FC

Memo

Date: November 04, 2016

Project: BCP Site # C360143

To: Village of Tuckahoe

From: John Guzewich, HDR

Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road

Subject: Tuckahoe, New York November 03, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Thursday November 03, 2016 site work. Site work on this day included probe installation of the vacuum monitoring points associated with the soil vapor extraction (SVE) system pilot test. Work was conducted with a direct-push technology (DPT) rig.

It should be noted that NYSDEC's subcontractor has begun "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for these activities. NYSDEC's subcontractor did not perform any "off-site" activities on this day. The CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Thursday November 03, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

NYSDEC staff was on-site on Thursday, November 03, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

Below is a summary table for the 11/03/2016 CAMP monitoring event.

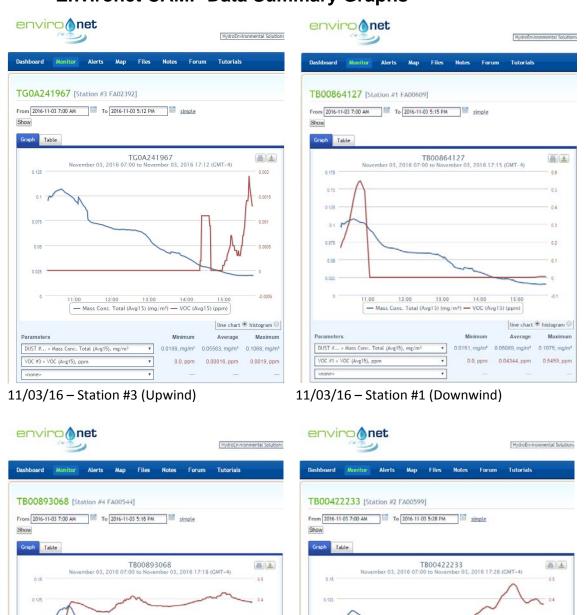
	Upwind	Downwind	Downwind	Buildings	Morgan Str.
Camp Data	(Sta. 3)	(Sta. 1)	(Sta. 4)	(Sta. 2)	(Sta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.00	0.00	0.00
Max. 15-min. Ave.	0.00	0.55	0.43	0.11	0.00
Overall Ave.	0.00	0.04	0.35	0.05	0.00
Dust (mg/m ³) *					
Min. 15-min. Ave.	0.0199	0.0151	0.0129	0.0185	0.0161
Max. 15-min. Ave.	0.1068	0.1075	0.1166	0.1101	0.1455
Overall Ave.	0.0556	0.0509	0.0583	0.0535	0.0531

Date: 11/03/16

NC – Not Collected

* As you can see from the graphs below, the Dust readings at all of the stations started out fairly high and then decreased over time. This time of year when we have cool nights and the ground is still relatively warm there is often a lot of ground fog and/or moisture in the air until this moisture dissipates as the temperatures rise. Often these high moisture ambient conditions cause the Dust meters to over read as it reads the moisture droplets a particulates.

Environet CAMP Data Summary Graphs



0.05

Parameters

DUST #.... > Mass Conc. Total (Avg15), mg/m

VOC #2 > VOC (Avg15), ppm

-0.1

Maximum

line chart 🖲 histogram 🔘

15.00

Average

0.0, ppm 0.35351, ppm 0.4288, ppm

0.0129, mg/m² 0.05829, mg/m² 0.1166, mg/m

11/03/16 – Station #4 (Downwind)

12.00

13.00

- Mass Conc. Total (Avg15) (mg/m¹) - VOC (Avg15) (ppm)

14.00

Minimum

0.075

Parameters

VOC #4 > VOC (Ave15), c

DUST #... > Mass Conc. Total (Avg15), mg/m

11/03/16 - Station #2 (Near Buildings)

12:00

13:00

- Mass Conc. Total (Avg15) (mg/m²) - VOC (Avg15) (ppm)

.

.

14:00

Minimum

15:00

0.0185, mg/m* 0.05347, mg/m* 0.1101, mg/m*

Average

0.0 ppm 0.27235 ppm 0.4707 ppm

line chart . histogram

Maximum

	2	1					HydroEm	fronmental Soluti
ashboard J	Monitor	Alerts	Мар	Files	Notes	Forum	Tutorials	i.
TB004527	77 [Sta	ation #5 I	FA00600	0]				
From 2016-11-03 Show	7:00 AM	То	2016-11-0	33 5:32 P.M	100 2	imple		
Graph Table								
	Nove	mber 03, 2		BOO45	2777 mber 03, 2	016 17:3	2 (GMT-4)	量土
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							line chart	histogram
Parameters					Minii	mum	Average	Maximur
VOC #5 > VOC	(Avg15), p	pm		*	0.0,	ppm	0.0001, ppm	0.003, pp
DUST # > Ma	ss Conc. T	otal (Avg15)	, mg/m ³		0.0161, #	g/m² D	05305, mg/m*	0.1455, mg/m

11/03/16 – Station #5 (Morgan Street)

FC

Memo

Date:November 07, 2016Project:BCP Site # C360143To:Village of TuckahoeFrom:John Guzewich, HDRSubject:Summary of CAMP Results During Site Investigation Activities
109-125 Marbledale Road
Tuckahoe, New York
November 04, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Friday November 04, 2016 site work. Site work on this day included probe installation of the vacuum monitoring points associated with the soil vapor extraction (SVE) system pilot test. Work was conducted with a directpush technology (DPT) rig.

