Memorandum

Agenda Item No. 8(0)(3)



Date:

June 4, 2019

To:

Honorable Chairwoman Audrey M. Edmonson and Members, Board of County Commissioners

From:

Carlos A. Gimenez

Mayor

Subject:

Resolution Approving the Certification of Financial Responsibility Pursuant to Rule 62-

528.435(9) of the Florida Administrative Code for Deep Injection and Dual Zone Monitoring

Wells at the County's North District Wastewater Treatment Plant

RECOMMENDATION

It is recommended that the Board of County Commissioners (Board) approve the attached resolution that approves the Certification of Financial Responsibility (see Exhibit A) pursuant to Rule 62-528.435(9) of the Florida Administrative Code.

This Certification of Financial Responsibility confirms that the County has the financial resources necessary to close, plug and abandon four existing Class I underground injection wells and four existing related monitoring wells and to close, plug and abandon five Class I underground injection wells and four related monitoring wells that will be constructed by the County at the North District Wastewater Treatment Plant after a permit is issued by the Florida Department of Environmental Protection (FDEP). This certification is a requirement of FDEP's permit application and approval process. The construction permit will allow the Miami-Dade Water and Sewer Department (WASD) to construct five new Class I underground injection wells and two of the new related monitoring wells. WASD has a FDEP permit renewal application to operate the existing four Class I underground injection wells at the North District Wastewater Treatment Plant and to construct two additional monitoring wells. The related monitoring wells are an auxiliary requirement.

SCOPE

This item is of countywide significance as the County's wastewater system is interconnected. The injection wells and monitoring wells are located in District 4, which is represented by Commissioner Sally A. Heyman.

FISCAL IMPACT/FUNDING SOURCE

There is no fiscal impact related to Board approval of this Certification of Financial Responsibility. There will only be a fiscal impact if a well is plugged and abandoned. In the event any of the wells need to be plugged and abandoned, the estimated cost for each well is itemized in Exhibit B. Sewer operations and maintenance revenue is the funding source used for plugging and abandoning a well.

TRACK RECORD/MONITOR

WASD's Assistant Director of Planning and Regulatory Compliance, Josenrique Cueto, P.E., will oversee WASD's process of maintaining the Certification of Financial Responsibility to ensure compliance with the requirements of the Florida Department of Environmental Protection's permit application.

BACKGROUND

The North District Wastewater Treatment Plant is located at 2575 Northeast 156th Street, North Miami, Florida and was constructed within a five-year period from July 1975 through December 1980 to dispose of secondary treated domestic effluent through ocean outfall. Subsequently, to address peak flow issues, between 1994 and 1997, WASD constructed an injection well (IW) system consisting of four Class I

Honorable Chairwoman Audrey M. Edmonson and Members, Board of County Commissioners Page 2

municipal injection wells and four associated Floridan aquifer monitor wells to meet all effluent discharge demands. The injection well disposal capacity at the North District Wastewater Treatment Plant is 70.87 MGD, and the treated effluent is discharged into an underground formation known as the Boulder Zone. To comply with the State's Ocean Outfall Legislation, which mandates that all ocean outfalls statewide cease operations on December 31, 2025, the County will construct an additional five injection wells and two monitoring wells at the North District Wastewater Treatment Plant.

WASD submitted to FDEP a Class I underground injection well operation permit renewal application on November 20, 2018 for the continued operation of the existing injection well system and for construction of an additional two monitoring wells. WASD is in the process of completing the permit application for the construction of additional five injection wells and two additional monitoring wells as part of the Ocean Outfall Legislation Compliance Plan to expand treated effluent disposal capacity at the North District Wastewater Treatment Plant and to dispose of wastewater effluent into the Boulder Zone. The additional monitoring wells will be used to monitor groundwater quality above the injection zone.

In accordance with Rule 62-528.435(9) of the Florida Administrative Code, the County must demonstrate it has the ability to maintain the financial responsibility and resources necessary to close, plug, and abandon the underground injection operations as a condition to the issuance of any injection well operation permit. The Certification of Financial Responsibility confirms the County's ability to comply with Rule 62-528.435(9) of the Florida Administrative Code.

