

From: "Stern, David" <DStern@arcadis-us.com>
To: "Steven Scharf" <sxscharf@gw.dec.state.ny.us>
CC: <john.cofman@ngc.com>, <larry.leskovjan@ngc.com>, "Wolfert, Mike" <MWolf...>
Date: 5/17/2005 1:42 PM
Subject: RE: NGC - OU3 Phase 1B RI Work Plan
Attachments: vpb data-NYSDEC.pdf

Steve:

The groundwater sampling from the 8 VPBs and the soil vapor survey as proposed in the 12/1/04 report were completed in late 2004/early 2005 as part of Phase 1A of the RI. We are currently preparing draft reports to NG summarizing these data and as stated in the Phase 1B work plan, these reports will be included in the RI Report. The scope of Phase 1B was determined in consideration of all groundwater data collected to date. Since we are still evaluating the soil vapor data collected earlier this year, we have not proposed any additional soil vapor sampling as yet.

To assist in your evaluation of the current work plan which focuses on obtaining additional groundwater data, we have attached an advance copy of the most recent groundwater results from Phases 1 and 1A.

We ask that NYSDEC issue an expedited letter approving the work plan so we can comply with the access agreement in sufficient time to begin the additional groundwater investigation phase as proposed. Feel free to call if you have questions.

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-----Original Message-----

From: Steven Scharf [mailto:sxscharf@gw.dec.state.ny.us]
Sent: Tuesday, May 17, 2005 10:40 AM
To: Stern, David

Cc: john.cofman@ngc.com
Subject: Re: NGC - OU3 Phase 1B RI Work Plan

Dave,

This plan has been changed from the one you submitted to me on December 1, 2014 that I held in abeyance until the park order was signed. The main thing I noticed off the top is 6 VPBs with 6 in contingency versus the eight proposed earlier and you dropped the soil gas testing.

Should I not continue my review of the original plan? Also, the soil gas survey needs to be done. Let's discuss.

Steven M. Scharf, P.E.
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New York State Department of
Environmental Conservation
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>>> "Stern, David" <DStern@arcadis-us.com> 05/17/05 10:21AM >>>
Steve:

Attached is our work plan for Phase 1B of the RI for Bethpage Park for your approval. Attachment 1 is in preparation and will be sent shortly.

<<Phase 1B-NYSDEC.pdf>> <<SITE ACCESS-PARK AREA.pdf>>

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Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	NYSDEC SCGs	Sample ID:	BCPMW-1 ⁽¹⁾	BCPMW-1 ⁽¹⁾	BCPMW-1 ⁽¹⁾	B30MW-1	BCPMW-2 ⁽¹⁾	BCPMW-2 ⁽¹⁾	BCPMW-2 ⁽¹⁾	BCPMW-3 ⁽¹⁾	BCPMW-3 ⁽¹⁾	BCPMW-3 ⁽¹⁾	BCPMW-3	
		Depth bls:	(55-72)	(55-72)	(55-72)	(55-72)	(55-72)	(55-72)	(55-72)	(55-72)	(55-72)	(55-72)	(55-72)	(55-72)
		Date:	06/19/2003	09/12/2003	11/25/2003	12/08/2004	06/19/2003	09/12/2003	11/25/2003	06/19/2003	09/12/2003	11/25/2003	12/08/2004	
Site-Related VOCs														
1,1,1-Trichloroethane	5	<5	<5	<5	...	<5	<5	<5	<5	<5	6	<5	...	
1,1-Dichloroethane	5	<5	<5	<5	...	18	18	16	<5	<5	10	18	...	
1,1-Dichloroethene	5	<5	<5	<5	...	<5	<5	<5	<5	<5	11	44	...	
Carbon disulfide	50	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
Carbon tetrachloride	5	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
Chloroethane	5	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
Chloroform	5	4	3	2	...	<5	2	<5	<5	<5	6	<5	...	
cis-1,2-Dichloroethene	5	4	6	5	...	120	150	120	5300	2900	5200	<5	...	
trans-1,2-Dichloroethene	5	<5	<5	<5	...	<5	<5	<5	<5	2	<5	<5	...	
Tetrachloroethene	5	<5	<5	<5	...	<5	2	<5	<5	<5	<5	<5	...	
Trichloroethene	5	83	76	60	...	230	280	210	620	760	1800	<5	...	
Trichlorotrifluoroethane	5	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
Vinyl Chloride	2	<2	<2	<2	...	<2	<2	<2	<2	<2	6	70	...	
Other VOCs														
Ethylbenzene	5	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
1,2-Dichloropropane	1	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
Xylenes	5	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
Toluene	5	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
2-Butanone (MEK)	50	<10	<10	<10	...	<10	<10	<10	<10	<10	<10	<10	...	
Acetone	50	<10	<10	<10	...	<10	<10	<10	<10	<10	<10	<10	...	
Bromomethane	5	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
Methylene Chloride	50	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
Chloromethane	NE	<5	<5	<5	...	<5	<5	<5	<5	<5	<5	<5	...	
1,3-Butadiene	NE	...	...	...	<1	...	...	...	...	...	...	...	<1
Total VOCs	--	91	85	67	<1	368	452	346	5,920	3,701	7,132	<1		