It should be noted that NYSDEC's subcontractor has begun "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for these activities. NYSDEC's subcontractor did not perform any "off-site" activities on this day. The CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Friday November 04, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

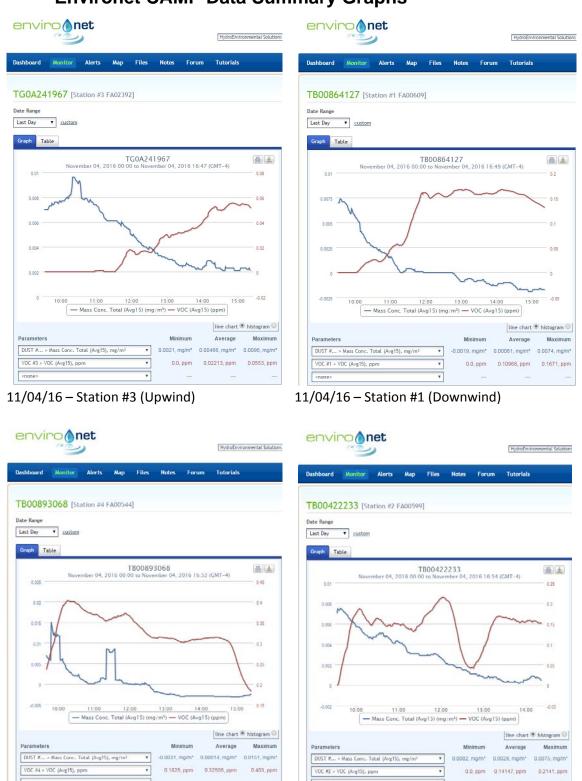
HDR staff was on-site on Friday, November 04, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

Below is a summary table for the 11/04/2016 CAMP monitoring event.

	Upwind	Downwind	Downwind	Buildings	Morgan Str.
Camp Data	(Sta. 3)	(Sta. 1)	(Sta. 4)	(Sta. 2)	(Sta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.18	0.00	0.00
Max. 15-min. Ave.	0.06	0.17	0.40	0.21	0.00
Overall Ave.	0.02	0.11	0.33	0.14	0.00
Dust (mg/m ³)					
Min. 15-min. Ave.	0.0021	0.0000	0.0000	0.0002	0.0012
Max. 15-min. Ave.	0.0096	0.0074	0.0151	0.0075	0.0070
Overall Ave.	0.0047	0.0006	0.0001	0.0028	0.0032

Date: 11/04/16

Environet CAMP Data Summary Graphs



11/04/16 - Station #4 (Downwind)

11/04/16 - Station #2 (Near Buildings)

envii		et 🖌					HydroEnvir	onmental Soluti
ashboard	Monitor	Alerts	Мар	Files	Notes	Foru	n Tutorials	
FR0045	2777 [Sti	ation de l	-					
ate Range	2/// [Su	ation #51	A00000	4				
Last Day	• custom							
Graph Ta	ble							
	ecceural			FB0045	2777			
0.05	Nove	mber 04, 2				2016 16:	56 (GMT-4)	0.008
	~							
0.025 -	1							0.005
	m	-						
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0				1				0.004
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-0.025						~	- when	0.002
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	-	YOC (Avg)	21 (5910)	- mass	conc. rota	a (vvg) a		
Parameters					M	nimum	Line chart 9	histogram (Maximur
					1	0, ppm	0.0, ppm	
-	/OC (Avg15), p)	pm						
VOC 45 > \	/OC (Avg15), p) Mass Conc. T		, mg/m ³		in the second	mg/m ^a	0.0032, mg/m*	0.0, ppr 0.007, mg/m

11/04/16 – Station #5 (Morgan Street)

Memo

Date:November 08, 2016Project:BCP Site # C360143To:Village of TuckahoeFrom:John Guzewich, HDR

Subject: Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road Tuckahoe, New York November 07, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Monday November 07, 2016 site work. Site work on this day included the shallow soil borings using a direct-push technology (DPT) rig.

It should be noted that NYSDEC's subcontractor has begun "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for this work when they are conducting intrusive activities. NYSDEC's subcontractor did not perform any "off-site" activities on this day. The CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Monday November 07, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

HDR staff was on-site on Monday, November 07, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

Below is a summary table for the 11/07/2016 CAMP monitoring event.