Jack Osterholt Deputy Mayor

Exhibit A

CERTIFICATION OF FINANCIAL RESPONSIBILITY

The County of Miami-Dade, a unit of local government of the State of Florida, hereby certifies that it has unconditionally obligated itself to have the financial resources necessary to close, plug, and abandon its Class I underground injection well(s) and related monitoring wells, as required by Chapter 62-528, Florida Administrative Code. It is further understood that the cost estimate to conduct plugging and abandonment, established on September 1, 2018, shall be reviewed on an annual basis and this obligation shall incorporate accumulated inflation costs. An annual adjustment exceeding 10 percent in any one year shall require submission of an updated certification form.

Facility where the wells will be located and operated:

Facility Name:

North District Wastewater Treatment Plant

Facility Address:

2575 NE 156th Street, North Miami, Florida, 33160

Facility Contact:

François Saint-Phard, Chief Plant Operator

Phone Number:

786-268-5900

Latitude/Longitude of Facility: 25° 55' 10" / 80° 09' 01"

DEP/EPA WACS Number: 56453

Total Current Plugging and Abandonment Cost Estimate (all wells): \$4,524,999

List of facility injection and associated monitoring well(s) covered by this Certification:

Injection Well IW-1N

DEP/EPA WACS Number: 9067

Latitude/Longitude of Injection Well: 25°55'14" / 80°08'52"

Current Plugging and Abandonment Cost Estimate: \$440,896

Injection Well IW-2N

DEP/EPA WACS Number: 9068

Latitude/Longitude of Injection Well: 25°55'10" / 80°08'50"

Current Plugging and Abandonment Cost Estimate: \$423,202

Injection Well IW-3N

DEP/EPA WACS Number: 9069

Latitude/Longitude of Injection Well: 25°55'06" / 80°08'49"

Current Plugging and Abandonment Cost Estimate: \$\\\\\$431,291

Injection Well IW-4N

DEP/EPA WACS Number: 9070

Latitude/Longitude of Injection Well: 25°55'05" / 80°08'55"

Current Plugging and Abandonment Cost Estimate: \$439,380

Injection Well IW-5N

DEP/EPA WACS Number: Not issued yet ____

Latitude/Longitude of Injection Well: 25°55'03" / 80°09'07"

Current Plugging and Abandonment Cost Estimate: \$435,561

Injection Well IW-6N

DEP/EPA WACS Number: Not issued yet

Latitude/Longitude of Injection Well: 25°55'03" / 80°09'10"

Current Plugging and Abandonment Cost Estimate: \$435,561

Injection Well IW-7N

DEP/EPA WACS Number: Not issued yet

Latitude/Longitude of Injection Well: 25°55'03" / 80°09'12"

Current Plugging and Abandonment Cost Estimate: \$435,561

Injection Well IW-8N

DEP/EPA WACS Number: Not issued yet

Latitude/Longitude of Injection Well: 25°55'00" / 80°09'12"

Current Plugging and Abandonment Cost Estimate: \$435,561

Injection Well IW-9N

DEP/EPA WACS Number: Not issued yet

Latitude/Longitude of Injection Well: 25°55'01" / 80°09'08"

Current Plugging and Abandonment Cost Estimate: \$435,561

Monitoring Well FA-1N Upper Zone

DEP/EPA WACS Number: 18892A

Latitude/Longitude of Injection Well: 25°55'14" / 80°08'51"

Current Plugging and Abandonment Cost Estimate: \$69,259

Monitoring Well FA-1RL Lower Zone

DEP/EPA WACS Number: Not issued yet

Latitude/Longitude of Injection Well: 25°55'14" / 80°08'51"

Current Plugging and Abandonment Cost Estimate: \$57,605

Monitoring Well FA-2N Upper and Lower Zone

DEP/EPA WACS Number: <u>18895A/B</u>

Latitude/Longitude of Injection Well: 25°55'09" / 80°08'50"

Current Plugging and Abandonment Cost Estimate: \$81,449

Monitoring Well FA-3N Upper and Lower Zone

DEP/EPA WACS Number: 18898A/B

Latitude/Longitude of Injection Well: 25°55'05" / 80°08'49"

Current Plugging and Abandonment Cost Estimate: \$81,284

Monitoring Well FA-4N Upper Zone

DEP/EPA WACS Number: <u>18900A</u>

Latitude/Longitude of Injection Well: 25°55'05" / 80°08'54"

