From: Davies, Wyn <Wyn.Davies@arcadis.com>
Sent: Wednesday, May 27, 2020 12:19 PM
To: Spellman, John (DEC); O'Connor, Maryanne (DEC)
Cc: Darrel Jackson; Stephanie Kulsha; Johnson, Sheila T.; Banach, Katie; Goldsmith, Christopher
Subject: AVNET (Former Channel Master Site, Ellenville NY) Semi Annual Groundwater First Half 2020
Attachments: Channel Master AVNET Ellenville NY - Semi Annual Groundwater First Half 2020.pdf

John:

Attached is the electronic version of the First Half 2020 groundwater report for the former Channel Master site in Ellenville, NY per the work performed in accordance with the new RCRA Corrective Action & Post Closure Consent Order executed on February 6, 2018. We appreciate your understanding and recommendations to file these compliance reports electronically per our previous communications. [Note: The US EPA will be receiving a hard copy.]

Please give me a call on my mobile with any questions or concerns.

Thank you,
Wyn

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Mr. John Spellman, P.E.
Division of Environmental Remediation
New York State Dept. of Environmental Conservation
625 Broadway
Albany, NY 12233-7014

Arcadis of New York, Inc.
17-17 Route 208 North
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Subject:
Semiannual Report – First Half 2020
Avnet Inc. - Former Channel Master Facility, Ellenville, NY
RCRA Corrective Action & Post Closure Consent Order
Index Number: CO 3-20170802-152
Site Number: 356025

ENVORONMENT

Date:
May 27, 2020

Contact:
Wyn V. Davies, CIH

Phone:
610.360.4895

Email:
wyn.davies@arcadis.com

Our ref:
00395052.0000

Dear Mr. Spellman:

Arcadis conducted the semiannual groundwater sampling at the former Channel Master facility in Ellenville, NY on May 4 & 5, 2020 in accordance with the RCRA Corrective Action & Post Closure Consent Order executed on February 6, 2018.

Samples were collected from three monitoring wells in the vicinity of the former surface impoundment (lagoon) as part of the compliance monitoring program required by the RCRA Corrective Action & Post Closure Consent Order of February 6, 2018. In accordance with previous commitments by the NYSDEC, monitoring wells MW-3, MW-8D, and MW-10S continue to be sampled semiannually for arsenic (dissolved and total). All other wells in the lagoon area have been eliminated from the sampling program. However, all outdoor wells continue to be used for water level measurements to assess the groundwater elevations in the former lagoon area.

Under the current sampling program, groundwater samples are also collected from eight wells (BH-2, BH-9, BH-11A, BH-11B, BH-16, BH-17, BH-18, and BH-19) which were formerly inside[1] the manufacturing building for volatile organics (VOCs) as part of the corrective action monitoring program required by the conditions of the RCRA Corrective Action & Post Closure Consent Order of February 6, 2018. To monitor the presence of volatile organic compounds in the

[1]In April 2016, the former manufacturing building demolition was completed while maintaining the integrity of the building slab. No substantial changes to the corrective action area or groundwater flow is anticipated.

deeper groundwater, deep overburden well BH-17 continues to be sampled in lieu of BH-1. In addition, water level measurements are taken from all the shallow monitoring wells as well as from the three shallow piezometers. Avnet will carefully monitor the groundwater conditions to assure no adverse impacts occur from the demolition of the building structure.

Passive bag samplers continue to be used to sample groundwater from the plant wells for VOCs (since May 2001 sampling round). Details of this sampling procedure were submitted to the NYSDEC in our letter dated November 1, 2001 and Avnet has approval from the NYSDEC to use this sampling method. All other sampling and analyses were performed as described in the Groundwater Monitoring Plan dated April 1991, as amended by subsequent correspondence with the NYSDEC. Groundwater samples were analyzed by EnviroTest Laboratories Inc. (Newburgh, NY) for the parameters stipulated in the Post Closure Consent Order of February 6, 2018.

