From: John Ferguson [mailto:jjfergus@gw.dec.state.ny.us]

Sent: Wednesday, July 17, 2013 10:57 AM

To: Ken Avery

Cc: Kristine (DOT) Edwards

Subject: Water Quality Monitoring Results

The Department has reviewed the water quality monitoring data submitted with your July 10 and 11 emails. The data are from the first water quality sampling undertaken, during fender removal on the Rockland side, in shallow water, and occurred on June 25 and 26, and subsequent collection on July 1. Results for samples collected June 25 and 26 suggest that work on those days may have caused levels for metals (mercury and copper) to rise above the standards set in the Departments permit for the bridge. However, in the Department's opinion it is more likely these results are attributable to the challenges associated with starting up a new monitoring program in shallow water.

Subsequent monitoring results for July 1 show water quality meeting the permit's water quality standards for metals. The July 1 results also suggest that work on that date caused total suspended solids (TSS) to rise above the permit's TSS limit. But based on direct field observation of the pile removal operations it is the Department's opinion that the reported TSS concentration was more likely caused by the sampling apparatus hitting the bottom prior to or during the collection of the bottom sample.

In response to these water quality results the Permittee has taken steps to require a change to the configuration of the silt curtain arrangement around the fender removal operations. Full-scale water quality monitoring will continue until permit conditions are met for two consecutive weeks (eight consecutive construction days). It is the Department's position that all permit requirements associated with Water Quality Monitoring have been met to date.

### Recommendations

1.Consistent with its typical requirements for similar water quality monitoring, and confirmed during observations of the fender removal operation and concurrent monitoring on July 2, it is the Department's opinion that collecting samples at three-depth intervals in shallower water (as required in condition 60) is technically difficult to implement and can cause questionable results.

It is the Department's opinion that if this requirement remains unchanged, similarly misleading results will likely continue for the project's duration. Therefore it is recommended that the TA, after discussion with its consultant as to the most effective and technically informative water quality monitoring methodology, request a modification of the relevant requirements in permit condition 60 to address these concerns. The Department will of course be available to collaborate on development of a revised plan.

2.The water quality standard for copper in permit condition 61 is incorrect; the value should be 5.6 ug/l, not 3.4 ug/l. Per 6 NYCRR §703.5, Table 1, the standard for copper in these waters is 3.4 ug/l - except in New York/New Jersey Harbor where it is 5.6 ug/l.

New York/New Jersey Harbor is defined in §700.1(a)(36) as "salt water classified segments identified in... Part 864..." Section 864.6 Table 1, Item 2, identifies the Hudson River from the New York-Bronx County line to the Bear Mountain Bridge as being saline (Class SB) waters. The project area is within the regulatory definition of New York/New Jersey Harbor, and thus the 5.6 ug/l standard applies. The Department will prepare a modification of the permit making this change.

If you have any questions please feel free to contact me.

Thank you for your cooperation.

J Ferguson

-	D	ate												6/25	5/13										
	Surve	еу Туре												V - Vess	el Based										
C	onstruct	ion Activ	ity	D	EM - D	emoliti	ion		Com	ments							Fenc	ler Rer	noval						
	Т	ide												Ek	ob										
	Source	Location												Pie	r 4										
(1)	nple ation					Upcui	rrent (/	Ambie	nt)									De	owncu	rrent					
11	nce to urce					Appro	x. 500	- 1000	ft <sup>1</sup>					-				Outsi	de Silt	Curtai	n <sup>2</sup>				
Samı	ple ID					062	513-DE	EM-E-L	J									062	513-DE	M-E-D	)				
		pa							P	СВ		0	ne	ped							P	CB		(h)	ne
200	raiailleter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Uı	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detection	on Limit <sup>3</sup>	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water Stand		*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
sult <sup>4</sup>	S	74.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	62.0	0.1097	ND	ND	ND	ΝĐ	ND	ND	ND	ND	ND	ND
Analytical Result <sup>4</sup>	М	58.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	78.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В	54.0	ND	ND	NĐ	ND	ND	ND	ND	ND	ND	ND	ND	112	0.1296	ND	NĐ	NĐ	NĐ	ND	NĐ	ND	ND	ND	ND

<sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible

<sup>&</sup>lt;sup>2</sup> Samples were collected as close as safely possible to the silt curtain

