

Carlos A. Gimenez, Mayor

Department of Regulatory and Economic Resources Environmental Resources Management 701 NW 1st Court, 4th Floor Miami, Florida 33136-3912 T 305-372-6756 F 305-372-6760

miamidade.gov

July 19, 2016

Howard Nelson Attorney at Law Bilzin Sumberg Baena Price & Axelrod LLP 1450 Brickell Avenue, 23rd Floor Miami, Florida 33131

Dear Mr. Nelson,

I certify that the attached pages 1 through 3 are a true and accurate copy of the electronic document titled D00\_Samp\_Sum in the RER-DERM Restoration and Enhancement Section records for the Miami Beach Marina Sewage Spill of June 2000.

Should you have any questions concerning these copies, please contact me at 305-372-6715 or <u>caporc@miamidade.gov</u>.

Sincerely,

Christopher Caporale, Manager Records Management Section

Attachments

Submitted into the public record for item(s) <u>SP.1 & SP.2</u> on <u>07/20/2016</u>, City Clerk

00851a DERM certified lotson -PULLAGe Ina

1111 E. 1.121

Summary of DERM R&E Section response to the contractor-caused rupture of a 54" raw sewage forcemain at Miami Beach Marina, June 20, 2000. This was DERM R&E sewage sampling event ID "D-00"

**D-00** - Tuesday June 20, 2000. At approximately 1:30 PM Ramesh Buch (EEL program), notified Susan Markley, Lee Hefty and Steve Blair, that a contractor driving pilings in the Miami Beach Marina, had ruptured the WASD 54" force main which carries untreated sewage from Bal Harbor, Surfside and Miami Beach to the WASD Central (Virginia Key) treatment plant. As of the notification, it was not known if the flow of sewage could be stopped, as there were no alternative (diverting) lines to carry the flow. Flow estimates were not known, however, the capacity of the line is 24 million gallons per day. Martin Roch was dispatched to collect samples at 5 locations in and around the area of the break. FDOH was contacted to allow consultation as to a possible Advisory area. It was determined based on the potential spread and movement of contaminated waters by wind, currents and tides, that the region from Julia Tuttle Causeway to Cape Florida, and west to Matheson Hammock, should be posted for possible sewage contamination. A joint advisory was released late Tuesday afternoon

- 6/21 – DERM sampled 27 sites (20 Bay sites, and 7 beach sites) to assess the scope and level of contamination. Results from 6/20 sampling indicated extensive transport of the effluent out Gov't Cut, and minimal contamination in adjacent bay waters. Unabated flow continued until Wednesday afternoon (after sample collection was completed), when an old 'out of service' City of Miami Beach 36" outfall line (out of 74<sup>th</sup> Street) was placed back into service. The ruptured portion of the line was isolated from the Miami Beach portion of the pipe (via a control valve in south Miami Beach), and untreated raw sewage was diverted offshore through the 74<sup>th</sup> St. outfall. The outfall terminated in 135 ft of water, approximately 2.5 miles offshore. WASD initiated chlorination of untreated sewage late Wednesday evening. Due to the initiation of the offshore diversion of untreated sewage, the Advisory was modified to include all coastal beach up to 163<sup>rd</sup> Street in Sunny Isles Beach.

- 6/22 – DERM sampled 41 sites adding a 15 site array associated with the offshore outfall. 16 offshore stations and 2 bay (inside Haulover inlet) were added to the sampling. 4 beach sites were discontinued, as these were duplicating the FDOH sampling. Results from the previous day indicated severe contamination only in the area of the ruptured pipeline. All other samples met County water quality standards. No modifications to the Advisory were made.

- 6/23 – DERM sampled 35 Sites. Additional duplicative beach sites were eliminated as well and the offshore sites were modified relative to prevailing winds and currents. Results of 6/22 sampling indicated contamination only at the offshore at the effluent surface plume (or boil). The rupture site had a low bacterial count, believed to be an effect of a strong incoming tide at the time of sampling. Bay samples between the Rickenbacker and the Tuttle causeways did show detectable bacteria, although the numbers were relatively low, and within standards and comparable to historic median values. No modifications to the Advisory were made.

- 6/24 – DERM sampled 35 Sites. The offshore matrix was adjusted to account for prevailing wind and currents. Results of 6/23 samples indicated severe contamination at the site of the pipeline rupture and the offshore effluent surface plume (or boil). All other samples were within County surface water quality standards. No modifications to the Advisory were made.
- 6/25- DERM sampled 35 Sites. The offshore matrix was adjusted to account for prevailing wind and currents. Results of 6/24 samples were consistent with previous days results. No

RER-DERM							
<b>Records Management</b>							
Page 1 of 3							

violations of water quality standards have been documented by the sampling for any of the bay sites within the Rickenbacker to Julia Tuttle Causeway area. No modifications to the Advisory were made.

