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CLERK OF THE BOARD
OF COUNTY COMMISSIONERS
MIAMI-DADE COUNTY, FLORIDA**

Memorandum



Date: February 6, 2024

To: Honorable Chairman Oliver G. Gilbert, III
and Members, Board of County Commissioners

Agenda Item No. 8(O)(1)

From: Honorable Daniella Levine Cava
Mayor

A handwritten signature in blue ink that reads "Daniella Levine Cava".

Resolution No. R-104-24

Subject: Resolution approving the Certification of Financial Responsibility pursuant to Rule 62-528.435(9) of the Florida Administrative Code for Underground Injection Wells and Related Monitoring Wells at the County's South District Wastewater Treatment Plant

EXECUTIVE SUMMARY

The Certification of Financial Responsibility serves to affirm that the County possesses the necessary financial resources to execute the closure, plugging, and abandonment of twenty (20) Class I underground injection wells and five (5) associated monitoring wells located at the South District Wastewater Treatment Plant (SDWWTP). This certification is a fundamental requirement in the Florida Department of Environmental Protection (FDEP) permit renewal application and approval process. Currently, the Miami-Dade Water and Sewer Department (WASD) is actively engaged in the renewal process for the Class I Municipal Construction and Testing Permit (FDEP Permit No. 061787-043-045-UC/1M). As such, the approval of this item is critical to the County's Ocean Outfall Legislation Compliance Plan.

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 twenty (20) Class I underground injection wells and five (5) related monitoring wells at the South District Wastewater Treatment Plant (SDWWTP). This certification is a requirement of the FDEP permit renewal application and approval process.

SCOPE

This item is of countywide significance because the County's wastewater system is interconnected. The injection wells and monitoring wells are located in District 8, which is represented by Commissioner Danielle Cohen Higgins.

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 attached hereto. The funding source for plugging and abandoning a well is sewer operations and maintenance revenue. Importantly, the County does not anticipate the need to plug and abandon

any wells and has not previously plugged and abandoned any wells, ensuring this item creates no fiscal impact beyond the Certification of Financial Responsibility.

TRACK RECORD/MONITOR

WASD's Deputy Director of the Capital Improvement Program, Marisela Aranguiz-Cueto, P.E., will ensure compliance with the requirements of the FDEP's permit application.

DELEGATION OF AUTHORITY

The permit renewal application for injection wells IW-18 through IW-20 at the SDWWTP requires an update to the Certificate of Financial Responsibility for the SDWWTP, which was adopted by this Board in March 2018 (Resolution No. R-228-18). Through this item, the County Mayor or County Mayor's designee will be delegated authority to execute and submit the updated Certification of Financial Responsibility to the FDEP on the County's behalf.

BACKGROUND

The SDWWTP is a 112.5 million gallons per day facility located 8950 SW 232 Street. The municipal High-Level Disinfection (HLD) treated effluent is discharged into seventeen (17) existing injection wells (IW-1 through IW-17) into an underground formation known as the Boulder Zone. The two (2) existing monitoring wells (CHI and FA-14 Upper) are used to monitor the groundwater quality above the injection 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 has constructed an additional three (3) injection wells (IW-18 through IW-20), and three (3) monitoring wells (FA-17 through FA-19) at the SDWWTP.

On August 10, 2023, WASD submitted to FDEP a Class I underground injection well construction permit renewal application for the additional three (3) injection wells (IW-18 through IW-20) and for three (3) monitoring wells (FA-17 through FA-19) as part of the Ocean Outfall Legislation Compliance Plan in order to expand treated effluent disposal capacity at the SDWWTP 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, attached as Exhibit A, confirms the County's ability to comply with Rule 62-528.435(9) of the Florida Administrative Code.



Jimmy Morales
Chief Operations Officer

Exhibit A

Certification of Financial Responsibility

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 in July 2023, 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: South District Wastewater Treatment Plant

Facility Address: 8950 SW 232nd Street, Cutler Bay, FL 33190

Facility Contact: Wayne Myers, Chief Plant Operator

Phone Number: 786-552-4213

Latitude/Longitude of Facility: 25° 32' 40.9" / 80° 20' 21.2"

DEP/EPA WACS Number: 57046

Total Current Plugging and Abandonment Cost Estimate (all wells): \$ 10,129,411

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

Injection Well IW-1

DEP/EPA WACS Number: 9085
Latitude/Longitude of Injection Well: 25° 32' 42.3422" / 80° 20' 20.234"
Current Plugging and Abandonment Cost Estimate: \$ 463,482

