	Surve	ey Date  y Type													12/01/2015												
	Surve	у Туре												V - Vess	el Based												
Co	nstruct	ion Activ	ity		ARM -	Armori	ng		Com	nents																	
	Т	ide												E	bb												
		Location												Armoring Barge 263													
Sam Loca						Upcu	rrent (A	mbien	t)					Downcurrent													
Distan Sou						Appro	x. 500 -	1000 f	t <sup>1</sup>					500 ft <sup>2</sup>													
Samp	le ID					120	115-A26	64-E-U						120115-A264-E-D													
Sample	Time		09:39													09:23											
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	ı	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		
sult4	s	NS																	NS								
Analytical Result⁴	М	28.7	ND	ND	ND <sup>5</sup>	ND	ND	ND	ND	ND	ND	ND	ND	37	ND	ND	ND 5	ND	ND	ND	ND	ND	ND	ND	ND		
Analy	В	NS NS												NS													

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.

<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 collected at the edge of the 500 ft mixing zone

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

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

<sup>&</sup>lt;sup>5</sup> Spiked sample recovery not within control limits

<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

	Surve	ey Date												12/03/2015												
	Surve	у Туре												V - Vess	sel Based											
Co	onstructi	ion Activ	ity	,	ARM -	Armori	ing		Com	ments																
		ide												Flood												
		Location												Armoring Barge 263												
Sam Loca						Upcu	rrent (A	mbien	t)					Downcurrent												
Distan Sou						Appro	x. 500 -	1000 f	t <sup>1</sup>					500 ft <sup>2</sup>												
Samp	le ID					120	315-A26	3-F-U						120315-A263-F-D												
Sample	Time			16:05										16:27												
meter	Parameter		Mercury	Nickel	Copper	Lead	Zinc	1242		1254 B	1260	Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	1242	1248		1260	Naphthalene	Benzo(a)pyrene	
Para		Total Suspended Solids	Mer	ž	Col	Le	Z	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Napht	Benzo(a	Total Su So	Mer	ž	Col	Le	Z	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Napht	Benzo(	
Un	it	(ppm)		(ppb)															(	ppb)						
Detectio	n Limit³	Ambient + 100	0.05				1	0.2	0.2	0.2	0.2	I	0.1	Ambient + 100	0.05		-		ı	0.2	0.2	0.2	0.2		0.1	
Water 0		*	0.0007	8.2	5.6	8.0	66					16	0.0006	*	0.0007	8.2	5.6	8.0	66					16	0.0006	
ssulf⁴ ∽		23.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Analytical Resulf⁴	М		_				NS						_		_				NS						_	
Analy	В	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

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.

<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 collected at the edge of the 500 ft mixing zone

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

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

<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

	Surv	y Date y Type													12/04/2015												
	Surve	у Туре												V - Vess	sel Based												
Co	nstruct	ion Activ	ity	,	ARM -	Armori	ng		Comr	nents																	
	Т	ide												Ebb													
		Location												Armoring Barge 263													
Sam Loca						Upcu	rrent (A	mbien	t)					Downcurrent													
Distan Sou						Appro	x. 500 -	1000 f	t <sup>1</sup>					500 ft <sup>2</sup>													
Samp	le ID		120415-A263-E-U												120415-A263-E-D												
Sample	Time	09:49													09:33												
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	1	0.1	Ambient + 100	0.05	1	ı	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	1	1	ı	1	16	0.0006	*	0.0007	8.2	5.6	8.0	66		1	1	ı	16	0.0006		
esult <sup>4</sup>	S					NS												NS									
Analytical Result⁴	М	23.5 ND							ND	25.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
Analy	В	NS													•		•	NS	•	•				-			

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.

<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 collected at the edge of the 500 ft mixing zone

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

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

<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

ND = Not Detected

	Surv	ey Date												12/10/2015											
	Surve	у Туре												V - Vess	sel Based										
Co	nstruct	ion Activ	ity		DEC - I	Decant	ing		Com	ments															
		ide													bb										
		Location												Armoring Barge A263											
Sam Loca						Upcu	rrent (A	mbien	t)					Downcurrent											
Distan Sou	Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>													
Samp	le ID	121015-D534-E-U												121015-D534-E-D											
Sample	imple Time 12:00												11:35												
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)															(	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	1	-		-	16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006
ssult <sup>4</sup>	s	11.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analytical Result <sup>4</sup>	М	15.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Analyti		26.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected

<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 collected at the edge of the 500 ft mixing zone

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

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

<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

	Surve	ey Date												12/11/2015												
	Surve	у Туре												V - Vess	sel Based											
C	onstructi	ion Activ	ity	[	DEC - I	Decant	ing		Comr	ments																
		ide												Fl	ood											
		Location												Armoring Barge A263												
Sam Loca	tion					Upcu	rrent (A	mbien	t)					Downcurrent												
Distan Sou		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>												
Samp	le ID	121115-D534-F-U										121115-D534-F-D														
Sample	e Time			09:03											08:30											
		pel							PC	СВ		a	ne	pel							P	СВ		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	
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	5.6	8.0	66	1	1	-	1	16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-		16	0.0006	
ssult <sup>4</sup>	s	17.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Analytical Resulf <sup>4</sup>		57.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
<b>B</b> 103 0.06				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	78.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

ND = Not Detected

<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 collected at the edge of the 500 ft mixing zone

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

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

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

<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