

# FLORIDA DEPARTMENT OF **Environmental Protection**

South District Post Office Box 2549 Fort Myers, Florida 33902-2549 SouthDistrict@FloridaDEP.gov

Rick Scott Governor Carlos Lopez-Cantera Lt. Governor Noah Valenstein Secretary

FLA147222

FLA147222-014-DW1P

January 23, 2019

January 22, 2024

### STATE OF FLORIDA DOMESTIC WASTEWATER FACILITY PERMIT

PERMIT NUMBER:

EFFECTIVE DATE:

EXPIRATION DATE:

FILE NUMBER:

PERMITTEE:

City of Key West

John P. Castro 3140 Flagler Avenue Key West, Florida 33040

(305) 809-3752

RESPONSIBLE OFFICIAL:

### FACILITY:

Richard A Heyman WWTP -Key West Trumbo Point Annex-Fleming Key Key West, FL Monroe County

Latitude: 24°34' 9.8257" N

Longitude: 81°47' 48.4625" W

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.). This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. The above-named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

### WASTEWATER TREATMENT:

Operate an existing 10.0 million gallons per day (MGD), annual average daily flow (AADF) domestic wastewater treatment facility. The headworks consist of three mechanical bar screens at 10 MGD, AADF, two grit removal systems and an odor control system. The biological treatment units consist of: two aeration basins (total volume 3.33 MG), one anoxic basin (0.97 MG), and one re-aeration basin (0.11 MG). Solids are removed from the effluent by two clarifiers with a capacity of 10 MGD each and four cloth media filters. The ultraviolet disinfection system consists of two UV-reactors. The facility has two offline chlorine contact tanks (no chlorinization). The residuals system consists of two sludge storage tanks (total volume 0.44 MG) and two belt-filter presses (fed at 600 - 900 pounds dry solids per hour).

### REUSE OR DISPOSAL:

Underground Injection U-001: An existing 10.0 MGD, AADF permitted capacity underground injection well system consisting of 2 Class V underground injection wells permitted under Department permit number(s) 327710-001-UO/5W and 327710-002-UO/5W discharging to Class G-III ground water. (Note: These UIC permits expire on 11/30/2019, Renewal applications must be submitted at least 60 days prior to expiration.). Underground Injection Well System U-001 is located approximately at latitude 24°34' 6" N, longitude 81°47' 49" W.

IN ACCORDANCE WITH: The limitations, monitoring requirements, and other conditions set forth in this cover sheet and Part I through Part X on pages 1 through 19 of this permit.

PERMITTEE:

City of Key West

FACILITY: Richard A Heyman WWTP -Key West

PERMIT NUMBER:

FLA147222-014

P.A. FILE NUMBER: FLA147222-014-DW1P

## I. RECLAIMED WATER AND EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

### A. Underground Injection Control Systems

During the period beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to discharge effluent to
Underground Injection Well System U-001 located approximately at latitude 24°34'6", longitude 81°47'49". Such discharge shall be limited and monitored
by the permittee as specified below and reported in accordance with Permit Condition I.B.7.:

			Reclaimed Water Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max Max Max	5.0 6.25 7.5 10.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFF-1	11003
Solids, Total Suspended	mg/L	Max Max Max Max	5.0 6.25 7.5 10.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFF-1	
Ultraviolet Light Dosage	mW-s/sqcm	Min	35	Single Sample	Daily; 24 hours	Meter	PPI-1	See I.A.6
Ultraviolet Light Transmittance	percent	Min	65	Single Sample	Daily; 24 hours	Meter	PPI-1	
Ultraviolet Light Intensity	mW/sqcm	Min	Report	Single Sample	Daily; 24 hours	Meter	PPI-1	
Coliform, Fecal	#/100mL	Max Max Max	200 200 800	Annual Average Monthly Geometric Mean Single Sample	5 Days/Week	Grab	EFF-1	See I.A.4
pH	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	Continuous	Grab	EFF-1	See I.A.3
Nitrogen, Total	mg/L	Max Max Max Max	3.0 P 3.75 4.5 6.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFF-1	
Phosphorus, Total (as P)	mg/L	Max Max Max Max	1.0 P P 1.25 P P 1.5 2.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFF-1	



# FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSant
Governo DERANTIFEE

Jeanette Nuñez
Lt. Governor
Noah Valenstein
Secretary

South District
Post Office Box 2549
Fort Myers, Florida 33902-2549
SouthDistrict@dep.state.fl.us

# STATE OF FLORIDA DOMESTIC WASTEWATER FACILITY PERMIT

#### PERMITTEE:

City of Marathon

RESPONSIBLE OFFICIAL:

Dan Saus 9805 Overseas Highway Marathon, Florida 33050 (305) 289-5008 PERMIT NUMBER:

UIC PERMITS: FILE NUMBER: EFFECTIVE DATE: FLA187364

41874-010, 011 and 012 FLA187364-015-DW2P October 24, 2019

EXPIRATION DATE: October 23, 2024

### FACILITY:

City of Marathon Area 5 WWTP 506 106th Street Gulf Marathon, FL 33050 Monroe County

Latitude: 24°43' 43.54" N Longitude: 81°2' 23.62" W

NOT HPDES

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.). This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. The above-named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

### WASTEWATER TREATMENT:

The plant is a membrane bioreactor (MBR) domestic wastewater treatment facility consisting of three 17,100-gallon MBR's. The permitted capacity for the annual average daily flow (AADF) is 0.450 million gallons per day (MGD). The facility's headworks consist of a rotating fine screen, manual backup screen, and one 145,000-gallon flow equalization tank. The biological treatment process consists of two 38,300-gallon pre-anoxic tanks, two 76,600-gallon aeration tanks, one 60,000-gallon post-anoxic tank, the three MBR's, two 10,000-gallon chlorine contact tanks, one 200,000-gallon digester tank, and one 68,000-gallon reuse storage tank. This wastewater treatment facility is authorized to accept digester sludge from the City of Marathon's WWTP's Areas 3, 4, 6 and 7.

### REUSE OR DISPOSAL:

Underground Injection U-001: An existing 0.450 MGD annual average daily flow permitted capacity underground injection well system consisting of three Class V underground injection wells permitted under Department permit number(s) 41874-010, 011 and 012, WACS ID No. 98780 discharging to Class G-III ground water. Underground Injection Well System U-001 is located approximately at latitude 24°43' 44" N, longitude 81°2' 24" W.

Land Application R-001: An existing 0.060 MGD annual average daily flow permitted capacity slow-rate public access system. R-001 is a reuse system which consists of irrigation of the Marathon Event Field and U.S. Highway 1 median. This reuse system is currently inactive and shall not be returned to service without written approval from the Department. Refer to condition I.B.3 of this permit for reactivation requirements.

PERMIT NUMBER: EXPIRATION DATE:

FLA187364 October 23, 2024

# $_{RECLAIMED}$ WATER AND EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

### A. Underground Injection Control Systems

 During the period beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to discharge effluent to Underground Injection Well System U-001 located approximately at latitude 24° 43′ 44″, longitude 81° 2′ 24″. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.B.8.:

				Reclaimed Water Limitations	Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max Max Max	5.0 6.25 7.5 10.0	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFA-01	
Solids, Total Suspended	mg/L	Max Max Max Max	5.0 6.25 7.5 10.0	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFB-01	
Coliform, Fecal	#/100mL	Max Max Max	200 200 800	Annual Average Monthly Geometric Mean Single Sample	Bi-weekly; every 2 weeks	Grab	EFA-01	See I.A.3
pН	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	5 Days/Week	Grab	EFA-01	
Chlorine, Total Residual (For Disinfection)	mg/L	Min	0.5	Single Sample	5 Days/Week	Grab	EFA-01	See I.A.4
Nitrogen, Total	mg/L	Max Max Max Max	3.0 PP 3.75 4.5 6.0	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFA-01	
Phosphorus, Total (as P)	mg/L	Max Max Max Max	1.0 PP 1.25 1.5 2.0	Annual Average  Monthly Average  Weekly Average  Single Sample	Bi-weekly; every 2 weeks	8-lır FPC	EFA-01	
Flow	gal/min	Max	469	Maximum Hourly Rate	5 Days/Week	Meter	FLW-03	



