

Survey Date		12/01/2015																						
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 ¹											500 ft ²												
Sample ID	120115-A264-E-U											120115-A264-E-D												
Sample Time	09:39											09:23												
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 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 Quality Standard ³	*	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 ⁴	S	NS											NS											
	M	28.7	ND	ND	ND ⁵	ND	ND	ND	ND	ND	ND	ND	ND	37	ND	ND	ND ⁵	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 Spiked sample recovery not within control limits

-- 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		12/03/2015																							
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 ¹											500 ft ²												
Sample ID		120315-A263-F-U											120315-A263-F-D												
Sample Time		16:05											16:27												
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 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 Quality Standard ³		*	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 ⁴	S	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
	M	NS											NS												
	B	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- 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		12/04/2015																						
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 ¹											500 ft ²												
Sample ID	120415-A263-E-U											120415-A263-E-D												
Sample Time	09:49											09:33												
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 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 Quality Standard ³	*	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 ⁴	S	NS											NS											
	M	23.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25.7	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		12/10/2015																						
Survey Type		V - Vessel Based																						
Construction Activity		DEC - Decanting					Comments																	
Tide		Ebb																						
Source Location		Armoring Barge A263																						
Sample Location	Upcurrent (Ambient)												Downcurrent											
Distance to Source	Approx. 500 - 1000 ft ¹												500 ft ²											
Sample ID	121015-D534-E-U												121015-D534-E-D											
Sample Time	12:00												11:35											
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 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 Quality Standard ³	*	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 ⁴	S	11.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	M	15.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	B	26.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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

Survey Date		12/11/2015																							
Survey Type		V - Vessel Based																							
Construction Activity		DEC - Decanting					Comments																		
Tide		Flood																							
Source Location		Armoring Barge A263																							
Sample Location		Upcurrent (Ambient)											Downcurrent												
Distance to Source		Approx. 500 - 1000 ft ¹											500 ft ²												
Sample ID		121115-D534-F-U											121115-D534-F-D												
Sample Time		09:03											08:30												
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 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 Quality Standard ³		*	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 ⁴	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
	M	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	103	0.06 ⁵	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	78.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- 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