-6/26 – DERM sampled 38 sites. The 3 additional sites were offshore, north of Haulover Inlet. The additional sites were sampled to insure areas of detectable contamination were being covered. Only the offshore outfall plume station had coliform levels in excess of standards. No violations of water quality standards have been documented by the sampling for any of the bay sites within the Rickenbacker to Julia Tuttle Causeway area. Advisory was modified, opening Key Biscayne Beaches; all other beaches remained under the advisory.

- 6/27 – DERM sampled 32 Stations. Stations were located between the Julia Tuttle Cswy and immediately south of the Rickenbacker Cswy, offshore north and south of the outfall, central and northern beach locations and the north Biscayne Bay, inside of Haulover Inlet. The Biscayne Bay stations between the south of the Rickenbacker Cswy and Mathieson Hammock park were discontinued, as the Advisory for this area had been lifted. Two stations had bacterial levels in violation of County surface water quality standards: The break site (Miami Beach Marina) and the offshore outfall plume (i.e., boil area).

-6/28 – DERM sampled 32 Stations (same stations as 6/27). Two stations had bacterial levels in violation of County surface water quality standards: Gov't Cut fishing Pier (sampled on outgoing tide) and the offshore outfall plume (i.e., boil area).

-6/29 – DERM sampled 32 Stations (same stations as 6/27&28). Only one station had bacterial levels in violation of County surface water quality standards: The break site (Miami Beach Marina). DERM personnel conducting the offshore sampling stated that, due to a very strong northern current the offshore outfall plume (i.e., boil area) was not discernable. Sampling occurred at the generalized location of the 'boil' (based on previous days recorded sampling locations).

-6/30 – DERM sampled 29 Stations (same stations as 6/27&28, excepting the three stations in the Julia Tuttle basin). No stations had bacterial levels in violation of County surface water quality standards. DERM personnel conducting the offshore sampling, again stated that, due to a very strong northern current the offshore outfall plume (i.e., boil area) was not discernable. Sampling occurred at the generalized location of the 'boil' (based on previous days recorded sampling locations).

-7/1 – 7/3 – DERM sampled 29 Stations (same stations as 6/30). No stations had bacterial levels in violation of County surface water quality standards. DERM personnel conducting the offshore sampling, again stated that, due to a very strong northern current the offshore outfall plume (i.e., boil area) was not discernable. Sampling occurred at the generalized location of the 'boil' (based on previous days recorded sampling locations). At approximately 8:45 PM on July 3<sup>rd</sup>. WASD put the repaired 54 inch forcemain back into service, conveying waste water to the Central District Treatment Plant on Virginia Key. At approximately 10: 30 PM on July 3<sup>rd</sup>. WASD closed off the 74<sup>th</sup> Street offshore outfall, discontinuing all non-treated ocean disposal. Due to the possibility of residual material in the outfall pipe and the possibility of incomplete closure of the outfall, sampling was to continue until two consecutive days of clean (no violations) samples were obtained.

-7/4 – DERM sampled 7 Stations: the break area (Miami Beach Marina), Gov't Cut Fishing Pier, the offshore plume (boil) area and the central and northern beach stations. All samples were in compliance with County Water quality standards.

Submitted into the public record for item(s) <u>SP.1 & SP.2</u> on <u>07/20/2016</u>, City Clerk

RER-DERM Records Management Page \_\_\_\_\_ of \_\_\_\_ -7/5 – DERM sampled 7 Stations: the break area (Miami Beach Marina), Gov't Cut Fishing Pier, the offshore plume (boil) area and the central and northern beach stations. All samples were in compliance with County Water quality standards. As this provided the second consecutive day of 'clean' samples, and no indication of continued released of sewage associated with the force main break and repair, DERM discontinued emergency response sampling for this event.