Injection Well IW-2

DEP/EPA WACS Number: 9086
Latitude/Longitude of Injection Well: 25° 32' 42.3486" / 80° 20' 12.016"
Current Plugging and Abandonment Cost Estimate: \$ 434,371

Injection Well IW-3

DEP/EPA WACS Number: 9087
Latitude/Longitude of Injection Well: 25° 32' 42.3558" / 80° 20' 3.8338"
Current Plugging and Abandonment Cost Estimate: \$ 464,797

Injection Well No. IW-4

DEP/EPA WACS Number: 9088
Latitude/Longitude of Injection Well: 25° 32' 48.7928" / 80° 20' 00.536"
Current Plugging and Abandonment Cost Estimate: \$ 465,524

Injection Well IW-5

DEP/EPA WACS Number: 9089
Latitude/Longitude of Injection Well: 25° 32' 57.8961" / 80° 19' 56.1815"
Current Plugging and Abandonment Cost Estimate: \$ 375,525

Injection Well IW-6

DEP/EPA WACS Number: 9090

Latitude/Longitude of Injection Well: 25° 33' 04.6499" / 80° 19' 56.2106"

Current Plugging and Abandonment Cost Estimate: \$ 462,756

Injection Well IW-7

DEP/EPA WACS Number: 9091

Latitude/Longitude of Injection Well: 25° 33' 04.4623" / 80° 20' 03.7173"

Current Plugging and Abandonment Cost Estimate: \$ 464,398

Injection Well IW-8

DEP/EPA WACS Number: 9092

Latitude/Longitude of Injection Well: 25° 33' 04.4207" / 80° 20' 11.8293"

Current Plugging and Abandonment Cost Estimate: \$ 465,414

Injection Well IW-9

DEP/EPA WACS Number: 9093

Latitude/Longitude of Injection Well: 25° 32' 44.369" / 80° 20' 29.2107"

Current Plugging and Abandonment Cost Estimate: \$ 465,328

Injection Well IW-10

DEP/EPA WACS Number: 9094

Latitude/Longitude of Injection Well: 25° 32' 48.2889" / 80° 20' 36.1517"

Current Plugging and Abandonment Cost Estimate: \$ 456,822

Injection Well IW-11

DEP/EPA Identification Number: 9095

Latitude/Longitude of Injection Well: 25° 32' 52.764" / 80° 20' 43.2182"

Current Plugging and Abandonment Cost Estimate: \$ 455,474

Injection Well IW-12

DEP/EPA WACS Number: 9096

Latitude/Longitude of Injection Well: 25° 32' 57.148" / 80° 20' 48.0978"

Current Plugging and Abandonment Cost Estimate: \$ 460,353

Injection Well IW-13

DEP/EPA WACS Number: 9097

Latitude/Longitude of Injection Well: 25° 33' 04.4383" / 80° 20' 49.9772"

Current Plugging and Abandonment Cost Estimate: \$ 460,287

Injection Well IW-14

DEP/EPA WACS Number: 9098

Latitude/Longitude of Injection Well: 25° 33' 04.3289" / 80° 20' 42.265"

Current Plugging and Abandonment Cost Estimate: \$ 460,262

Injection Well IW-15

DEP/EPA WACS Number: 2939

Latitude/Longitude of Injection Well: 25° 33' 04.4188" / 80° 20' 34.7256"

Current Plugging and Abandonment Cost Estimate: \$ 460,204

Injection Well IW-16

DEP/EPA WACS Number: 2940
Latitude/Longitude of Injection Well: 25° 33' 04.4056" / 80° 20' 26.9744"
Current Plugging and Abandonment Cost Estimate: \$ 459,510

Injection Well IW-17

DEP/EPA WACS Number: 2941
Latitude/Longitude of Injection Well: 25° 33' 04.3607" / 80° 20' 19.26"
Current Plugging and Abandonment Cost Estimate: \$ 461,832

Injection Well IW-18

DEP/EPA WACS Number: 14099
Latitude/Longitude of Injection Well: 25° 32' 45.26" / 80° 20' 31.07"
Current Plugging and Abandonment Cost Estimate: \$ 478,646

Injection Well IW-19

DEP/EPA WACS Number: 14100
Latitude/Longitude of Injection Well: 25°32'53.00" / 80°20'17.90"
Current Plugging and Abandonment Cost Estimate: \$ 474,797

