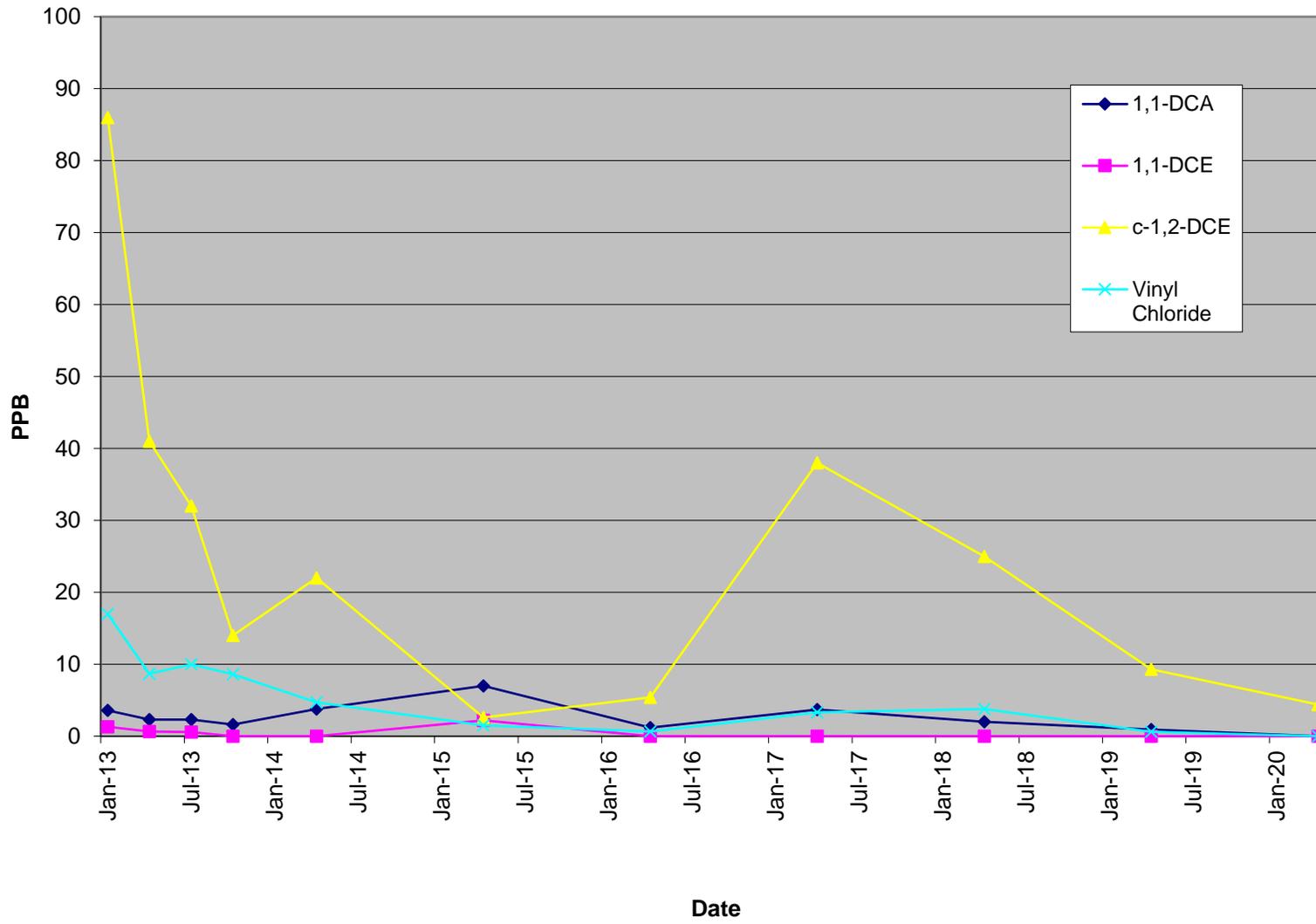
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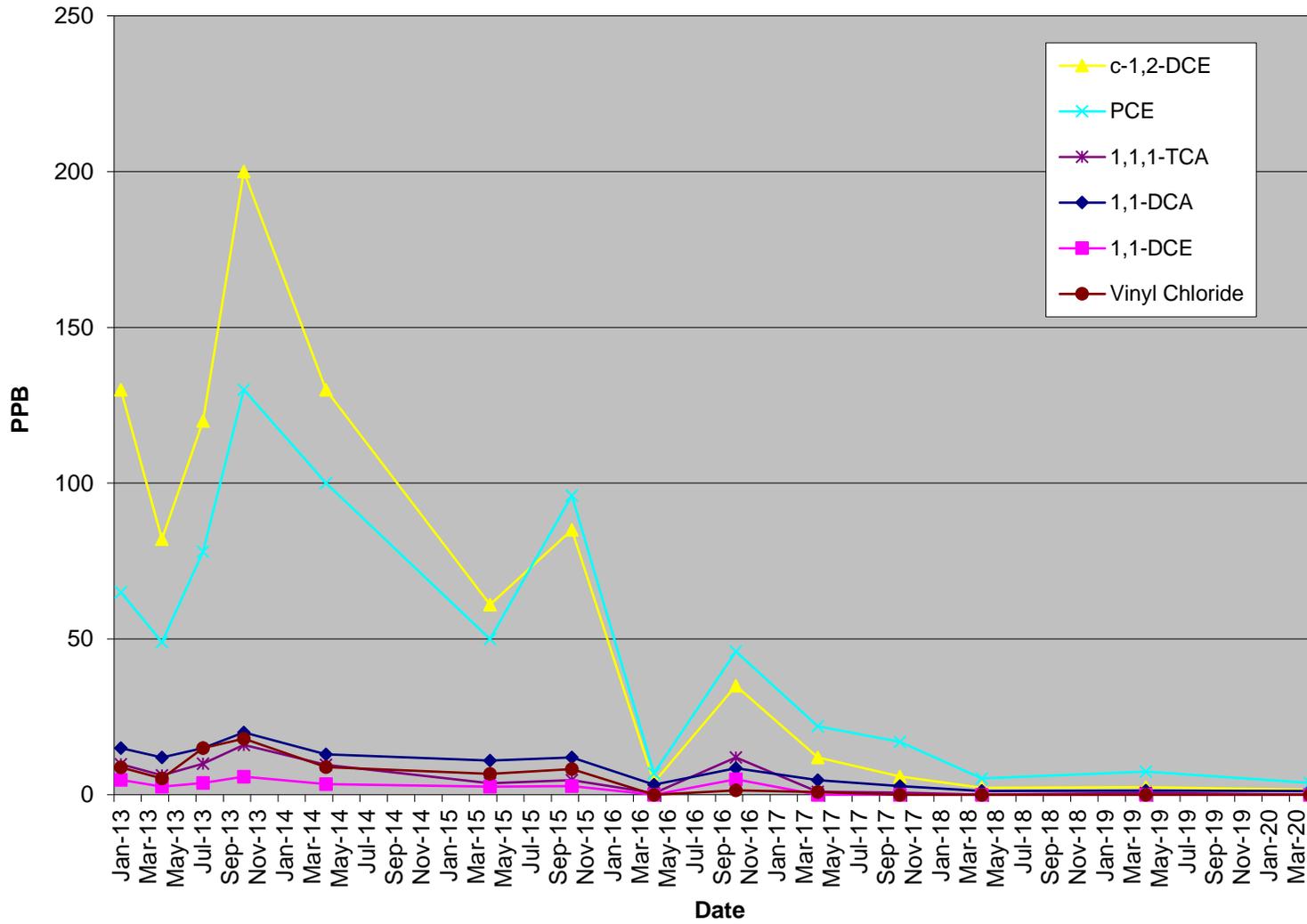
MW-35D