Current Plugging and Abandonment Cost Estimate: \$68,708

Monitoring Well FA-4RL Lower Zone

DEP/EPA WACS Number: Not issued yet

Latitude/Longitude of Injection Well: 25°55'05" / 80°08'54"

Current Plugging and Abandonment Cost Estimate: \$57,605

Monitoring Well FA-5N Upper and Lower Zone

DEP/EPA WACS Number: Not issued yet

Latitude/Longitude of Injection Well: 25°55'03" / 80°09'08"

Current Plugging and Abandonment Cost Estimate: \$98,257

Monitoring Well FA-6N Upper and Lower Zone

DEP/EPA WACS Number: Not issued yet

Latitude/Longitude of Injection Well: 25°55'02" / 80°09'12"

Current Plugging and Abandonment Cost Estimate: \$98,257

(Cicuotum)		
(Signature)	APPROVED AS TO	FORM:
Carlos A. Gimenez		
(Print Name)		
Mayor of Miami-Dade County		
(Title)	Office of the County	Attorney
(Date)	·	
STATE OF FLORIDA COUNTY OF MIAMI-DADE		
Sworn to (or affirmed) and subscribed before me this _	day of	2019, by
of the Mi	ami-Dade County, who	is personally know
to me,		
·		
(SEAL)		

Exhibit B

WASD North District WWTP Injection Well System Plugging and Abandonment Opinion of Cost Sep-2018

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP IW-IN				
1 Mobilize the drill rig and kill the well	\$63,000	LS	1	\$63,000
2 Remove Wellhead	\$10,000	LS	1	\$10,000
3 Geophysical logging	\$15,000	LS	1	\$1 5,0 00
4 Install gravel in the injection zone open hole from 2,980 feet bis to 3,300 feet bis	\$12	CF	884	\$10,603
5 Fill the 23,00-inch Inside Diameter (ID) steel casing				
to land surface with neat cement	\$24	. CF	8,597	\$206,323
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost	:			\$314,926
20 Percent Contingency				\$62,985
20 Engineering Fees				\$62,985
TOTAL ESTIMATED COST PER INJECTION WELL		ani a Ark		\$440,896

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP IW-2N				
1 Mobilize the drill rig and kill the well	\$63,000	L\$	1	\$63,000
2 Remove Wellhead	\$10,000	LS	1	\$10,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2,630 feet bis to 3,300 feet bis	\$12	CF	1,850	\$22,200
5 Fill the 23,00-inch Inside Diameter (ID) steel casing				
to land surface with neat cement	\$24	CF	7,587	\$182,087
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$302,287
20 Percent Contingency	·			\$60,457
20 Engineering Fees				\$60,457
TOTAL ESTIMATED COSTPER INJECTION WELL				\$423,202

•	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP IW-3N			できるできる。 カースパンコンの自動製	"你是是一看是一种的
1 Mobilize the drill rig and kill the well	\$63,000	LS	1	\$63,000
2 Remove Wellhead	\$10,000	LS	1	\$10,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2,790 feet bis to 3,300 feet bis	\$12	CF	1,408	\$16,898
5 Fill the 23.00-inch Inside Diameter (ID) steel casing				
to land surface with neat cement	\$24	CF	8,049	\$193,166
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$308,065
20 Percent Contingency				\$61,613
20 Engineering Fees		CASSING ALBERTAN	unungan netra amata. Hardefall distric	\$61,613
TOTAL ESTIMATED COST PER INJECTION WELL				\$431,291

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASB North District WWTP IWAN	ではることを といるがら	^使 汽車		《理解》、"国籍人类"
1 Mobilize the drill rig and kill the well	\$63,000	LS	1	\$63,000
2 Remove Wellhead	\$10,000	LS	1	\$10,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2,950 feet bis to 3,300 feet bis	\$12	CF	966	\$11,597
5 Fill the 23.00-inch Inside Diameter (ID) steel casing				
to land surface with neat cement	\$24	CF	8,510	\$204,246
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost		_		\$313,843
20 Percent Contingency				\$62,769
20 Engineering Fees				\$62,769
TOTAL ESTIMATED COST PER INJECTION WELL	* *			\$439,380

