



## Florida Department of Environmental Protection

South District Branch Office  
2796 Overseas Highway, Suite 221  
Marathon, Florida 33050  
[SouthDistrict@dep.state.fl.us](mailto:SouthDistrict@dep.state.fl.us)

Rick Scott  
Governor

Carlos Lopez-Cantera  
Lt. Governor

Jonathan P. Steverson  
Secretary

September 13, 2016

Jay Miller  
Wastewater Division Manager, Operations  
Florida Keys Aqueduct Authority  
1100 Kennedy Drive Key West, FL 33040  
[jmiller@fkaa.com](mailto:jmiller@fkaa.com)

Re: Compliance Assistance Offer  
Duck Key Wastewater Cooperative WWTP  
FLA014772  
Monroe County – DW

Dear Mr. Miller:

A Compliance Evaluation Inspection was conducted at your Facility on July 28, 2016. During this inspection, potential non-compliance was noted. The purpose of this letter is to offer compliance assistance as a means of resolving these matter(s).

Specifically, potential non-compliance with the requirements of Chapter 403, Florida Statutes, and Chapter 62-600, Florida Administrative Code was observed. Please see the attached inspection report for a full account of Department observations and recommendations.

We request you review the item(s) of concern noted and respond in writing within 15 days of receipt of this Compliance Assistance Offer. Your written response should include one of the following:

1. Describe what has been done to resolve the non-compliance issue or provide a schedule describing how/when the issue will be addressed,
2. Provide the requested information, or information that mitigates the concerns or demonstrates them to be invalid, or
3. Arrange for the case manager to visit your facility to discuss the item(s) of concern.

It is the Department's desire that you are able to adequately address the aforementioned issues so that this matter can be closed. Your failure to respond promptly may result in the initiation of formal enforcement proceedings.

Company Name  
Facility ID No.: FLA014772  
Compliance Assistance Offer  
Page 2 of 2

Please address your response and any questions to Gary Hardie of the South District Marathon Branch Office at (305)289-7074 or via e-mail at [Gary.Hardie@dep.state.fl.us](mailto:Gary.Hardie@dep.state.fl.us). We look forward to your cooperation with this matter.

Sincerely,



For Jennifer L. Carpenter  
Assistant District Director  
South District  
Florida Department of Environmental Protection

Enclosures: Inspection Report (with attachments)

cc: [DPrice@fkaa.com](mailto:DPrice@fkaa.com)  
[SD\\_CAE\\_WPR@dep.state.fl.us](mailto:SD_CAE_WPR@dep.state.fl.us)

## FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

**WASTEWATER COMPLIANCE INSPECTION REPORT**

## FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
Duck Key Wastewater Cooperative	FLA014772	Monroe	07/28/2016
Mile Marker 61		Phone	Exit Date/Time
Duck Key, Florida 33050		(305) 296-2454	07/28/2016
Name(s) of Field Representatives(s)	Title	Email	Phone
Danny Price	Lead Operator	<a href="mailto:DPrice@fkaa.com">DPrice@fkaa.com</a>	(305) 809-2645
Name and Address of Permittee or Designated Representative	Title	Phone	Operator Certification #
Jay Miller	Operations Manager	(305) 296-2454	
1100 Kennedy Drive	Email		
Key West, Florida 33040	<a href="mailto:JMiller@fkaa.com">JMiller@fkaa.com</a>		
Inspection Type:	<input type="checkbox"/> C <input type="checkbox"/> E <input type="checkbox"/> I	Samples Taken(Y/N): N	@ Sample ID#:
<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	Were Photos Taken(Y/N): Y	@ Log book Volume:
			@ Page

## FACILITY COMPLIANCE AREAS EVALUATED

IC: In Compliance; MC: Minor Out of Compliance; NC: Out of Compliance SC: Significant Non-Compliance;

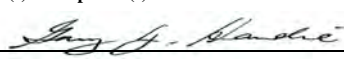

NA: Not Applicable; NE or Blank: Not Evaluated

Significant Non-Compliance Criteria Should be Reviewed When Out of Compliance Ratings Are Given in Areas Marked by a "♦"

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1. ♦ Permit	IC	3. Laboratory	IC	6. Facility Site Review	NC	9. ♦ Effluent Quality
NE	2. ♦ Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10. ♦ Effluent Disposal
		IC	5. ♦ Records & Reports	IC	8. ♦ Operation & Maintenance	IC	11. Biosolids/Sludge
						NA	12. Groundwater
NA	14. Other:					NE	13. SSO Survey