## Summary of DERM R&E Section response to the contractor-caused rupture of a 54" raw sewage forcemain at Miami Beach Marina, June 20, 2000. This was DERM R&E sewage sampling event ID "D-00"

**D-00** - Tuesday June 20, 2000. At approximately 1:30 PM Ramesh Buch (EEL program), notified Susan Markley, Lee Hefty and Steve Blair, that a contractor driving pilings in the Miami Beach Marina, had ruptured the WASD 54" force main which carries untreated sewage from Bal Harbor, Surfside and Miami Beach to the WASD Central (Virginia Key) treatment plant. As of the notification, it was not known if the flow of sewage could be stopped, as there were no alternative (diverting) lines to carry the flow. Flow estimates were not known, however, the capacity of the line is 24 million gallons per day. Martin Roch was dispatched to collect samples at 5 locations in and around the area of the break. FDOH was contacted to allow consultation as to a possible Advisory area. It was determined based on the potential spread and movement of contaminated waters by wind, currents and tides, that the region from Julia Tuttle Causeway to Cape Florida, and west to Matheson Hammock, should be posted for possible sewage contamination. A joint advisory was released late Tuesday afternoon

- 6/21 – DERM sampled 27 sites (20 Bay sites, and 7 beach sites) to assess the scope and level of contamination. Results from 6/20 sampling indicated extensive transport of the effluent out Gov't Cut, and minimal contamination in adjacent bay waters. Unabated flow continued until Wednesday afternoon (after sample collection was completed), when an old 'out of service' City of Miami Beach 36" outfall line (out of 74<sup>th</sup> Street) was placed back into service. The ruptured portion of the line was isolated from the Miami Beach portion of the pipe (via a control valve in south Miami Beach), and untreated raw sewage was diverted offshore through the 74<sup>th</sup> St. outfall. The outfall terminated in 135 ft of water, approximately 2.5 miles offshore. WASD initiated chlorination of untreated sewage late Wednesday evening. Due to the initiation of the offshore diversion of untreated sewage, the Advisory was modified to include all coastal beach up to 163<sup>rd</sup> Street in Sunny Isles Beach.

- 6/22 - DERM sampled 41 sites adding a 15 site array associated with the offshore outfall. 16 offshore stations and 2 bay (inside Haulover inlet) were added to the sampling. 4 beach sites were discontinued, as these were duplicating the FDOH sampling. Results from the previous day indicated severe contamination only in the area of the ruptured pipeline. All other samples met County water quality standards. No modifications to the Advisory were made. - 6/23 - DERM sampled 35 Sites. Additional duplicative beach sites were eliminated as well and the offshore sites were modified relative to prevailing winds and currents. Results of 6/22 sampling indicated contamination only at the offshore at the effluent surface plume (or boil). The rupture site had a low bacterial count, believed to be an effect of a strong incoming tide at the time of sampling. Bay samples between the Rickenbacker and the Tuttle causeways did show detectable bacteria, although the numbers were relatively low, and within standards and comparable to historic median values. No modifications to the Advisory were made. - 6/24 – DERM sampled 35 Sites. The offshore matrix was adjusted to account for prevailing wind and currents. Results of 6/23 samples indicated severe contamination at the site of the pipeline rupture and the offshore effluent surface plume (or boil). All other samples were within County surface water quality standards. No modifications to the Advisory were made. - 6/25- DERM sampled 35 Sites. The offshore matrix was adjusted to account for prevailing wind and currents. Results of 6/24 samples were consistent with previous days results. No

violations of water quality standards have been documented by the sampling for any of the bay sites within the Rickenbacker to Julia Tuttle Causeway area. No modifications to the Advisory were made.

-6/26 – DERM sampled 38 sites. The 3 additional sites were offshore, north of Haulover Inlet. The additional sites were sampled to insure areas of detectable contamination were being covered. Only the offshore outfall plume station had coliform levels in excess of standards. No violations of water quality standards have been documented by the sampling for any of the bay sites within the Rickenbacker to Julia Tuttle Causeway area. Advisory was modified, opening Key Biscayne Beaches; all other beaches remained under the advisory.

- 6/27 – DERM sampled 32 Stations. Stations were located between the Julia Tuttle Cswy and immediately south of the Rickenbacker Cswy, offshore north and south of the outfall, central and northern beach locations and the north Biscayne Bay, inside of Haulover Inlet. The Biscayne Bay stations between the south of the Rickenbacker Cswy and Mathieson Hammock park were discontinued, as the Advisory for this area had been lifted. Two stations had bacterial levels in violation of County surface water quality standards: The break site (Miami Beach Marina) and the offshore outfall plume (i.e., boil area).

-6/28 – DERM sampled 32 Stations (same stations as 6/27). Two stations had bacterial levels in violation of County surface water quality standards: Gov't Cut fishing Pier (sampled on outgoing tide) and the offshore outfall plume (i.e., boil area).

