

Key Largo Wastewater Treatment District Board of Commissioners Meeting Agenda Item Summary

Meeting Date:

September 16, 2025

Agenda Item Number: G-1

Action Required:

No

Department:

General Manager

Sponsor:

Peter Rosasco

Subject:

FDEP Plant Inspection

Summary:

Mr. Rosasco will discuss the FDEP Plant Inspection.

Reviewed / Approved

Operations: _____

Administration: _____

Finance: _____

District Counsel: _____

District Clerk: _____

Engineering: _____

Financial Impact

\$

Funding Source:

N/A

Budgeted:

N/A

Attachments

1. FDEP Plant Inspection Report

Approved By: _____

General Manager



Date: 09/11/2025



FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis
Governor

Jay Collins
Lt. Governor

Alexis A. Lambert
Secretary

Southeast District
2796 Overseas Highway, Suite 221
Marathon, FL 33050
305-289-7070

September 2, 2025

Mr. Peter Rosasco
General Manager
Key Largo Wastewater Treatment District
100301 Overseas Highway
Key Largo, Florida 33037
Email: Cunstruction@KLWTD.com

Re: In Compliance
Key Largo Wastewater Treatment Facility
UIC Facility No.: WACS 97750 & WACS 100121
Monroe County

Dear Mr. Rosasco:

Department personnel conducted an inspection of the above-referenced facility on August 22, 2025. Based on the information provided during and following the inspection, the facility was determined to be in compliance with the Department's rules and regulations.

The Department appreciates your efforts to maintain this facility in compliance with state and federal rules. Should you have any questions or comments, please contact Elsa Portanyi at 305-289-7070 or via e-mail at Elsa-Marie.Portanyi@FloridaDEP.gov or TAL_UIC@dep.state.fl.us.

Sincerely,

A handwritten signature in blue ink, appearing to read "M'Liss Bordelon", with a long, wavy horizontal line extending to the right.

M'Liss Bordelon, Environmental Administrator
Southeast District
Florida Department of Environmental Protection

Enclosure: Inspection Report

cc: M'Liss Bordelon, FDEP
Richard Lobinske, FDEP

Whitney.Bordelon@FloridaDEP.gov
Richard.Lobinske@FloridaDEP.gov



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Facility: Key Largo Wastewater Treatment Facility 100301 Overseas Highway Key Largo, Florida 33037 Monroe County – UIC Contact name: Adam Baptiste Contact E-mail: adam.baptiste@klwtd.com	WACS ID: 97750 Operational Permit Permit Expiration: May 16, 2030 Well Field Status: Operational A non-hazardous underground injection control (UIC) well system, consisting of one Class I injection well (IW-1) and one dual-zone monitor well (MW-1), for the disposal of secondary treated municipal effluent which has received high level disinfection from the Key Largo Wastewater Treatment Facility (WWTF). IW-1 is constructed with a 14.48-inch inside diameter fiberglass reinforced plastic (FRP) casing to 2,735 feet (ft) below land surface (bls) and a total depth of 3,604 ft bls. The maximum disposal rate is 4,520 gallons per minute (GPM) and the maximum disposal volume is 6.5 million gallons per day (MGD). MW-1 is completed from 1,460 to 1,494 ft bls and from 1,650 to 1,702 ft bls.	File Number: 0272762-007-UO/1M
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Inspection Date: August 22, 2025	Purpose of Visit (Inspection Type) Bi-Annual (INSP) <input checked="" type="checkbox"/> Compliance (INSP) <input checked="" type="checkbox"/> Construction (COI) <input type="checkbox"/> Enforcement (INSP) <input type="checkbox"/> Complaint (CI) <input type="checkbox"/> Other <input type="checkbox"/> ()								
Wells authorized in permit:	<table border="1"> <tr> <td>Class I</td> <td>IW-1</td> <td>Monitoring wells</td> <td>MW-1</td> </tr> <tr> <td>Class V</td> <td>376727-002-UO/5W, WACS ID 100121</td> <td>Other</td> <td>N/A</td> </tr> </table>	Class I	IW-1	Monitoring wells	MW-1	Class V	376727-002-UO/5W, WACS ID 100121	Other	N/A
Class I	IW-1	Monitoring wells	MW-1						
Class V	376727-002-UO/5W, WACS ID 100121	Other	N/A						
SWells inspected at visit:	<table border="1"> <tr> <td>Class I</td> <td>IW-1</td> <td>Monitoring wells</td> <td>MW-1</td> </tr> <tr> <td>Class V</td> <td>376727-002-UO/5W, WACS ID 100121</td> <td>Other</td> <td>N/A</td> </tr> </table>	Class I	IW-1	Monitoring wells	MW-1	Class V	376727-002-UO/5W, WACS ID 100121	Other	N/A
Class I	IW-1	Monitoring wells	MW-1						
Class V	376727-002-UO/5W, WACS ID 100121	Other	N/A						
Is operator's license current and posted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (OM; only applicable to DW/ASR) Adam Baptiste , Class A Operator, License No. 0026780 exp. 4/30/2027 William Cunningham , Class B Operator, License No. 0028844 exp. 4/30/2027 Joe Williams , Class C Operator, License No. 0023825 exp. 4/30/2027									

