

Survey Date		11/12/2015																								
Survey Type		V - Vessel Based																								
Construction Activity		ARM - Armoring					Comments																			
Tide		Ebb																								
Source Location		Armoring Barge 263																								
Sample Location		Upcurrent (Ambient)												Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>												
Sample ID		111215-A263-E-U												111215-A263-E-D												
Sample Time		14:38												14:16												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene		
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260				
Unit	(ppm)	(ppb)												(ppm)	(ppb)											
Detection 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 Quality Standard <sup>3</sup>	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006		
Analytical Result <sup>4</sup>	S	NS												NS												
	M	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		
	B	NS												NS												

- Notes:
- 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.

Survey Date		11/13/2015																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring					Comments																		
Tide		Flood																							
Source Location		Armoring Barge 263																							
Sample Location		Upcurrent (Ambient)											Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID		111315-A263-F-U											111315-A263-F-D												
Sample Time		9:38											10:09												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260			
Unit		(ppm)		(ppb)										(ppm)		(ppb)									
Detection 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 Quality Standard <sup>3</sup>		*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006
Analytical Result <sup>4</sup>	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
	M	NS											NS												
	B	16.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes: <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 collected at the edge of the 500 ft mixing zone

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

<sup>4</sup> 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

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.

Survey Date		11/13/2015																						
Survey Type		V - Vessel Based																						
Construction Activity		ARM - Armoring					Comments																	
Tide		Ebb																						
Source Location		Armoring Barge 263																						
Sample Location	Upcurrent (Ambient)											Downcurrent												
Distance to Source	Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID	111315-A263-E-U											111315-A263-E-D												
Sample Time	13:42											13:26												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260		
Unit	(ppm)	(ppb)											(ppm)	(ppb)										
Detection 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 Quality Standard <sup>3</sup>	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006
Analytical Result <sup>4</sup>	S	NS											NS											
	M	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
	B	NS											NS											

Notes: <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 collected at the edge of the 500 ft mixing zone

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

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

<sup>5</sup> 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.

<b>Survey Date</b>		11/14/2015																							
<b>Survey Type</b>		V - Vessel Based																							
<b>Construction Activity</b>		ARM - Armoring				<b>Comments</b>																			
<b>Tide</b>		Flood																							
<b>Source Location</b>		Armoring Barge 263																							
<b>Sample Location</b>		<b>Upcurrent (Ambient)</b>											<b>Downcurrent</b>												
<b>Distance to Source</b>		Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
<b>Sample ID</b>		111415-A263-F-U											111415-A263-F-D												
<b>Sample Time</b>		08:04											08:20												
<b>Parameter</b>	<b>Total Suspended Solids</b>	<b>Mercury</b>	<b>Nickel</b>	<b>Copper</b>	<b>Lead</b>	<b>Zinc</b>	<b>PCB</b>				<b>Naphthalene</b>	<b>Benzo(a)pyrene</b>	<b>Total Suspended Solids</b>	<b>Mercury</b>	<b>Nickel</b>	<b>Copper</b>	<b>Lead</b>	<b>Zinc</b>	<b>PCB</b>				<b>Naphthalene</b>	<b>Benzo(a)pyrene</b>	
							<b>Aroclor 1242</b>	<b>Aroclor 1248</b>	<b>Aroclor 1254</b>	<b>Aroclor 1260</b>									<b>Aroclor 1242</b>	<b>Aroclor 1248</b>	<b>Aroclor 1254</b>	<b>Aroclor 1260</b>			
<b>Unit</b>		(ppm)	(ppb)											(ppm)	(ppb)										
<b>Detection Limit<sup>3</sup></b>		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
<b>Water Quality Standard<sup>3</sup></b>		*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006
<b>Analytical Result<sup>4</sup></b>	<b>S</b>	NS											NS												
	<b>M</b>	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
	<b>B</b>	NS											NS												

- Notes:
- <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 collected at the edge of the 500 ft mixing zone
  - <sup>3</sup> Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14
  - <sup>4</sup> 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  
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.