See footnotes on last page.

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	Sample ID: NYSDEC Depth bls: SCGs	VP-1	VP-1	VP-1	VP-2	VP-2	VP-2	VP-3	VP-3	VP-3	VP-4	VP-4	VP-4
		(67-72) 07/28/2004	(85-90) 07/28/2004	(105-110) 07/28/2004	(65-70) 08/02/2004	(87-92) 08/02/2004	(105-110) 07/29/2004	(65-70) 07/30/2004	(85-90) 07/30/2004	(110-115) 07/30/2004	(65-70) 08/03/2004	(85-90) 08/03/2004	(105-110) 07/30/2004
Site-Related VOCs													
1,1,1-Trichloroethane	5	<5	<5	<5	<5	<5	<5	0.6	<5	<5	1	<5	<5
1,1-Dichloroethane	5	<5	<5	<5	<5	<5	<5	1	<5	<5	7	5	<5
1,1-Dichloroethene	5	<5	<5	<5	<5	<5	<5	2	<5	<5	6	<5	<5
Carbon disulfide	50	<5	<5	<5	<5	<5	<5	1	<5	<5	<5	<5	<5
Carbon tetrachloride	5	<5	<5	<5	<5	<5	<5	0.5	<5	<5	<5	<5	<5
Chloroethane	5	<5	<5	<5	<5	<5	<5	0.7	<5	<5	<5	<5	<5
Chloroform	5	<5	<5	<5	<5	<5	0.9	4	19	4	<5	2	7
cis-1,2-Dichloroethene	5	29	<5	<5	11	5	1	160	70	2	420 D	240 D	2
trans-1,2-Dichloroethene	5	<5	<5	<5	<5	<5	<5	1	<5	<5	2	<5	<5
Tetrachloroethene	5	<5	0.9	0.5	<5	<5	0.5	5	2	0.3	2	3	<5
Trichloroethene	5	3	<5	<5	14	10	2	5	6	3	94	82	9
Trichlorotrifluoroethane	5	<5	<5	<5	<5	<5	<5	0.8	<5	<5	<5	<5	<5
Vinyl Chloride	2	<2	<2	<2	<2	<2	<2	18	5	<2	26	<2	<2
Other VOCs													
Ethylbenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	1	<5	<5	0.5	<5	<5	<5	<5	<5
2-Butanone (MEK)	50	<10	<10	<10	32	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	50	3	4	<10	5	<10	<10	6	<10	<10	<10	3	<10
Bromomethane	5	<5	3	2	3	2	3	2	4	2	5	2	4
Methylene Chloride	50	5	0.3	<5	<5	<5	<5	1	0.3	<5	3	<5	<5
Chloromethane	NE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	NE	...	...	...	...	...	...	...	...	...	...	...	...
Total VOCs	--	40	8	3	66	17	7	209	106	11	566	337	22

See footnotes on last page.

