

Survey Date		11/02/2013																								
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 ¹												500 ft ²												
Sample ID		110213-A263-E-U												110213-A263-E-D												
Sample Time		13:12												13:23												
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	12.0	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	23.6	ND	ND	ND	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 discernible² Samples collected at the edge of the 500 ft mixing zone³ 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		11/02/2013																							
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 ¹												500 ft ²											
Sample ID		110213-A263-F-U												110213-A263-F-D											
Sample Time		10:25												10:45											
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	12.8	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	30.8	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND
	M	NS												NS											
	B	16.8	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	ND	65.2	ND	ND	ND	ND	13	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

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Survey Date		11/05/2013																								
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 ¹												500 ft ²												
Sample ID		110513-A263-E-U												110513-A263-E-D												
Sample Time		14:37												14:25												
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	6.00	ND	ND	8.9	3.9	29	ND	ND	ND	ND	ND	ND	14.4	ND	ND	6.0	ND	31	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 discernible² Samples collected at the edge of the 500 ft mixing zone³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

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⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom⁵ Upcurrent (ambient) concentration exceeds the Water Quality Standard, Downcurrent concentration is less than 30% over background.

Survey Date		11/06/2013																							
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 ¹												500 ft ²											
Sample ID		110613-A263-E-U												110613-A263-E-D											
Sample Time		14:24												14:37											
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	18.8	ND	ND	3.3	3.1	21	ND	ND	ND	ND	ND	ND	17.6	ND	ND	8.8	ND	23	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 discernible² Samples collected at the edge of the 500 ft mixing zone³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

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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 ¹												500 ft ²												
Sample ID		110613-A263-F-U												110613-A263-F-D												
Sample Time		12:25												12:09												
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 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	36.4	ND	ND	3.8	ND	20	ND	ND	ND	ND	ND	ND	21.6	ND	ND	5.5	ND	21	ND	ND	ND	ND	ND	ND	
	M	NS												NS												
	B	58.8	ND	ND	4.4	ND	23	ND	ND	ND	ND	ND	ND	46.4	ND	ND	7.3	ND	25	ND	ND	ND	ND	ND	ND	

Notes:

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Survey Date		11/07/2013																							
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 ¹												500 ft ²											
Sample ID		110713-A263-E-U												110713-A263-E-D											
Sample Time		16:51												16:37											
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	20.4	ND	ND	4.5	ND	23	ND	ND	ND	ND	ND	ND	44.4	ND	ND	4.9	ND	20	ND	ND	ND	ND	ND	ND
	M	NS												NS											
	B	30.8	ND	ND	4.0	ND	21	ND	ND	ND	ND	ND	ND	43.2	ND	ND	6.0	ND	22	ND	ND	ND	ND	ND	ND

- Notes:
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 - 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
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Survey Date		11/07/2013																									
Survey Type		V - Vessel Based																									
Construction Activity		PDC - Pile Driving - Zone C				Comments																					
Tide		Ebb																									
Source Location		Pier 32																									
Sample Location		Upcurrent (Ambient)												Downcurrent													
Distance to Source		Approx. 500 - 1000 ft ¹												500 ft ²													
Sample ID		110713-P032-E-U												110713-P032-E-D													
Sample Time		16:11												16:28													
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	8.00	ND	ND	3.5	ND	19	ND	ND	ND	ND	ND	ND	8.40	ND	ND	8.0	3.4	21	ND	ND	ND	ND	ND	ND		
	M	7.60	ND	ND	3.6	ND	23	ND	ND	ND	ND	ND	ND	8.80	ND	ND	ND	ND	22	ND	ND	ND	ND	ND	ND		
	B	7.20	ND	ND	4.4	ND	22	ND	ND	ND	ND	ND	ND	14.4	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND		

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 - 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
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Survey Date		11/07/2013																							
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 ¹												500 ft ²											
Sample ID		110713-P032-F-U												110713-P032-F-D											
Sample Time		15:06												14:46											
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	5.60	ND	ND	4.7	ND	23	ND	ND	ND	ND	ND	ND	10.8	ND	ND	8.9	ND	22	ND	ND	ND	ND	ND	ND
	M	12.4	ND	ND	6.3	ND	26	ND	ND	ND	ND	ND	ND	13.6	ND	ND	12	ND	20	ND	ND	ND	ND	ND	ND
	B	18.8	ND	ND	7.5	ND	27	ND	ND	ND	ND	ND	ND	25.6	ND	ND	9.6	ND	21	ND	ND	ND	ND	ND	ND

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

Survey Date		11/08/2013																									
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 ¹												500 ft ²													
Sample ID		110813-A263-F-U												110813-A263-F-D													
Sample Time		09:10												09:24													
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	21.6	ND	ND	5.2	ND	20	ND	ND	ND	ND	ND	ND	22.8	ND	ND	4.5	ND	18	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