# Florida Department or **Environmental Protection**

South District P.O. Box 2549 Fort Myers, Florida 33902-2549

Jeff Kottkam LL GOVERNOR

Michael W. Sole Secretary

### STATE OF FLORIDA DOMESTIC WASTEWATER FACILITY PERMIT

PERMITTEE:

Village of Islamorada

RESPONSIBLE OFFICIAL:

Kenneth Fields 81990 Overseas Highway Islamorada, Florida 33036 (305) 664-6410

PERMIT NUMBER:

FLA351849-005

FILE NUMBER:

FLA351849-005-DW2P

ESSUANCE DATE:

October 5, 2009

EXPIRATION DATE: October 4, 2014

### FACILITY:

Plantation Key Colony WWTF Village of Islamorada Islamorada, FL 33036 Monroe County

Latitude: 24°59' 36.0643" N

Longitude: 80°32' 24.7704" W

NOT HPDES

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.). This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. The above named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

### WASTEWATER TREATMENT:

The facility is a domestic wastewater treatment plant. The permitted capacity for the maximum monthly average daily flow (MMADF) is 0.355 million gallons per day (MGD). The facility consists of one bar screen, two biological treatment trains, two 9,000 gallon chlorine contact tanks, a sodium hydroxide disinfection system, one 240,000 reuse storage tank and one 28,500 gallon sludge holding tank. Each treatment train consists of one 20,000 gallon surge tank, two 10,000 gallon anoxic basins, one 30,000 gallon aeration basin between the anoxic basins, and one membrane bioreactor in a 17,500 gallon aeration tank.

### REUSE AND DISPOSAL:

Underground Injection U-001: An existing 0.355 MGD MMADF permitted capacity underground injection well system consisting of three, nominal six-inch diameter, Class V, Group 3, underground injection wells permitted under Department permit numbers 76333-017 to -019 discharging to Class G-III ground water into the Key Largo and Miami Oolite Formations. Underground Injection Well System U-001 is located on the facility's property.

Land Application R-001: Treated effluent may be reused in the slow-rate, public-access reclaimed water irrigation system R-001. R-001 consists of irrigation systems for an athletic park, schools, a church, the US-1 corridor and the treatment facility's site. The permitted capacity for R-001 is 0.036 MGD MMADF.

IN ACCORDANCE WITH: The limitations, monitoring requirements, and other conditions set forth in this cover sheet and Part I through Part X on pages 1 through 23 of this permit.

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PERMITTEE: Village of Islamorada

PERMIT NUMBER:

FLA351849

FACILITY: Plantation Key Colony WWTF

PA FILE NUMBER: FLA351849-005-DW2P/NR

I. RECLAIMED WATER AND EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

### A. Underground Injection Control Systems

 During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge effluent to Underground Injection Well System U-001. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with condition I.C.8.

			Reclaimed Water Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max	0.355	Monthly Average	5 Days/Week	Recording Flow Meter with Totalizer	FLW-02	See I.
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max Max Max	5.0 6.25 7.5 10.0	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFA-01	
Solids, Total Suspended	mg/L	Max Max Max Max	5.0 6.25 7.5 10.0	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFA-01	
Coliform, Fecal	#/100mL	Max Max Max	200 200 800	Annual Average Monthly Geometric Mean Single Sample	Bi-weekly; every 2 weeks	Grab	EFA-01	See I.A.4
pH	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	5 Days/Week	Grab	EFA-01	
Chlorine, Total Residual (For Disinfection)	mg/L	Min	0.5	Single Sample	5 Days/Week	Grab	EFA-01	See I.A.5
Nitrogen, Total	mg/L	Max Max Max Max	3.0 PA 3.75 4.5 6.0	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFA-01	•
Phosphorus, Total (as P)	mg/L	Max Max Max Max	1.0 1.25 1.5 2.0	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFA-01	