Injection Well IW-20

DEP/EPA WACS Number: 14101
Latitude/Longitude of Injection Well: 25°32'55.49" / 80°20'18.92"
Current Plugging and Abandonment Cost Estimate: \$ 474,880

Monitoring Well CHI Upper and Lower

DEP/EPA WACS Number: 28037A/B

Latitude/Longitude of Injection Well: 25°33'53.46" / 80°21'25.34"

Current Plugging and Abandonment Cost Estimate: \$ 212,797

Monitoring Well FA-14 Upper Zone

DEP/EPA WACS Number: 5740A

Latitude/Longitude of Injection Well: 25°32'51.9665" / 80°20'43.7467"

Current Plugging and Abandonment Cost Estimate: \$ 217,921

Monitoring Well FA-17 Upper Zone

DEP/EPA WACS Number: 30400A

Latitude/Longitude of Injection Well: 25°33'05.162" / 80°20'48.988"

Current Plugging and Abandonment Cost Estimate: \$ 178,145

Monitoring Well FA-18 Upper Zone

DEP/EPA WACS Number: 30401A

Latitude/Longitude of Injection Well: 25°32'42.11" / 80°20'12.823"

Current Plugging and Abandonment Cost Estimate: \$ 177,883

Monitoring Well FA-19 Upper Zone

DEP/EPA WACS Number: 30402A

Latitude/Longitude of Injection Well: 25°33'03.926" / 80°19'969"

Current Plugging and Abandonment Cost Estimate: \$ 178,004

It is hereby understood that the cancellation of this certification may not take place without the prior written consent of the Secretary of the Florida Department of Environmental Protection.

(Signature)

Daniella Levine Cava

(Print Name)

Mayor of Miami-Dade County

(Title)

(Date)

APPROVED AS TO FORM:

Office of the County Attorney

STATE OF FLORIDA
COUNTY OF MIAMI-DADE

Sworn to (or affirmed) and subscribed before me this _____ day of _____ 2023, by
_____ of the Miami-Dade County, who is personally known
to me,

(SEAL)

Exhibit B

Estimated Plugging and Abandonment Cost for Each Well

Injection Well IW-1
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-1				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2638 feet bls to 3110 feet bls (24.0-inch open hole)	\$24	CF	1,483	\$35,588
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,614	\$182,732
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$343,320
15 Percent Contingency				\$51,498
20 Engineering Fees				\$68,664
TOTAL ESTIMATED COST PER INJECTION WELL				\$463,482
TOTAL				\$463,482

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-2
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-2				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2638 feet bls to 2824 feet bls (24.0-inch open hole)	\$24	CF	584	\$14,024
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,614	\$182,732
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$321,756
15 Percent Contingency				\$48,263
20 Engineering Fees				\$64,351
TOTAL ESTIMATED COST PER INJECTION WELL				\$434,371
TOTAL				\$434,371

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-3
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-3				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2639 feet bls to 3123 feet bls (24.0-inch open hole)	\$24	CF	1,521	\$36,493
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,617	\$182,802
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$344,294
15 Percent Contingency				\$51,644
20 Engineering Fees				\$68,859
TOTAL ESTIMATED COST PER INJECTION WELL				\$464,797
TOTAL				\$464,797

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-4
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-4				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2674 feet bls to 3133 feet bls (24.0-inch open hole)	\$24	CF	1,442	\$34,608
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,718	\$185,225
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$344,833
15 Percent Contingency				\$51,725
20 Engineering Fees				\$68,967
TOTAL ESTIMATED COST PER INJECTION WELL				\$465,524
TOTAL				\$465,524

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-5
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-5				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2756 feet bls to 3193 feet bls (20.0-inch open hole)	\$24	CF	953	\$22,881
5 Fill from 10 feet below the 19.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	5,429	\$130,285
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$278,167
15 Percent Contingency				\$41,725
20 Engineering Fees				\$55,633
TOTAL ESTIMATED COST PER INJECTION WELL				\$375,525
TOTAL				\$375,525

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-6
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-6				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2750 feet bls to 3112 feet bls (24.0-inch open hole)	\$24	CF	1,137	\$27,294
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,937	\$190,488
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$342,782
15 Percent Contingency				\$51,417
20 Engineering Fees				\$68,556
TOTAL ESTIMATED COST PER INJECTION WELL				\$462,756
TOTAL				\$462,756