Come Data	Upwind	Downwind	Downwind	Buildings	Morgan Str.
Camp Data	(Sta. 3)	(Sta. 1)	(Sta. 4)	(Sta. 2)	(Sta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.10	0.00	0.00
Max. 15-min. Ave.	0.01	0.06	0.29	0.28	0.00
Overall Ave.	0.00	0.03	0.24	0.21	0.00
Dust (mg/m³)					
Min. 15-min. Ave.	0.0052	0.0000	0.0000	0.0002	0.0029
Max. 15-min. Ave.	0.0088	0.0050	0.0075	0.0053	0.0100
Overall Ave.	0.0061	0.0010	0.0022	0.0035	0.0043

Date: 11/07/16

Environet CAMP Data Summary Graphs



11/07/16 - Station #4 (Downwind)

11/07/16 - Station #2 (Near Buildings)

envir		net 🧳					HydroEnviro	nmental Solutio
ashboard	Monitor	Alerts	Мар	Files	Notes	Forur	n Tutorials	
B0045	2 777 [St	ation #5	FA00600	0]				
rom 2016-11	-07 7:00 AM	то	2016-11-	07 5:23 PM	,	imple		
Graph Ta	ble		_					
0.075 -	Nove	mber 07, 2		FB0045 10 to Nove		2016 17	23 (GMT-5)	0.012
0.05				Λ				0.01
0.025					Λ			0.008
0 -				+	In			0.006
0.025	~	m	~		1.1		- Andred	0.004
-0:05	10:00	11-00 VOC (Avg1	12:00 5) (ppm)	13:0 — Mass		00 11 (Avg15	15:00 16:0) (mg/m ¹)	0.002
							line chart 🖲	histogram 🔘
Parameters					м	nimum	Average	Maximum
VOC #5 > V	OC (Avg15), p	pm			0	.0. ppm	0.0, ppm	0.0, ppm
DUST # >	Mass Conc. 7	otal (Avg15). mg/m ³	*	0.0029	ma/mª	0.00431, mg/m*	0.01, mg/m ³

11/07/16 – Station #5 (Morgan Street)

Memo

Date:	November 09, 2016
Project:	BCP Site # C360143
To:	Village of Tuckahoe
From:	John Guzewich, HDR
Subject:	Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road Tuckahoe, New York November 08, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Tuesday November 08, 2016 site work. Site work on this day included shallow soil borings using a direct-push technology (DPT) rig and collection of soil samples for laboratory analysis.

It should be noted that NYSDEC's subcontractor is continuing with their "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for this work when they are conducting intrusive activities. NYSDEC's subcontractor collected soil vapor and ambient air vapor samples as part of their "off-site" activities on this day. CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Tuesday November 08, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

NYSDEC staff was on-site on Tuesday, November 08, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

Below is a summary table for the 11/08/2016 CAMP monitoring event.

CAMP Data	Upwind (Sta. 3)	Downwind (Sta. 1)	Downwind (Sta. 4)	Buildings (Sta. 2)	Morgan Str. (Sta. 5)
	(3(8, 5)	(3(8, 1)	(3(a, 4)	(3(a, 2)	(3ta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.07	0.00	0.00
Max. 15-min. Ave.	0.03	0.15	0.33	0.12	0.01
Overall Ave.	0.01	0.06	0.27	0.07	0.00
Dust (mg/m ³)					
Min. 15-min. Ave.	0.0012	0.0000	0.0000	0.0197	0.0016
Max. 15-min. Ave.	0.0095	0.0109	0.0060	0.0239	0.0100
Overall Ave.	0.0049	0.0026	0.0008	0.0220	0.0050

Date: 11/08/16

Environet CAMP Data Summary Graphs

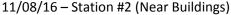




11/08/16 - Station #4 (Downwind)







envir		et					HydroEnviro	nmental Solutio
Dashboard	Monitor	Alerts	Мар	Files	Notes	Forum	Tutorials	
TB0045	2777 [Sta	tion dE l	10060	1				
Date Range	2777 [Sta	ICION #3 I	-AUU6U(<u>л</u>				
Last Day	▼ <u>custom</u>							
Graph Ta	ble							
			-	FB0045	2777			(a)(t)
0.006	Nove	mber 08, 2				016 16:4	1 (GMT-5)	0.0175
0.005						_		0.015
0.004								0.0125
0.003	1							0.01
0.002 —	h	~~~		~				0.0075
0.001 -	-			han	N		(0.005
0 -					L.	1th	m	0.0025
-0.001	10:00	11:0 VOC (Avg1		12:00 — Mass	13:00 Conc. Tota	14: II (Avg15)		0
							line chart 🖲	histogram 🤇
Parameters					Mi	nimum	Average	Maximun
VOC #5 > V	OC (Avg15), p	m		٣	0.	0, ppm	0.0002, ppm	0.005, ppr
	Mass Conc. T	otal (Avg15)	, mg/m ³	*	0.0016	mg/mª	0.00503, mg/m³	0.01, mg/m
<none></none>				٣		-	-	-

11/08/16 – Station #5 (Morgan Street)

Memo

Date:	November 10, 2016
Project:	BCP Site # C360143
To:	Village of Tuckahoe
From:	John Guzewich, HDR
Subject:	Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road Tuckahoe, New York November 09, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Wednesday November 09, 2016 site work. Site work on this day included shallow soil borings using a direct-push technology (DPT) rig and collection of soil samples for laboratory analysis.