Facility Contact(s) at time of inspection:	Phone:	Email:
Adam Baptiste, Lead Operator	954-661-5160	Adam.Baptiste@klwtd.com
Joe Williams, Senior Operator	786-399-3972	Joe.Williams@klwtd.com
Ryan Dempsey, Operations and Facilities Manager	305-798-2203	Ryan.Dempsey@klwtd.com

Compliance areas evaluated: (Red is COMET violation codes)							
IC: In Compliance; NC: Out of Compliance SC: Significant Non-Compliance NA: Not Applicable, NE: Not Evaluated							
Operating Requirements		Monitoring, Records, & Reports		Facility Site Review (OM)		Calibration (OM)	
IC	1. Volume (WI)	IC	6. Records of MOR (MM)	IC	8. Wellheads	IC	14. Pressure Gauges
IC	2. Pressure (IP)	IC	7. Lab Reports (electronic or hard copies) (MR)	NA	9. Annulus Tank	IC	15. Flow Meters
IC	3. Emergency (OM)			IC	10. Rust & Corrosion	NA	16. Chart Recorders
IC	4. Valid Permit (OP)			IC	11. Labeling	IC	17. Other Equipment (SCADA)
IC	5. O&M Manual (OM)			IC	12. Purging	IC	18. Calibration Certificates
				IC	13. Maintenance		

Key Largo Wastewater Treatment Facility; WACS ID: 97750

Facility Inspection Worksheet

GENERAL

	Rule	Operating Requirements	N/A	Yes	No	COMET CODE	Notes
1	62-528.415(4)(c)	Emergency Discharge method permitted and operational	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
2	62-528.415(4)(b)	Abnormal Events reported	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(FN)	None to report
3	62-528.307(1)(l)	Current Permit on site	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OP)	Exp. May 16, 2030
4	62-528.415(3)	Up-To-Date Operation and Maintenance Manual on site	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	AquaSBR O&M

	Rule	Monitoring, Records, And Reports	N/A	Yes	No	COMET CODE	Notes
5	62-528.307(1)(m)	Monitoring Records & Reports on site and current (MOR's)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(MM)	
6		Specific Injectivity Test available	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(MM)	
7		Fall-Off Test available	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(MM)	
8	62-528.307(1)(m)	Lab Reports available	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(MR)	
9	62-528.307(f)	SCADA System functioning properly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	

Notes: The facility has a designated drawer onsite for storage of physical copies for MORs and test results. The operator was able to navigate to flow and pressure values of IW-1 and MW-1 via SCADA. The facility received a new permit on May 16, 2025 (0272762-007-UO/1M) with new sample schedule requirements for IW-1 for Quarterly and Annual analysis, the schedule requirements were not due prior to the 2025 inspection and therefore not reviewed at the inspection. The annual analysis of IW-1 has been scheduled for September 2025, and the testing kit was on site during the inspection.