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-7
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-7				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2638 feet bls to 3119 feet bls (24.0-inch open hole)	\$24	CF	1,511	\$36,267
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,614	\$182,732
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$343,999
15 Percent Contingency				\$51,600
20 Engineering Fees				\$68,800
TOTAL ESTIMATED COST PER INJECTION WELL				\$464,398
TOTAL				\$464,398

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-8
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-8				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2430 feet bls to 3112 feet bls (24.0-inch open hole)	\$24	CF	2,143	\$51,422
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,014	\$168,329
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$344,751
15 Percent Contingency				\$51,713
20 Engineering Fees				\$68,950
TOTAL ESTIMATED COST PER INJECTION WELL				\$465,414
TOTAL				\$465,414

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-9
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-9				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2428 feet bls to 3111 feet bls (24.0-inch open hole)	\$24	CF	2,146	\$51,497
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,008	\$168,191
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$344,688
15 Percent Contingency				\$51,703
20 Engineering Fees				\$68,938
TOTAL ESTIMATED COST PER INJECTION WELL				\$465,328
TOTAL				\$465,328

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-10
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-10				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2435 feet bls to 3028 feet bls (24.0-inch open hole)	\$24	CF	1,863	\$44,711
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,028	\$168,675
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$338,387
15 Percent Contingency				\$50,758
20 Engineering Fees				\$67,677
TOTAL ESTIMATED COST PER INJECTION WELL				\$456,822
TOTAL				\$456,822

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-11
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-11				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2438 feet bls to 3015 feet bls (24.0-inch open hole)	\$24	CF	1,813	\$43,505
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,037	\$168,883
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$337,388
15 Percent Contingency				\$50,608
20 Engineering Fees				\$67,478
TOTAL ESTIMATED COST PER INJECTION WELL				\$455,474
TOTAL				\$455,474

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-12
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-12				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2402 feet bls to 3060 feet bls (24.0-inch open hole)	\$24	CF	2,067	\$49,612
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	6,933	\$166,390
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$341,002
15 Percent Contingency				\$51,150
20 Engineering Fees				\$68,200
TOTAL ESTIMATED COST PER INJECTION WELL				\$460,353
TOTAL				\$460,353

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-13
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-13				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2410 feet bls to 3060 feet bls (24.0-inch open hole)	\$24	CF	2,042	\$49,009
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	6,956	\$166,944
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$340,953
15 Percent Contingency				\$51,143
20 Engineering Fees				\$68,191
TOTAL ESTIMATED COST PER INJECTION WELL				\$460,287
TOTAL				\$460,287

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-14
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-14				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2413 feet bls to 3060 feet bls (24.0-inch open hole)	\$24	CF	2,033	\$48,783
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	6,965	\$167,152
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$340,935
15 Percent Contingency				\$51,140
20 Engineering Fees				\$68,187
TOTAL ESTIMATED COST PER INJECTION WELL				\$460,262
TOTAL				\$460,262

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-15
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-15				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2420 feet bls to 3060 feet bls (24.0-inch open hole)	\$24	CF	2,011	\$48,255
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	6,985	\$167,637
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$340,892
15 Percent Contingency				\$51,134
20 Engineering Fees				\$68,178
TOTAL ESTIMATED COST PER INJECTION WELL				\$460,204
TOTAL				\$460,204

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-16
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-16				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2430 feet bls to 3054 feet bls (24.0-inch open hole)	\$24	CF	1,960	\$47,048
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,014	\$168,329
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$340,378
15 Percent Contingency				\$51,057
20 Engineering Fees				\$68,076
TOTAL ESTIMATED COST PER INJECTION WELL				\$459,510
TOTAL				\$459,510

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-17
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-17				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2420 feet bls to 3076 feet bls (24.0-inch open hole)	\$24	CF	2,061	\$49,461
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	6,985	\$167,637
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$342,098
15 Percent Contingency				\$51,315
20 Engineering Fees				\$68,420
TOTAL ESTIMATED COST PER INJECTION WELL				\$461,832
TOTAL				\$461,832

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-18
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-18				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2430 feet bls to 3242 feet bls (24.0-inch open hole)	\$24	CF	2,551	\$61,223
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,014	\$168,329
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$354,553
15 Percent Contingency				\$53,183
20 Engineering Fees				\$70,911
TOTAL ESTIMATED COST PER INJECTION WELL				\$478,646
TOTAL				\$478,646

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Injection Well IW-19
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-19				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2440 feet bls to 3205 feet bls (24.0-inch open hole)	\$24	CF	2,403	\$57,680
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,043	\$169,022
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$351,701
15 Percent Contingency				\$52,755
20 Engineering Fees				\$70,340
TOTAL ESTIMATED COST PER INJECTION WELL				\$474,797
TOTAL				\$474,797

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
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- 3 Costs do not assume post-closure monitoring.