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP IW SN	加量。它可能學績	4 255		
1 Mobilize the drill rig and kill the well	\$63,000	LS	1	\$63,000
2 Remove Wellhead	\$10,000	LS	1	\$10,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2,810 feet bis to 3,300 feet bis	\$12	CF	1,539	\$18,473
5 Fill the 23.00-Inch Inside Diarneter (ID) steel casing				
to land surface with neat cement	\$24	ÇF	8,110	\$194,643
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$311,115
20 Percent Contingency				\$62,223
20 Engineering Fees				\$62,223
TOTAL ESTIMATED COST PERINJECTION WELL	N _{ate} .	ûnyr I		\$435,561

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP IW-6N		No Time		"整理"。
1 Mobilize the drill rig and kill the well	\$63,000	LS	1	\$63,000
2 Remove Wellhead	\$10,000	L\$	1.	\$10,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2,810 feet bis to 3,300 feet bis	\$12	CF	1,539	\$18,473
5 Fill the 23,00-inch Inside Diameter (ID) steel casing			•	
to land surface with neat cement	\$24	CF	8,110	\$194,643
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost		-		\$311,115
20 Percent Contingency				\$62,223
20 Engineering Fees				\$62,223
TOTAL ESTIMATED COST PER INJECTION WELL				\$435,561.

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP IW 7N		1987年前	flatmany of K	
1 Mobilize the drill rig and kill the well	\$63,000	LS	1	\$63,000
2 Remove Wellhead	\$10,000	LS	1	\$10,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2,810 feet bis to 3,300 feet bis	\$12	CF	1,539	\$18,473
5 Fill the 23,00-inch Inside Diameter (ID) steel casing				
to land surface with neat cement	\$24	CF	8,110	\$194,643
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost	_			\$311,115
20 Percent Contingency			•	\$62,223
20 Engineering Fees				\$62,223
TIOTIAL ESTIMATED COST RERUNJECTION WELL				\$435,561

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP IW-8N	o and Inde	77 70 AU		
1 Mobilize the drill rig and kill the well	\$63,000	LS	1	\$63,000
2 Remove Wellhead	\$10,000	LS	1	\$10,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2,810 feet bis to 3,300 feet bis	\$12	CF	1,539	\$18,473
5 Fill the 23.00-Inch Inside Diameter (ID) steel casing				
to land surface with neat coment	\$24	CF	8,110	\$194,643
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost			•	\$311,115
20 Percent Contingency				\$62,223
20 Engineering Fees				\$62,223
TOTAL ESTIMATED GOST PERINJECTION WELL				\$435,561

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP IW 9N	「To Pro Astronom 数。 以下、Januar Sec 真子		V. V. D. STEP V. C. T. T. STEP V. C. T. STEP V. STEP	
1 Mobilize the drill rig and kill the well	\$63,000	LS	1	\$63,000
2 Remove Wellhead	\$10,000	LŞ	1	\$10,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2,810 feet bis to 3,300 feet bis	\$12	CF	1,539	\$18,473
5 Fill the 23.00-Inch Inside Diameter (ID) steel casing				
to land surface with neat cement	\$24	CF	8,110	\$194,643
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$311,115
20 Percent Contingency				\$62,223
20 Engineering Fees				\$62,223
TOTAL ESTIMATED COST PER INJECTION WELL		6 12 3		\$435,561

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWIP FA-IN				
Upper Monitoring Zone	Control of the State of State	199 BANK 14	at the military of section for the	Tenant is 1994 2 in a communication date.
1 Mobilize the drill rig and kill the well	\$15,000	LS	1	\$15,000
2 Remove Wellhead	\$4,000	LS	1	\$4,000
3 Geophysical logging	\$10,000	LS	1	\$10,000
4 Install gravel in the annular space between the 12.75-inch OD casing and 6.625-inch OD tubing from 1,170 feet bls to 1,262 feet bls	\$40	CF	53	\$2,131
5 Fill annular space between the 12.75-inch OD casing and 6.625-inch OD tubing from 1.170 to land surface with neat cement	\$24	CF	639	\$15,340
6 Complete below ground/add monument	\$3,000	LS	1	\$3,000
Plug and Abandonment of Dual Zone Monitoring Well Cost	:			\$49,471
20 Percent Contingency		•		\$9,894
20 Engineering Fees				\$9,894
TOTAL ESTIMATED COST/FORMONITORING WELL 4				\$69,259