Attachments to this letter include the following:

I. Data from the Post Closure Groundwater Monitoring Program:

- Table 1 Dissolved and Total Arsenic
- Table 2 Field Parameters
- Table 3 Monitoring Well Measurements

II. Data from the Corrective Action/Groundwater Monitoring Program:

- Table 4 Volatile Organic Compounds (Halocarbons)
- Table 5 Field Parameters
- Table 6 Monitoring Well Measurements

III. Monitoring Data Maps

- Figure 2-1 Lagoon Area
- Figure 3-1 Plant Area

IV. Water Table Elevation Contour Maps

- Figure 2-1A Lagoon Area
- Figure 3-1 Plant Area

Groundwater samples were collected in the outdoor area of the former lagoon on May 5, 2020 and the results are presented in Table 1 and depicted in Figure 2.1. Dissolved arsenic was below the NYSDEC groundwater quality standard (GWQS) of 25 µg/l in all three wells. Total (dissolved plus undissolved) arsenic was detected in all wells including MW-3 at 64 µg/l, MW-10S at 36 µg/l and MW-8D at 440 µg/l with all being at concentrations above the NYSDEC groundwater quality standard (GWQS) of 25 µg/l.

Groundwater samples from shallow monitoring wells in the former production area were obtained on May 4, 2020 and the results are presented in Table 4 and depicted in Figure 3.1. Samples collected from the shallow monitoring wells exhibited 1,1,1 trichloroethane (TCA) concentrations ranging from 1.2 µg/l in BH-2 to 370.00 µg/l in BH-16. More specifically, shallow wells BH-2, BH-9, BH-11B, and BH-16 contained 1,1,1 trichloroethane (TCA, the predominant VOC contaminant) at concentrations of 1.20, 5.10, 30.00, and 370.00 µg/l (respectively), with BH-9, BH-11B and BH-16 above the GWQS of 5 µg/l. Samples from BH-11B and BH-16 also contained 1,1-dichloroethane (1,1-DCA, a breakdown product of TCA) at concentrations of 14 and 46 µg/l both above its GWQS of 5 µg/l. The sample from BH-16 contained additional breakdown products of TCA for which the contaminant does not have a GWQS including: 1,2-Dichloroethane at concentrations of 1.3 µg/l, Trichloroethene at concentrations of 1.7 µg/l and Tetrachloroethene at concentrations of 2.2 µg/l.

Groundwater samples from deep wells were obtained on May 4, 2020 and the results are presented in Table 4. Groundwater samples from the deep wells BH-11A, BH-17 and BH-19 contained no VOCs detected above their respective detection limits for all the deep wells.

The monitoring well measurement results presented in Table 6 indicate that no monitoring wells will require corrective redevelopment prior to the next sampling event.

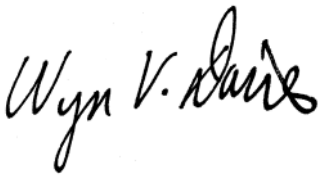
The water table elevation contour map for the former lagoon area and surrounding area is presented in Figure 2-1A and the water table elevation contour map for the former building pad area wells is presented in Figure 3-1A.

The next round of groundwater sampling is scheduled for November 2020.

If you have any questions regarding the report or enclosures, please call me at (610) 360-4895.

Sincerely,

Arcadis of New York, Inc.



Wyn V. Davies, CIH
Associate Vice President

Copies:
M. O'Connor, NYSDEC Region 3 (electronic only)
D. Jackson, Avnet Inc.
K. Davis, Fox Rothschild LLP
S. Kulsha, AmTrust Realty Corp.
P. Flax, USEPA Region 2
Enclosures:

TABLE 1

FORMER CHANNEL MASTER SITE
POST-CLOSURE GROUNDWATER MONITORING -
FORMER LAGOON AREA
DISSOLVED AND TOTAL ARSENIC
First HALF 2020
SAMPLING DATE: May 4-5, 2020

PARAMETER	MW-3	MW-8D	MW-10S	GWPC *
Dissolved Arsenic	21	10 U	10 U	25
Total Arsenic	64	440	36	

Notes:

Concentrations in ug/l

U - Compound was undetected at the specified detection limit

* Groundwater protection concentration from Part 373 Permit Module V. Sec 8(a)