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Survey Date		11/09/2013																							
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 ¹												500 ft ²											
Sample ID		110913-A263-F-U												110913-A263-F-D											
Sample Time		11:47												11:24											
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	27.6	ND	ND	3.3	ND	17	ND	ND	ND	ND	ND	ND	44.8	ND	ND	3.8	ND	18	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 discernible² Samples collected at the edge of the 500 ft mixing zone³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

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Survey Date		11/12/2013																								
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 ¹												500 ft ²												
Sample ID		111213-A263-F-U												111213-A263-F-D												
Sample Time		15:12												15:01												
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 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	30.8	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	ND	49.2	ND	ND	ND	ND	19	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		11/12/2013																								
Survey Type		V - Vessel Based																								
Construction Activity		PDC - Pile Driving - Zone C				Comments																				
Tide		Ebb																								
Source Location		Pier 31																								
Sample Location		Upcurrent (Ambient)												Downcurrent												
Distance to Source		Approx. 500 - 1000 ft ¹												500 ft ²												
Sample ID		111213-P031-E-U												111213-P031-E-D												
Sample Time		11:38												11:09												
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 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	13.2	ND	ND	3.4	ND	15	ND	ND	ND	ND	ND	11.6	ND	ND	3.1	ND	17	ND	ND	ND	ND	ND	ND	
		M	22.0	ND	ND	4.4	ND	16	ND	ND	ND	ND	ND	ND	32.4	ND	ND	3.1	ND	19	ND	ND	ND	ND	ND	
		B	69.6	ND	ND	3.1	ND	17	ND	ND	ND	ND	ND	ND	32.8	ND	ND	4.0	ND	18	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 discernible² Samples collected at the edge of the 500 ft mixing zone³ 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

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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.

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

Survey Date		11/13/2013																							
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 ¹											500 ft ²												
Sample ID		111313-A263-E-U											111313-A263-E-D												
Sample Time		12:26											11:52												
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 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	67.2	ND	ND	4.0	ND	22	ND	ND	ND	ND	ND	ND	94.4	ND	ND	3.8	ND	22	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

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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.

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

Survey Date		11/13/2013																								
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 ¹												500 ft ²												
Sample ID		111313-A263-F-U												111313-A263-F-D												
Sample Time		15:45												15:55												
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	28.8	ND	ND	ND	ND	24	ND	ND	ND	ND	ND	ND	26.4	ND	ND	ND	ND	21	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 discernible² Samples collected at the edge of the 500 ft mixing zone³ 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

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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.

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

Survey Date		11/13/2013																								
Survey Type		V - Vessel Based																								
Construction Activity		PDC - Pile Driving - Zone C				Comments																				
Tide		Ebb																								
Source Location		Pier 31																								
Sample Location		Upcurrent (Ambient)												Downcurrent												
Distance to Source		Approx. 500 - 1000 ft ¹												500 ft ²												
Sample ID		111313-P031-E-U												111313-P031-E-D												
Sample Time		13:31												13:03												
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	18.4	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	21.2	ND	ND	3.3	ND	19	ND	ND	ND	ND	ND	ND		
	M	33.6	ND	ND	3.8	3.5	19	ND	ND	ND	ND	ND	26.4	ND	ND	3.4	ND	19	ND	ND	ND	ND	ND	ND		
	B	28.8	ND	ND	3.1	ND	21	ND	ND	ND	ND	ND	25.6	ND	ND	3.2	ND	20	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 discernible² Samples collected at the edge of the 500 ft mixing zone³ 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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⁴ S = Near Surface, M = Mid-Depth, B = Near Bottom

Survey Date		11/13/2013																						
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 ¹											500 ft ²											
Sample ID		111313-P031-F-U											111313-P031-F-D											
Sample Time		16:10											16:28											
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	13.2	ND	ND	ND	ND	18	ND	ND	ND	ND	ND	14.4	ND	ND	3.1	ND	17	ND	ND	ND	ND	ND	ND
	M	14.8	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	14.8	ND	ND	3.2	ND	20	ND	ND	ND	ND	ND	ND
	B	15.0	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	16.4	ND	ND	3.0	ND	20	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 discernible² Samples collected at the edge of the 500 ft mixing zone³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

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Survey Date		11/14/2013																								
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 ¹												500 ft ²												
Sample ID		111413-A263-E-U												111413-A263-E-D												
Sample Time		11:46												10:25												
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	34.0	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	16.4	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	ND	
	M	NS												NS												
	B	39.6	ND	ND	ND	ND	18	ND	ND	ND	ND	ND	ND	ND	50.8	ND	ND	ND	ND	18	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

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Survey Date		11/14/2013																									
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 ¹												500 ft ²													
Sample ID		111413-A263-F-U												111413-A263-F-D													
Sample Time		09:12												09:01													
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 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	14.4	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	ND	37.2	ND	ND	ND	ND	18	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 discernible² Samples collected at the edge of the 500 ft mixing zone³ Based on New York State Department of Environmental Conservation (NYSDEC) Permit Facility ID 3-9903-00043/00012-14

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