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWIP FA-INR		100	CONTRACTOR OF THE SECOND	Made 155
Lower Monitoring Zone				
1 Mobilize the drill rig and kill the well	\$15,000	LS	1	\$15,000
2 Remove Wellhead	\$4,000	LS	1	\$4,000
3 Geophysical logging	\$10,000	LS	1	\$10,000
4				
Install gravel in the Lower Zone open hole from 1,420 feet bis to 1,515 feet bis	\$40	CF	78	\$3,110
5 Fill the 6.625-inch OD FRP tubing from				
1,420 feet bis to land surface with neat cement	\$24	CF	252	\$6,036
3 Complete below ground/add monument	\$3,000	LS	1	\$3,000
Plug and Abandonment of Dual Zone Monitoring Well Cost				\$41,146
20 Percent Contingency				\$8,229
20 Engineering Fees				\$8,229
TOTAL ESTIMATED COST FOR MONITORING WELL CALLS				\$57,605

	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP FA-2N				是17年2月11年,2007年
Lower Monitoring Zone				
1 Mobilize the drill rig and kill the well	\$15,000	LS	1	\$15 _, 000
2 Remove Wellhead	\$4,000	LS	1	\$4,000
3 Geophysical logging	\$10,000	LS	1	\$10,000
4				
Install gravel in the Lower Zone open hole from 1,425 feet bis to 1,505 feet bis	\$40	CF	65	\$2,619
5 Fill the 6.625-inch OD FRP tubing from				
1,425 feet bis to land surface with neat cement	\$24	CF	252	\$6,057
Upper Monitoring Zone				
1 Install gravel in the annular space between the 12.75-inch OD casing and 6.625	5. \$40	CF	57	\$2,293
inch QD tubing from 1,160 feet bis to 1,259 feet bis				
2 Fill annular space between the 12.75-inch OD casing and 6.625-inch OD tubing	ş \$24	CF	634	\$15,209
from 1,160 to land surface with neat cement				
3 Complete below ground/add monument	\$3,000	LS	1	\$3,000
Plug and Abandonment of Dual Zone Monitoring Well Cost			-	\$58,178
20 Percent Contingency	•			\$11,636
20 Engineering Fees				\$11,636
TOTAL ESTIMATEDICOST FOR MONITORING WELL				\$81,449

	11.14.54	11-74	Number of Units	September 2018 Total Cost
	Unit Cost	Unit		
WASD North District WWTP FA-3N	的复数形式 下着 着	A to a Brighty	斯斯特特特	達多聚酸人類如曆
Lower Monitoring Zone				
Mobilize the drill rig and kill the well	\$15,000	LS	1	\$15,000
2 Remove Wellhead	\$4,000	LS	1	\$4,000
3 Geophysical logging	\$10,000	LS	1	\$10,000
4				
Install gravel in the Lower Zone open hole from 1,420 feet bis to 1,510 feet bis	\$40	CF	74	\$2,946
5 FIII the 6.625-inch OD FRP tubing from				
1,420 feet bis to land surface with neat cement	\$24	CF	252	\$6,036
Upper Monitoring Zone				
1 Install gravel in the annular space between the 12,75-inch OD casing and 6,625	\$40	CF	43	\$1,737
inch OD tubing from 1,170 feet bls to 1,245 feet bls				
2 Fill annular space between the 12.75-inch OD casing and 6.625-inch OD tubing	\$24	CF	639	\$15,340
from 1,170 to land surface with neat cement				
3 Complete below ground/add monument	\$3,000	LS	1	\$3,000
Plug and Abandonment of Dual Zone Monitoring Well Cost				\$58,060
20 Percent Contingency				\$11,612
20 Engineering Fees				\$11,612
TOTAL ESTIMATED COST FOR MONITORING WELL		等學術家		284

	Unit Cost	Unit	Number of Units_	September 2018 Total Cost
WASD North District WWTP FA-4N	KERKER		不能機械 陰 臟	建 要的产品的形式。
Upper Monitoring Zone				
1 Mobilize the drill rig and kill the well	\$15,000	LS	1	\$15,000
2 Remove Wellhead	\$4,000	LS	1	\$4,000
3 Geophysical logging	\$10,000	LS	1	\$10,000
4 Install gravel in the annular space between the 12.75 inch OD casing and 6.625 inch OD tubing from 1,160 feet bis to 1,259 feet bis	\$40	CF	43	\$1,737
5 Fill annular space between the 12.75-Inch OD casing and 6.625-inch OD tubing from 1,160 to land surface with neat cement	\$24	CF	639	\$15,340
6	\$3,000	LS	1	\$3,000
Plug and Abandonment of Dual Zone Monitoring Well Cost			,	\$49,077
20 Percent Contingency				\$9,815
20 Engineering Fees POTAL ESTIMATED COST FOR MONITORING WELL				\$9,815 \$68,708