<sup>&</sup>lt;sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14

<sup>--</sup> No detection limit or water quality standard

<sup>\*</sup> None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

<sup>&</sup>lt;sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

	· D	ate												6/25	5/13										
	Surve	у Туре												V - Vess	el Based										
С		ion Activ	ity	D	EM - D	emoliti	ion		Com	ments							Fenc	ler Rer	noval						
		ide ————												Flo											
		Location		<u> </u>										Pie	r 5										
Loca	nple ation					Upcu	rrent (/	Ambie	nt)									De	owncu	rrent					
1	nce to irce	,			Appro	x. 500	- 1000	ft <sup>1</sup>									Outsi	de Silt	Curtaii	n <sup>2</sup>	-				
Sam	ole ID					062	513-DE	M-F-L	J	-								062	513-DE	EM-F-C	)	_			
		pa			Ī				P	СВ		_	e e	pa							P	СВ			e e
G G		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Uı	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detectio	n Limit <sup>3</sup> ,	Ambient + 100	0.05		<u></u>			0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water ( Stand		*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66				~-	16	0.0006
esult <sup>4</sup>	S	53.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	68.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Analytical Result <sup>4</sup>	М	62.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	106	ND	ND	ND	ND	ND	ND	ND	ND	ND	NĐ	ND
Analy	В	78.0	ND	·ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible

<sup>&</sup>lt;sup>2</sup> Samples were collected as close as safely possible to the silt curtain

<sup>&</sup>lt;sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14

<sup>--</sup> No detection limit or water quality standard

<sup>\*</sup> None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

<sup>&</sup>lt;sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

	D	ate												6/26	6/13										
	Surve	еу Туре												V - Vess	el Based										
С	onstruct	ion Activ	ity	D	EM - D	emoliti	ion		Com	ments	W. C.						Fenc	ler Rer	noval						
	Т	ide												Flo	od										
		Location												Pie	r 6										
San Loca			v			Upcui	rrent (	Ambie	nt)									De	owncu	rrent					
Distai Sou						Appro	x. 500	- 1000	ft <sup>1</sup>									Outsi	de Silt	Curtai	n <sup>2</sup>				
Samp	ole ID					062	613-DE	M-F-L	J									062	613-DE	M-F-C	) -				
		eq							P	СВ			эс	pa		1.					P	СВ			e e
Daramoter		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detectio	n Limit <sup>3</sup>	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water (		*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
sult4	s	77.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	59.0	ND	NĐ	5.8	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Result <sup>4</sup>	М	90.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	70.0	ND	NĐ	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В	112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	74.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- 1 Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible
- <sup>2</sup> Samples were collected as close as safely possible to the silt curtain
- <sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14
- -- No detection limit or water quality standard
- \* None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

## ND Not Detected

<sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

	D	ate												6/27	7/13										
	Surve	у Туре												V - Vess	el Based										
C	onstruct	ion Activi	ty	D	EM - D	emolit	on		Com	ments							Fenc	ler Rer	noval						
		ide												Et								·			
		Location							-					Pie	r 8										
Sample Location Distance to Source						Upcu	rent (/	Ambie	nt)									D	owncu	ırrent					
					Appro	x. 500	- 1000	ft <sup>1</sup>									Outsi	de Silt	Curtai	n²			_		
Sam	ple ID					062	713-DE	M-E-U	J									062	713-DE	EM-E-D	)				
		pa		<u> </u>					P	СВ			e	pa							P	СВ			e u
o de care de c	raine Berring	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Uı	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detection	on Limit <sup>3</sup>	Ambient + 100	0.05	<u>-</u> -				0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05		· <b></b>	_		0.2	0.2	0.2	0.2		0.1
Water (	Quality dard <sup>3</sup>	*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
sult <sup>4</sup>	s	35.2	ND	ND	ND	ND	ND	ND	ND	NĐ	ND	ND	ND	40.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical R∋sult⁴	М	46.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	59.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В	46.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	40.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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	D	ate												6/2	7/13										
	Surve	∋у Туре												V - Vess	el Based										
c	onstruct	ion Activ	ity	D	EM - [	Demolit	ion	<u> </u>	Com	ments							Fend	der Rei	moval						
		īde		<u> </u>										Flo	ood										
		Location	****	<u> </u>										Pie	er 9										
Source Location  Sample Location  Distance to Source  Sample ID					Upcu	rrent (	Ambie	nt)									D	owncu	ırrent						
Distance to Source						Appro	x. 500	- 1000	ft <sup>1</sup>									Outsi	ide Silt	Curtai	n²				
Samı	ole ID				062	713-DI	EM-F-L	J									062	713-DI	EM-F-D	)					
		pe							P	СВ			l g	pe							P	СВ			e e
101000	r af all refer	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Uı	nit	(ppm)						(ppb)					-	(ppm)						(ppb)					
Detection	n Limit <sup>3</sup>	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water (	, ,	*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
sult4	S	28.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Analytical R-ssult <sup>4</sup>	М	41.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	48.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anal	В	50.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	68.8	ND	NĐ	ND	ND	ND	ND	ND	ND	ND	ND	ND

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<sup>&</sup>lt;sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14