-6/29 – DERM sampled 32 Stations (same stations as 6/27&28). Only one station had bacterial levels in violation of County surface water quality standards: The break site (Miami Beach Marina). DERM personnel conducting the offshore sampling stated that, due to a very strong

northern current the offshore outfall plume (i.e., boil area) was not discernable. Sampling occurred at the generalized location of the 'boil' (based on previous days recorded sampling locations).

-6/30 – DERM sampled 29 Stations (same stations as 6/27&28, excepting the three stations in the Julia Tuttle basin). No stations had bacterial levels in violation of County surface water quality standards. DERM personnel conducting the offshore sampling, again stated that, due to a very strong northern current the offshore outfall plume (i.e., boil area) was not discernable. Sampling occurred at the generalized location of the 'boil' (based on previous days recorded sampling locations).

-7/1 – 7/3 – DERM sampled 29 Stations (same stations as 6/30). No stations had bacterial levels in violation of County surface water quality standards. DERM personnel conducting the offshore sampling, again stated that, due to a very strong northern current the offshore outfall plume (i.e., boil area) was not discernable. Sampling occurred at the generalized location of the 'boil' (based on previous days recorded sampling locations). At approximately 8:45 PM on July 3<sup>rd</sup>. WASD put the repaired 54 inch forcemain back into service, conveying waste water to the Central District Treatment Plant on Virginia Key. At approximately 10: 30 PM on July 3<sup>rd</sup>. WASD closed off the 74<sup>th</sup> Street offshore outfall, discontinuing all non-treated ocean disposal. Due to the possibility of residual material in the outfall pipe and the possibility of incomplete closure of the outfall, sampling was to continue until two consecutive days of clean (no violations) samples were obtained.

-7/4 – DERM sampled 7 Stations: the break area (Miami Beach Marina), Gov't Cut Fishing Pier, the offshore plume (boil) area and the central and northern beach stations. All samples were in compliance with County Water quality standards.

-7/5 – DERM sampled 7 Stations: the break area (Miami Beach Marina), Gov't Cut Fishing Pier, the offshore plume (boil) area and the central and northern beach stations. All samples were in compliance with County Water quality standards. As this provided the second consecutive day of 'clean' samples, and no indication of continued released of sewage associated with the force main break and repair, DERM discontinued emergency response sampling for this event.

Station	Fecal	21-Jun Total	Fecal	22-Jun Total	Fecal	23-Jun Total	Fecal	24-Jun Total	Fecal	25-Jun Total	Fecal	26-Jun Total
D00-1		>20000		90	4000	19000	120	800	500	1700	<10	100
200-2	040000	20000	100	00	4000	10000	120	000	000			
000-3												
D00-4	<10	30	<10	<10	<10	<10	50	300	70	600	<10	<10
D00-5	<10	25	1.10	10	10	-10	00	000	10	000	10	10
D00-6	<10	10	<10	<10								
D00-0	<10	20	20	30								
D00-8	<10	10	<10	<10	<10	<10	10	20	<10	<10	<10	<10
D00-0	<10	20	<10	<10	10	20	<10	10	<10	<10	<10	<10
D00-10		20	<10	<10	30	100	10	30	<10	<10	20	40
D00-10		40	<10	<10	<10	<10	<10	20	<10	10	<10	10
D00-12		50	<10	<10	20	40	<10	<10	10	80	50	210
D00-12		<10	<10	<10	<10	<10	<10	10	<10	<10	<10	10
D00-13		40	<10	<10	<10	10	10	20	<10	40	<10	<10
D00-14 D00-15		20	<10	<10	10	100	10	60	<10	<10	<10	<10
D00-15		30	10	20	<10	60	<10	20	<10	<10	<10	10
D00-16	-	<10	<10	<10	<10	<10	20	80	10	60	10	20
						10	20	00	10	00	10	20
D00-18		<10	140	250								
D00-19		240	<10	20	-10	<10	-10	<10	<10	<10	<10	-10
000-20		260	<10	<10	<10	<10	<10	<10	<10	<10		<10
000-21		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
000-22		<10						10	10		10	
000-23		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
000-24		<10	<10	<10	<10	20	<10	<10	10	20	<10	<10
000-25		<10	<10	<10	<10	<10	10	20	<10	<10	<10	<10
D00-26		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
D00-27		<10										
D00-28		<10	<10	<10								
D00-29	<10	<10						10000				
D00-30			4700	27000	12000	25000	1500	18000	19000	150000		58000
D00-31			<10	<10	<10	10	<10	10	<10	10	<10	10
D00-32			<10	<10	<10	<10	<10	20	<10	10	<10	<10
D00-33			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
000-34			<10	<10	<10	<10	10	40	<10	20	<10	<10
000-35			<10	<10	<10	<10	10	50	<10	10	<10	<10
000-36			<10	<10	<10	<10	<10	<10	10	20	<10	<10
000-37			<10	<10	<10	<10	<10	<10	10	40	<10	<10
000-38			<10	<10	<10	<10	<10	<10	<10	20	<10	<10
000-39			<10	<10								
000-40			<10	<10								
000-41			<10	<10								
000-42			<10	<10	<10	<10					<10	<10
000-43			<10	<10	<10	<10					<10	<10
000-44			<10	<10	<10	<10					<10	<10
000-45			<10	<10	<10	10	<10	<10	<10	<10	20	100
000-46			10	20	<10	<10	<10	<10	210	900	<10	<10
000-47			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
000-48					<10	<10	<10	10	<10	<10	<10	<10
000-49					<10	<10	<10	20	10	30	<10	<10
000-50							<10	<10	<10	<10	<10	<10
000-51							<10	10	<10	<10	<10	<10
000-52							<10	<10	<10	<10	<10	<10