Injection Well IW-20
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Injection Well IW-20				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the injection zone open hole from 2430 feet bls to 3205 feet bls (24.0-inch open hole)	\$24	CF	2,435	\$58,434
5 Fill from 10 feet below the 23.0-inch Inside Diameter (ID) seamless steel final casing to land surface with neat cement	\$24	CF	7,014	\$168,329
6 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Injection Well Cost				\$351,763
15 Percent Contingency				\$52,764
20 Engineering Fees				\$70,353
TOTAL ESTIMATED COST PER INJECTION WELL				\$474,880
TOTAL				\$474,880

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
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- 3 Costs do not assume post-closure monitoring.

Dual-Zone Monitor Well CHI
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Dual-Zone Monitor Well CHI				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the lower monitoring zone from 1720 feet bls to 1770 feet bls (8.625-inch open hole)	\$24	CF	20	\$487
5 Fill the 8.625-inch Outside Diameter (OD) FRP casing to land surface with neat cement	\$24	CF	546	\$13,111
6 Install gravel in the upper monitoring zone from 1412 feet bls to 1431 feet bls (14.0-inch open hole)	\$24	CF	13	\$302
7 Fill annular space between the 14.0-inch OD and 8.625-inch OD casings from 1412 feet bls to land surface with neat cement	\$24	CF	780	\$18,726
8 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Dual-Zone Monitor Well Only Cost				\$157,627
15 Percent Contingency				\$23,644
20 Engineering Fees				\$31,525
TOTAL ESTIMATED COST PER INJECTION WELL				\$212,797
TOTAL				\$212,797

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- 3 Costs do not assume post-closure monitoring.

Monitor Well FA-14
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Monitor Well FA-14				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the upper monitoring zone from 1500 feet bls to 1575 feet bls (14-inch open hole)	\$24	CF	80	\$1,924
5 Fill the 14-inch Outside Diameter (OD) FRP Casing to land surface with neat cement	\$24	CF	1,437	\$34,498
8 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Monitor Well Only Cost				\$161,423
15 Percent Contingency				\$24,213
20 Engineering Fees				\$32,285
TOTAL ESTIMATED COST PER INJECTION WELL				\$217,921
TOTAL				\$217,921

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Monitor Well FA-17
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Monitor Well FA-17				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the open hole from 985 feet bls to 1095 feet bls (12.25-inch open hole)	\$24	CF	90	\$2,161
5 Fill the 6.625-inch Outside Diameter (OD) FRP casing to land surface with neat cement	\$24	CF	200	\$4,799
8 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Monitor Well Only Cost				\$131,959
15 Percent Contingency				\$19,794
20 Engineering Fees				\$26,392
TOTAL ESTIMATED COST PER INJECTION WELL				\$178,145
TOTAL				\$178,145

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Monitor Well FA-18
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Monitor Well FA-18				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the open hole from 998 feet bls to 1095 feet bls (12.25-inch open hole)	\$24	CF	79	\$1,905
5 Fill the 6.625-inch Outside Diameter (OD) FRP casing to land surface with neat cement	\$24	CF	203	\$4,860
8 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Monitor Well Only Cost				\$131,765
15 Percent Contingency				\$19,765
20 Engineering Fees				\$26,353
TOTAL ESTIMATED COST PER INJECTION WELL				\$177,883
TOTAL				\$177,883

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Monitor Well FA-19
Plugging and Abandonment Opinion of Cost
Jul-2023

	Unit Cost	Unit	Number of Units	Total Cost
Monitor Well FA-19				
1 Mobilize the drill rig and kill the well	\$80,000	LS	1	\$80,000
2 Remove Wellhead	\$20,000	LS	1	\$20,000
3 Geophysical logging	\$15,000	LS	1	\$15,000
4 Install gravel in the open hole from 992 feet bls to 1095 feet bls (12.25-inch open hole)	\$24	CF	84	\$2,023
5 Fill the 6.625-inch Outside Diameter (OD) FRP casing to land surface with neat cement	\$24	CF	201	\$4,832
8 Complete below ground/add monument	\$10,000	LS	1	\$10,000
Plug and Abandonment of Monitor Well Only Cost				\$131,855
15 Percent Contingency				\$19,778
20 Engineering Fees				\$26,371
TOTAL ESTIMATED COST PER INJECTION WELL				\$178,004
TOTAL				\$178,004

- 1 This cost estimate does not include monitoring or testing prior to abandonment.
- 2 Costs assume each well is abandoned at different times.
- 3 Costs do not assume post-closure monitoring.