Survey Date		11/16/2015																						
Survey Type		V - Vessel Based																						
Construction Activity		ARM - Armoring					Comments																	
Tide		Ebb																						
Source Location		Armoring Barge 263																						
Sample Location	Upcurrent (Ambient)											Downcurrent												
Distance to Source	Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID	111615-A263-E-U											111615-A263-E-D												
Sample Time	08:03											07:47												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260		
Unit	(ppm)	(ppb)											(ppm)	(ppb)										
Detection 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 Quality Standard <sup>3</sup>	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006
Analytical Result <sup>4</sup>	S	NS											NS											
	M	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
	B	NS											NS											

Notes: <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 collected at the edge of the 500 ft mixing zone

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

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

<sup>5</sup> 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.

Survey Date		11/18/2015																						
Survey Type		V - Vessel Based																						
Construction Activity		ARM - Armoring					Comments																	
Tide		Ebb																						
Source Location		Armoring Barge 263																						
Sample Location	Upcurrent (Ambient)											Downcurrent												
Distance to Source	Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID	111815-A263-E-U											111815-A263-E-D												
Sample Time	10:46											10:19												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260		
Unit	(ppm)	(ppb)											(ppm)	(ppb)										
Detection 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 Quality Standard <sup>3</sup>	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006
Analytical Result <sup>4</sup>	S	NS											NS											
	M	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
	B	NS											NS											

Notes: 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

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.

Survey Date		11/19/2015																						
Survey Type		V - Vessel Based																						
Construction Activity		ARM - Armoring					Comments																	
Tide		Ebb																						
Source Location		Armoring Barge 263																						
Sample Location	Upcurrent (Ambient)											Downcurrent												
Distance to Source	Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID	111915-A263-E-U											111915-A263-E-D												
Sample Time	10:00											09:39												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260		
Unit	(ppm)	(ppb)											(ppm)	(ppb)										
Detection 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 Quality Standard <sup>3</sup>	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006
Analytical Result <sup>4</sup>	S	NS											NS											
	M	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	B	NS											NS											

Notes: 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

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.

Survey Date		11/20/2015																						
Survey Type		V - Vessel Based																						
Construction Activity		ARM - Armoring					Comments																	
Tide		Ebb																						
Source Location		Armoring Barge 263																						
Sample Location	Upcurrent (Ambient)											Downcurrent												
Distance to Source	Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID	112015-A263-E-U											112015-A263-E-D												
Sample Time	12:04											11:50												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260		
Unit	(ppm)	(ppb)											(ppm)	(ppb)										
Detection 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 Quality Standard <sup>3</sup>	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006	*	0.0007	8.2	5.6	8.0	66	-	-	-	-	16	0.0006
Analytical Result <sup>4</sup>	S	NS											NS											
	M	44.3	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	44.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	B	NS											NS											

Notes: <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 collected at the edge of the 500 ft mixing zone

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

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

<sup>5</sup> 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.



Survey Date		11/21/2015																						
Survey Type		V - Vessel Based																						
Construction Activity		ARM - Armoring					Comments																	
Tide		Ebb																						
Source Location		Armoring Barge 263																						
Sample Location	Upcurrent (Ambient)											Downcurrent												
Distance to Source	Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID	112115-A263-E-U											112115-A263-E-D												
Sample Time	10:12											09:52												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260		
Unit	(ppm)	(ppb)											(ppm)	(ppb)										
Detection 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 Quality Standard <sup>3</sup>	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006
Analytical Result <sup>4</sup>	S	16.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.3	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	M	NS											NS											
	B	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes: <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 collected at the edge of the 500 ft mixing zone

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

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

<sup>5</sup> 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.