### Florida Department of Environmental Protection

South District
Post Office Box 2549
Fort Myers, Florida 33902-2549
SouthDistrict@dep.state.fl.us

Carlos Lopez-Cantera Lt. Governor

> Noah Valenstein Secretary

### STATE OF FLORIDA DOMESTIC WASTEWATER FACILITY PERMIT

PERMITTEE:

City of Naples

PERMIT NUMBER:

FL0026271 (Major) FL0026271-015-DW1P

FILE NUMBER: EFFECTIVE DATE:

June 14, 2017 June 13, 2022

EXPIRATION DATE: REVISION DATE:

August 30, 2017

RESPONSIBLE OFFICIAL:

Robert Middleton 380 Riverside Circle Naples, Florida 34102 (239) 213-4745

### FACILITY:

City of Naples Water Reclamation Facility 1400 3rd Avenue North Naples, FL 34102 Collier County

Latitude: 26°9' 6.85" N Longitude: 81°47' 17.49" W

EPA STANDURD

VPDES 1/9004

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.) and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. The above-named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

### WASTEWATER TREATMENT:

Operate an existing 10.0 million gallons per day (MGD) maximum monthly average daily flow (MMADF) Bardenpho process water reclamation facility (WRF) consisting of two preliminary mechanical bar screens, an aerated grit removal system, four 1st anoxic basins totaling 0.965 million gallons (MG), four aeration basins totaling 2.13 MG, four 2nd anoxic basins totaling 0.88 MG, an alum feed system, four reaeration basins totaling 0.229 MG, six secondary clarifiers totaling 23,326 sq.ft., a flash mixer, two flocculators, three tertiary filters totaling 4,320 sq.ft., two chlorine contact basins totaling 209,628 gallons, an effluent transfer pump station, a reuse distribution pump station, two 5.0 MG reuse/effluent storage tanks, a sulfur dioxide dechlorination system, a cascade aeration unit, and two residuals (WAS) aerated holding tanks totaling 0.754 MG.

For biosolids treatment, the facility also includes three belt filter presses, truck loading belt conveyers, a sludge thermofeeder, a sludge/lime mixer thermoblender, a lime storage and feed system, lime transfer and screw conveyors, a pasteurization vessel, and associated appurtenances. Dewatered biosolids are disposed of at Lee County's composting facility. This equipment is currently not in use, but may be brought back into service if required.

The permittee is authorized to construct modifications to convert the gas chlorine system to a liquid chlorine disinfection system.



PERMITTEE:

City of Naples

FACILITY:

City of Naples Water Reclamation Facility

PERMIT NUMBER: PA FILE NUMBER:

FL0026271 (Major) FL0026271-015-DW1P

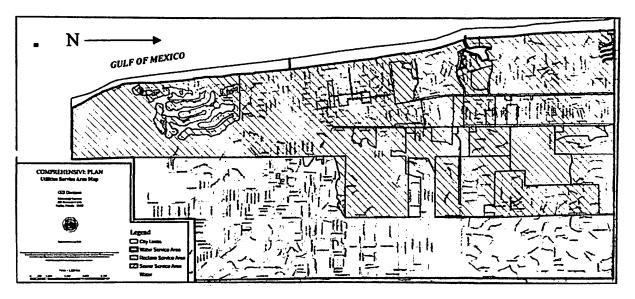
### **REUSE OR DISPOSAL:**

Surface Water Discharge D-002: An existing 10.0 MG (MMADF), 2.42 MGD annual average daily flow (AADF) permitted discharge to the Gordon River (Class III Marine waters) which is upstream of the Bay of Naples at Discharge Location (D-002) (WBID# 3278R5) which is approximately 50 feet in length and discharges at a depth of approximately 5 feet. The point of discharge is located approximately at latitude 26° 09' 06" N, longitude 81° 47' 09" W.

Underground Injection U-001: Reference ASR permit number(s) 261821-UC/5SR-007, 008, and 009.

