	Surv	ey Date												11/12	2/2015										
	Surve	у Туре												V - Vess	sel Based										
Co	nstruct	ion Activ	ity	,	ARM -	Armori	ng		Com	nents															
	Т	ide												E	bb										
	Source	Location												Armoring	Barge 26	3									
Sam Loca						Upcu	rrent (A	mbien	t)									ı	Downcur	rent					
Distan Sou						Appro	x. 500 -	1000 f	t ¹										500 ft ²	2					
Samp	le ID					111	215-A26	3-E-U										11	1215-A26	3-E-D					
Sample	Time		_				14:38							_					14:16						
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
Un	it	(ppm)					((ppb)						(ppm)					((ppb)					
Detec Lim		Ambient + 100	0.05			-	1	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 C		*	0.0007	8.2	5.6	8.0	66		-	-	-	16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006
esult ⁴	s						NS												NS						
Analytical Result⁴	М	23.7	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В						NS												NS						

- ¹ Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible
- ² Samples collected at the edge of the 500 ft mixing zone
- ³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14
- ⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom
- ⁵ Upcurrent (ambient) concentration exceeds the Water Quality Standard, Downcurrent concentration is less than 30% over background.
- -- 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
- NS = Not Sampled due to water depth, pursuant to 8/6/13 modification to Condition 60 of NYSDEC Permit Facility ID 3-9903-00043/00012-14.

	Surve	ey Date												11/13	3/2015										
	Surve	у Туре												V - Vess	sel Based										
Co	onstructi	ion Activ	ity	,	ARM -	Armori	ing		Com	ments															
		ide												Fl	ood										
		Location												Armoring	Barge 26	3									
Sam Loca					Upcu	rrent (A	mbien	t)									ı	Downcuri	rent						
Distan Sou						Appro	x. 500 -	1000 f	t ¹										500 ft ²	2					
Samp	le ID					111	315-A26	3-F-U										11	1315-A26	3-F-D					
Sample	Time					-	9:38		-				_				-		10:09						
ter		Suspended Solids	7.	_	<u>.</u>			:42		ZB	09:	lene	yrene	ended	5	_	Je.			:42	84 BC		09;	lene	yrene
Parameter		Total Susp Solid	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
Un	it	(ppm)					(ppb)						(ppm)					(ppb)					ı
Detection	n Limit³	Ambient + 100	0.05				1	0.2	0.2	0.2	0.2	-	0.1	Ambient + 100	0.05		-		1	0.2	0.2	0.2	0.2	-	0.1
Water C		*	0.0007	8.2	5.6	8.0	66		-	-		16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	1	-	1	16	0.0006
esult ⁴	s	17.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Resulf⁴	М		_				NS								_				NS						_
Analy	В	16.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected

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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁻⁻ 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

	Surve	ey Date												11/13	3/2015										
	Surve	у Туре												V - Vess	sel Based										
Co	nstruct	ion Activ	ity	,	ARM -	Armori	ng		Com	nents															
	Т	ide												E	bb										
		Location												Armoring	Barge 26	3									
Sam Loca						Upcu	rrent (A	mbien	t)									ı	Downcur	rent					
Distan Sou						Appro	x. 500 -	1000 f	t ¹										500 ft ²	2					
Samp	le ID					111	315-A26	3-E-U										11	1315-A26	3-E-D					
Sample	Time						13:42												13:26						
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
Un	it	(ppm)					((ppb)						(ppm)					((ppb)					
Detec Lim		Ambient + 100	0.05				1	0.2	0.2	0.2	0.2	-	0.1	Ambient + 100	0.05		ı	1	1	0.2	0.2	0.2	0.2		0.1
Water C Stand		*	0.0007	8.2	5.6	8.0	66	1	-	-	1	16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006
esult ⁴	s		NS NS																NS						
Analytical Result ⁴	М	49.3	0.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	77.5	0.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В						NS												NS						

ND = Not Detected

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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁵ Upcurrent (ambient) concentration exceeds the Water Quality Standard, Downcurrent concentration is less than 30% over background.