Survey Date		11/23/2015																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring					Comments																		
Tide		Flood																							
Source Location		Armoring Barge 263																							
Sample Location		Upcurrent (Ambient)											Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID		112315-A263-F-U											112315-A263-F-D												
Sample Time		09:23											09:04												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260			
Unit		ppm	ppb											ppm	ppb										
Detection 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 Quality Standard <sup>3</sup>		*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006
Analytical Result <sup>4</sup>	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
	M	NS											NS												
	B	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

- Notes:
- <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 collected at the edge of the 500 ft mixing zone
  - <sup>3</sup> Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14
  - <sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom
  - <sup>5</sup> 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.

Survey Date		11/24/2015																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring					Comments																		
Tide		Ebb																							
Source Location		Armoring Barge 263																							
Sample Location		Upcurrent (Ambient)												Downcurrent											
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>											
Sample ID		112415-A263-E-U												112415-A263-E-D											
Sample Time		11:08												10:36											
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260			
Unit		(ppm)	(ppb)										(ppm)	(ppb)											
Detection 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 Quality Standard <sup>3</sup>		*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006
Analytical Result <sup>4</sup>	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
	M	NS												NS											
	B	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

Notes: <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 collected at the edge of the 500 ft mixing zone

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

<sup>4</sup> 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

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.

Survey Date		11/25/2015																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring					Comments																		
Tide		Flood																							
Source Location		Armoring Barge 263																							
Sample Location		Upcurrent (Ambient)											Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID		112515-A263-F-U											112515-A263-F-D												
Sample Time		09:10											08:51												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260			
Unit		(ppm)		(ppb)										(ppm)		(ppb)									
Detection 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 Quality Standard <sup>3</sup>		*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006
Analytical Result <sup>4</sup>	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
	M	NS											NS												
	B	124	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	120	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND

- Notes:
- <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 collected at the edge of the 500 ft mixing zone
  - <sup>3</sup> Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14
  - <sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom
  - <sup>5</sup> 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.

Survey Date		11/27/2015																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring					Comments																		
Tide		Flood																							
Source Location		Armoring Barge 263																							
Sample Location		Upcurrent (Ambient)											Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID		112715-A263-F-U											112715-A263-F-D												
Sample Time		09:21											09:42												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260			
Unit		(ppm)		(ppb)										(ppm)		(ppb)									
Detection 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 Quality Standard <sup>3</sup>		*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006
Analytical Result <sup>4</sup>	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
	M	NS											NS												
	B	92.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	83.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- Notes:
- <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 collected at the edge of the 500 ft mixing zone
  - <sup>3</sup> Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14
  - <sup>4</sup> 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  
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.

Survey Date		11/28/2015																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring					Comments																		
Tide		Flood																							
Source Location		Armoring Barge 263																							
Sample Location		Upcurrent (Ambient)											Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID		112815-A263-F-U											112815-A263-F-D												
Sample Time		09:22											09:02												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260			
Unit		(ppm)		(ppb)										(ppm)		(ppb)									
Detection 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 Quality Standard <sup>3</sup>		*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006
Analytical Result <sup>4</sup>	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
	M	NS											NS												
	B	64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes: <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 collected at the edge of the 500 ft mixing zone

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

<sup>4</sup> 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

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.

Survey Date		11/30/2015																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring					Comments																		
Tide		Flood																							
Source Location		Armoring Barge 263																							
Sample Location		Upcurrent (Ambient)											Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>												
Sample ID		113015-A263-F-U											113015-A263-F-D												
Sample Time		09:38											10:01												
Parameter	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	Total Suspended Solids	Mercury	Nickel	Copper	Lead	Zinc	PCB				Naphthalene	Benzo(a)pyrene	
							Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260									Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260			
Unit		(ppm)	(ppb)										(ppm)	(ppb)											
Detection 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 Quality Standard <sup>3</sup>		*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006	*	0.0007	8.2	5.6	8.0	66	--	--	--	--	16	0.0006
Analytical Result <sup>4</sup>	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
	M	NS											NS												
	B	46	0.08 <sup>5</sup>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- Notes:
- <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 collected at the edge of the 500 ft mixing zone
  - <sup>3</sup> Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14
  - <sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom
  - <sup>5</sup> 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.