TABLE 2

FORMER CHANNEL MASTER SITE
POST-CLOSURE GROUNDWATER MONITORING -
FORMER LAGOON AREA
FIELD PARAMETERS
First HALF 2020
SAMPLING DATE: May 4-5, 2020

MONITORING WELL NUMBER	TEMPERATURE (degrees Celsius)	pH (std units)	CONDUCTIVITY (umhos)
MW-3	10.39	7.39	388
MW-8D	11.17	7.93	394
MW-10S	10.41	7.35	451

TABLE 3

FORMER CHANNEL MASTER SITE
POST-CLOSURE GROUNDWATER MONITORING - FORMER LAGOON AREA
MONITORING WELL MEASUREMENTS
First HALF 2020
SAMPLING DATE: May 4-5, 2020

MONITORING WELL NUMBER	TOP OF PVC CASING ELEVATION (1)	DEPTH TO WATER (2)	GROUND WATER ELEVATION (1)	INITIAL WELL DEPTH (2) (4)	MEASURED WELL DEPTH (2)	PERCENT OF SCREEN FILLED (3)	DOES WELL NEED TO BE REDEVELOPED (3)
MW-2S	300.71	9.72	290.99	18.3	18.20	1	NO
MW-2D	301.05	9.77	291.28	37.5	37.60	0	NO
MW-3	292.21	3.61	288.60	22.6	22.31	2.9	NO
MW-4	302.82	8.51	294.31	31.9	31.80	1	NO
MW-6	301.11	6.93	294.18	28.3	28.30	0	NO
MW-7	303.11	9.03	294.08	28.8	28.70	1	NO
MW-8S	300.32	11.03	289.29	18.8	18.70	1	NO
MW-8D	300.65	11.61	289.04	36.9	36.35	5.5	NO
MW-10S	306.86	11.54	295.32	24.7	24.75	0	NO
MW-10D	306.73	11.23	295.50	36.5	36.70	0	NO
MW-11S	307.23	13.74	293.49	21.9	22.10	0	NO
MW-11D	308.11	14.48	293.63	37.7	37.65	0.5	NO
MW-13S	294.64	6.52	288.12	11.1	11.05	0.5	NO
MW-13D	294.89	6.31	288.58	26.4	26.30	1	NO
MW-18	291.67	7.64	284.03	18.0	18.25	0	NO

NOTES:
(1) Elevations are in feet above mean sea level.
(2) Depths are in feet below top of PVC casing
(3) If percent of well screen filled with sediment is equal to or greater than 10%, well should be redeveloped prior to the next sampling event.
(4) measured depth to bottom after being redeveloped by Layne on 12-8-2016

TABLE 4

FORMER CHANNEL MASTER SITE
CORRECTIVE ACTION GROUNDWATER MONITORING
VOLATILE ORGANIC COMPOUNDS (HALOCARBONS)
First HALF 2020
SAMPLING DATE: May 4-5, 2020

PARAMETER	GWQS	BH-2	BH-9	BH-11A *	BH-11B	BH-16	BH-17	BH-18	BH-19
1,1,1-Trichloroethane	5.0	1.20	**5.10**	0.48 J	**30.00**	**370.00 D**	0.24 U	0.41 J	0.25 J
1,1,2,2-Tetrachloroethane	*	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	1	0.20 U	0.20 U	0.20 U	0.21 J	**3.30**	0.20 U	0.20 U	0.20 U
1,1-Dichloroethane	5	0.27 U	2.10	0.27 U	**14.00**	**46.00 D**	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	*	0.27 U	0.27 U	0.27 U	0.27 U	1.70 D	0.27 U	0.27 U	0.27 U
1,2-Dichlorobenzene	5	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,2-Dichloroethane	0.6	0.30 U	0.30 U	0.30 U	0.30 U	**1.30**	0.30 U	0.30 U	0.30 U
1,2-Dichloroethene (total)	5	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
1,2-Dichloropropane	1	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,3-Dichlorobenzene	5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,4-Dichlorobenzene	5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Chloroethylvinylether	*	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Bromoform	*	0.21 U	0.21 U	0.21 U	0.21 U	0.35 J	0.21 U	0.21 U	0.21 U
Bromomethane	5	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Carbon tetrachloride	5	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Chlorobenzene	5	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Chlorodibromomethane	*	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Chloroethane	*	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	7	0.19 U	0.19 U	0.19 U	0.19 U	0.48 J	0.19 U	0.19 U	0.19 U
Chloromethane	*	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
cis-1,3-Dichloropropene	0.4	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Dichlorobromomethane	*	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Dichlorodifluoromethane	5	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methylene chloride	5	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Tetrachloroethene	*	0.31 U	0.31 U	0.31 U	0.31 U	2.20	0.31 U	0.31 U	0.31 U
trans-1,3-Dichloropropene	0.4	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Trichloroethene	5	0.28 U	0.28 U	0.28 U	0.33 J	1.70	0.28 U	0.28 U	0.28 U
Trichlorofluoromethane	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U