⁻⁻ 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

	Surv	ey Date												11/14	1/2015										
	Surve	у Туре												V - Vess	sel Based										
C	onstruct	ion Activ	ity	,	ARM -	Armori	ng		Com	nents															
	Т	ide												Fl	ood										
		Location												Armoring	Barge 26	3									
Sam Loca	tion					Upcu	rrent (A	mbien	t)									ı	Downcur	rent					
Distan Sou			Approx. 500 - 1000 ft ¹																500 ft ²	!					
Samp	le ID		111415-A263-F-U															11	1415-A26	3-F-D					
Sample	Time						08:04												08:20						
Parameter		Solids	Mercury	Nickel	Copper	Lead	Zinc	1242	1248		1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	1242	1248		1260	Naphthalene	Benzo(a)pyrene
Para		Total Su So	Mer	Ä	Col	Fe	ΙΖ	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Napht	Benzo(Total Su So	Mer) N	loo	Le	ΙΖ	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Napht	Benzo(
Un	it	(ppm)					(ppb)						(ppm)					(ppb)					
Detectio	n Limit ³	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	5.6	8.0	66		-			16	0.0006	*	0.0007	8.2	5.6	8.0	66	-			-	16	0.0006
esulf⁴	s		NS																NS						
Analytical Result ⁴	М	27.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В						NS												NS						

ND = Not Detected

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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁻⁻ 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

	Surv	ey Date												11/16	6/2015										
	Surve	у Туре												V - Vess	sel Based										
Co	nstruct	ion Activ	ity	,	ARM -	Armori	ng		Com	nents															
	Т	ide												E	bb										
		Location												Armoring I	Barge 263	3									
Sam Loca						Upcu	rrent (A	mbien	t)									ı	Downcur	rent					
Distan Sou						Appro	x. 500 -	1000 f	t ¹										500 ft ²	2					
Samp	le ID					1110	615-A26	3-E-U										11	1615-A26	3-E-D					
Sample	Time						08:03												07:47						
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
Un	it	(ppm)		<u> </u>			((ppb)		<u> </u>	<u> </u>			(ppm)					((ppb)	<u> </u>				
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 C Stand		*	0.0007	8.2	5.6	8.0	66		-	-		16	0.0006	*	0.0007	8.2	5.6	8.0	66	-		-	-	16	0.0006
sult4	s						NS												NS						
Analytical Result⁴	М	54	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43.3	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В						NS	-											NS	-					-

- 1 Samples collected at a location up current of the source where the water quality effects of the project are no longer discernible
- 2 Samples collected at the edge of the 500 ft mixing zone $\,$
- ³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14
- ⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom
- ⁵ Upcurrent (ambient) concentration exceeds the Water Quality Standard, Downcurrent concentration is less than 30% over background.
- -- 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
- NS = Not Sampled due to water depth, pursuant to 8/6/13 modification to Condition 60 of NYSDEC Permit Facility ID 3-9903-00043/00012-14.

	Surv	ey Date												11/18	3/2015										
	Surve	у Туре												V - Vess	sel Based										
Co	nstruct	ion Activ	ity	,	ARM -	Armori	ng		Com	ments															
	Т	ide												E	bb										
	Source	Location												Armoring	Barge 26	3									
Sam Loca						Upcu	rrent (A	mbien	t)									ı	Downcur	rent					
Distan Sou						Appro	x. 500 -	1000 f	t ¹										500 ft ²	2					
Samp	le ID					111	815-A26	3-E-U										11	1815-A26	3-E-D					
Sample	Time						10:46												10:19						
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
Un	it	(ppm)					((ppb)						(ppm)					((ppb)					
Detec Lim		Ambient + 100	0.05			ı	ı	0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05	1	1	1		0.2	0.2	0.2	0.2		0.1
Water C Stand		*	0.0007	8.2	5.6	8.0	66					16	0.0006	*	0.0007	8.2	5.6	8.0	66		-			16	0.0006
esulť	s		NS																NS						
Analytical Result⁴	М	25.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anal)	В						NS												NS						