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions:

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Gary Hardie 	SDB/ (305)289-7070	09/13/2016
Signature of Reviewer	District Office/Phone Number	Date
Diane DiPascale 	SD/ (239)344-5641	09/13/2016

Single Event Violation Code(s):

## INSPECTION REPORT SUMMARY

**Facility Name:** Duck Key Wastewater Cooperative

**Facility ID:** FLA014772

**Inspection Type:** CEI

**Inspection Date:** 07/28/2016

### FACILITY BACKGROUND:

**Facility Address:** Mile Marker 61, Duck Key, Florida 33050, Monroe County

**Program/ Permit Information:** DW, permit issue date: 04/25/2012, expiration date: 04/24/2017

**Treatment Summary:** Bardenpho with chlorinated effluent to reuse or injection wells

**Permitted Capacity:** 0.274 MGD

#### 1. Permit: RATING – IN COMPLIANCE

1.1 Observation: *General* – A copy of the permit was onsite and available to plant personnel.

Additional Comments: The current facility permit will expire on April 24, 2017. If the facility will continue to operate beyond the effective dates of the permit, an application for renewal must be submitted at least 180 days before the expiration date.

#### 2. Compliance Schedules: RATING – NOT EVALUATED

2.1 Observation: *General* – Not Evaluated.

#### 3. Laboratory: RATING – IN COMPLIANCE

3.1 Observation: *General* – The laboratory is certified by the Department of Health.

Additional Comments: Nutrient samples for the facility are analyzed by Flowers (Altamonte) - E83018; Required TSS and fecal coliform samples are analyzed by Flowers (Marathon) - E35834.

#### 4. Sampling: RATING – IN COMPLIANCE

4.1 Observation: *General* – Safe and dry access to influent and effluent sampling points are provided.

4.2 Observation: *General* – Calibrations were performed correctly.

Additional Comments: The operator demonstrated daily procedures for calibration verification of the meter used in pH and TRC analysis.

4.3 Observation: *General* – Sample collection is being performed in accordance with DEP-SOP-001/01.

Additional Comments: The influent and effluent automatic samplers are programmed to collect flow proportioned composites as required by the permit. During the inspection, the operator demonstrated the programming procedure. The NIST traceable thermometers were in the acceptable range. Minimum sample aliquots of 100 mL were being pulled.

4.4 Observation: *General* – Calibration standards/buffers were within the expiration dates.

Additional Comments: TRC standards and pH buffers used for process control were current.

**5. Records and Reports: RATING – IN COMPLIANCE**

5.1 Observation: *General* – Operators' certification(s) were current and available on-site.

Additional Comments: Danny Price - WWA0015283; Stephen Frates - WWC0009207; Terry Rongey - WWA0006224; Jay Miller - WWC0022875

5.2 Observation: *General* – The certified operator's daily logbook was complete.

5.3 Observation: *General* – A copy of the current laboratory certification was available at the time of the inspection [62-620.350(1), Florida Administrative Code (F.A.C.)].

**Please Note: A more efficient and paperless alternative to reporting discharge and groundwater monitoring data is available at <http://www.ezdmr.dep.state.fl.us>.**

**6. Facility Site Review: RATING – IN COMPLIANCE**

6.1 Observation: *General* – The facility grounds were secured properly.

6.2 Observation: *General* – The facility grounds were clean and well maintained.

6.3 Observation: *General* – Foul odors did not permeate beyond the boundaries of the plant site at the time of the inspection.

6.4 Observation: *General* – Please see specific comment

Additional Comments: Chemicals (hydroxide, glycerine, alum, hypochlorite) on site are stored in areas providing secondary containment.

6.5 Observation: *Alternate Power* – An alternative power source is available at the WWTF.

Additional Comments: Two portable generators are available on site to address collection system power issues.

6.6 Observation: *Alternate Power* – The onsite generator is tested under load on a routine basis.

Additional Comments: The onsite generator is tested weekly under load for approximately one hour.

6.7 Observation: *Alternate Power* – A record of testing was available for the onsite generator.

6.8 Observation: *Aeration Basins/Activated Sludge* – The contents in the aeration chambers appeared to be adequately mixed.