It should be noted that NYSDEC's subcontractor is continuing with their "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for this work when they are conducting intrusive activities. NYSDEC's subcontractor collected soil vapor and ambient air vapor samples as part of their "off-site" activities on this day. CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Wednesday November 09, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

HDR staff was on-site on Wednesday, November 09, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities.

It should be noted that Dust monitors were not deployed at the on-site CAMP stations during this event due to the rain that was falling. Rain minimizes the potential for dust to be released and also moisture can damage the Dust meters. None of the VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

Date: 11/05/10	Upwind	Downwind	Downwind	Buildings	Morgan Str.
CAMP Data	(Sta. 3)	(Sta. 1)	(Sta. 4)	(Sta. 2)	(Sta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.00	0.00	0.00
Max. 15-min. Ave.	0.00	0.00	0.48	0.11	0.00
Overall Ave.	0.00	0.00	0.30	0.05	0.00
Dust (mg/m ³)					
Min. 15-min. Ave.	NC	NC	NC	NC	0.0320
Max. 15-min. Ave.	NC	NC	NC	NC	0.0490
Overall Ave.	NC	NC	NC	NC	0.0398

Below is a summary table for the 11/09/2016 CAMP monitoring event.

NC – Not Collected

Date: 11/09/16

* The on-site CAMP Dust monitors were not deployed due to the rain during the site activities on 11/09/16.

Environet CAMP Data Summary Graphs

	lydroEnvironmental Solutions	enviroonet	HydroEnvironmental Solut
shboard <u>Monitor</u> Alerts Map Files Notes Forum Tu	torials	Dashboard Monitor Alerts Map Files Notes Forum	Tutorials
G0A241967 [Station #3 FA02392]		TB00864127 [Station #1 FA00609]	
ast Day • custom		Date Range	
Table TG0A241967	[−5) 0.05	Graph Table TB00864127 November 09, 2016 00:00 to November 09, 2016 16:43 (0)	GMT-5) 0.05
	0.025		0.025
	0		- 0
	-0.025		-0.025
10'00 12:00 13:00 14: — Mass Conc. Total (Avg1 5) (mg/m³) — VOC (Avg1 5) (ppm		10:00 11:00 12:00 15:00 - Mass Conc. Total (Avg15) (mg/m²) VOC (Avg15) (g	14:00 -0.05 ppm)
line	e chart 🖲 histogram 🔘		line chart 🖲 histogram (
	Average Maximum	Parameters Minimum	Average Maximu
, , .	no data> <no data=""></no>	DUST # > Mass Conc. Total (Avg15), mg/m ³ v <no data=""></no>	<no data=""> <no data<="" td=""></no></no>
VOC #3 > VOC (Avg15), ppm	0.0, ppm 0.0, ppm	VOC #1 > VOC (Avg15), ppm	0.0, ppm 0.0, pp

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ishboard Monitor Alerts Map Fil	es Notes Foru	m Tutorials		Dashboard Monitor Alerts Map	Files No	otes Forun	n Tutorials	
B00893068 [Station #4 FA00544]				TB00422233 [Station #2 FA0059	9]			
ate Range Last Day • custom Graph Table				Date Range Last Day Custom Graph Table				
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\sim			0.5			N	m	0.075
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/			0.1					•
10:00 11:00 12:00 — Mass Conc. Total (Avg15	15:00 (mg/m³) — VOC (Avg	14:00 15) (ppm)	-0.1	10:00 11:00	12:00 Avg15) (mg/m²)	13:00 — VOC (Avg	14:00 (ppm)	-0.025
			🗄 histogram 🖂	and a state of the state				🖲 histogram 🖾
Parameters DUST # > Mass Conc. Total (Avg15), mg/m ³	Minimum	<pre>Average <no data=""></no></pre>	<pre>Maximum <no data=""></no></pre>	Parameters DUST # > Mass Conc. Total (Avg15), mg/m ¹		Minimum	Average	Maximum
VDC #4 > VDC (Avg15), ppm	• 0.0, ppm	0 29852, ppm	0.4777, ppm	VOC #2 > VOC (Avg15), ppm	•	0.0, ppm	0.04722, ppm	0.1074.ppr
	to set behave		The second second	Loc at a Loc faction boun		our ppin	o.our.ez, ppm	a. rura, ppi

11/09/16 – Station #4 (Downwind)

11/09/16 – Station #2 (Near Buildings)

envir	ro or	net /					HydroEnvi	ronmental Solut
ashboard	Monitor	Alerts	Мар	Files	Notes	Foru	m Tutorials	
B0045	2777 [Sta	ation #5	E400600	01				
ate Range	2111 [50	acion #5	AUUUUU	2]				
Last Day	• <u>custom</u>							
Graph Ta	ble							
			-	FB0045	0777			
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0.05								0.05
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11/09/16 – Station #5 (Morgan Street)

Memo

Date:	November 11, 2016
Project:	BCP Site # C360143
To:	Village of Tuckahoe
From:	John Guzewich, HDR
Subject:	Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road Tuckahoe, New York November 10, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Thursday November 10, 2016 site work. Site work on this day included shallow soil borings using a direct-push technology (DPT) rig and collection of soil samples for laboratory analysis.