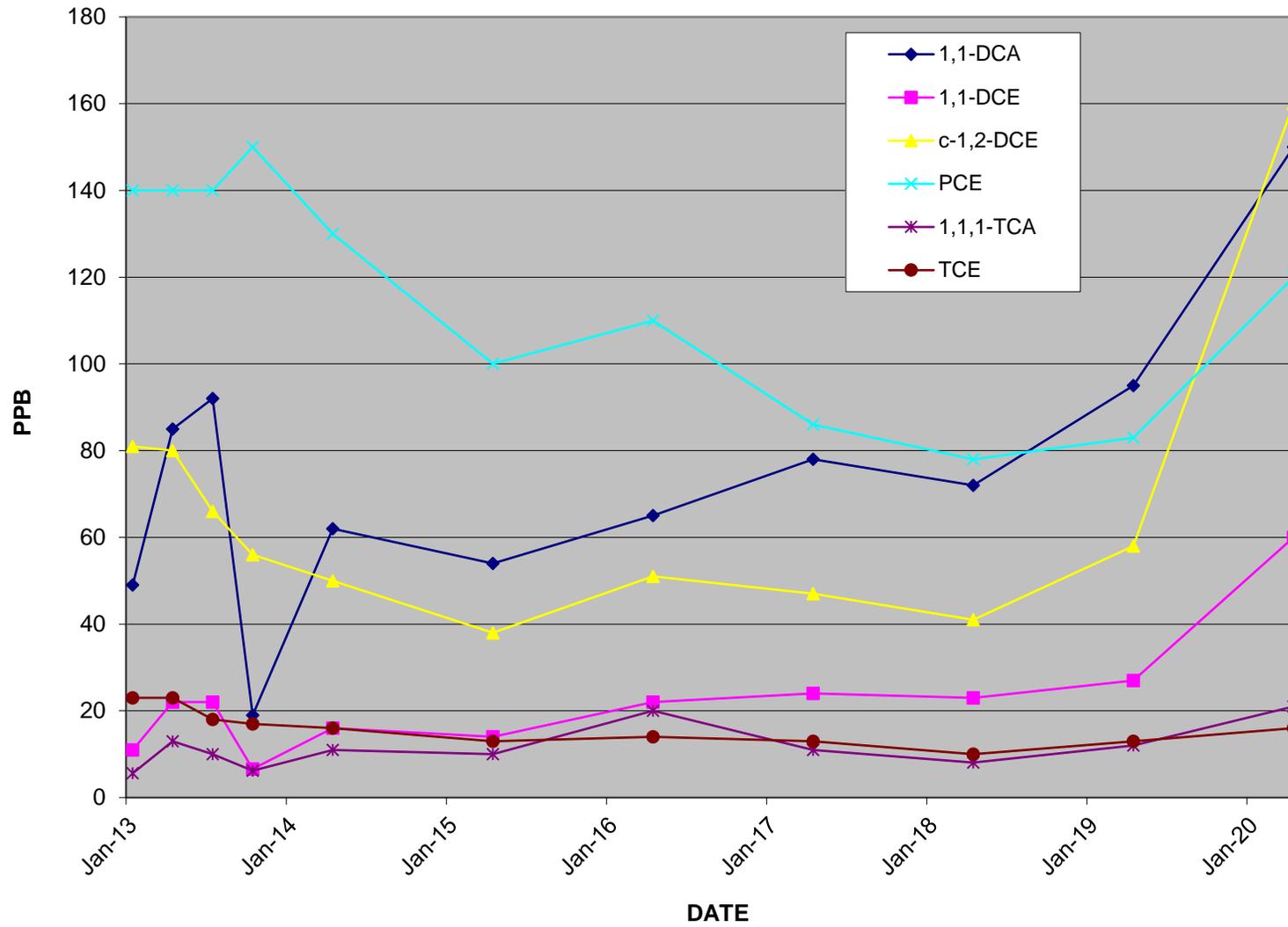
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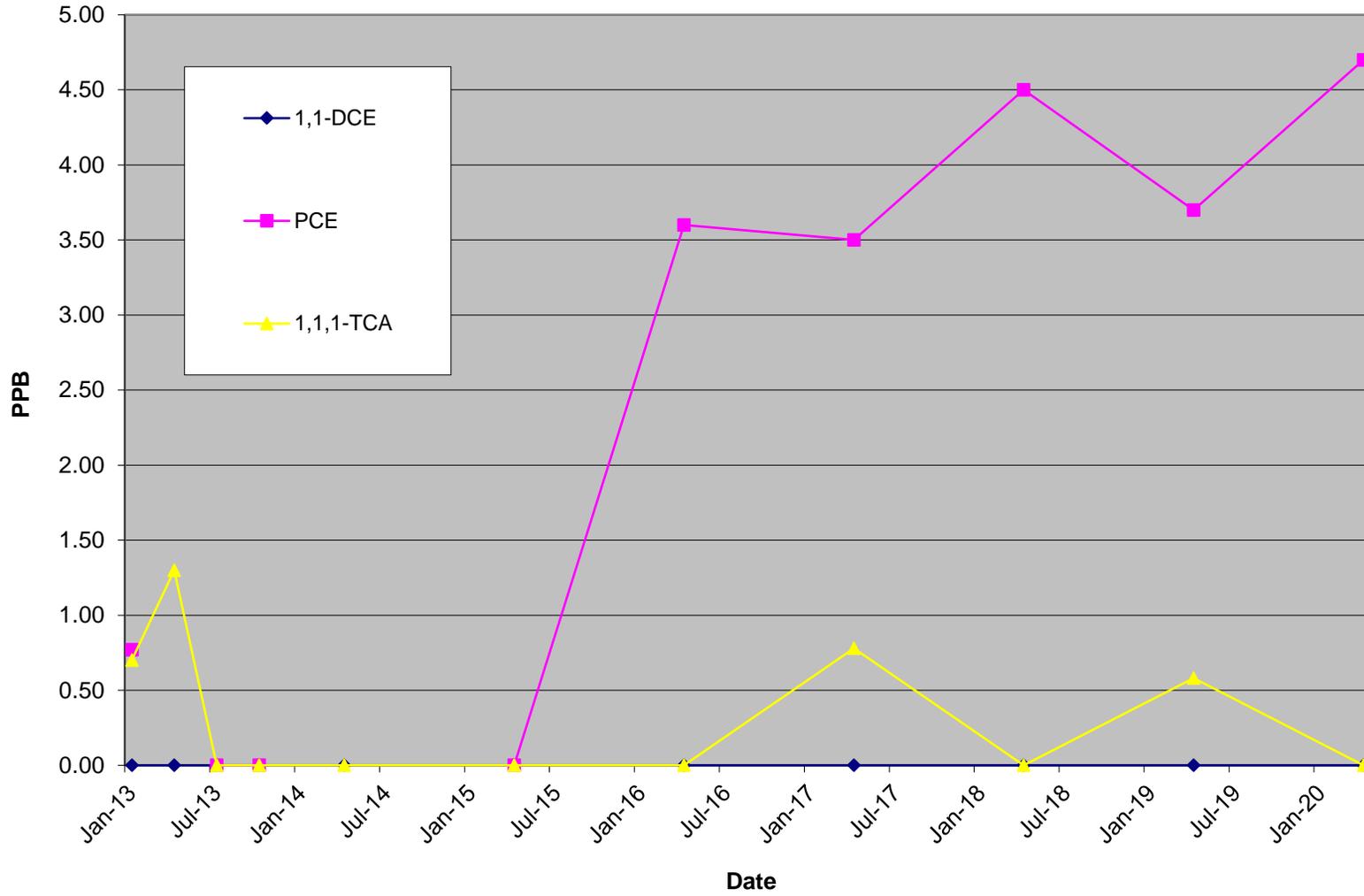
MW-37I 2013 to Present