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	Sample ID: NYSDEC Depth bls: SCGs	Date:	VP-5	VP-5	VP-5	VP-6	VP-6	VP-6	VP-7	VP-7	VP-7	VP-8	VP-8	VP-8
			(65-70)	(85-90)	(105-110)	(65-70)	(85-90)	(105-110)	(65-70)	(85-90)	(105-110)	(75-80)	(95-100)	(115-120)
			08/04/2004	08/04/2004	07/30/2004	08/05/2004	08/05/2004	08/05/2004	08/04/2004	08/04/2004	08/04/2004	09/23/2004	09/23/2004	09/22/2004
Site-Related VOCs														
1,1,1-Trichloroethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	6	<5	<5
1,1-Dichloroethane	5		<5	2	2	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon disulfide	50		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	5		<5	3	15	34	58	17	15	8	<5	37	4	4
cis-1,2-Dichloroethene	5		62 D	690	240 D	2	3	54	<5	<5	3 J	10	81	28
trans-1,2-Dichloroethene	5		<5	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	5		2	2	<5	2	2	<5	5	3	<5	<5	<5	<5
Trichloroethene	5		12	69	80	2	2	24	1	<5	9	10	47	11
Trichlorotrifluoroethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Chloride	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Other VOCs														
Ethylbenzene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	1		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5		<5	<5	<5	2	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	50		5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	50		4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane	5		<5	<5	3	<5	<5	<5	<5	2	<5	<5	<5	<5
Methylene Chloride	50		<5	<5	3	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NE		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	NE		...	...	...	...	...	...	...	...	...	...	...	...
Total VOCs	--		85	767	343	42	65	95	21	13	12	63	132	43

See footnotes on last page.

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	NYSDEC SCGs	Sample ID:	VP-8	VP-8	VP-8	VP-8	VP-8	VP-8	VP-8	VP-8	VP-8	VP-9	VP-9	VP-9
		Depth bls: Date:	(135-140) 09/21/2004	(155-160) 09/21/2004	(175-180) 09/21/2004	(204-209) 09/20/2004	(226-231) 09/17/2004	(235-240) 09/17/2004	(255-260) 09/16/2004	(275-280) 09/16/2004	(296-301) 09/10/2004	(65-70) 08/27/2004	(75-80) 08/26/2004	(95-100) 08/26/2004
Site-Related VOCs														
1,1,1-Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	3	<5	<5
1,1-Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	2	<5	<5
1,1-Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1	<5	<5
Carbon disulfide	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	5	0.7	2	12	1	1	2	<5	<5	0.7	1	2	13	
cis-1,2-Dichloroethene	5	8	<5	<5	<5	<5	<5	<5	<5	<5	96	9	2	
trans-1,2-Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	5	<5	<5	<5	<5	<5	6	13	4	5	<5	<5	<5	<5
Trichloroethene	5	6	3	7	14	13	2	3	6	7	190	30	7	
Trichlorotrifluoroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	3	<5	<5	<5
Vinyl Chloride	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	7	2	<2	
Other VOCs														
Ethylbenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	3	0.8	<5	
1,2-Dichloropropane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	4	2	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	43	16	<5	
2-Butanone (MEK)	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	3	<10	<10	<10
Acetone	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	8	<10	<10	<10
Bromomethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	3	<5	<5	<5
Chloromethane	NE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	NE	...	...	...	...	...	...	...	...	...	...	...	...	...
Total VOCs	--	15	5	19	15	14	10	16	10	13	367	62	22	

See footnotes on last page.