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	D	ate												7/1	/13										
	Surve	у Туре												V - Vess	el Based										
C	construct	ion Activ	ity	D	EM - E	emoliti	ion		Com	ments		-					Fenc	der Rei	noval						
	Т	ide												Ek	ob										
		Location												Pier	11										
Loca	nple ation					Upcu	rrent (	Ambie	nt)									D	owncu	rrent					
11	nce to urce					Appro	x. 500	- 1000	ft <sup>1</sup>									Outsi	de Silt	Curtai	n <sup>2</sup>				
Sam	ole ID					070	113-DE	EM-E-L	J									070	113-DE	EM-E-D	)				
		pa							P	СВ			Je	pa							P	CB			Je
O store	a a a a a a a a a a a a a a a a a a a	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detection	on Limit <sup>3</sup>	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water (	,	*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
sult4	S	25.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Result <sup>4</sup>	М	24.4	ND	ND	ND	ND	ND	36.0	ND	ND	ND	ND	ND	ND	NĐ	ND	ND	NĐ	ND .						
Analy	В	25.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	371	ND	ND	ND	NĐ	ND	ND	ND	ND	ND	ND	ND

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<sup>&</sup>lt;sup>2</sup> Samples were collected as close as safely possible to the silt curtain

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	ם	ate												7/2	/13										
	Surve	у Туре												V - Vess	el Based										
C	onstruct	ion Activ	ity	D	EM - D	emolit	ion		Com	ments		<u> </u>					Fend	ler Rer	noval						
	Т	ide										-		Flo	od										
		Location												Pie	13										
13	nple ation					Upcu	rrent (/	Ambie	nt)	=======================================								D	owncu	rrent		<b></b>			
	nce to urce				Appro	x. 500	- 1000	ft¹									Outsi	de Silt	Curtai	n²					
Sam	ple ID				-	070	213-DE	M-F-L	J									070	213-DE	EM-F-C	)				
		pa							P	СВ			Je	þe							P	СВ			e
e e	rafameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
U	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detection	on Limit <sup>3</sup>	Ambient + 100	0.05	NF P				0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water Stan	Quality dard <sup>3</sup>	*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
esult <sup>4</sup>	S 23.2 ND ND ND ND ND ND									ND	ND	ND	ND	30.0	ND	ND	ND	ND	ND	NĐ	ND	ND	ND	ND	ND
Analytical Result <sup>4</sup>	M	24.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25.0	ND	NĐ	ND	ND	ND	ΝĐ	ND	ND	ND	ND	ND
Anal	В	30.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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	D	ate												7/2	/13										
	Surve	у Туре												V - Vess	el Based										
С	onstruct	ion Activi	ity	D	EM - D	emoliti	on		Com	ments							Fend	ler Rer	noval						
	Т	ide												Et		· · · · · · · · · · · · · · · · · · ·									
		Location		<u> </u>										Pier	14										
San Loca						Upcu	rent (/	Ambie	nt)									D	owncu	rrent					
Distar Sou	nce to Irce			Appro	x. 500	- 1000	ft¹									Outsi	de Silt	Curtai	n <sup>2</sup>						
Samp	ole ID			*		070	213-DE	M-E-L	J									070	213-DE	EM-E-D	)				
		pe							PO	СВ			ЭE	pel							P	СВ	T		e e
Darameter		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Arocior 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detectio	on Limit <sup>3</sup>	Ambient + 100	0.05				**	0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water (		*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
sult <sup>4</sup>	s	19.6	ND	ND	ND	ND	ND	ND	ND	ND	23.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28	ND			
Analytical R∍sult⁴	М	19.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35	ND
Analy	В	20.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	42.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21	ND

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<sup>-</sup> No detection limit or water quality standard

<sup>\*</sup> None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

<sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

	D	ate												7/3	/13										
	Surve	∋у Туре								3				V - Vess	el Based										
С	onstruct	ion Activ	ity	D	EM - E	emolit	ion		Com	ments							Fend	ler Rer	noval						
	Т	ide												Flo	od										
		Location												Pier	15										
Loca						Upcu	rrent (/	Ambie	nt)									D	owncu	rrent					
Location Distance to Source Solids Olids Wercury						Appro	x. 500	- 1000	ft¹									Outsi	de Silt	Curtai	n²				
Samı	ole ID					070	313-DE	EM-F-L	j									070	313-DE	EM-F-D	)				
		pe							P	СВ			eu	pəl							P	СВ			e
2000		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Uı	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detection	on Limit <sup>3</sup>	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05	<u></u>	eres.			0.2	0.2	0.2	0.2		0.1
Water 6		*	0.0007	8.2	3.4	8	66			<u></u>		16	0.0006	*	0.0007	8.2	3.4	8	66	AP.				16	0.0006
sult <sup>4</sup>	s	20.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22	ND
Analytical Result <sup>4</sup>	М	20.4	ND	NĐ	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В	32.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	72.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.0	ND

<sup>&</sup>lt;sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible

<sup>&</sup>lt;sup>2</sup> Samples were collected as close as safely possible to the silt curtain