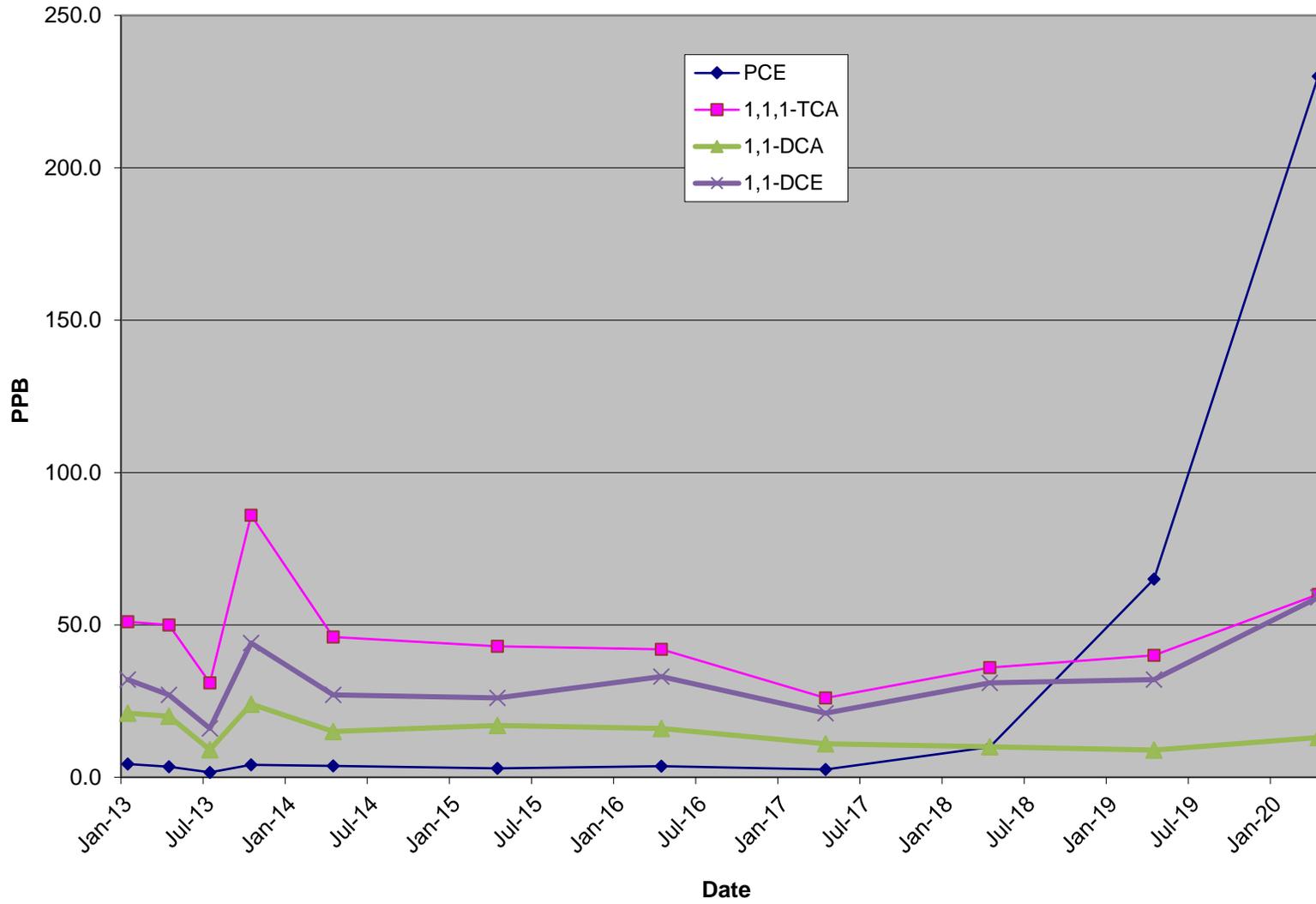
MW-38S



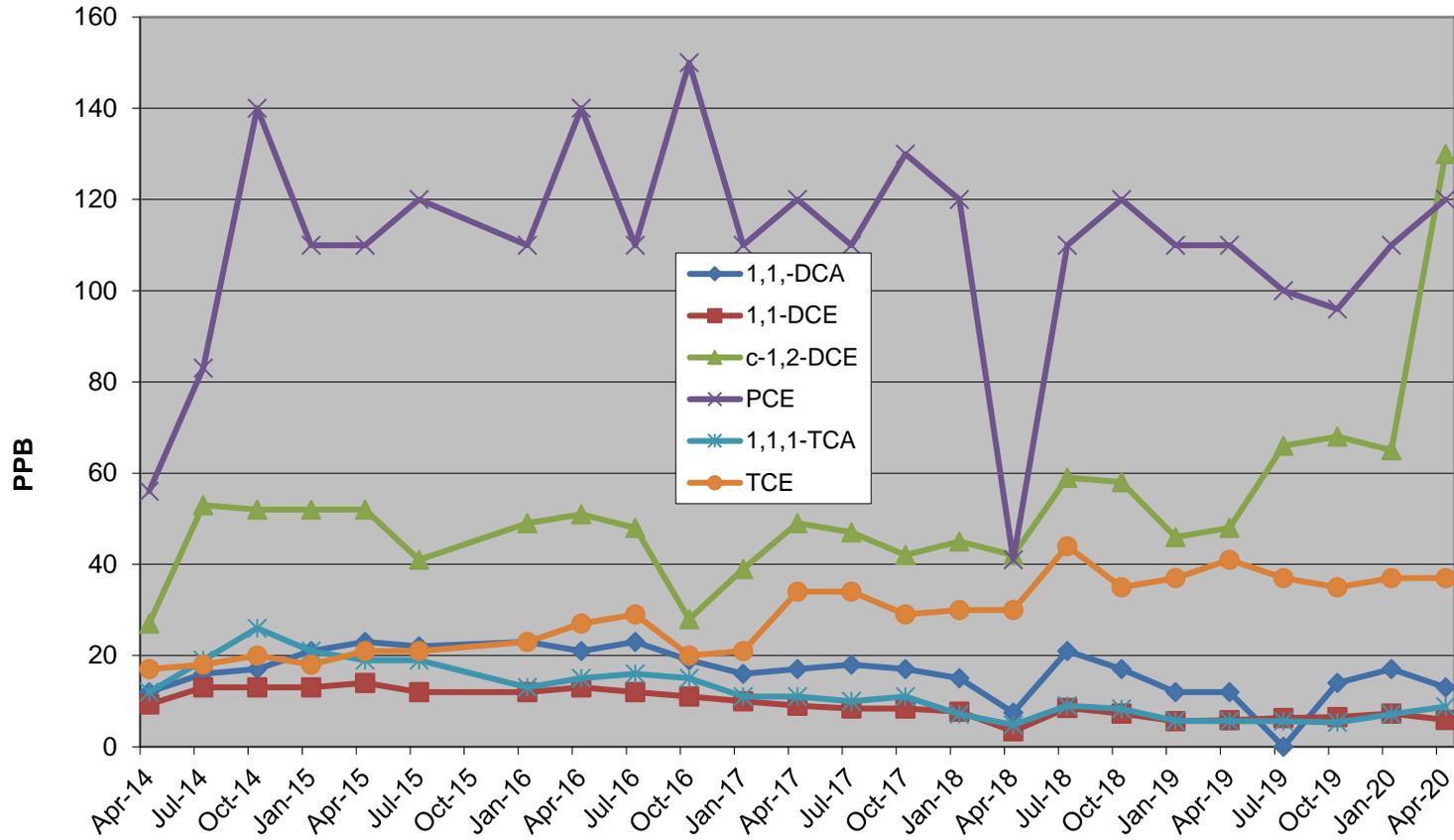
MW-56D
2013-Current