•	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP FA 4NR				
Lower Monitoring Zone				*
1 Mobilize the drlll rig and kill the well	\$15,000	LS	1	\$15,000
2 Remove Wellhead	\$4,000	LS	1	\$4,000
3 Geophysical logging	\$10,000	LS	1	\$10,000
4 Install gravel in the Lower Zone open hole from 1,420 feet bis to 1,515 feet bis	\$40	CF	78	\$3,110
5 Fill the 6,625-inch OD FRP tubing from	•			
1,420 feet bis to land surface with neat cement	\$24	CF	252	\$6 ,036
3 Complete below ground/add monument	\$3,000	LS	1	\$3,000
Plug and Abandonment of Dual Zone Monitoring Well Cost				\$41,146
20 Percent Contingency				\$8,229
20 Engineering Fees				\$8,229
TOTAL ESTIMATED COST FOR MONITORING WELL.		1 77.5		*C #\$ C \$57,605

•	Unit Cost	Unit	Number of Units	September 2018 Total Cost
WASD North District WWTP FA-5N	秦秦城、秦藤城			58% 個本數學的
Lower Monitoring Zone				
1 Mobilize the drill rig and kill the well	\$15,000	LS	1	\$15,000
2 Remove Wellhead	\$4,000	LS	1	\$4,000
3 Geophysical logging	\$10,000	LS	1	\$10,000
4				
Instail gravel in the Lower Zone open hole from 1,410 feet bls to 1,500 feet bls	\$40	CF	74	\$2,946
5 Fill the 6.625-inch QD FRP tubing from				67.756
1,410 feet bis to land surface with neat cement	\$24	CF	240	\$5,750
Upper Monitoring Zone				
1 Install gravel in the annular space between the 16-inch OD casing and 6.625-	\$40	CF	52	\$2,085
inch OD tubing from 1,160 feet bis to 1,250 feet bis				007.400
2 Fill annular space between the 16-inch OD casing and 6.625-inch OD tubing	\$24	CF	1,142	\$27,402
from 1,160 to land surface with neat cement				80.000
3 Complete below ground/add monument	\$3,000	LS	1	\$3,000
Plug and Abandonment of Dual Zone Monitoring Well Cost				\$70,183
20 Percent Contingency				\$14,037
20 Engineering Fees				\$14,037
TOTAL ESTIMATEDICOSTIFOR MONITORING WELL				\$98,257