<sup>&</sup>lt;sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14

<sup>--</sup> No detection limit or water quality standard

<sup>\*</sup> None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

<sup>&</sup>lt;sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

	D	ate												7/3	/13										
	Surve	еу Туре												V - Vess	el Based										
С	onstruct	ion Activ	ity	D	EM - E	Demolit	ion		Com	ments							Fend	der Rei	noval						
		ide												El	bb										
		Location												Pie	r 16										
San Loca	•					Upcu	rrent (4	Ambie	nt)									D	owncu	irrent					
Location Distance to Source					Appro	x. 500	- 1000	ft <sup>1</sup>									Outsi	de Silt	Curtai	n²					
(I						070	313-DE	EM-E-U	J									070	313-DE	EM-E-C	כ				
		pal							P	СВ			e e	pe							P	СВ			e
Parameter		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	it	(ppm)						(ppb)						(ppm)						(ppb)					
Detectio	n Limit³	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water Quality * 0.0007				8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
sult4	S 1		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28.0	ΝD	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
/tical R	M 19.2 ND			ND	ND	ND	ND	ND	ND	NĐ	ND	ND	ND	32.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Anal	Result     Result			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49.2	ND	ND	ND	ND	ND	ND	ND	NĐ	NĐ	2.2	ND

<sup>&</sup>lt;sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible

<sup>&</sup>lt;sup>2</sup> Samples were collected as close as safely possible to the silt curtain

<sup>&</sup>lt;sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14

<sup>--</sup> No detection limit or water quality standard

<sup>\*</sup> None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

<sup>&</sup>lt;sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

	D	ate												7/8	/13										
	Surve	еу Туре												V - Vess	el Based										
(	Construct	ion Activ	ity	D	EM - [	Demolit	ion	<u> </u>	Com	ments							Fenc	ler Rei	moval						
	Т	ide												Flo	od										
		Location		<u></u>										Pie	r 17										
Loc	mple ation					Upcu	rrent (	Ambie	nt)									Đ	owncu	rrent					
	nce to urce	Approx. 500 - 1000 ft'  070813-DEM-F-U																Outs	ide Silt	Curtai	n <sup>2</sup>				
Sam	ple ID					070	813-DI	EM-F-L	J									070	813-DE	EM-F-D	)				
		eq							P	СВ			e e	led							PO	СВ			Je
	rarameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
U	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detection	on Limit <sup>3</sup>	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
	Quality dard <sup>3</sup>	**	0.0007	8.2	3.4	8	66	1				16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
esult4	S 22.4 ND ND ND ND 11 ND										ND :	20.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Analytical Result <sup>4</sup>	М	M 23.6 ND												36.4	ND	ΝD	ND	ND	11	ND	יבוא	ND	ND	ND	ND
Analy	В	26.8	ND	ND	ND	'ND	11	ND	ND	ND	ND	ND	ΝD	41.6	ND	ND	ND	ND	10	ND	ND	ND	ND	ND:	NĐ

<sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible

<sup>&</sup>lt;sup>2</sup> Samples were collected as close as safely possible to the silt curtain

<sup>&</sup>lt;sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14

<sup>--</sup> No detection limit or water quality standard

<sup>\*</sup> None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

<sup>&</sup>lt;sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

	D	ate												7/9	/13										
	Surve	еу Туре												V - Vess	el Based										
С		ion Activi	ity	D	EM - D	emoliti	on		Com	ments							Fenc	ler Rer	noval						
		ide		<u> </u>										Et											
		Location		<u> </u>										Pier	· 19			****		_					
San Loca	ation			Upcu	rrent (/	Ambie	nt)									De	owncu	rrent							
Distar Sou	rce to			Appro	x. 500	- 1000	ft <sup>1</sup>									Outsi	de Silt	Curtai	n²						
Samp	ole ID	Approx. 500 - 1000 ft <sup>1</sup> 070913-DEM-E-U																070	913-DI	EM-E-D	)				
		eq							P	СВ	,		Je L	þa							P	СВ			e
Darameter		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detectio	n Limit <sup>3</sup>	Ambient + 100	0.05		<b></b>			0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05		84			0.2	0.2	0.2	0.2		0.1
Water (		*	0.0007	8.2	3.4	8	66		·			16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
esult <sup>4</sup>	S									ND	ND	ND	ND	23.5	ND	ND	ND	ND	ND	П	ND	ND	ND	0.10	ND
Analytical Result <sup>4</sup>	М	28.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.5	ND	NΩ	ND	ND	מא	ND	ND	ND	ND	ND	ND
Anal)	В	30.7	ND	ND	ND	ND	ND	ND	NĐ	ND	ND	ND	ND	30.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.50	ND

<sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible

<sup>&</sup>lt;sup>2</sup> Samples were collected as close as safely possible to the silt curtain

<sup>&</sup>lt;sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14

<sup>--</sup> No detection limit or water quality standard

<sup>\*</sup> None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

<sup>&</sup>lt;sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

# **Edwards, Kristine**

From:

Edwards, Kristine (DOT) < Kristine. Edwards@dot.ny.gov>

Sent:

Thursday, July 18, 2013 10:52 AM

To:

Edwards, Kristine

Subject:

FW: Fwd: 20130715 Form NYSTA\_TZC\_NCR\_ENV 03015.pdf

----Original Message----

From: John Ferguson [mailto:jjfergus@gw.dec.state.ny.us]

Sent: Thursday, July 18, 2013 10:30 AM

To: Edwards, Kristine (DOT)

Subject: Re: Fwd: 20130715 Form NYSTA\_TZC\_NCR\_ENV\_03015.pdf

Kristine - Regarding the results for nickel on July 10: The sample collection occurred during flood tide and is the result shows the only detectable value for nickel of all the samples collected thus far. The sample was taken at the surface, but the samples collected at mid-depth and at the bottom were non-detect for nickel. The samples taken at ebb tide on that same day were non-detect for nickel at all three sampling depths. In addition, all other sample results we have received thus far were non-detect for nickel at all three sampling depths at both flood and ebb tides. Therefore we consider the July 10 flood tide surface sample result for nickel suspect data. We will continue to review sampling data as we receive it, but recommend no action in response to this result at this time.

J Ferguson

	C	Date												71′	10/13										
	Surv	еу Туре												V - Ves	sel Base	d									
С	Construct	tion Activ	ity	0	EM - I	Demoli	ion	<u> </u>	Com	ments		<u> </u>					Fe	nder R	emova	I					
	Т	ide						Const Con-			~				Ebb						***************************************				
		Location		<u></u>										Pi	er 20										
Loca	mple ation					Upcu	rrent (	Ambie	nt)					·				1	Downo	urrent	t				
	nce to urce					Appro	x. 500	- 1000	ft <sup>1</sup>									Out	side S	ilt Curta	ain <sup>2</sup>				
Samı	ple ID					071	013-DI	EM-E-U	J									07	1013-[	DEM-E	-D				
	b de d												a e	pel							Р	СВ		$\prod_{a}$	Je J
G	ralameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	nit	(ppm)						(ppb)						(ppm)						(ppb	)				
Detectio	on Limit <sup>3</sup>	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water (		ality * 0,0007 82 34 8 66										16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
s 20.0 ND					ND	ND	ND	ND	ND	ND	ND	ND	·ND	24.4	ND	ND	ND	ND	ND	ND	NO	ND	MD	0.13	ND
W 21.6 ND  B 28.4 ND  B 28.4 ND					ND	ND	11	ND	ND	ND	ND	ND	, ND	32.4	ND	ND	ND	ND	ND	ND	ND	ND	MD	0.074	ND
B 28.4 ND /					MD	ND	ND	ND	ND	ND	ND	ND	ND	28.0	ND	ND	3.4	ND	12	ND	NID	ND	ND	0.23	ND

- <sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible
- <sup>2</sup> Samples were collected as close as safely possible to the silt curtain
- <sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14
- -- No detection limit or water quality standard
- \* None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

# ND Not Detected

<sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

		Date												7/10	0/13										
	Surv	еу Туре												V - Vess	el Based										
	Construct	tion Activ	ity	D	EM - [	Demolit	ion		Com	ments							Fen	der Re	moval				***************************************		
	Т	ide													ood										
		Location												Pie	r 21										
11	mple ation					Upcu	rrent (	Ambie	ent)									D	owncı	ırrent					
11	nce to urce					Appro	x. 500	- 1000	ft <sup>1</sup>									Outs	ide Silt	Curtai	in <sup>2</sup>				
Sam	ple ID					071	013-DI	EM-F-U	J									071	013-DI	EM-F-	)				
	2 8 4 0 ed												Je l	eq							P	СВ			e e
	rarameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Uı	nit	(ppm)						(ppb)					** 1.	(ppm)						(ppb)		,			
Detectio	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1		
Water of Stand	Quality dard <sup>3</sup>	*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
esult <sup>4</sup>	s	18.8	ND .	ND	ND	ND	10	ND	ND	ND	ND	ND	ND	25.2	ND	11	ND	ND	11	ND	ND :	ND	ND	0.19	ND
Analytical Result <sup>4</sup>	M	18.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	47.6	ND	ND	ND	ND	ND	ND .	ND	ND	ND	0.33	ND
W B 24.4 ND					ND	ND	10	ND	ND	ND	ND	. ND	ND	32.8	ND	ND	ND	ND	10	ND	ND	ND	ND	0.21	ND

<sup>&</sup>lt;sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible

<sup>&</sup>lt;sup>2</sup> Samples were collected as close as safely possible to the silt curtain