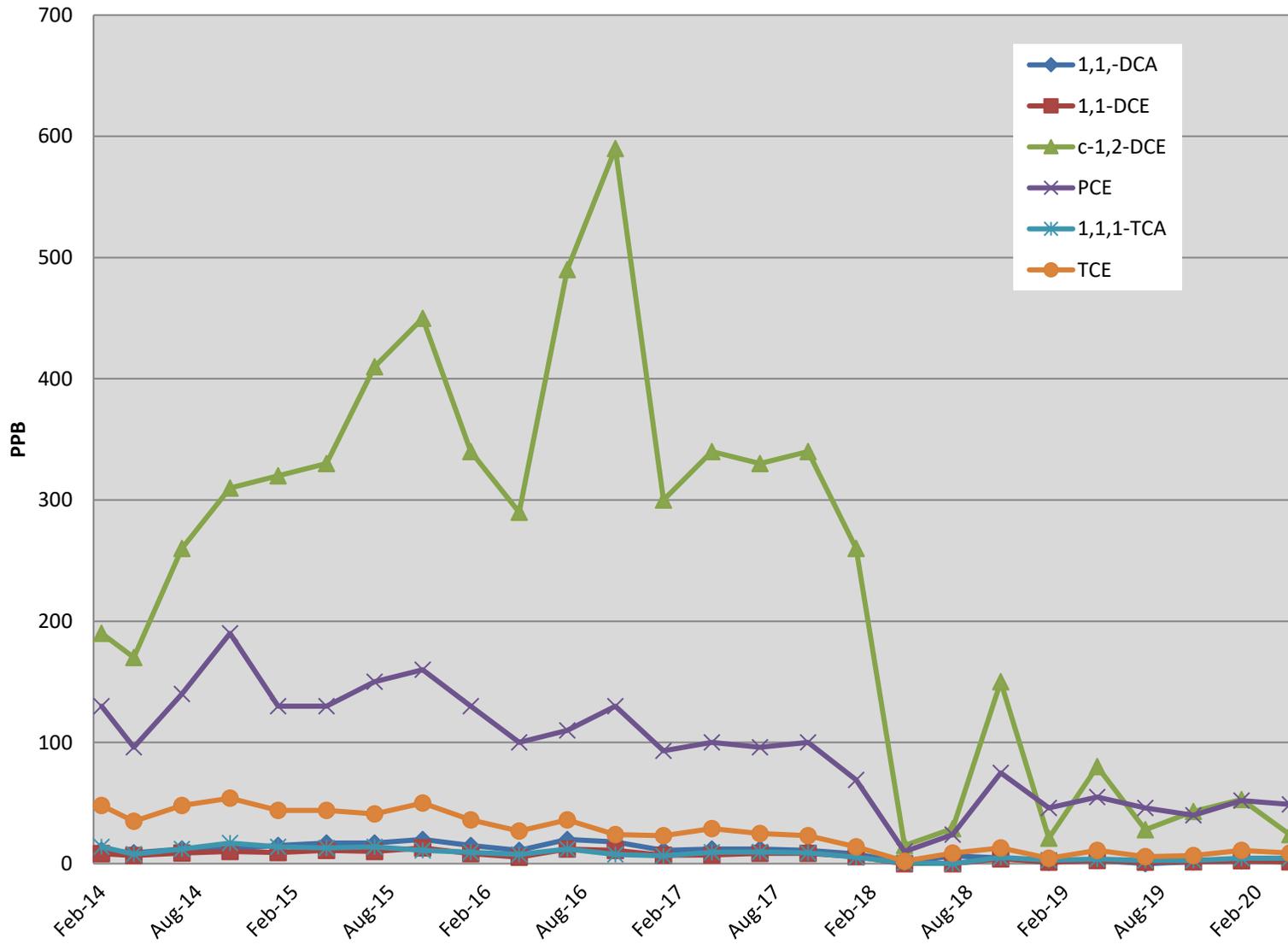
MW-61D



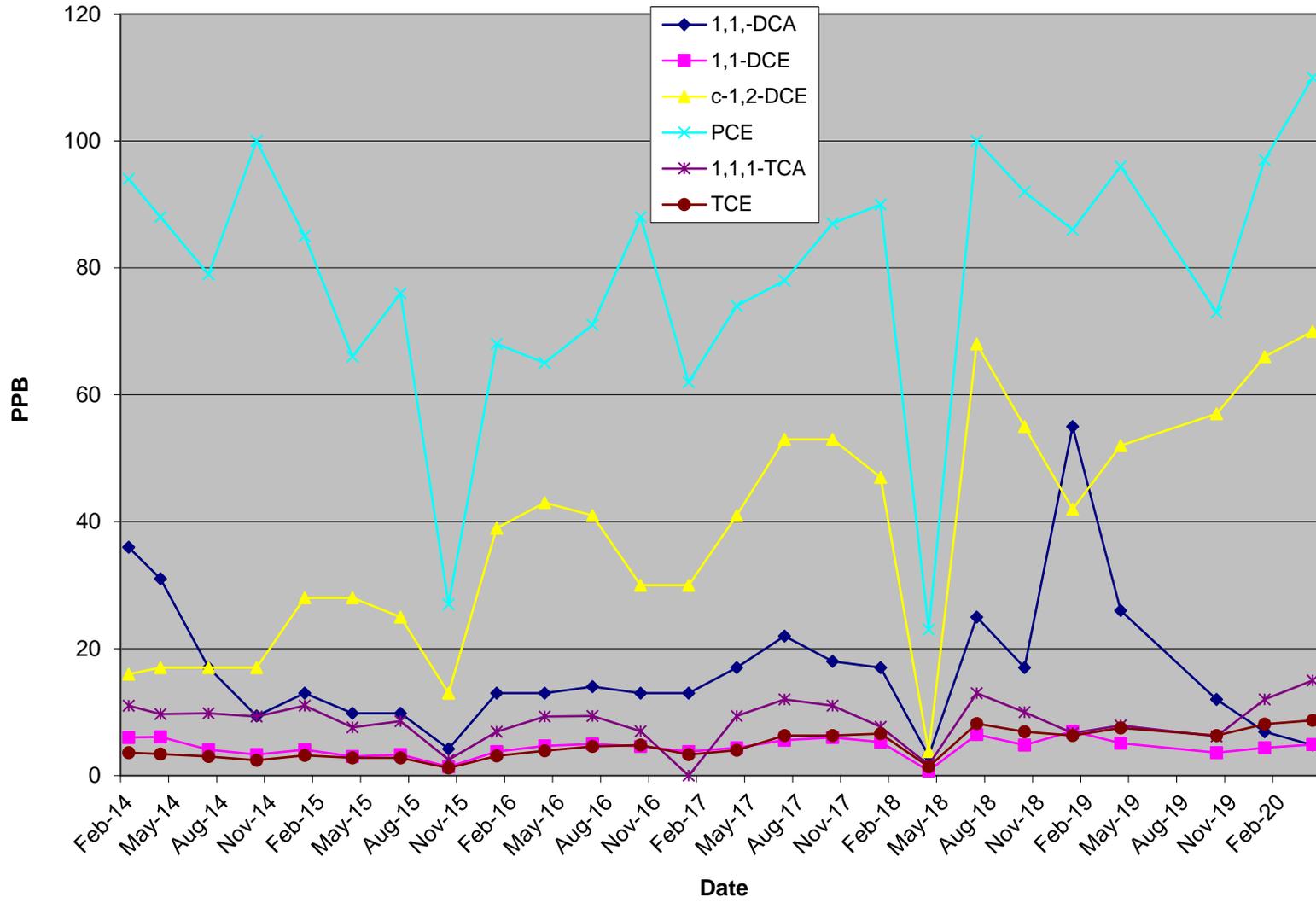
RW-2



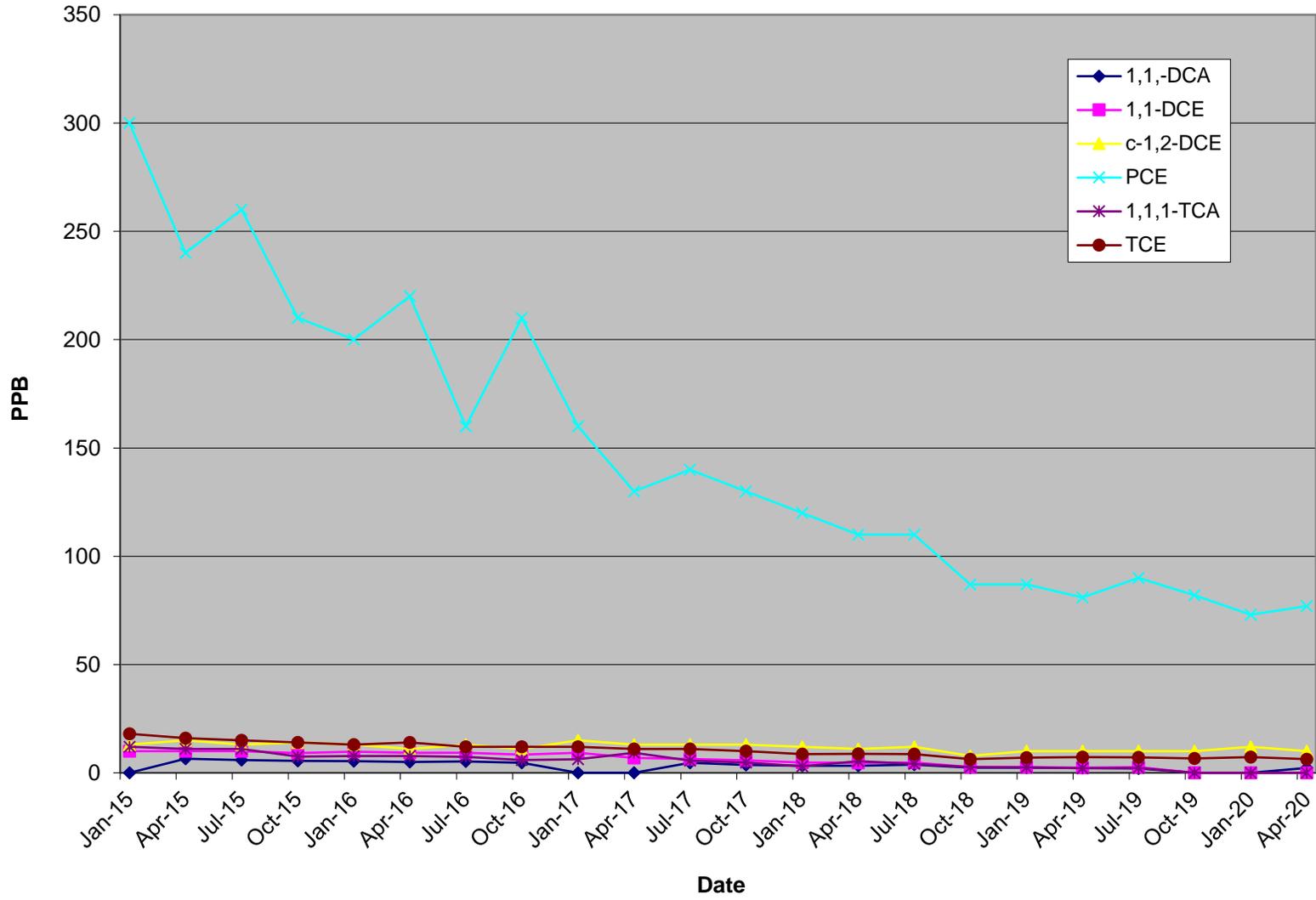