Notes:
Concentrations in ug/l.
U - Compound undetected at the specified detection limit.
J - Estimated concentration below detection limit
D - Dilution for analysis. Surrogate or matrix spike recoveries were not obtained
E- Result exceeded calibration range, secondary dilution required
* - Well is screened deeper than other wells.
-- Compound not analyzed

TABLE 5

FORMER CHANNEL MASTER SITE
CORRECTIVE ACTION GROUNDWATER MONITORING
FIELD PARAMETERS
First HALF 2020
SAMPLING DATE: May 4-5, 2020

MONITORING WELL NUMBER	TEMPERATURE (degrees Celsius)	pH (std units)	CONDUCTIVITY (umhos)
BH-2	11.71	7.30	490
BH-9	11.88	7.14	295
BH-11A	12.64	7.27	699
BH-11B	12.32	7.43	308
BH-16	12.50	7.80	460
BH-17	13.40	7.95	742
BH-18	14.21	9.21	694
BH-19	12.15	7.72	88

TABLE 6

FORMER CHANNEL MASTER SITE
CORRECTIVE ACTION GROUNDWATER MONITORING
MONITORING WELL MEASUREMENTS

First HALF 2020
SAMPLING DATE: May 4-5, 2020

MONITORING WELL NUMBER	TOP OF PVC CASING ELEVATION (1)	DEPTH TO WATER (2)	GROUND WATER ELEVATION (1)	INITIAL WELL DEPTH (2) (4)	MEASURED WELL DEPTH (2)	PERCENT OF SCREEN FILLED (3)	DOES WELL NEED TO BE REDEVELOPED (3)
BH-1	308.84	9.89	298.95	20.3	20.37	0	NO
BH-2	308.56	9.72	298.84	19.5	18.63	8.7	NO
BH-3	311.14	11.58	299.56	25.6	25.45	1.5	NO
BH-4	308.60	7.43	301.17	20.6	20.15	4.5	NO
BH-7	309.03	9.15	299.88	20.9	20.25	6.5	NO
BH-9	308.65	9.92	298.73	19.8	19.40	4	NO
BH-10	308.36	9.77	298.59	19.4	18.65	7.5	NO
BH-11A *	308.38	6.31	302.07	37.5	36.90	6	NO
BH-11B (4)	308.52	9.65	298.87	17.85	18.10	0	NO
BH-12	308.51	9.79	298.72	19.0	18.60	4	NO
BH-13 *	308.72	10.12	298.60	32.0	31.40	6	NO
BH-14	308.52	8.32	300.20	19.0	18.10	9	NO
BH-15	308.38	9.45	298.93	20.0	19.35	6.5	NO
BH-16	308.62	8.03	300.59	20.0	19.85	1.5	NO
BH-17 *	308.33	6.31	302.02	32.0	31.20	8	NO
BH-18	308.53	8.91	299.62	20.5	20.35	1.5	NO
BH-19 *	308.42	6.38	302.04	51.0	50.50	5	NO
BH-20 **	308.69	9.81	298.88	23.5		NM	NA
REC WELL **	309.66	16.40	293.26	30.0		NM	NA
PZ-1	308.66	9.83	298.83	NA		0	NO
PZ-2	308.60	9.91	298.69	NA		0	NO
PZ-3	308.83	10.21	298.62	NA		0	NO