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	NYSDEC SCGs	Sample ID:	VP-9	VP-9	VP-9	VP-9	VP-9	VP-9	VP-9	VP-9	VP-9	VP-9	VP-10	VP-10
		Depth bls:	(115-120)	(135-140)	(153-158)	(175-180)	(195-200)	(215-220)	(235-240)	(255-260)	(296-301)	(65-70)	(85-90)	
		Date:	08/26/2004	08/25/2004	08/25/2004	08/23/2004	08/20/2004	08/19/2004	08/19/2004	08/18/2004	08/17/2004	08/23/2004	08/20/2004	
Site-Related VOCs														
1,1,1-Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.7	<5
1,1-Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	2	<5
1,1-Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1	<5
Carbon disulfide	50	<5	<5	<5	<5	<5	<5	<5	<5	1	J	<5	<5	<5
Carbon tetrachloride	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	5	8	0.7	<5	<5	<5	<5	<5	<5	<5	<5	<5	2	11
cis-1,2-Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	160	15 J
trans-1,2-Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	2	J	2	J	2	J	4
Trichloroethene	5	2	<5	<5	<5	1	J	3	J	4	J	5	J	5
Trichlorotrifluoroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	2	J	2	J	2
Vinyl Chloride	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Other VOCs														
Ethylbenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	50	4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	50	<5	<5	<5	<5	<5	<5	<5	3	J	2	J	<5	<5
Chloromethane	NE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	NE	...	...	...	...	...	...	...	...	...	...	...	...	...
Total VOCs	--	16	1	0	0	1	3	9	12	9			217	39

See footnotes on last page.

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	NYSDEC SCGs	Sample ID:	VP-10	VP-10	VP-10	VP-11	VP-11	VP-11	VP-11	VP-11	VP-12	VP-12	
		Depth bls:	(105-110)	(125-130)	(145-150)	(65-70)	(85-90)	(105-110)	(125-130)	(145-150)	(70-75)	(90-95)	
		Date:	08/20/2004	08/19/2004	08/19/2004	08/31/2004	08/31/2004	08/31/2004	08/30/2004	08/30/2004	08/31/2004	08/31/2004	
Site-Related VOCs													
1,1,1-Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,1-Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,1-Dichloroethene	5	<5	<5	<5	1	J	8	J	2	J	<5	<5	
Carbon disulfide	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Carbon tetrachloride	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Chloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Chloroform	5	5	8	2	J	<5	<5	7	6	0.7	J	23	43
cis-1,2-Dichloroethene	5	2	2	J	4	J	68	280	150	3	J	860	690
trans-1,2-Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	5	<5	<5	<5	3	J	<5	<5	2	J	<5	<5	<5
Trichloroethene	5	6	4	J	6	16	100	48	71	4	J	66	79
Trichlorotrifluoroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Chloride	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Other VOCs													
Ethylbenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	50	<10	<10	<10	<5	<5	<5	<5	<10	<10	<10	<10	<10
Acetone	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	23
Bromomethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	7	J	<5
Chloromethane	NE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	NE	...	...	...	...	...	...	...	...	...	...	...	...
Total VOCs	--	13	14	12	88	388	207	82	5	956	835		

See footnotes on last page.

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	NYSDEC SCGs	Sample ID:	VP-12	VP-12	VP-12	VP-13	VP-13	VP-13 (2)	VP-13 (2)	VP-13 (2)	VP-14	VP-14
		Depth bls:	(110-115)	(130-135)	(150-155)	(92-97)	(105-110)	(60-65)	(70-75)	(80-85)	(65-70)	(75-80)
		Date:	08/31/2004	08/30/2004	08/30/2004	01/13/2005	01/12/2005	1/26/2005	1/26/2005	1/26/2005	01/11/2005	01/11/2005
Site-Related VOCs												
1,1,1-Trichloroethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	2 J
1,1-Dichloroethene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	0.9 J
Carbon disulfide	50		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	5		35	5	14	2 J	<5	100	110	56	26	23
cis-1,2-Dichloroethene	5		690	2 J	1	31	0.5 J	2 J	1 J	<5	220 D	580 D
trans-1,2-Dichloroethene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	2 J
Tetrachloroethene	5		<5	<5	<5	<5	<5	1 J	1 J	<5 B	0.5 J	1 J
Trichloroethene	5		110	4 J	6	23	2 J	2 J	1 J	0.7 J	21 J	46
Trichlorotrifluoroethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Chloride	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Other VOCs												
Ethylbenzene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	1		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	50		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	50		<10	<10	<10	<10	<10	20	<10	<10	<10	<10
Bromomethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	50		8	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NE		<5	<5	<5	<5	<5	<5	<5	<5	<5	1 J
1,3-Butadiene	NE		...	...	...	...	...	...	...	...	...	...
Total VOCs	--		843	11	21	56	3	125	113	57	268	656

See footnotes on last page.