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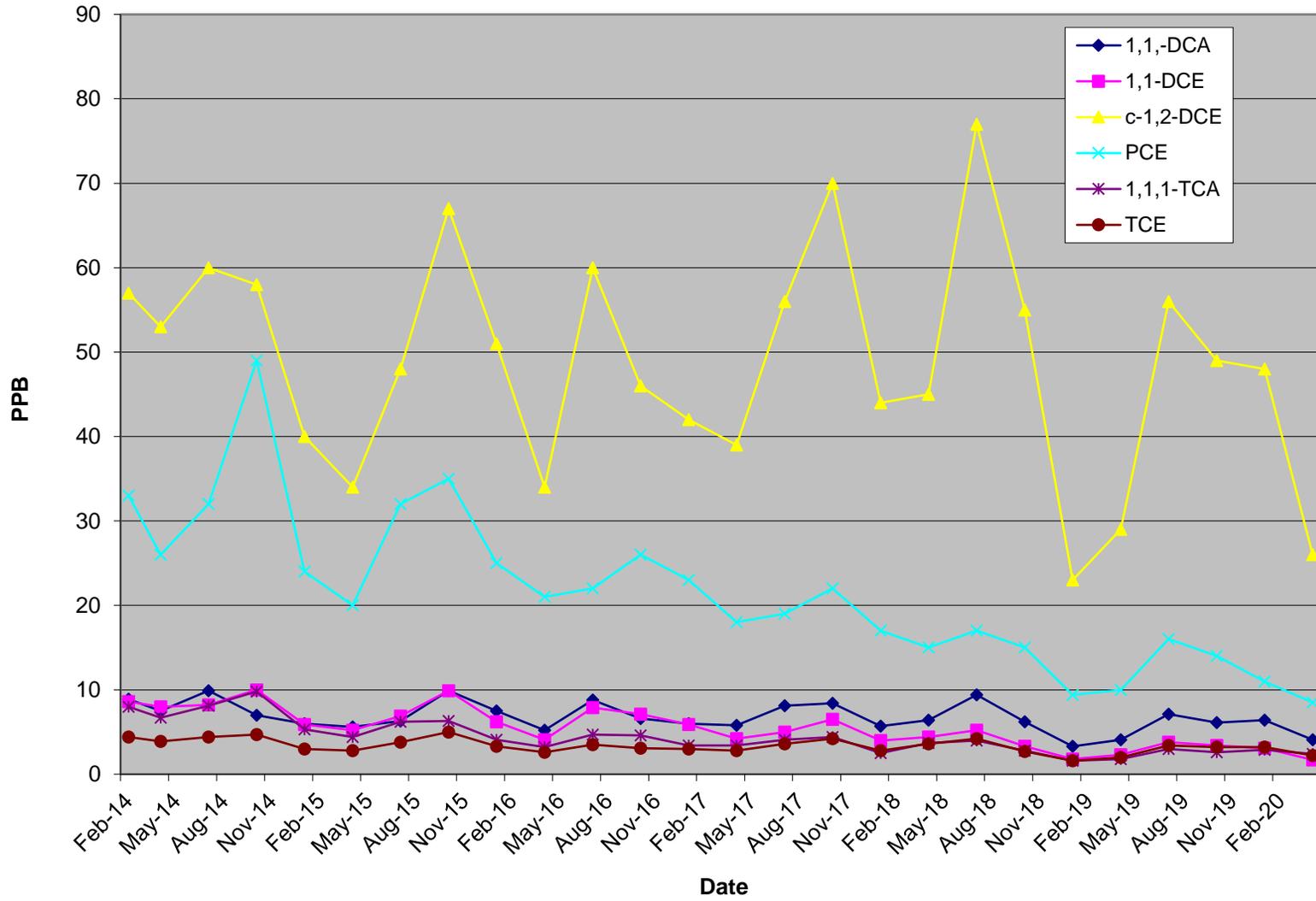
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