Lower Monitoring Zone 1 Mobilize the drill rig and kill the well 2 Remove Wellhead 3 Geophysical logging 4 Install gravel in the Lower Zone open hole from 1,410 feet bis to 1,500 feet bis 5 Fill the 6,625-inch OD FRP tubing from 1,410 feet bis to land surface with neat cement 4 Upper Monitoring Zone 1 Install gravel in the annular space between the 16-inch OD casing and 6,625-inch OD tubing from 1,160 feet bis to 1,250 feet bis 2 Fill annular space between the 16-inch OD casing and 6,625-inch OD tubing from 1,160 feet bis to 1,250 feet bis 2 Fill annular space between the 16-inch OD casing and 6,625-inch OD tubing from 1,160 to land surface with neat cement 3 Complete below ground/add monument 4 S3,000 2 Fill g and Abandonment of Dual Zone Monitoring-Well Cost 2 O Percent Contingency 2 Engineering Fees 50 TALLES/IIMATIED/COST FOR MONITORING/WEILE 5 S15,000 LS 1 5 1 5 1,142 5 27,402 5 70,183 5 14,037	,	Unit Cost	Unit	Number of Units	September 2018 Total Cost
1 Mobilize the drill rig and kill the well 2 Remove Wellhead 3 Geophysical logging 4 Install gravel in the Lower Zone open hole from 1,410 feet bis to 1,500 feet bis 5 Fill the 6.625-inch OD FRP tubing from 1,410 feet bis to land surface with neat cement 5 Fill the 6.625-inch OD FRP tubing from 1,410 feet bis to land surface with neat cement 5 Fill the annular space between the 16-inch OD casing and 6.625-inch OD tubing from 1,160 feet bis to 1,250 feet bis 2 Fill annular space between the 16-inch OD casing and 6.625-inch OD tubing from 1,160 to land surface with neat cement 3 Complete below ground/add monument 4 \$3,000 Plug and Abandonment of Dual Zone Monitoring-Well Cost 20 Percent Contingency 20 Engineering Fees 1 \$1,000 LS 1 \$1,000 \$4,000 LS 1 \$3,000	WASD North District WWTP FA-6N	THE WAR	90.34		
2 Remove Wellhead \$4,000 LS 1 \$4,000 3 Geophysical logging \$10,000 LS 1 \$10,000 4 install gravel in the Lower Zone open hole from 1,410 feet bis to 1,500 feet bis \$40 CF 74 \$2,946 5 Fill the 6.625-inch OD FRP tubing from 1,410 feet bis to land surface with neat cement \$24 CF 240 \$5,750 Upper Monitoring Zone 1 Install gravel in the annular space between the 16-inch OD casing and 6.625-inch OD tubing from 1,160 feet bis to 1,250 feet bis 2 Fill annular space between the 16-inch OD casing and 6.625-inch OD tubing from 1,160 to land surface with neat cement \$3,000 LS 1 \$3,000 Plug and Abandonment of Dual Zone Monitoring-Well Cost 20 Percent Contingency 20 Engineering Fees	Lower Monitoring Zone				
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3 Geophysical logging \$10,000 LS 1 \$10,000 4 Install gravel in the Lower Zone open hole from 1,410 feet bis to 1,500 feet bis \$40 CF 74 \$2,946 5 Fill the 6.625-inch OD FRP tubing from 1,410 feet bis to land surface with neat cement \$24 CF 240 \$5,750 Upper Monitoring Zone 1 Install gravel in the annular space between the 16-inch OD casing and 6.625-inch OD tubing from 1,160 feet bis to 1,250 feet bis 2 Fill annular space between the 16-inch OD casing and 6.625-inch OD tubing from 1,160 to land surface with neat cement \$3,000 LS 1 \$3,000 Plug and Abandonment of Dual Zone Monitoring Well Cost 20 Percent Contingency 20 Engineering Fees		\$4,000	LS	1	\$4,000
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Upper Monitoring Zone 1 install gravel in the annular space between the 16-Inch OD casing and 6.625- inch OD tubing from 1,160 feet bls to 1,250 feet bls 2 Fill annular space between the 16-Inch OD casing and 6.625-inch OD tubing from 1,160 to land surface with neat cement 3 Complete below ground/add monument Plug and Abandonment of Dual Zone Monitoring Well Cost 20 Percent Contingency 20 Engineering Fees \$2,085 \$				0.40	ec 760
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2 Fill annular space between the 16-inch OD casing and 6.625-inch OD tubing \$24 CF 1,142 \$27,402 from 1,160 to land surface with neat cement \$3,000 LS 1 \$3,000 Plug and Abandonment of Dual Zone Monitoring-Well Cost \$70,183 20 Percent Contingency \$14,037 20 Engineering Fees	1 Install gravel in the annular space between the 16-Inch OD casing and 6.625-	\$40	CF	52	\$2,085
from 1,160 to land surface with neat cement 3 Complete below ground/add monument Plug and Abandonment of Dual Zone Monitoring-Well Cost 20 Percent Contingency 20 Engineering Fees \$3,000 LS 1 \$3,000 \$14,037	inch OD tubing from 1,160 feet bis to 1,250 feet bis	⊕ □.4	CE.	1 1/2	\$27.402
3 Complete below ground/add monument \$3,000 LS 1 \$3,000 Plug and Abandonment of Dual Zone Monitoring-Well Cost \$70,183 20 Percent Contingency \$14,037 20 Engineering Fees	2 Fill annular space between the 16-inch OD casing and 6.625-inch OD tubing from 1.160 to land surface with next cement	\$24	CF	1,142	921,402
20 Percent Contingency 20 Engineering Fees \$14,037		\$3,000	LS	1	\$3,000
20 Percent Contingency 20 Engineering Fees \$14,037	The state of the s		•		\$70 183
20 Percent Contingency \$14,037 20 Engineering Fees				-	
ZU Engineering rees	20 Percent Contingency				
TOTAL ESTIMATED COST FOR MONITORING WELL \$25.598.200					
	TOTAL ESTIMATED COST FOR MONITORING WELL 17 3.		Maria en 190		FILE 596725(i