6.9 Observation: *Aeration Basins/Activated Sludge* – The air line(s) to the aeration basin was free from leaks at the time of the inspection.

6.10 Observation: *Aeration Basins/Activated Sludge* – The time clock for the aeration system control was operational at the time of the inspection.

6.11 Observation: *Aeration Basins/Activated Sludge* – The RAS line was properly located.

6.12 Observation: *Blowers/Motors* – The blower was operational at the time of the inspection.

6.13 Observation: *Blowers/Motors* – The blowers were equipped with belt guards.

6.14 Observation: *Clarifiers* – The clarifier weirs appear to be level.

6.15 Observation: *Clarifiers* – The clarifier had good settling and clear effluent.

6.16 Observation: *Filtration* – No problems or deficiencies were observed in the filters.

6.17 Observation: *Disinfection* – The chlorine contact chamber was clean and the effluent leaving the plant was clear

6.18 Observation: *Digestors* – The digestors were free from excessive odors.

**7. Flow Measurement: RATING – IN COMPLIANCE**

7.1 Observation: *General* – The copy of the flow calibration report is current and satisfactory.

Additional Comments: The reuse, influent, and effluent flow measurement devices were last calibrated 12/14/15.

7.2 Observation: *General* – The chart recorder for the flow meter was operational at the time of the inspection.

**8. Operation and Maintenance: RATING – IN COMPLIANCE**

8.1 Observation: *General* – The operator is performing treatment plant operation and maintenance duties in a responsible and professional manner.

8.2 Observation: *General* – A certified operator as required by Rule 62-602 and the Permit, was operating the WWTF.

**9. Effluent Quality: RATING – OUT OF COMPLIANCE**

9.1 Observation: *General* – The effluent appeared clear with an acceptable chlorine residual.

Additional Comments: TRC = 1.61 mg/L @ 10:25. Grab sample analyzed with DR890 Unit #2.

**9.2 Deficiency Description: *General* – A review of the Discharge Monitoring Reports revealed the following effluent exceedance(s).**

Additional Comments: The facility reported single grab sample maximum results of 27.6 mg/L in August 2015 and 5.8 mg/L in April 2016 at EFB-1 for effluent TSS to R-001. In addition, the facility reported a 67.0 cfu/100 mL single grab sample maximum result for effluent fecal coliform at EFA-1 to R-001 in February 2016. The facility also reported failing to meet the minimum 75.0 percent less than detection limit for fecal coliform in January, March, and June 2016 at EFA-1 to R-001. DMRs from the period of July 2015 through June 2016 were reviewed for this inspection.

**Permit/Rule or Other Reference:**

F.A.C. Rule 62-600.440(6)(a) states that except as provided in paragraphs 62-600.440(6)(e) and (f), F.A.C., facilities required to provide high-level disinfection shall meet the following criteria (using MF or equivalent MPN methods): 1. Over a 30 day period (monthly), 75% of the fecal coliform values shall be below the detection limits. 2. Any one sample shall not exceed 25 fecal coliform values per 100 mL of sample. 3. Any one sample shall not exceed 5.0 mg/L of TSS at a point before application of the disinfectant.

**10. Effluent Disposal: RATING – IN COMPLIANCE**

10.1 Observation: *General* – The facility was discharging at the time of the inspection.

10.2 Observation: *General* – The effluent was free from visible sheen at the time of the inspection.

10.3 Observation: *General* – The effluent was free from excessive turbidity.

10.4 Observation: *General* – The effluent was free from excessive foam.

10.5 Observation: *General* – Please see specific comment.

Additional Comments: At the time of the inspection, the facility was discharging to the injection wells (U-001) due to slightly high salinity. Elevated salinity effluent would need to be mixed with potable water for adequate dilution prior to discharging to the reuse system. In addition, the system is set to auto-reject to U-001 at TRC = 1.0 mg/L and/or turbidity = 3.0 NTU.

11. **Biosolids/Sludge:** RATING – IN COMPLIANCE

11.1 Observation: *General* – Residuals were being disposed of in accordance with the permit.

12. **Groundwater Quality:** RATING – NOT APPLICABLE

12.1 Observation: *General* – Not Applicable.

13. **SSO Survey:** RATING – NOT EVALUATED

13.1 Observation: No observations were recorded.

14. **Other:** RATING – NOT APPLICABLE

14.1 Observation: *General* – Not Applicable.