The City of Naples is authorized to introduce recovered water from its reclaimed water aquifer storage and recovery (ASR) system into the existing wastewater treatment facility prior to disinfection and filtration. This introduction of recovered water shall not cause a violation of any permit limits, nor shall recovered water be discharged to the existing surface water outfall D-002.

Land Application R-001: An existing 16.0 MGD annual average daily flow design capacity slow-rate public access system. The permitted capacity for R-001 is 10.0 MGD MMADF. R-001 is a reuse system which consists of a general service reuse area with various types of reuse as shown on the map below.



D-003: Reclaimed water is currently stored in stormwater management ponds at the existing Bears Paw golf course existing public access reuse irrigation system. Storage of reclaimed water in these ponds is authorized. The stormwater control structure for the lower stormwater lake intermittently discharges to an unnamed ditch upstream of the Golden Gate Canal (Class III fresh waters) at Discharge Location D-003 (WBID# 3278K), which is upstream of the Gordon River in Collier County, Florida. The point of discharge is located approximately at latitude 26° 12' 19.0434" N, longitude 81°46' 29.5422" W.

D-004: Reclaimed water is currently stored in stormwater management ponds at the existing Royal Poinciana golf course existing public access reuse irrigation system. The stormwater control structure for the lower stormwater lake intermittently discharges to an unnamed ditch (Class III fresh waters) at Discharge Location D-004 (WBID# 3278K), which is upstream of the Gordon River in Collier County, Florida. Discharge D-004 includes two stormwater structures that are located approximately at latitude 26° 12' 15.7859" N, longitude 81° 46' 31.0872" W and latitude 26° 11' 04" N, longitude 81° 46' 55" W.

D-005: Reclaimed water is currently stored in stormwater management ponds at the existing Quail Run golf course existing public access reuse irrigation system. The stormwater control structure for the lower stormwater lake intermittently discharges to an unnamed ditch (Class III fresh waters) at Discharge Location D-005 (WBID# 3278K), which is upstream of the Gordon River in Collier County, Florida.

PERMITTEE:

City of Naples

FACILITY:

City of Naples Water Reclamation Facility

PERMIT NUMBER: PA FILE NUMBER:

FL0026271 (Major) FL0026271-015-DW1P

## I. RECLAIMED WATER AND EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

### A. Surface Water Discharges

 During the period beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to discharge effluent from Outfall D-002 to Gordon River. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.D.8.:

		1						
				Effluent Limitations	Monitoring Requirements			1
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max Max	2.42 10.0	Annual Average Monthly Average	Continuous	Recording Flow Meter with Totalizer	EFF-01	See I.A.4
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max Max Max	5.0 6.25 7.5 10.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFA-01	
Solids, Total Suspended	mg/L	Max	5.0	Single Sample	Daily; 24 hours	Grab	EFB-01	
Coliform, Fecal	#/100mL	Max	25	Single Sample	Daily; 24 hours	Grab	EFA-01	1
Coliform, Fecal, % less than detection	percent	Min	75	Monthly Total	Daily; 24 hours	Calculated	EFA-01	See I.A.5
pН	s.u.	Min Max	6.5 8.5	Single Sample Single Sample	Continuous	Meter	EFA-01	See I.A.3
Chlorine, Total Residual (For Disinfection)	mg/L	Min	1.0	Single Sample	Continuous	Meter	EFA-01	See I.A.3 and I.A.6
Chlorine, Total Residual (For Dechlorination)	mg/L	Max	0.01	Single Sample	Daily; 24 hours	Grab	EFF-01	
Nitrogen, Total	mg/L	Max Max Max Max	3.0 PP 3.75 4.5 6.0	Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFA-01	
Phosphorus, Total (as P)	mg/L	Max Max Max Max	1.0 PP 1.25 1.5 2.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFA-01	
Silver, Total Recoverable	ug/L	Max	Report	Single Sample	Annually	24-hr FPC	EFF-01	
Aluminum, Total Recoverable	mg/L	Max	Report	Single Sample	Annually	24-hr FPC	EFF-01	,
Iron, Total Recoverable	mg/L	Max	0.3	Single Sample	Annually	24-hr FPC	EFF-01	