

Survey Date		11/15/2013																								
Survey Type		V - Vessel Based																								
Construction Activity		ARM - Armoring				Comments																				
Tide		Flood																								
Source Location		Armoring Operations																								
Sample Location		Upcurrent (Ambient)												Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>												
Sample ID		111513-A263-F-U												111513-A263-F-D												
Sample Time		8:53												9:11												
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	24.8	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	36.8	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	
	M	NS												NS												
	B	44.8	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	57.6	ND	ND	ND	ND	14	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

-- 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.

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

Survey Date		11/16/2013																								
Survey Type		V - Vessel Based																								
Construction Activity		ARM - Armoring				Comments																				
Tide		Ebb																								
Source Location		Armoring Operations																								
Sample Location		Upcurrent (Ambient)												Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>												
Sample ID		111613-A263-E-U												111613-A263-E-D												
Sample Time		11:14												11:27												
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 <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	19.6	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	23.2	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND		
	B	NS												NA												

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<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

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Survey Date		11/16/2013																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring				Comments																			
Tide		Flood																							
Source Location		Armoring Operations																							
Sample Location		Upcurrent (Ambient)												Downcurrent											
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>											
Sample ID		111613-A263-F-U												111613-A263-F-D											
Sample Time		09:53												09:35											
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 <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	16.0	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	19.6	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	ND
	M	NS												NS											
	B	29.2	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	40.4	ND	ND	ND	ND	14	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

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Survey Date		11/18/2013																								
Survey Type		I - Visual Inspection																								
Construction Activity		ARM - Armoring				Comments																				
Tide		Ebb																								
Source Location		Armoring Operations																								
Sample Location		Upcurrent (Ambient)												Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>												
Sample ID		111813-A263-E-U												111813-A263-E-D												
Sample Time		14:36												14:22												
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	15.6	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	15.6	ND	ND	ND	ND	43	ND	ND	ND	ND	ND	ND	
	B	NS												NS												

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Survey Date		11/18/2013																								
Survey Type		I - Visual Inspection																								
Construction Activity		ARM - Armoring				Comments																				
Tide		Flood																								
Source Location		Armoring Operations																								
Sample Location		Upcurrent (Ambient)												Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>												
Sample ID		111813-A263-F-U												111813-A263-F-D												
Sample Time		12:17												11:56												
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	8.00	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	16.8	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND		
	M	NS												NS												
	B	7.60	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	26.4	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	

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Survey Date		11/19/2013																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring				Comments																			
Tide		Flood																							
Source Location		Armoring Operations																							
Sample Location		Upcurrent (Ambient)												Downcurrent											
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>											
Sample ID		111913-A263-F-U												111913-A263-F-D											
Sample Time		10:04												10:32											
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	26.0	ND	ND	3.1	ND	12	ND	ND	ND	ND	ND	ND	62.8	ND	ND	3.1	ND	13	ND	ND	ND	ND	ND	ND
	B	NS												NS											

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Survey Date		11/19/2013																						
Survey Type		V - Vessel Based																						
Construction Activity		ARM - Armoring			Comments																			
Tide		Ebb																						
Source Location		Armoring Operations																						
Sample Location		Upcurrent (Ambient)											Downcurrent											
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>											500 ft <sup>2</sup>											
Sample ID		111913-A263-E-U											111913-A263-E-D											
Sample Time		14:53											14:36											
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	NS											NS											
	M	115	ND	ND	3.0	ND	15	ND	ND	ND	ND	ND	103	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND
	B	NS											NS											

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Survey Date		11/20/2013																									
Survey Type		V - Vessel Based																									
Construction Activity		ARM - Armoring				Comments																					
Tide		Flood																									
Source Location		Armoring Operations																									
Sample Location		Upcurrent (Ambient)												Downcurrent													
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>													
Sample ID		112013-A263-F-U												112013-A263-F-D													
Sample Time		11:28												11:15													
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	48.8	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	ND	388 <sup>5</sup>	ND	ND	3.3	ND	14	ND	ND	ND	ND	ND	ND		
	B	NS												NS													

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<sup>5</sup> Sample considered unrepresentative of armoring operation due to other activities in the immediate area.

Survey Date		11/20/2013																									
Survey Type		V - Vessel Based																									
Construction Activity		ARM - Armoring				Comments																					
Tide		Ebb																									
Source Location		Armoring Operations																									
Sample Location		Upcurrent (Ambient)												Downcurrent													
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>													
Sample ID		112013-A263-E-U												112013-A263-E-D													
Sample Time		14:13												13:59													
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	42.8	ND	ND	3.1	ND	13	ND	ND	ND	ND	ND	ND	50.4	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND		
	B	NS												NS													

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Survey Type		V - Vessel Based																									
Construction Activity		ARM - Armoring				Comments																					
Tide		Ebb																									
Source Location		Armoring Operations																									
Sample Location		Upcurrent (Ambient)												Downcurrent													
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>													
Sample ID		112113-A263-E-U												112113-A263-E-D													
Sample Time		15:10												15:23													
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 <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	16.8	ND	ND	3.4	ND	15	ND	ND	ND	ND	ND	ND	35.2	ND	ND	3.3	ND	16	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
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  - 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.
  - <sup>4</sup> S = Near Surface, M = Mid-Depth, B = Near Bottom

Survey Date		11/21/2013																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring				Comments																			
Tide		Flood																							
Source Location		Armoring Operations																							
Sample Location		Upcurrent (Ambient)												Downcurrent											
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>											
Sample ID		112113-A263-F-U												112113-A263-F-D											
Sample Time		10:07												09:51											
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	NS												NS											
	M	17.6	ND	ND	3.3	ND	16	ND	ND	ND	ND	ND	ND	38.8	ND	ND	3.4	ND	14	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

-- 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.