<sup>&</sup>lt;sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14

<sup>--</sup> No detection limit or water quality standard

<sup>\*</sup> None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

<sup>&</sup>lt;sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

	D	ate												7/1	1/13										
	Surve	еу Туре						_					,	V - Vess	el Based										
C	onstruct	ion Activ	ity	D	EM - D	Demolit	ion		Com	ments															
	Т	ide												Е	bb										
		Location												Pie	r 22		,								
Loca	nple ation					Upcu	rrent (	Ambie	nt)				attanto a consultanto de la consultanto			Marin and State of Paris and		D	owncu	ırrent		***************************************			
11	nce to urce		7.			Appro	x. 500	- 1000	ft <sup>1</sup>									Outs	ide Silt	Curtai	in <sup>2</sup>				
Samı	ple ID					071	113-DE	EM-E-U	J									071	113-DI	EM-E-	)				
		pa							P	СВ		0	ne	ed							P	СВ		0	ne
200	rafameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Uı	nit	(ppm)				· Aurania		(ppb)						(ppm)						(ppb)					
Detectio	on Limit <sup>3</sup>	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water (		*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66		-			16	0.0006
sult4	s	28.0	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	58.0	ND	ND	3.6	ND	10	ND	ND	ND	ND	1.2	ND
Analytical Result <sup>4</sup>	M	29.6	ND	ND	3.7	NĐ	12	ND	ND	ND	ND	ND	ND	78.8	ND	ND	3.5	ND	13	ND	ND	ND	ND	2.4	ND
Analy	В	36.8	NĐ	ND	4.1	ND :	14	ND	ND	ND	ND	ND	ND	92.8	ND	ND	3.5	ND	10	ND	ND	ND	ND	3.3	ND

- <sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible
- $^{2}\ \mbox{Samples}$  were collected as close as safely possible to the silt curtain
- <sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14
- -- No detection limit or water quality standard
- \* None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

### ND Not Detected

<sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

Upcurrent (Ambient) concentration exceeds the Water Quality Standard. Downcurrent concentration is less than 30% over background.3

	D	ate												7/1	1/13						`				
	Surve	у Туре										_		V - Vess	el Based										
С	onstruct	ion Activi	ity	D	EM - E	emolit	ion		Com	ments															
Santa Caracteria de Caracteria	Т	ide													ood										
		Location												Pie	r 23										
Loca						Upcu	rrent (	Ambie	nt)									D	owncu	irrent					
	nce to urce					Appro	x. 500	- 1000	ft <sup>1</sup>									Outs	ide Silt	Curtai	n <sup>2</sup>				
Samı	ple ID					071	113-DE	EM-F-L	J									071	113-DI	EM-F-	)				
		led							P	СВ		0	ne	led							P	СВ	-	I .	ne
or o	משומנום	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	, Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Uı	nit	(ppm)						(ppb)						(ppm)						(ppb)					
Detectio	on Limit³	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water (	-	* 0.0007 8.2 3.4 8 66										16	0.0006	*	0.0007	8.2	3.4	8	66	-				16	0.0006
ssult <sup>4</sup>	s	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	26.4	ND	ND	3.5	ND	ND	ND	ND	ND	ND	2.8	ND		
W 14.8 ND  14.8 ND  14.8 ND  14.8 ND					3.7	ND	11	ND	ND	ND	ND	ND	ND	35.2	ND	ND	3.5	ND	ND	ND	ND	ND	ND	0.94	ND
<b>B</b> 21.2 <i>ND</i>					3.6	ND	NĐ	ND	ND	ND	ND	ND	ND	18.0	ND	ND	4.3	ND	16	ND	ND	ND	ND	0.89	NĐ

### ND Not Detected

Upcurrent (Ambient) concentration exceeds the Water Quality Standard. Downcurrent concentration is less than 30% over background.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible

<sup>&</sup>lt;sup>2</sup> Samples were collected as close as safely possible to the silt curtain

<sup>&</sup>lt;sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14

<sup>--</sup> No detection limit or water quality standard

<sup>\*</sup> None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

<sup>&</sup>lt;sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

	D	ate												7/1	5/13										
	Surve	у Туре												V - Ves	sel Basec										
С	onstruct	ion Activ	ity	[	DEM - I	Demoli	tion		Com	ments						Tir	mber P	ile Clu	ster Rem	oval					
	Т	ide												Е	bb										
		Location	ersmannen er en											Pie	er 24										
San Loca						Upcu	rrent (A	mbien	t) .								,	****	Downcur	rent		360			
Distar Sou	nce to Irce					Appro	x. 500 -	1000 f	t <sup>1</sup>									Out	side Silt (	Curtain	2				
Samp	ole ID			071	513-DEI	M-E-U					,					07	1513-DE	M-E-D							
		pel							P	СВ		a,	ne	led							P	СВ		u u	e l
Parameter		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	nit	(ppm)					(	ppb)						(ppm)						(ppb)					
								0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1
Water (		*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
sult <sup>4</sup>	s	12.4	ND	ND	4.2	ND .	12	ND	ND	ND	ND	ND	ND	23.2	ND	ND	4.4	ND	10	ND	ND	ND	ND	0.93	ND .
Analytical Result <sup>4</sup>	М	22.0	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	24.4	ND	ND	4.8	ND	12	ND	ND	ND	ND	0.21	ND
Analy B 28.0 V				ND	4.3	ND	10	ND	ND	ND	ND	ND	ND	35.2	ND	ND	4.1	ND	14	ND	ND	ND	ND	4.4	ND