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	NYSDEC SCGs	Sample ID:	VP-14	VP-14	VP-14	VP-14	VP-15	VP-15	VP-15	VP-15	VP-15	VP-16
		Depth bls: Date:	(85-90) 01/11/2005	(95-100) 01/10/2005	(105-110) 01/07/2005	(115-120) 01/07/2005	(65-70) 01/06/2005	(75-80) 01/06/2005	(85-90) 01/05/2005	(95-100) 01/05/2005	(105-110) 01/04/2005	(65-70) 01/03/2005
Site-Related VOCs												
1,1,1-Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	5	3 J	2 J	2 J	2 J	<5	2 J	2 J	<5	<5	<5	3 J
1,1-Dichloroethene	5	1 J	0.6 J	0.8 J	0.8 J	<5	<5	<5	<5	<5	<5	<5
Carbon disulfide	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	5	27	60	83	24	1 J	2 J	4 J	9	18	2 J	J
cis-1,2-Dichloroethene	5	650 D	240 D	370 D	73	630 D	600 D	230 D	1 J	11	530 D	D
trans-1,2-Dichloroethene	5	2 J	0.7 J	1 J	1 J	<5	1 J	1 J	<5	<5	<5	0.8 J
Tetrachloroethene	5	1 J	0.7 J	1 J	1 J	<5	0.8 J	0.6 J	<5	<5	<5	0.7 J
Trichloroethene	5	69	53	72	25	34	54	22	1 J	10	73	J
Trichlorotrifluoroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Chloride	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Other VOCs												
Ethylbenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	50	<10	<10	20	11	<10	<10	<10	<10	<10	<10	<10
Bromomethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	NE	...	...	...	...	...	...	...	...	...	...	...
Total VOCs	--	753	357	550	133	669	660	256	11	39	610	

See footnotes on last page.

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	Sample ID: NYSDEC SCGs	VP-16	VP-16	VP-16	VP-16	VP-17	VP-17	VP-17	VP-17	VP-17	VP-18
		Depth bls: Date:	(75-80) 01/03/2005	(85-90) 12/21/2004	(95-100) 12/21/2004	(105-110) 12/17/2004	(65-70) 11/23/2004	(75-80) 11/23/2004	(85-90) 11/23/2004	(95-100) 11/22/2004	(105-110) 11/22/2004
Site-Related VOCs											
1,1,1-Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	11
1,1-Dichloroethane	5	3 J	5	1 J	<5	6	6	4 J	<5	<5	12
1,1-Dichloroethene	5	<5	<5	<5	<5	0.5 J	<5	<5	<5	<5	10
Carbon disulfide	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	5	5 J	3 J	5	13	1 J	2 J	3 J	7	5 J	3 J
cis-1,2-Dichloroethene	5	400 D	660 D	33	3 J	350 D	430 D	270 D	22	1 J	2800 D
trans-1,2-Dichloroethene	5	0.9 J	1 J	<5	<5	1 J	1 J	<5	<5	<5	8
Tetrachloroethene	5	0.7 J	1 J	<5	<5	0.9 J	0.9 J	<5	<5	<5	1 J
Trichloroethene	5	54	77	20	13	140	150	72	17	10	150 D
Trichlorotrifluoroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Chloride	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0.8 J
Other VOCs											
Ethylbenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	1 J
Xylenes	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5 B	<5 B	<5 B	<5 B	<5 B	<5 B
2-Butanone (MEK)	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	NE	...	...	...	...	...	...	...	...	...	...
Total VOCs	--	464	747	59	29	499	590	349	46	16	2,997

See footnotes on last page.