It should be noted that NYSDEC's subcontractor is continuing with their "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for this work when they are conducting intrusive activities. NYSDEC's subcontractor did not perform any "off-site" activities on this day. CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Thursday November 10, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

HDR staff was on-site on Thursday, November 10, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

Below is a summary table for the 11/10/2016 CAMP monitoring event.

	Upwind	Downwind	Downwind	Buildings	Morgan Str.
CAMP Data	(Sta. 3)	(Sta. 1)	(Sta. 4)	(Sta. 2)	(Sta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.00	0.00	0.00
Max. 15-min. Ave.	0.02	0.13	0.00	0.04	0.00
Overall Ave.	0.00	0.07	0.00	0.01	0.00
Dust (mg/m ³)					
Min. 15-min. Ave.	0.0040	0.0000	0.0000	0.0000	0.0022
Max. 15-min. Ave.	0.0107	0.0174	0.0037	0.0185	0.0041
Overall Ave.	0.0060	0.0029	0.0004	0.0081	0.0031

Date: 11/10/16

Environet CAMP Data Summary Graphs



11/10/16 - Station #4 (Downwind)

11/10/16 - Station #2 (Near Buildings)

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ishboard	Monitor	Alerts	Мар	Files	Notes	For	um Tutorials	
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	2111 [Sta	ation #31	FAUUGU	<u>1</u>				
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Parameters					Mini	mum	Average	Maximun
VOC #5 > \	'OC (Avg15), p	pm		٣	0.0	ppm	0.0, ppm	0.0, ppn
DUST # :	Mass Conc. T	otal (Avg15)), mg/m ³	٣	0.0022, n	ng/m²	0.00306, mg/m ^a	0.0041, mg/m

11/10/16 – Station #5 (Morgan Street)

Memo

Date:	November 15, 2016
Project:	BCP Site # C360143
To:	Village of Tuckahoe
From:	John Guzewich, HDR
Subject:	Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road Tuckahoe, New York November 14, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Monday November 14, 2016 site work. Site work on this day included shallow soil borings using a direct-push technology (DPT) rig and collection of soil samples for laboratory analysis.

It should be noted that NYSDEC's subcontractor is continuing with their "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for this work when they are conducting intrusive activities. NYSDEC's subcontractor did not perform any "off-site" activities on this day. CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Monday November 14, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

NYSDEC staff was on-site on Monday, November 14, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

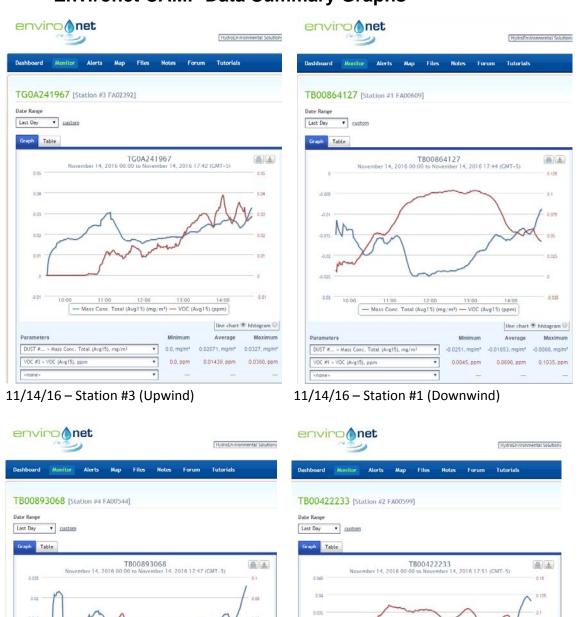
Below is a summary table for the 11/14/2016 CAMP monitoring event.

	Upwind	Downwind	Downwind	Buildings	Morgan Str.
CAMP Data	(Sta. 3)	(Sta. 1)	(Sta. 4)	(Sta. 2)	(Sta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.00	0.00	0.00
Max. 15-min. Ave.	0.04	0.10	0.06	0.11	0.03
Overall Ave.	0.01	0.07	0.01	0.08	0.00
Dust (mg/m ³)					
Min. 15-min. Ave.	0.0000	-0.0251	0.0000	0.0127	0.0124
Max. 15-min. Ave.	0.0327	-0.0088	0.0229	0.0395	0.0394
Overall Ave.	0.0207	-0.0185	0.0119	0.0195	0.0238

Date: 11/14/16

* Station #1 dust monitor was reading below zero for much of the day.

Environet CAMP Data Summary Graphs



0.03

0.025



11/14/16 - Station #4 (Downwind)

11/14/16 – Station #2 (Near Buildings)

12:00

- Mass Conc. Total (Avg15) (mg/m³) - VOC (Avg15) (ppm)

.