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- <sup>2</sup> Samples were collected as close as safely possible to the silt curtain
- <sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14
- -- No detection limit or water quality standard
- \* None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

- <sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom
- <sup>5</sup> Upcurrent (ambient) concentration exceed the Water Quality Standard, Downcurrent concentration is less than 30% over background.

	D	ate												7/1	5/13										
	Surve	еу Туре												V - Ves	sel Based	<u> </u>									
С	onstruct	ion Activ	rity		DEM -	Demoli	tion		Com	ments						Tir	nber F	ile Clu	ster Rem	oval					
<u> </u>	Т	ide												· Fl	lood										
		Location												Pie	er 26										
San Loca	ation					Upcu	rrent (A	mbier	ıt)										Downcur	rent					
Distar Sou						Appro	x. 500 -	1000	ft <sup>1</sup>									Out	side Silt (	Curtair	n <sup>2</sup>				
Samp	ole ID					071	513-DE	M-F-U										07	1513-DE	M-F-D					
		led							P	СВ		- w	ne	Jed							P	СВ		ω.	ne
O reterret		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	nit	(ppm)					(	(ppb)						(ppm)						(ppb)					
Detec Lim		Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05		-			0.2	0.2	0.2	0.2		0.1
Water (		*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
esulf <sup>4</sup>	S	11.6	ND	ND	4.3	ND	10	ND	ND	ND	ND	ND	ND:	23.2	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Result <sup>4</sup>	М	18.8	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	16.8	ND	ND	4.3	ND	10	ND	ND	ND	ND	ND	ND
Anal	٠в	20.4	0.1	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	22.0	ND	ND	4.6	ND	ND .	ND	ND	ND	ND	0.26	ND

<sup>&</sup>lt;sup>1</sup> Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible

<sup>&</sup>lt;sup>2</sup> Samples were collected as close as safely possible to the silt curtain

<sup>&</sup>lt;sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14

<sup>--</sup> No detection limit or water quality standard

<sup>\*</sup> None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

<sup>&</sup>lt;sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

<sup>&</sup>lt;sup>5</sup> Upcurrent (ambient) concentration exceed the Water Quality Standard, Downcurrent concentration is less than 30% over background.

	D	ate												7/1	6/13										
	Surve	у Туре												V - Vess	sel Based										
С	onstruct	ion Activ	ity		DEM - I	Demoli	tion		Com	ments						Tir	nber P	ile Clu	ster Remo	oval					
	Т	ide												Е	bb										
		Location												Pie	er 27										
Sam Loca						Upcu	rrent (A	mbien	t)									l	Downcur	rent					
Distar Sou						Appro	x. 500 -	1000 f	t <sup>1</sup>			-						Out	side Si <u>l</u> t C	urtain <sup>i</sup>	2 ,				
Samp	Sample ID         071613-DEM-E-U           PCB																	07	1613-DE <b>l</b>	M-E-D					
		pər							PO	СВ		0	ne	per							PO	СВ		d)	ne
Parameter		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	nit	(ppm)					(	ppb)						(ppm)		-			(	ppb)	,				
Detectio	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05		-			0.2	0.2	0.2	0.2	-	0.1		
Water ( Stand		y * 0.0007 8.2 3.4 8 66							- <b>-</b>			16	0.0006	*	0.0007	8.2	3.4	8	66			:		16	0.0006
sult4	S	24.0	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	59.2	ND	ND	4.0	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Result <sup>4</sup>	М	24.8	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	31.2	ND	ND	4.0	ND .	ND	ND	ND	ND	ND	0.063	ND
<b>B</b> 40.4 <i>Ni</i>				ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	39.2	ND	ND	4.1	ND	ND	ND	ND	ND	ND	0.16	ND

- 1 Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible
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- <sup>3</sup> Based on New York State Department of Environmental Conservation Permit Facility ID 3-9903-00043/00012-14
- -- No detection limit or water quality standard
- \* None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages

- <sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom
- <sup>5</sup> Upcurrent (ambient) concentration exceed the Water Quality Standard, Downcurrent concentration is less than 30% over background.