Pump Station				
10	Total Number of Pumps	4	Number of Pumps operating at time of inspection:	1
11	Type of Pumps	Vertical turbine	Number of pumps operational at time of inspection:	4

	Rule	Pump Station	N/A	Yes	No	COMET CODE	Notes
12	62-600.540(4)(h)	Designated Stand-by pump	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
13	62-600.540(4)(a)	Lightning Arrestor on Pump Station	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
14	62-528.307(1)(f)	Pump free of leaks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
15	62-528.307(1)(f)	Pump station free of rust and corrosion If corroded, note degree (Minor, Moderate, Severe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
16	62-528.307(1)(f)	Pressure gauge operational	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	

Notes: The permit was administratively continued until May 16, 2025, when a new permit (0272762-007-UO/1M) was issued. During the inspection, all four effluent pumps were in service. The pumps activate when the injection threshold of treated effluent is met, and the pumps alternate between injection sessions.

Key Largo Wastewater Treatment Facility; WACS ID: 97750

Injection Well # IW-1							
17	Rule: 62-528.415(1)(f)		18	Rule: 62-528.415(1)(a)-(c)			
Max Flow Permitted		Flow at Inspection	Max Wellhead Pressure			Pressure at Inspection	
4,520 GPM		3,046 GPM	114 psi			57 psi SCADA 56.5 psi wellhead	
	Rule	Injection Well Requirements	N/A	Yes	No	COMET CODE	Notes
19	62-528.307(1)(f)	Injection well labeled by well number	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(OM)	Additional labels added and submitted on 8/27/25
20	62-528.425(1)(b)	Gauges & Flow Meter agree with electronic equipment (SCADA)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
21	62-600.540(4)	Manual back-up pressure and flow equipment functioning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
22	62-528.425(1)(b)	Flow meter functioning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
23	62-528.307(1)(f)	Injection Wellhead free of leaks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
24	62-528.307(1)(f)	Injection well / Surface equipment free of rust and corrosion If corroded, note degree (Minor, Moderate, Severe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
25	62-600.540(4)(f)	Pad maintained, not used for storage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
26	62-528.307(1)(f)	Sumps are maintained	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
27	62-528.307(1)(f)	Air release valves free from leaks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
28	62-528.415(1)(f)	Maximum Flow within limits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(WI)	
29	62-528.415(1)(a)-(c)	Maximum Pressure within limits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IP)	
30	62-528.425(1)(b)	Annulus Tank level is readable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(OM)	
31	62-528.307(1)(f) & (m)	Per the MOR, what is the Normal Annular Pressure Range	N/A				
32	62-528.307(1)(f) & (m)	Annular Pressure within Normal Range (tubing and packer) note PSI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(OM)	
33	62-528.307(1)(f) & (m)	Annular Pressure greater than Injection Pressure (tubing and packer) Note PSI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(OM)	
34	62-528.307(1)(f) & (m)	Pressure Gauge Calibrated	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	
35	62-528.307(1)(f) & (m)	Flow meters Calibrated	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)	Panametrics PT878 Magnetic flow tube
36	62-528.307(1)(f) & (m)	Chart recorders Calibrated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(OM)	
37	62-528.307(1)(f) & (m)	Latest Calibration -----Dates:	11-13-24				
Well Compliance Status:							
<input checked="" type="checkbox"/>	In-Compliance	<input type="checkbox"/>	Out-Of-Compliance	<input type="checkbox"/>	Significant Out of Compliance		
Notes: The facility promptly added additional labeling to IW-1 and provided documentation to the Department on 8/27/25. The flow meter, pressure transmitter, and pH analyzer were all functioning and calibrated at the time of the inspection.							