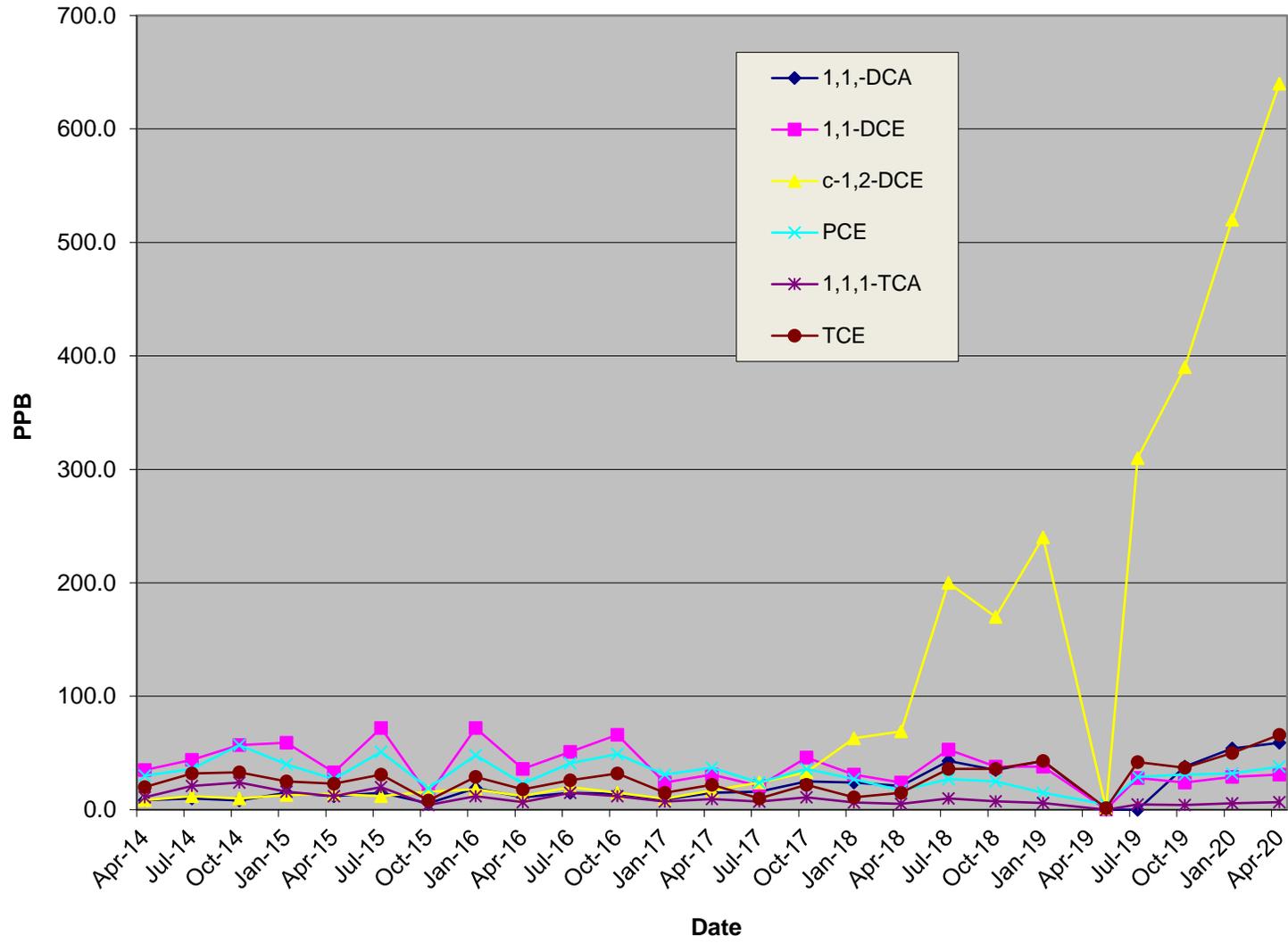
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