	D	ate												7/1	6/13										
	Surve	у Туре												V - Ves	sel Based	t									
C	onstruct	ion Activ	ity	С	EM - [	Demoli	tion		Com	ments						Tir	nber P	ile Clu	ster Rem	noval					
	Т	ide												FI	ood										
		Location	10											Pie	er 28										
Sam Loca	ition					Upcu	rrent (A	mbien	ıt)										Downcur	rrent	-				
Distar Sou						Appro	x. 500 -	1000 1	ft <sup>1</sup>									Out	side Silt (	Curtair	12				
Samp	ole ID					071	613-DEI	M-F-U										07	1613-DE	M-F-D					
		per					-		P	СВ		0	ne	led							P	СВ		0	ne
Parameter		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur					(	ppb)						(ppm)						(ppb)							
Unit (ppm)  Detection					-	-		0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05		1	1		0.2	0.2	0.2	0.2		0.1
Water 0		*	0.0007	8.2	3.4	8	66					16	0.0006	*	0.0007	8.2	3.4	8	66					16	0.0006
esult <sup>4</sup>	s	22.8	ND	ND	4.2	ND	10	ND	ND	ND	ND	ND	ND	58.0	ND	ND	4.0	ND	ND	ND	ND	ND	ND	0.70	ND
Analytical Result <sup>4</sup>		33.6	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	74.0	ND	ND	3.8	ND	ND	ND	ND	ND	ND	0.13	ND
Analy	В	63.2	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	40.4	ND	ND	4.5	ND	12	ND	ND	ND	ND	0.95	ND

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	D	ate												7/1	7/13										
	Surve	у Туре				2.6						- 1 - 2 - 2 - 2		V - Ves	sel Based				1		1.112				To be that
С	onstruct	ion Activ	ity	[	DEM -	Demoli	tion		Com	ments			- 1111			Tir	mber P	ile Clu	ster Rem	oval					
	Т	ide	0.00		Ex Ex		-							E	bb			12.		*2.1		*****			
	Source	Location											200	Pie	er 29			1							
San Loca	nple ation	1111				Upcu	rrent (A	mbien	t)					21			100		Downcur	rent		*			
Distar Sou						Appro	x. 500 -	1000 f	t¹									Out	side Silt (	Curtain	2				
Samp	ole ID		200	100 :		071	713-DEI	M-E-U						***				07	1713-DE	M-E-D	- 1317			1	
	1.11	pa					W.b.		P	СВ			ЭС	pa							P	СВ			ЭЕ
Daramoter		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	nit	(ppm)						ppb)		1.		71,7		(ppm)			16.0			(ppb)			75.7		11.
Detectio	on Limit <sup>3</sup>	Ambient + 100	0.05				-	0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05	=		-		0.2	0.2	0.2	0.2	-	0.1
Water (		*	0.0007	8.2	3.4	8	66	_		<u>.</u>		16	0.0006	*	0.0007	8.2	3.4	8	66	-	=		-	16	0.0006
ssult <sup>4</sup>	S	18.0	ND	ND	4.0	ND	13	ND	ND	ND	ND	ND	ND	27.2	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Result <sup>4</sup>	М	26.0	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	38.0	ND	ND	4.0	ND	11	ND	ND	ND	ND	ND	ND
Analy	В	26.0	ND	ND	3.9	ND	11	ND	ND	ND	ND	ND	ND	50.8	ND	ND	4.0	ND	11	ND	ND	ND	ND	0.51	ND

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	D	ate												7/1	8/13										
	Surve	еу Туре		1111		1.781		1.1111						V - Ves	sel Based	d		1111							
C	onstruct	ion Activ	rity		DEM -	Demoli	tion		Com	ments						Tir	nber P	ile Clu	ster Rem	oval					
	T	ide	****	100	11.		1							FI	ood								****		
	Source	Location												Pie	er 31										
Sam Loca						Upcu	rrent (A	mbier	nt)					400					Downcui	rent					
Distar Sou						Appro	x. 500 -	1000	ft <sup>1</sup>	10.0								Out	side Silt (	Curtair	n <sup>2</sup>				
Samp	le ID	7 1 1 1 1 1		· m :		071	813-DE	M-F-U		1111			10	6.2722				07	1813-DE	M-F-D					
		pa							P	СВ	1111		ne	pa							P	СВ		0	l e
Parameter		Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Naphthalene	Benzo(a)pyrene
Ur	nit	(ppm)		t or y		-1.7		(ppb)		**.				(ppm)				1.		(ppb)					
Detec Lim		Ambient + 100	0.05					0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05	-				0.2	0.2	0.2	0.2		0.1
Water (		*	0.0007	8.2	3.4	8	66			=		16	0.0006	*	0.0007	8.2	3.4	8	66		-	_	-	16	0.0006
esult4	S	12.8	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND.	ND	12.8	ND	ND	4.4	ND	19	ND	ND	ND	ND	ND	ND
Analytical Result⁴	М	21.2	ND	ND	4.0	ND	ND	ND	ND	ND	ND	ND	ND	14.0	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В	19.2	ND	ND	4.2	ND	11	ND	ND	ND	ND	ND	ND	39.2	ND	ND	3.9	ND	11	ND	ND	ND	ND	ND	ND

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