Key Largo Wastewater Treatment Facility; WACS ID: 97750

Monitor Well #: MW-1				Associated with Injection Well: IW-1			
UPPER ZONE		LOWER ZONE		Emergency Class V well WACS 100121			
38	Rule: 62-528.425(1)(g)5	39	Rule: 62-528.425(1)(g)5	40	Rule: 62-528.425(1)(g)5		
Wellhead Pressure	Wellhead Water Level	Wellhead Pressure	Wellhead Water Level	Wellhead Pressure	Wellhead Water Level		
19.8 psi	N/A	21.2 psi	N/A	0	N/A		
	Rule	Monitor Well Requirements		N/A	Yes	No	COMET CODE
41	62-528.307(f)	Monitor well labeled by well number		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(OM) Additional labels added and submitted on 8/27/25
42	62-528.307(f)	Sample Ports labeled		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)
43	62-528.425(1)(g)1 62-528.307(f)	Wellhead pressure / Water Level gauges functioning		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)
44	62-528.425(1)(g)1 62-528.307(f)	Wellhead gauges agree with electronic equipment (SCADA)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(MR)
45	62-528.425(1)(g)1 62-528.307(f)	Transducer in working order		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)
46	62-528.307(1)(f)	Monitor wellhead free from leaks		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)
47	62-528.307(1)(f)	Monitor well / Surface equipment free of rust and corrosion If corroded, note degree (Mild, Moderate, Severe)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)
48	62-600.540(4)(f)	Pad maintained, not used for storage		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)
49	62-528.307(1)(f)	Sumps are maintained		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)
50	62-528.307(1)(f) & (m)	Pressure Gauge Calibrated		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)
51	62-528.307(1)(f) & (m)	Chart recorders Calibrated		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(OM)
52	62-528.307(1)(f) & (m)	Transducers Calibrated		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(OM)
53	62-528.307(1)(f) & (m)	Latest Calibration ----- Dates:		11/13/24			
54		Monitoring well purge waters flow to:		On-site sink draining to in-plant pump station			
55		Monitoring well purge technique:		Centrifugal pump			
56		Monitoring well volume purged / time needed:		N/A			
Well Compliance Status:							
<input checked="" type="checkbox"/>	In-Compliance	<input type="checkbox"/>	Out-Of-Compliance	<input type="checkbox"/>	Significant Out of Compliance		
Notes: The facility has a class V injection well (WACS 100121), "Class V", that is used in the case of emergencies and/or during MIT. The facility's most recent compliance evaluation inspection observed that: purging did not meet stabilization completion criteria established in FS 2200, the purge volumes were inconsistent with Section 4-3 of the O&M for UZ and LZ, and the units for specific conductance (COND.) and dissolved oxygen (DO) were not consistently circled on the purge logs. These deficiencies were promptly corrected and were not observed in the review of recent MOR submissions.							
Facility/Well Compliance Status:							
<input checked="" type="checkbox"/>	In-Compliance	<input type="checkbox"/>	Out-Of-Compliance	<input type="checkbox"/>	Significant Out of Compliance		
Comments/Rule or Permit Violations/ Recommended Actions:							
The facility had all record requirements available on site in both physical and digital forms. The facility received new requirements for the Quarterly and Annual testing schedule of IW-1 which were not due prior to the inspection and therefore were not reviewed during the 2025 compliance evaluation inspection. The facility had scheduled the annual sampling for the wells and demonstrated their intention by having the sampling bottles on site. The facility has redundancy with pumps and exercises the components in a rotational order as injection is needed. The facility's wastewater permit ensures sufficient staffing for the injection well. The well heads were free of leaks and rust and appeared to be in compliance. The facility promptly added additional labels to the injection wells and their associated sample points and piping. The facility had past deficiency for purge log data completeness, the deficiency was promptly corrected and was not observed in the review of recent MOR submissions. The facility was found to be in compliance with the Department's rules and the facility's current permit requirements.							
Elsa Portanyi <i>Elsa Portanyi</i> FDEP Inspector – 8/27/25				M'Liss Bordelon <i>M'Liss Bordelon</i> Inspector's Manager – 9/2/2025			

Key Largo WWTP Class I (WACS 97750) and Key Largo WWTP Class V emergency injection well (WACS 100121)
 Photos by Elsa Portanyi on 8/22/25.