Summary of Miami-Dade Emergency Response Sampling: Results of Coliform and Enterococcus bacteria Samples

Station ID	Fecal	27-Jun Total	Fecal	28-Jun Total	Fecal	29-Jun Total	Fecal	30-Jun Total	Fecal	1-Jul Total
D00-1	300	2300	100	300	300	3700	90	800	10	60
D00-2	000	2000	100							
D00-2										
	180	320	500	1700	200	600	20	200	<10	30
D00-4	100	520	500	1700	200	000	20	200		
D00-5										
D00-6										
D00-7	10	00	40	00	-10	-10				
D00-8	10	30	10	20	<10	<10				
D00-9	30	200	10	30	<10	10				
D00-10	20	140	<10	<10	<10	<10		10	.10	.10
D00-11	10	190	<10	<10	<10	10	<10	<10	<10	<10
D00-12	330	620	10	200	10	90	<10	40	<10	<10
D00-13	<10	<10	<10	<10	<10	10	<10	<10	<10	<10
D00-14	90	240	50	160	30	170	20	100	<10	10
D00-15	<10	<10	190	210	<10	<10	<10	<10	<10	<10
D00-16	<10	10	<10	<10	<10	20	<10	<10	<10	<10
D00-17	<10	<10	10	20	<10	<10	<10	20	<10	<10
D00-18										
D00-18										
D00-19	<10	<10	<10	<10	<10	<10				
	<10	40	10	150	<10	<10	<10	<10	<10	<10
D00-21	1 <10	40	10	150	-10	-10	-10	-10	-10	10
D00-22	1 .40	-10	-10	<10	<10	<10				
D00-23	<10	<10	<10	<10	10	-10				
D00-24										
D00-25										
D00-26										
D00-27										
D00-28										
D00-29										10
D00-30	32000	69000	27000	46000	<10	<10	<10	<10	<10	<10
D00-31	100	430	<10	10	<10	<10	<10	<10	<10	<10
D00-32	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
D00-33	<10	<10	<10	10	<10	<10	<10	<10	<10	<10
D00-34	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
D00-35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
D00-36	10	40	<10	<10	<10	<10	<10	10	<10	<10
D00-37	20	40	<10	<10	<10	<10	<10	<10	<10	<10
D00-37	<10	<10	10	40	<10	<10	<10	<10	<10	<10
D00-39	-10	-10		40	10					
D00-40										
D00-41										
D00-42										
D00-43										
										-10
D00-44		<10	<10	<10	<10	<10	<10	<10	<10	<10
D00-44 D00-45	<10				<10	10	<10	<10	<10	<10
D00-44 D00-45 D00-46	<10	<10	<10	<10						
D00-44 D00-45 D00-46	<10 <10	<10 <10	<10	<10	<10	<10	<10	<10	<10	<10
D00-44 D00-45	<10	<10			<10 <10	<10	<10	<10	<10	<10
D00-44 D00-45 D00-46 D00-47	<10 <10	<10 <10	<10	<10	<10			<10 <10	<10 <10	<10 <10
D00-44 D00-45 D00-46 D00-47 D00-48 D00-49	<10 <10 <10 <10	<10 <10 <10 <10	<10 <10	<10 <10	<10 <10	<10	<10	<10	<10	<10 <10 <10
D00-44 D00-45 D00-46 D00-47 D00-48	<10 <10 <10	<10 <10 <10	<10 <10 <10	<10 <10 <10	<10 <10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10

## Miami-Dade DERM Emergency Response Sampling Summary of Coliform Results for June 27 to July 1



