TOTAL ESTIMATED COSTS FOR 9 INJECTION WELLS AND 8 MONITORING WELLS \$4,524,99	9
	_
1 This cost estimate does not include monitoring or testing prior to abandonment.	4
2 Costs assume each well is abandoned at different times.	4
3 Costs do not assume post-closure monitoring.	┙



MEMORANDUM

(Revised)

_	Members, Board of County Commissioners	DATE:	June 4, 2019	
FROM: A liga	ail Price-Williams ty Attorney	SUBJECT:	Agenda Item No.	8(0)(3)
Please no	ote any items checked.			
	"3-Day Rule" for committees applicable if	raised		
	6 weeks required between first reading and	d public hearing	g	
	4 weeks notification to municipal officials a hearing	required prior t	o public	
	Decreases revenues or increases expenditu	res without bal	ancing budget	
	Budget required			
	Statement of fiscal impact required			
····	Statement of social equity required			
 -	Ordinance creating a new board requires or report for public hearing	detailed County	Mayor's	
	No committee review			
	Applicable legislation requires more than a present, 2/3 membership, 3/5's _7 vote requirement per 2-116.1(3)(h) or (4) requirement per 2-116.1(3)(h) or (4)(c) requirement per 2-116.1(4)(c)(2)) to a	, unanimou (c), CDMI _, or CDMP 9 v	S, CDMP	
	Current information regarding funding so balance, and available capacity (if debt is c	urce, index code contemplated) r	e and available equired	

Approved	Mayor	Agenda Item No.	8(0)(3)
Veto		6-4-19	
Override			
	DESOLUTION NO		

RESOLUTION APPROVING THE CERTIFICATION OF FINANCIAL RESPONSIBILITY PURSUANT TO RULE 62-528.435(9) OF THE FLORIDA ADMINISTRATIVE CODE FOR THE OPERATION OF FOUR CLASS I UNDERGROUND INJECTION WELLS AND FOR THE CONSTRUCTION OF FIVE ADDITIONAL CLASS I UNDERGROUND INJECTION WELLS AND FOUR RELATED MONITORING WELLS AT MIAMIDADE COUNTY'S NORTH DISTRICT WASTEWATER TREATMENT PLANT; AND AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXECUTE SAME FOR AND ON BEHALF OF MIAMI-DADE COUNTY AND TO EXERCISE THE PROVISIONS CONTAINED THEREIN

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that this Board hereby approves the Certification of Financial Responsibility, pursuant to Rule 62-528.435(9) of the Florida Administrative Code, as required by the State of Florida Department of Environmental Protection, in connection with the operation of four (4) Class I underground injection wells and four (4) related monitoring wells and the construction of five (5) new Class I underground injection wells and four (4) related monitoring wells at Miami-Dade County's North District Wastewater Treatment Plant, in substantially the form attached to the accompanying memorandum as Exhibit A and made a part hereof. The Board also authorizes the County Mayor or County Mayor's designee to execute same for and on behalf of Miami-Dade County, Florida and to exercise the provisions contained therein.

Agenda Item No. 8(0)(3) Page No. 2

The foregoing resolution was offered by Commissioner who moved its adoption. The motion was seconded by Commissioner and upon being put to a vote, the vote was as follows:

> Audrey M. Edmonson, Chairwoman Rebeca Sosa, Vice Chairwoman

Esteban L. Bovo, Jr.

Daniella Levine Cava

Jose "Pepe" Diaz

Sally A. Heyman

Eileen Higgins

Barbara J. Jordan

Joe A. Martinez

Dennis C. Moss

Jean Monestime

Sen. Javier D. Souto

Xavier L. Suarez

The Chairperson thereupon declared this resolution duly passed and adopted this 4th day of June, 2019. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this resolution and the filing of this approval with the Clerk of the Board.

> MIAMI-DADE COUNTY, FLORIDA BY ITS BOARD OF COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By:	
Deputy Clerk	

Approved by County Attorney as to form and legal sufficiency.

SED

Sarah E. Davis