IW-1 Field view



Additional labeling on IW-1 provided on 8/27/25



IW-1 Continuous monitoring gauges and display



IW-1 Pressure transmitter



IW-1 pH and pressure



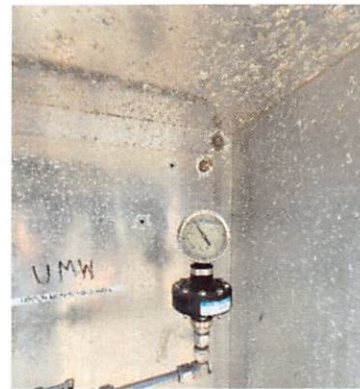
MW-1 Field view



MW-1 pad



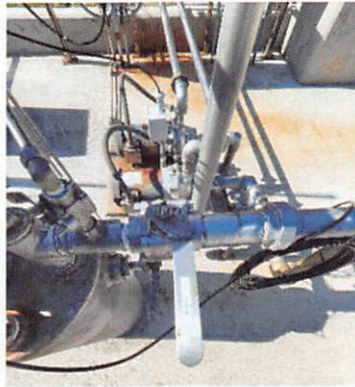
MW-1 monitoring station



UMZ Pressure gauge and label



LMZ Pressure gauge and label



MW-1 valve Label



MW-1 valve Label



MW-1 Sample station



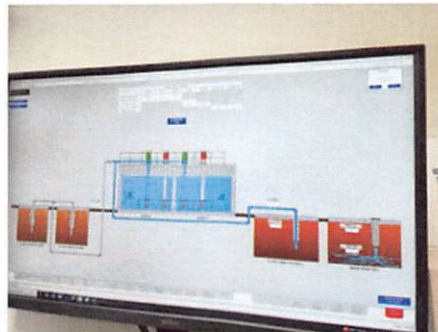
Class V backup well
WACS 100121



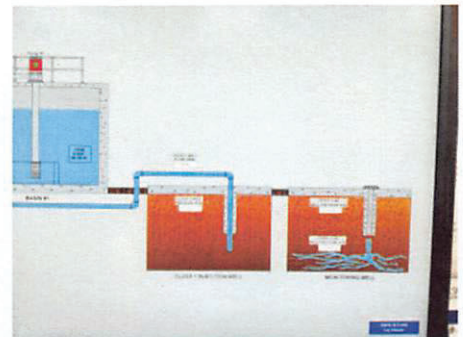
Additional labeling on IW-I provided on
8/27/25
WACS 100121



Class V Backup well pressure gauge
WACS 100121

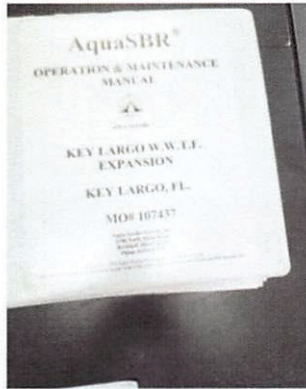


SCADA full UIC system view

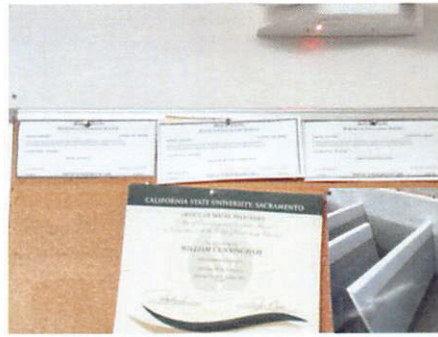


SCADA IW-1 and MW-1

Key Largo WWTP Class I (WACS 97750) & Key Largo WWTP Class V (WACS 100121)
8/22/2025



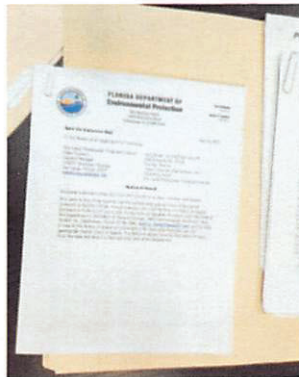
O&M



Operator Certifications



Annual Sampling work order



Onsite permit



Financial Responsibility for P&A