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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁻⁻ 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

	Surv	ey Date												11/19	9/2015										
	Surve	у Туре												V - Vess	sel Based										
Co	nstruct	ion Activ	ity		ARM -	Armori	ng		Com	nents															
	Т	ide												E	bb										
		Location												Armoring	Barge 26	3									
Sam Loca						Upcu	rrent (A	mbien	t)									ı	Downcur	rent					
Distan Sou						Appro	x. 500 -	1000 f	t ¹										500 ft ²	2					
Samp	le ID					111	915-A26	3-E-U										11	1915-A26	3-E-D					
Sample	Time						10:00												09:39						
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
Un	it	(ppm)					((ppb)						(ppm)					((ppb)					
Detec Lim		Ambient + 100	0.05				1	0.2	0.2	0.2	0.2	-	0.1	Ambient + 100	0.05		ı	1	1	0.2	0.2	0.2	0.2		0.1
Water C Stand		*	0.0007	8.2	5.6	8.0	66			-	1	16	0.0006	*	0.0007	8.2	5.6	8.0	66		-	-	-	16	0.0006
ssult ⁴	s						NS												NS						
Analytical Result⁴	М	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В						NS												NS						

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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁻⁻ 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

	Surv	ey Date												11/20)/2015										
	Surve	у Туре												V - Vess	sel Based										
Co	nstruct	ion Activ	ity	,	ARM -	Armori	ng		Comr	nents															
	Т	ide												E	bb										
	Source	Location												Armoring	Barge 26	3									
Sam Loca						Upcu	rrent (A	mbien	t)									ı	Downcur	rent					
Distan Sou						Appro	x. 500 -	1000 f	t ¹										500 ft ²	2					
Samp	le ID					112	015-A26	3-E-U										11	2015-A26	3-E-D					
Sample	Time						12:04												11:50						
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
Un	it	(ppm)					((ppb)						(ppm)						(ppb)				•	
Detec Lim		Ambient + 100	0.05				1	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 C Stand		*	0.0007	8.2	5.6	8.0	66		-	-		16	0.0006	*	0.0007	8.2	5.6	8.0	66			-	-	16	0.0006
esult ⁴	s	NS																	NS						
Analytical Result⁴	М	44.3	3 0.07 ND											44.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analy	В			-			NS	-											NS	-					

ND = Not Detected

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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁵ Upcurrent (ambient) concentration exceeds the Water Quality Standard, Downcurrent concentration is less than 30% over background.

⁻⁻ 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

	Surv	ey Date												11/21	1/2015										
	Surve	у Туре												V - Vess	sel Based										
Co	nstruct	ion Activ	ity		ARM -	Armori	ng		Com	ments															
	Т	ide												E	bb										
	Source	Location												Armoring	Barge 26	3									
Sam Loca						Upcu	rrent (A	mbien	t)									ı	Downcur	rent					
Distan Sou						Appro	x. 500 -	1000 f	t¹										500 ft ²	2					
Samp	le ID					112	115-A26	3-E-U										11:	2115-A26	3-E-D					
Sample	Time						10:12												09:52						
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
Un	it	(ppm)		•	•			(ppb)		•	•			(ppm)					((ppb)					
Detec Lim		Ambient + 100	0.05			1	1	0.2	0.2	0.2	0.2	1	0.1	Ambient + 100	0.05	1	1	1	1	0.2	0.2	0.2	0.2	1	0.1
Water C Stand		*	0.0007	8.2	5.6	8.0	66		-			16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006
ssult ⁴	s	16.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.3	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Result⁴	М						NS												NS						
naly	В	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	40	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
- ² Samples collected at the edge of the 500 ft mixing zone
- ³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14
- ⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom
- ⁵ Reported value exceeds the Water Quality Standard as stated in Condition 61 of NYSDEC 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
- NS = Not Sampled due to water depth, pursuant to 8/6/13 modification to Condition 60 of NYSDEC Permit Facility ID 3-9903-00043/00012-14.