13:00

Minimum

14:00

11:00

DUST #... > Mass Conc. Total (Avg15), mg/m

VOC #2 = VOC (Avg15), ppm

<none:

0.075

0.05

15:00 -0.035

Maximum

line chart 🖲 histogram 🗍

Average

0.0, ppm 0.08384, ppm 0.1098, ppm

0.0127, mg/m* 0.0195, mg/m* 0.0395, mg/m

Let By salar Credit Table 000 TB00452777 November 14, 2016 00:00 to November 14, 2016 17:53 (CMT-5) 066 002 004 002 003 003 005 004 005 005 003 005 003 005 003 005 005 005 005 005 005 005 10:00 10:00 12:00 13:00 10:00 12:00 13:00 005 005 005 005 005 005 005 005 005 10:00 005 10:00 005 10:00 005 005 005 005 005 005 005 005 005 005 005 005 005 005 <t< th=""><th>ashboard</th><th>Monitor</th><th>Alerts</th><th>Мар</th><th>Files</th><th>Notes</th><th>Forum</th><th>Tutorials</th><th></th></t<>	ashboard	Monitor	Alerts	Мар	Files	Notes	Forum	Tutorials	
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Parameters Minimum Average Maximum								line chart	histogram
VOC #5 × VOC (Avg15), ppm • 0.0257, ppm	Parameters					Mini	mum	CONTRACT SCO	Maximur
	VOC #5 > V	OC (Avg15), p	pm		*	0.0,	ppm	0.00182, ppm	0.0257, pp

11/14/16 – Station #5 (Morgan Street)

Memo

Date:	November 28, 2016
Project:	BCP Site # C360143
To:	Village of Tuckahoe
From:	John Guzewich, HDR
Subject:	Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road Tuckahoe, New York November 22, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Tuesday November 22, 2016 site work. Site work on this day included shallow soil borings using a direct-push technology (DPT) rig and collection of soil samples for laboratory analysis.

It should be noted that NYSDEC's subcontractor is continuing with their "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for this work when they are conducting intrusive activities. NYSDEC's subcontractor did not perform any "off-site" activities on this day. CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Tuesday November 22, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

NYSDEC staff was on-site on Tuesday, November 22, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

Below is a summary table for the 11/22/2016 CAMP monitoring event.

	Upwind	Downwind	Downwind	Buildings	Morgan Str.
CAMP Data	(Sta. 3)	(Sta. 1)	(Sta. 4)	(Sta. 2)	(Sta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.00	0.00	NDA
Max. 15-min. Ave.	0.01	0.04	0.00	0.07	NDA
Overall Ave.	0.00	0.03	0.00	0.05	NDA
Dust (mg/m ³)					
Min. 15-min. Ave.	0.0100	0.0000	0.0000	0.0013	0.0019
Max. 15-min. Ave.	0.0267	0.0030	0.0048	0.0035	0.0051
Overall Ave.	0.0153	0.0009	0.0005	0.0022	0.0031

Date: 11/22/16

* Off-Site VOC monitor was not transmitting data to the Environet website.

NDA – No Data Available.

Environet CAMP Data Summary Graphs



VOC #4 > VOC (Avg15), ppm 0.0, ppm 0.00013, ppm 0.0025, ppn Ŧ 11/22/16 – Station #4 (Downwind)

Minimum

11/22/16 – Station #2 (Near Buildings)

DIJST #... > Mass Conc. Total (Avg15), mg/m

VOC #2 > VOC (Avg15), ppm

Minimum

0.0, ppm

line chart ® histogram O

0.04705, ppm 0.0657, ppm

Maximum

Average

0.0013, mg/m^a
 0.00215, mg/m^a
 0.0035, mg/m^a

hdrinc.com

Parameters

DUST #... > Mass Conc. Total (Avg15), mg/m3

tine chart ® histogram 🕀

Maximun

Average

-0.0001. ma/m* 0.00052. ma/m* 0.0048. ma/m

envir	o or	et					HydroEn	vironmental Solut
Dashboard	Monitor	Alerts	Мар	Files	Notes	Forur	n Tutorials	5
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11/22/16 – Station #5 (Morgan Street)

Memo

Date:	November 28, 2016
Project:	BCP Site # C360143
To:	Village of Tuckahoe
From:	John Guzewich, HDR
Subject:	Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road Tuckahoe, New York November 23, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Wednesday November 23, 2016 site work. Site work on this day included shallow soil borings using a direct-push technology (DPT) rig and collection of soil samples for laboratory analysis.

It should be noted that NYSDEC's subcontractor is continuing with their "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for this work when they are conducting intrusive activities. NYSDEC's subcontractor did not perform any "off-site" activities on this day. CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Wednesday November 23, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

HDR staff was on-site on Wednesday, November 23, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

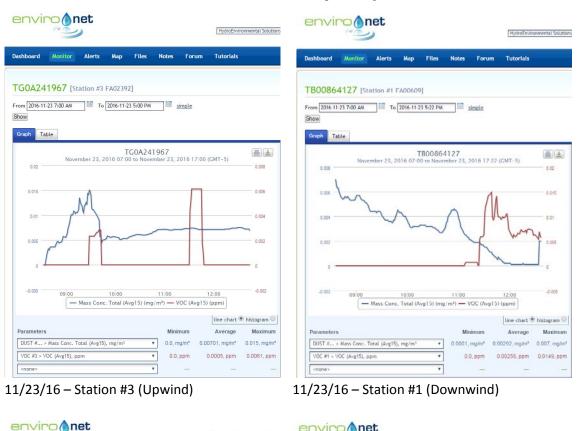
Below is a summary table for the 11/23/2016 CAMP monitoring event.