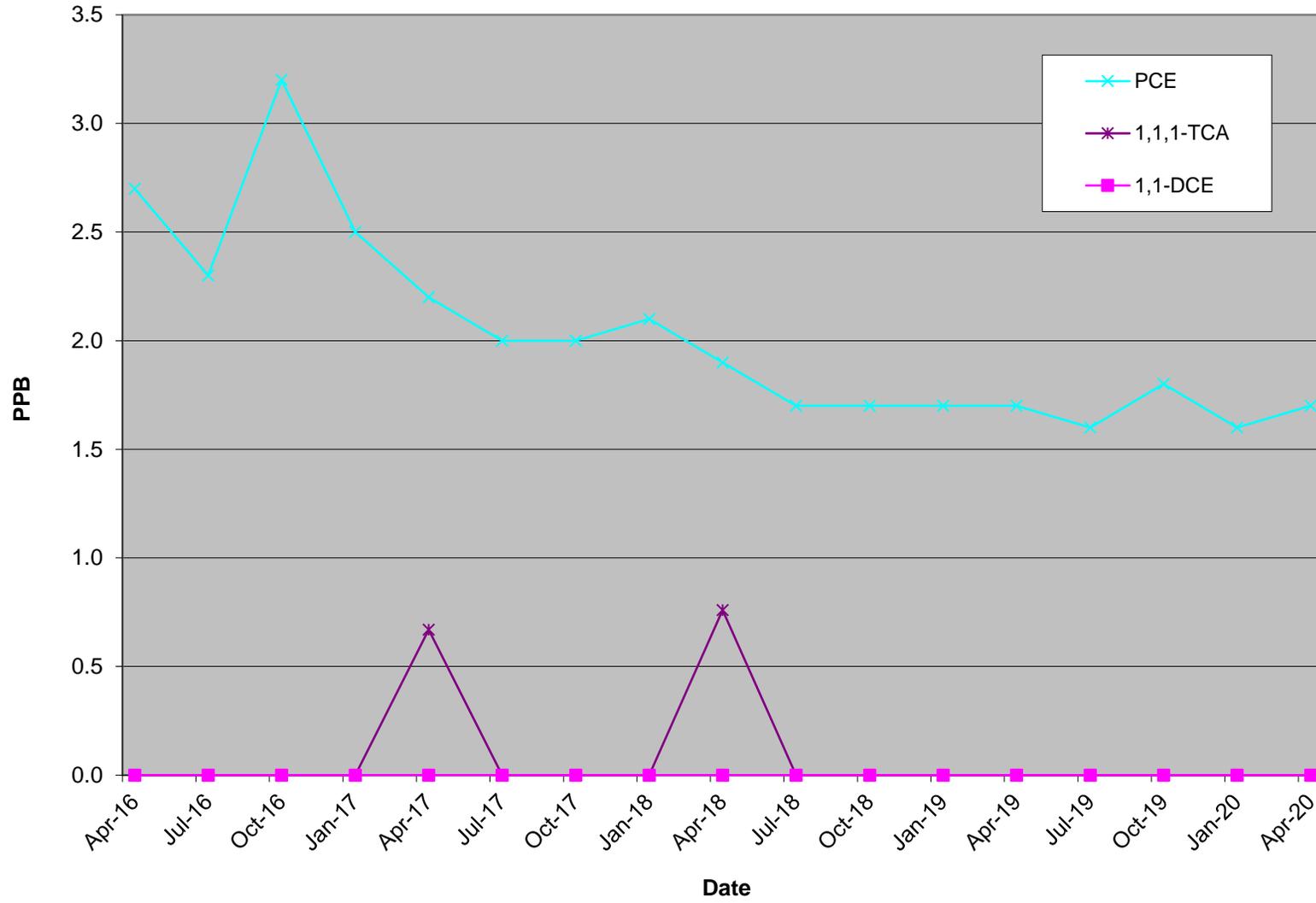
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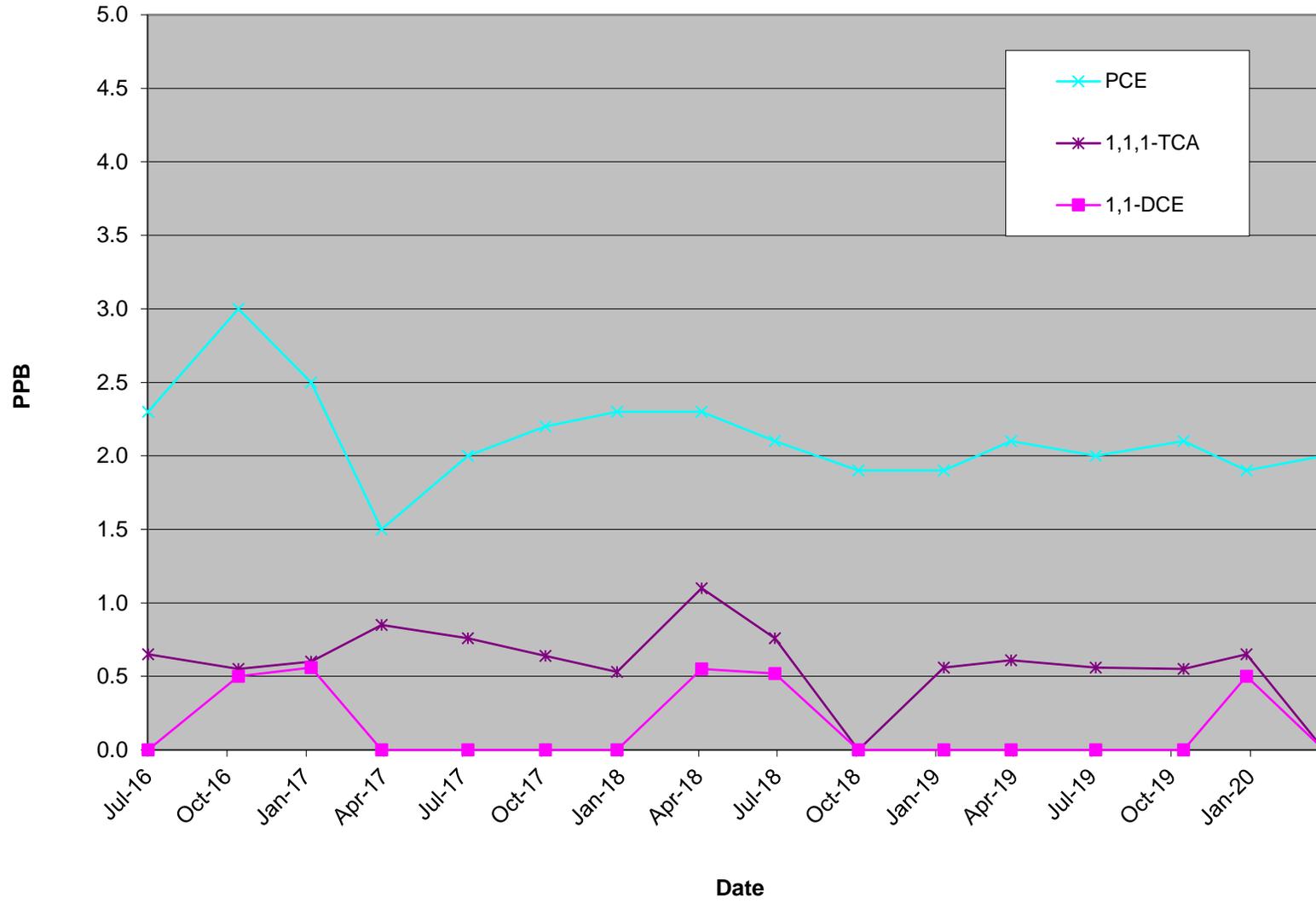
RW-9