	Surve	ey Date												11/23	3/2015										
	Surve	у Туре												V - Vess	sel Based										
C	onstructi	ion Activ	ity	,	ARM -	Armori	ng		Com	nents															
		ide												Fl	ood										
		Location												Armoring	Barge 26	3									
Sam Loca	tion					Upcu	rrent (A	mbien	t)									l	Downcur	rent					
Distan Sou		Approx. 500 - 1000 ft ¹																	500 ft ²	2					
Samp	le ID	112315-A263-F-U																11	2315-A26	3-F-D					
Sample	e Time						09:23		-			-	_						09:04	-					
		pel							P	СВ			ne	pel							PC	В		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	nit	(ppm)					(ppb)						(ppm)					(ppb)					
Detectio	n Limit ³	Ambient + 100	0.05		-	-	1	0.2	0.2	0.2	0.2	-	0.1	Ambient + 100	0.05				1	0.2	0.2	0.2	0.2	1	0.1
Water (*	0.0007	8.2	5.6	8.0	66	-	-	-		16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-	1	16	0.0006
esult ⁴	s	22.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	46.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Resulf⁴	М		NS																NS						
Anal	В	43	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	55.3	0.06	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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁵ Upcurrent (ambient) concentration exceeds the Water Quality Standard, Downcurrent concentration is less than 30% over background.

⁻⁻ 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

	Surve	ey Date												11/24	/2015										
	Surve	у Туре												V - Vesse	el Based										
Co	nstruct	ion Activ	ity	-	ARM -	Armori	ng		Com	ments															
	-	ide												Et	b										
		Location												Armoring E	Barge 263	3									
Sam Locat						Upcu	rrent (A	mbien	t)									D	owncu	rrent					
Distan Soui			Approx. 500 - 1000 ft ¹																500 ff	t ²					
Samp	le ID					112	415-A26	3-E-U										112	415-A2	63-E-D)				
Sample	Time						11:08												10:36	6					
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
Un	it	(ppm)					((ppb)		•	•			(ppm)					•	(ppb)				•	
Detec Lim		Ambient + 100	0.05				ı	0.2	0.2	0.2	0.2	1	0.1	Ambient + 100	0.05	-	ı	1	1	0.2	0.2	0.2	0.2	ı	0.1
Water C Stand		*	0.0007	8.2	5.6	8.0	66		-		-	16	0.0006	*	0.0007	8.2	5.6	8.0	66				1	16	0.0006
ssulf ⁴	s	38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Result⁴	М						NS												NS						
Anal	В	42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28.7	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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁻⁻ 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

	Surve	ey Date												11/2	5/2015										
	Surve	у Туре												V - Vess	sel Based										
C	onstructi	ion Activ	ity	,	ARM -	Armori	ing		Comr	nents															
	T	ide												FI	ood										
		Location												Armoring	Barge 26	3									
Sam Loca	ition	Upcurrent (Ambient)															l	Downcur	rent						
Distar Sou		Approx. 500 - 1000 ft ¹																	500 ft ²	2					
Samp	ole ID					112	515-A26	3-F-U										11	2515-A26	3-F-D					
Sample	e Time	_					09:10	-		-		-					-		08:51	-					
ī	5	papu	_					23	P(8	ene	rene	papu	_		_			21	P(8	ane	rene
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)					ı	(ppm)					(ppb)				ı	
Detectio	n Limit ³	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	5.6	8.0	66	-	-	-	-	16	0.0006	*	0.0007	8.2	5.6	8.0	66	-			-	16	0.0006
esult ⁴	s	44.3	0.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	76	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Result ⁴	М		NS																NS						
Analy	В	124	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	120	0.1	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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁵ Upcurrent (ambient) concentration exceeds the Water Quality Standard, Downcurrent concentration is less than 30% over background.