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	NYSDEC SCGs	Sample ID: Depth bls: Date:	VP-18 (75-80) 11/30/2004	VP-18 (85-90) 11/29/2004	VP-18 (95-100) 11/29/2004	VP-18 (105-110) 11/23/2004	VP-19 (65-70) 12/17/2004	VP-19 (75-80) 12/02/2004	VP-19 (85-90) 12/02/2004	VP-19 (95-100) 12/15/2004	VP-19 (105-110) 12/15/2004	VP-20 (65-70) 12/02/2004
Site-Related VOCs												
1,1,1-Trichloroethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	5		4 J	<5	<5	<5	<5	<5	<5	<5	<5	0.9 J
1,1-Dichloroethene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	0.7 J
Carbon disulfide	50		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	5		3 J	4 J	7 J	6 J	8 J	8 J	13 J	10 J	9 J	1 J
cis-1,2-Dichloroethene	5		36	5	4 J	2 J	0.6 J	0.5 J	2 J	2 J	0.5 J	54 J
trans-1,2-Dichloroethene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5		22	5	9	3 J	3 J	3 J	4 J	3 J	1 J	290 J
Trichlorotrifluoroethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Chloride	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	0.6 J
Other VOCs												
Ethylbenzene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	1		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	1 J
Toluene	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	14 J
2-Butanone (MEK)	50		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	50		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	50		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NE		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	NE		...	...	...	...	...	...	...	...	...	...
Total VOCs	--		65	14	20	11	12	12	19	15	11	362

See footnotes on last page.

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

CONSTITUENT (units in ug/L)	NYSDEC SCGs	Sample ID:	VP-20	VP-20	VP-20	VP-20
		Depth bis:	(75-80)	(85-90)	(95-100)	(105-110)
		Date:	12/02/2004	12/02/2004	12/01/2004	12/01/2004
Site-Related VOCs						
1,1,1-Trichloroethane	5	<5	<5	<5	<5	<5
1,1-Dichloroethane	5	<5	<5	<5	<5	<5
1,1-Dichloroethene	5	<5	<5	<5	<5	<5
Carbon disulfide	50	<5	<5	<5	<5	<5
Carbon tetrachloride	5	<5	<5	<5	<5	<5
Chloroethane	5	<5	<5	<5	<5	<5
Chloroform	5	8	4	J 11	5	
cis-1,2-Dichloroethene	5	0.8	J	0.6	J 3	J 1
trans-1,2-Dichloroethene	5	<5	<5	<5	<5	<5
Tetrachloroethene	5	<5	<5	<5	<5	<5
Trichloroethene	5	3	J	3	J 15	9
Trichlorotrifluoroethane	5	<5	<5	<5	<5	<5
Vinyl Chloride	2	<2	<2	<2	<2	<2
Other VOCs						
Ethylbenzene	5	<5	<5	<5	<5	<5
1,2-Dichloropropane	1	<5	<5	<5	<5	<5
Xylenes	5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5
2-Butanone (MEK)	50	<5	<10	<10	<10	<10
Acetone	50	<10	<10	<10	<10	<10
Bromomethane	5	<5	<5	<5	<5	<5
Methylene Chloride	50	<5	<5	<5	<5	<5
Chloromethane	NE	<5	<5	<5	<5	<5
1,3-Butadiene	NE	...	...	...	...	...
Total VOCs	--	12	8	29	15	

Table 2. VOC Concentrations in On-Site Wells and VPB Groundwater Samples, Former Grumman Settling Ponds (OU3 - Bethpage Community Park), Bethpage, New York.

- (1) Data obtained from Table B-5, Investigation Sampling Program, Bethpage Community Park (Dvirka & Bartilucci, 2003).
- Exceeds associated SCG value
- Bold** Detected compound
- bls below land surface
- J Estimated Value
- D Constituent quantified at a secondary dilution.
- H Alternate peak was selected upon review by the laboratory analyst.
- NYSDEC SCG New York State Department of Environmental Conservation Standards Criteria and Guidance Values.
- . . . Not Analyzed
- NE Not Established
- B Constituent also identified in associated blank sample.
- ug/L Micrograms per liter.