RW-11



RW-12



RW-13

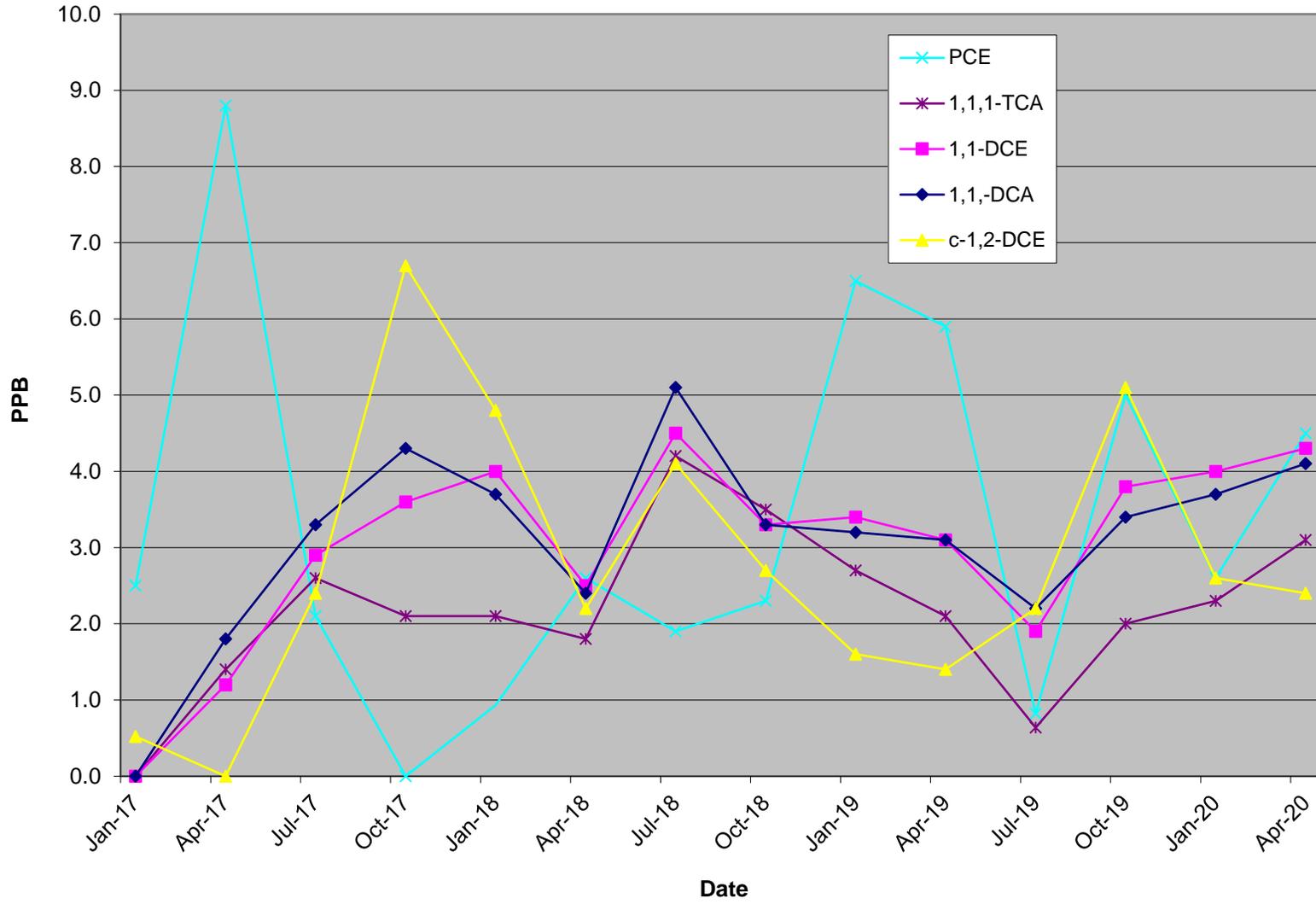


Table-1
Soil Vapor Extraction Sampling
FORMER MILLER CONTAINER FACILITY

NYSDEC SITE # 7-38-029

DATE: April 4, 2020

Centek Report No.: C2004013

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 $\mu\text{g}/\text{m}^3$	1000 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$	1000 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$	1000 $\mu\text{g}/\text{m}^3$	1000 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$
DPEN-1	2.9	1.4	0.67	<1.1	2.5	<0.52	40	2.1
DPEN-2	9.8	2.0	0.40	<1.1	1.9	0.59	42	0.70
DPEN-4	240	56	2.8	<1.1	170	0.76	160	30
SVEN-2	1.5	<0.61	<0.59	57	<0.59	0.59	29	<0.81

All readings in $\mu\text{g}/\text{m}^3$

* Matrix B is assumed for all compounds not specifically listed

TABLE-2
FORMER MILLER CONTAINER FACILITY
SVE SYSTEM MONITORING
April 4, 2020

Well	Delta p	SCFM	Cu M/day	Total VOC ug/m3	ug/day	g/day
DPEN-1	0.40	35.1	1430	50	71494	0.07
DPEN-2	0.93	53.5	2180	57	124275	0.12
DPEN-4	0.08	15.7	639	660	422044	0.42
SVEN-2	0.07	14.7	598	88	52638	0.05
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			5899.12		Grams per day	0.67
					Pounds per day	0.001
					Pounds per month	0.04
					Pounds per year	0.54

Flow rates are calculated using the formula $Q(\text{SCFM})=128.8 \cdot K \cdot D^2 \cdot \text{SQRT}(P \cdot \text{DP}/(T+460 \cdot S_s))$ from Dwyer where k is flow coefficient 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)		
Compound	Soil Clean-up Levels (PPM)	
	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