Dute: 11/25/10					
	Upwind	Downwind	Downwind	Buildings	Morgan Str.
CAMP Data	(Sta. 3)	(Sta. 1)	(Sta. 4)	(Sta. 2)	(Sta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.00	0.00	0.00
Max. 15-min. Ave.	0.01	0.01	0.00	0.05	0.09
Overall Ave.	0.00	0.00	0.00	0.02	0.06
Dust (mg/m ³)					
Min. 15-min. Ave.	0.0000	0.0001	-0.0009	0.0021	0.0029
Max. 15-min. Ave.	0.0150	0.0070	0.0093	0.0086	0.0050
Overall Ave.	0.0070	0.0029	0.0015	0.0043	0.0037

Date: 11/23/16

* Dust monitor at Station 4 dropped slightly below zero towards the end of the monitoring event.

Environet CAMP Data Summary Graphs





						HydroEnvi	HydroEnvironmental Solutio	
shboard Monitor	Alerts	Мар	Files	Notes	Foru	m Tutorials		
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Graph Table								
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						line chart (🖲 histogram 🔘	
Parameters					imum	Average	Maximum	
VOC #5 > VOC (Avg15)	, ppm		٣	0.0), ppm	0.06466, ppm	0.0937, ppm	
DUST # > Mass Cond				0.0029.1		0.00365, mg/m ^a	0.005, mg/m ³	

11/23/16 – Station #5 (Morgan Street)

FSS

Memo

Date:	November 28, 2016
Project:	BCP Site # C360143
To:	Village of Tuckahoe
From:	John Guzewich, HDR
Subject:	Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road Tuckahoe, New York November 28, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Monday November 28, 2016 site work. Site work on this day included shallow soil borings using a direct-push technology (DPT) rig and collection of soil samples for laboratory analysis.

It should be noted that NYSDEC's subcontractor is continuing with their "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for this work when they are conducting intrusive activities. NYSDEC's subcontractor did not perform any "off-site" activities on this day. CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Monday November 28, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

HDR staff was on-site on Monday, November 28, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

Below is a summary table for the 11/28/2016 CAMP monitoring event.

	Upwind	Downwind	Downwind	Buildings	Morgan Str.
CAMP Data	(Sta. 3)	(Sta. 1)	(Sta. 4)	(Sta. 2)	(Sta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.00	0.00	0.00
Max. 15-min. Ave.	0.07	0.06	0.00	0.10	0.21
Overall Ave.	0.02	0.02	0.00	0.06	0.13
Dust (mg/m ³)					
Min. 15-min. Ave.	0.0000	0.0114	0.0193	0.0168	0.0181
Max. 15-min. Ave.	0.0357	0.0290	0.0390	0.0470	0.0382
Overall Ave.	0.0210	0.0176	0.0260	0.0219	0.0247

Date: 11/28/16

Page 3

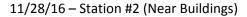
Environet CAMP Data Summary Graphs

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11/28/16 - Station #4 (Downwind)





Marbledale Road BCP Site Summary of CAMP Results (11/28/16) November 28, 2016

enviro ()ne	L				HydroEnv	ironmental Soluti
ashboard Monitor A	lerts Map	Files	Notes	Forum	Tutorials	8
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11/23/16 – Station #5 (Morgan Street)

FJS

Memo

Date:	December 02, 2016
Project:	BCP Site # C360143
To:	Village of Tuckahoe
From:	John Guzewich, HDR
Subject:	Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road Tuckahoe, New York December 01, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Thursday December 01, 2016 site work. Site work on this day included shallow soil borings using a direct-push technology (DPT) rig and collection of soil samples for laboratory analysis.

It should be noted that NYSDEC's subcontractor is continuing with their "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for this work when they are conducting intrusive activities. NYSDEC's subcontractor did not perform any "off-site" activities on this day. CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Thursday December 01, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

HDR staff was on-site on Thursday, December 01, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

Below is a summary table for the 12/01/2016 CAMP monitoring event.

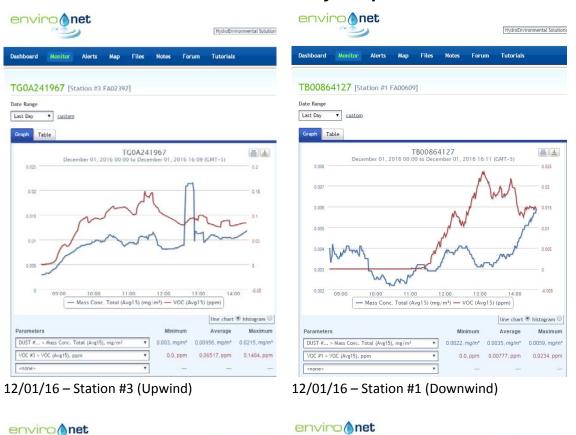
CAMP Data	Upwind (Sta. 3)	Downwind (Sta. 1)	Downwind (Sta. 4)	Buildings (Sta. 2)	Morgan Str. (Sta. 5)
VOCs (ppm)				•	
Min. 15-min. Ave.	0.00	0.00	0.00	0.00	0.00
Max. 15-min. Ave.	0.15	0.02	0.02	0.12	0.18
Overall Ave.	0.09	0.01	0.00	0.08	0.11
Dust (mg/m ³)					
Min. 15-min. Ave.	0.0030	0.0022	0.0005	0.0033	0.0023
Max. 15-min. Ave.	0.0215	0.0059	0.1194	0.0700	0.0113
Overall Ave.	0.0096	0.0035	0.0077	0.0074	0.0070

Date: 12/01/16

* It should be noted that the elevated 15-min readting at Station #4 (below the action level criterion) occurred when the meter was initially set-up; drilling activities for the day had not started at this point.