Well	P&A Opinion Cost
IW-1	\$ 463,482
IW-2	\$ 434,371
IW-3	\$ 464,797
IW-4	\$ 465,524
IW-5	\$ 375,525
IW-6	\$ 462,756
IW-7	\$ 464,398
IW-8	\$ 465,414
IW-9	\$ 465,328
IW-10	\$ 456,822
IW-11	\$ 455,474
IW-12	\$ 460,353
IW-13	\$ 460,287
IW-14	\$ 460,262
IW-15	\$ 460,204
IW-16	\$ 459,510
IW-17	\$ 461,832
IW-18	\$ 478,646
IW-19	\$ 474,797
IW-20	\$ 474,880
DZMW CHI	\$ 212,797
FA-14	\$ 217,921
FA-17	\$ 178,145
FA-18	\$ 177,883
FA-19	\$ 178,004
Total	\$ 10,129,411



MEMORANDUM

(Revised)

TO: Honorable Chairman Oliver G. Gilbert, III
and Members, Board of County Commissioners

DATE: February 6, 2024

FROM: 
Gen Bonzon-Keenan
County Attorney

SUBJECT: Agenda Item No. 8(O)(1)

Please note any items checked.

- ☐ "3-Day Rule" for committees applicable if raised
- ☐ 6 weeks required between first reading and public hearing
- ☐ 4 weeks notification to municipal officials required prior to public hearing
- ☐ Decreases revenues or increases expenditures without balancing budget
- ☐ Budget required
- ☐ Statement of fiscal impact required
- ☐ Statement of social equity required
- ☐ Ordinance creating a new board requires detailed County Mayor's report for public hearing
- ☐ No committee review
- ☐ Applicable legislation requires more than a majority vote (i.e., 2/3's present ____, 2/3 membership ____, 3/5's ____, unanimous ____, CDMP 7 vote requirement per 2-116.1(3)(h) or (4)(c) ____, CDMP 2/3 vote requirement per 2-116.1(3)(h) or (4)(c) ____, or CDMP 9 vote requirement per 2-116.1(4)(c)(2) ____ to approve
- ☐ Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 8(O)(1)
2-6-24

RESOLUTION NO. R-104-24

RESOLUTION APPROVING THE CERTIFICATION OF FINANCIAL RESPONSIBILITY PURSUANT TO RULE 62-528.435(9) OF THE FLORIDA ADMINISTRATIVE CODE FOR THE OPERATION OF 20 CLASS I UNDERGROUND INJECTION WELLS AND FIVE RELATED MONITORING WELLS AT MIAMI-DADE COUNTY'S SOUTH 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 20 Class I underground injection wells and five related monitoring wells at Miami-Dade County's South 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.

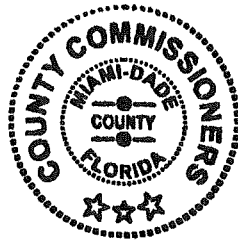
The foregoing resolution was offered by Commissioner **Eileen Higgins**, who moved its adoption. The motion was seconded by Commissioner **Anthony Rodriguez** and upon being put to a vote, the vote was as follows:

Oliver G. Gilbert, III, Chairman	aye		
Anthony Rodríguez, Vice Chairman	aye		
Marleine Bastien	aye	Juan Carlos Bermudez	aye
Kevin Marino Cabrera	aye	Sen. René García	absent
Roberto J. Gonzalez	aye	Keon Hardemon	aye
Danielle Cohen Higgins	aye	Eileen Higgins	aye
Kionne L. McGhee	aye	Raquel A. Regalado	aye
Micky Steinberg	aye		

The Chairperson thereupon declared this resolution duly passed and adopted this 6th day of February, 2024. 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

JUAN FERNANDEZ-BARQUIN, CLERK



By: Basia Pruna
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.

SED

Sarah E. Davis