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



Survey Date		11/22/2013																								
Survey Type		V - Vessel Based																								
Construction Activity		ARM - Armoring			Comments																					
Tide		Ebb																								
Source Location		Armoring Operations																								
Sample Location		Upcurrent (Ambient)												Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>												
Sample ID		112213-A263-E-U												112213-A263-E-D												
Sample Time		15:37												15:26												
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	20.8	ND	ND	3.3	ND	16	ND	ND	ND	ND	ND	20.8	ND	ND	3.5	ND	15	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

-- 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.

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



Survey Date		11/22/2013																									
Survey Type		V - Vessel Based																									
Construction Activity		ARM - Armoring				Comments																					
Tide		Flood																									
Source Location		Armoring Operations																									
Sample Location		Upcurrent (Ambient)												Downcurrent													
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>													
Sample ID		112213-A263-F-U												112213-A263-F-D													
Sample Time		10:05												09:50													
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	14.8	ND	ND	3.1	ND	15	ND	ND	ND	ND	ND	ND	26.0	ND	ND	3.2	ND	14	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

-- 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.

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

Survey Date		11/22/2013																							
Survey Type		V - Vessel Based																							
Construction Activity		PDC - Pile Driving - Zone C				Comments																			
Tide		Flood																							
Source Location		Pier 32																							
Sample Location		Upcurrent (Ambient)												Downcurrent											
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>											
Sample ID		112213-P032-F-U												112213-P032-F-D											
Sample Time		15:09												13:18											
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	10.8	ND	ND	3.3	ND	12	ND	ND	ND	ND	ND	ND	14.4	ND	ND	3.8	ND	13	ND	ND	ND	ND	ND	ND
	M	26.8	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	ND	24.8	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND
	B	30.4	ND	ND	ND	ND	18	ND	ND	ND	ND	ND	ND	46.0	ND	ND	ND	ND	16	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

-- 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.

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

Survey Date		11/23/2013																									
Survey Type		V - Vessel Based																									
Construction Activity		ARM - Armoring				Comments																					
Tide		Flood																									
Source Location		Armoring Operations																									
Sample Location		Upcurrent (Ambient)												Downcurrent													
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>													
Sample ID		112313-A263-F-U												112313-A263-F-D													
Sample Time		11:16												11:29													
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	53.6	ND	ND	3.1	ND	16	ND	ND	ND	ND	ND	ND	63.2	ND	ND	3.2	ND	13	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

-- 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.

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

Survey Date		11/25/2013																								
Survey Type		V - Vessel Based																								
Construction Activity		ARM - Armoring				Comments																				
Tide		Flood																								
Source Location		Armoring Operations																								
Sample Location		Upcurrent (Ambient)												Downcurrent												
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>												
Sample ID		112513-A263-F-U												112513-A263-F-D												
Sample Time		11:22												11:08												
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	61.0	ND	ND	4.2	ND	16	ND	ND	ND	ND	ND	ND	19.6	ND	ND	3.7	ND	18	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

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

Survey Date		11/26/2013																							
Survey Type		V - Vessel Based																							
Construction Activity		ARM - Armoring				Comments																			
Tide		Ebb																							
Source Location		Armoring Operations																							
Sample Location		Upcurrent (Ambient)												Downcurrent											
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>											
Sample ID		112613-A263-E-U												112613-A263-E-D											
Sample Time		09:52												09:40											
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	ND	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	94.0	ND	ND	ND	ND	15	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

-- No detection limit or water quality standard

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ND = Not Detected

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

Survey Date		11/26/2013																									
Survey Type		V - Vessel Based																									
Construction Activity		ARM - Armoring				Comments																					
Tide		Flood																									
Source Location		Armoring Operations																									
Sample Location		Upcurrent (Ambient)												Downcurrent													
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>													
Sample ID		112613-A263-F-U												112613-A263-F-D													
Sample Time		12:42												12:54													
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	ND	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	12.0	ND	ND	ND	ND	15	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

-- 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

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

Survey Date		11/26/2013																							
Survey Type		V - Vessel Based																							
Construction Activity		PDC - Pile Driving - Zone C				Comments																			
Tide		Flood																							
Source Location		Pier 31																							
Sample Location		Upcurrent (Ambient)												Downcurrent											
Distance to Source		Approx. 500 - 1000 ft <sup>1</sup>												500 ft <sup>2</sup>											
Sample ID		112613-P031-F-U												112613-P031-F-D											
Sample Time		13:53												14:14											
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	10.0	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND
	M	ND	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND
	B	24.0	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	19.0	ND	ND	ND	ND	22	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

-- 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.

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