Page 3

Environet CAMP Data Summary Graphs





	1	1					HydroEnv	ironmental Solu
ashboard	Monitor	Alerts	Мар	Files	Notes	Forum	Tutorials	N.
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Parameters VOC #5 > \	_	VOC (Avg1	5) (ppm)		Conc. Tota Minii 0.0,	l (Avg15) mum ppm l	(mg/m³)	 histogram Maximu 0.1838, pp

12/01/16 – Station #5 (Morgan Street)

FJS

Memo

 Date:
 December 02, 2016

 Project:
 BCP Site # C360143

 To:
 Village of Tuckahoe

 From:
 John Guzewich, HDR

 Summary of CAMP Results During Site Investigation Activities 109-125 Marbledale Road

Subject: Tuckahoe, New York December 02, 2016

This memorandum was prepared by HDR to provide a review of the Community Air Monitoring Plan (CAMP) implementation during Friday December 02, 2016 site work. Site work on this day included shallow soil borings using a direct-push technology (DPT) rig and collection of soil samples for laboratory analysis. Today HES completed the soil boring activities scheduled for the site.

It should be noted that NYSDEC's subcontractor is continuing with their "off-site" work along the east side of Marbledale Road across from the quarry area. The subcontractor is conducting CAMP monitoring (VOCs and Dust) for this work when they are conducting intrusive activities. NYSDEC's subcontractor did not perform any "off-site" activities on this day. CAMP data collected by NYSDEC's subcontractor is not included in these summaries.

DATA EVALUATION AND INTERPRETATIONS

In accordance with the RAWP, a CAMP is required during site activities involving soil disturbance activities. HES is conducting CAMP monitoring during the current RAWP precharacterization sampling, well installation, and other activities. In accordance with the RAWP, four monitoring stations (upwind, two downwind, and a location between the work area and the nearest occupied building) are set up on-site to collect particulate (Dust) and volatile organic compound (VOC) measurements. In addition, HES has a 5th CAMP monitoring station off-site between the site and the Waverly Early Childhood Center. The CAMP station was situated on Morgan Street, near the intersection of Bellew Ave. for this monitoring event.

Details of the CAMP monitoring procedures and the monitoring equipment used to conduct the CAMP are included in previous data summary memoranda.

Water and vapor/odor suppressant foam are available on-site in the event there is a release of dust or VOCs from site activities. On Friday December 02, 2016, neither water nor foam were required. There were no visible dusts or noticeable odors released from

the work activities for this event. "At hole" air monitoring also occurred with separate instruments.

HDR staff was on-site on Friday, December 02, 2016 to observe drilling and CAMP monitoring activities. During this monitoring event there were no exceedances of the CAMP alert triggers at any of the five CAMP stations during site activities. None of the dust or VOC concentrations approached the action levels requiring a work stoppage or corrective measures.

Below is a summary table for the 12/02/2016 CAMP monitoring event.

	Upwind	Downwind	Downwind	Buildings	Morgan Str.
CAMP Data	(Sta. 3)	(Sta. 1)	(Sta. 4)	(Sta. 2)	(Sta. 5)
VOCs (ppm)					
Min. 15-min. Ave.	0.00	0.00	0.00	0.00	0.00
Max. 15-min. Ave.	0.20	0.01	0.03	0.12	0.02
Overall Ave.	0.10	0.00	0.02	0.08	0.01
Dust (mg/m ³)					
Min. 15-min. Ave.	0.0109	0.0000	-0.0033	0.0065	0.0057
Max. 15-min. Ave.	0.0193	0.0146	0.0097	0.0138	0.0155
Overall Ave.	0.0138	0.0085	0.0043	0.0094	0.0103

Date: 12/02/16

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Environet CAMP Data Summary Graphs



12/02/16 - Station #4 (Downwind)

12/02/16 - Station #2 (Near Buildings)

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ashboard	Monitor	Alerts	Мар	Files	Notes	For	um Tutorials	;
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							5) (mg/m ³)	
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Parameters					Mini	mum	Average	Maximur
VOC #5 > V	OC (Avg15), p	pm		٣	0.0	ppm	0.11642, ppm	0.1705, ppr
DUST # >	Mass Conc. T	otal (Avg15)), mg/m ³		0.0057, n	ng/m³	0.01025, mg/m ³	0.0155, mg/m

12/02/16 – Station #5 (Morgan Street)