⁻⁻ 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

Survey Date														11/27	7/2015										
	Surve	у Туре												V - Vessel Based											
Co	ARM - Armoring Comments																								
Tide											Flood														
Source Location							Armoring Barge 263																		
Sam Loca	tion	Upcurrent (Ambient)											Downcurrent												
Distan Sou						Appro	x. 500 -	1000 f	t ¹					500 ft ²											
Samp	le ID	ID 112715-A263-F-U										112715-A263-F-D													
Sample	Time																								
									P	СВ	1	a	ne	pel							PC	В		o o	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
Un	it	(ppm)	(ppb)											(ppm) (ppb)											
Detection	n Limit ³	Ambient + 100	0.05			-	ı	0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05				I	0.2	0.2	0.2	0.2	1	0.1
Water C		*	0.0007	8.2	5.6	8.0	66	-	-	-		16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-	1	16	0.0006
esult ⁴	s	81.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	85.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Result⁴	М						NS												NS						
Analyt		92.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	83.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected

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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁻⁻ 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

Survey Date					11/28/2015 V - Vessel Based ARM - Armoring Comments Flood Armoring Barge 263 Upcurrent (Ambient) Downcurrent																				
	Surve	у Туре												V - Vessel Based											
Construction Activity						ARM - Armoring Comments																			
Tide																									
Source Location							1																		
Sam Loca	tion	Upcurrent (Ambient)										Downcurrent													
Distan Sou						Appro	x. 500 -	1000 f	t ¹					500 ft ²											
Samp	le ID	112815-A263-F-U											112815-A263-F-D												
Sample	Time																								
		Total Suspended Solids							P	СВ		a	ne	pel							PC	В		o o	ne
Parameter	Parameter		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
Un	it	(ppm)		(ppb)										(ppm) (ppb)											
Detectio	n Limit ³	Ambient + 100	0.05			-	ı	0.2	0.2	0.2	0.2	1	0.1	Ambient + 100	0.05				1	0.2	0.2	0.2	0.2	1	0.1
Water C		*	0.0007	8.2	5.6	8.0	66		-	-		16	0.0006	*	0.0007	8.2	5.6	8.0	66	-		-	-	16	0.0006
esult ⁴	s	48.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	47.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Resulf⁴	М						NS												NS						
Analyt		64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected

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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁻⁻ 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

	Surve	ey Date											11/30	0/2015											
	Surve	у Туре												V - Vessel Based											
Construction Activity ARM - A						Armori	ng		Com	nents															
Tide											Flood														
Source Location							Armoring Barge 263																		
Sam Loca	tion	Upcurrent (Ambient)											Downcurrent												
Distan Sou						Appro	x. 500 -	1000 f	t ¹					500 ft ²											
Samp	le ID	113015-A263-F-U											113015-A263-F-D												
Sample	e Time																								
		pel							P	СВ			ne	pel							PC	В		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	nit	(ppm)		(ppb)										(ppm) (ppb)											
Detectio	n Limit ³	Ambient + 100	0.05				1	0.2	0.2	0.2	0.2		0.1	Ambient + 100	0.05				1	0.2	0.2	0.2	0.2	1	0.1
Water (*	0.0007	8.2	5.6	8.0	66	-	1	-		16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	1	1	16	0.0006
sulf ⁴	s	29.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Resulf⁴	М						NS												NS						
Analyt		46	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41	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

² Samples collected at the edge of the 500 ft mixing zone

³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

⁵ Upcurrent (ambient) concentration exceeds the Water Quality Standard, Downcurrent concentration is less than 30% over background.

⁻⁻ 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