NOTES: (1) Elevations are in feet above mean sea level.
(2) Depths are in feet below top of PVC casing
(3) If percent of well screen filled with sediment is equal to or greater than 10%, well should be redeveloped prior to the next sampling event.
(4) measured depth to bottom after being redeveloped by Layne on 12-8-2016
NM - Not measured (well was inaccessible or PDB sampler interfered with probe)
NA - Not applicable or not available
* - Wells are screened deeper than other wells
** - Pumping wells

Legend

Dissolved Arsenic

Total Arsenic

ug/l - Micrograms per liter

N

MW10S
Total Arsenic 36 ug/l
Dissolved Arsenic ND

MW4

MW7

MW6

MW18

MW2S

MW8D
Total Arsenic 440 ug/l
Dissolved Arsenic ND

MW3
Total Arsenic 64 ug/l
Dissolved Arsenic 21 ug/l

MW13S

0 25 50 100
Feet

Elevations: feet MSL.

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ARCADIS Design & Consultancy for natural and built assets

CHANNEL MASTER
ELLENVILLE, NEW YORK
SEMI-ANNUAL GROUNDWATER ANALYTICAL RESULTS
FORMER LAGOON AREA WELLS - May 4-5, 2020

0395-052-108
FIGURE 2-1

Legend

1,1,1-TCA - Trichloroethane

ug/l - Micrograms per liter

ND - Not Detected

N

BH10

BH3

BH2
1,1,1-TCA 1.2 ug/

BH15

BH14

BH19
1,1,1-TCA ND

PZ2

BH12

BH16
1,1,1-TCA 370.0 ug/l

BH9
1,1,1-TCA 5.1 ug/l

BH17
1,1,1-TCA ND

BH20

PZ3

PZ1

BH11B
1,1,1-TCA 30.0 ug/l
BH11A
1,1,1-TCA 0.48 ug/l

BH18
1,1,1-TCA 0.41 ug/l

Recovery

BH13

BH1

BH4

BH7

0 25 50 100
Feet

Elevations: feet MSL

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ARCADIS Design & Consultancy for natural and built assets

CHANNEL MASTER
ELLENVILLE, NEW YORK
SEMI-ANNUAL GROUNDWATER
Analytical Results May 4-5, 2020

0395-052-108
FIGURE 3-1

Legend

Former Lagoon Area Water Table Contours (5/5/2020)

N

MW10S (295.32)

MW4 (294.31)

MW7 (294.08)

MW11S (293.49)

MW6 (294.18)

295

294

293

292

291

290

289

288

285

286

287

MW2S (290.99)

MW8S (289.29)

MW3 (288.6)

MW18 (284.03)

MW13S (288.12)

0 25 50 100 Feet

Elevations: feet MSL.

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ARCADIS Design & Consultancy for natural and built assets

CHANNEL MASTER
ELLENVILLE, NEW YORK
WATER TABLE ELEVATION CONTOUR MAP
FORMER LAGOON AREA WELLS -MAY 5, 2020

0395-052-108

FIGURE 2-1A

Legend

Former Plant Area Water Table Contours (5/4/2020)

N

BH10 (298.59)

BH3 (299.56)

299

BH15 (298.93)

BH2 (298.84)

BH14 (300.20)

BH12 (298.72)

BH19 (302.04)

BH9 (298.73)

PZ2 (298.69)

BH16 (300.59)

BH17 (302.02)

301

PZ3 (298.62)

BH20 (298.88)

PZ1 (298.83)

BH11B (298.87)
BH11A (302.07)

300

Recovery (293.26)

296

BH18 (299.62)

297

299

298

300

BH13 (298.60)

BH1 (298.95)

BH4 (301.17)

301

BH7 (299.88)

0 25 50 100 Feet

Elevations: feet MSL.

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ARCADIS Design & Consultancy for natural and built assets

CHANNEL MASTER
ELLENVILLE, NEW YORK
WATER TABLE ELEVATION CONTOUR MAP
FORMER PLANT AREA WELLS - MAY 4, 2020

0395-052-108

FIGURE 3-1