



# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Rick Scott  
Governor

Carlos Lopez-Cantera  
Lt. Governor

Jonathan P. Steverson  
Secretary

## SENT VIA ELECTRONIC MAIL

In the Matter of an Application for Permit by:

6 May 2016

Mr. Jack Shelton, Water Reclamation Director  
City of Cocoa Beach  
1600 Minutemen Causeway  
Cocoa Beach, Florida 32931  
[JShelton@cityofcocoabeach.com](mailto:JShelton@cityofcocoabeach.com)

Brevard County UIC  
FDEP File No: [0224301-003-UC/5SR](#)  
WACS ID Number: [99135](#)  
Class V, ASR Well System  
Construction Permit

## NOTICE OF DRAFT PERMIT

The Department of Environmental Protection hereby gives notice that a Draft Permit has been developed for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, City of Cocoa Beach, Mr. Jack Shelton, Water Reclamation Director, 1600 Minutemen Causeway, Cocoa Beach, Florida 32931, applied on February 15, 2015 for a permit to construct a Class V Aquifer Storage and Recovery (ASR) well system at the City of Cocoa Beach Water Reclamation Facility, 1600 Minutemen Causeway, Cocoa Beach, Florida 32931 in the County of Brevard.

The Department has permitting jurisdiction under chapter 403 of the Florida Statutes and the rules adopted thereunder. The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed work.

Pursuant to section 403.815 of the Florida Statutes, and Rule 62-528.315(6)(b) of the Florida Administrative Code, you (the applicant) are required to publish at your own expense the enclosed Notice of Draft Permit. The Notice must be published one time only within 30 days in a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031 of the Florida Statutes, in the county where the activity is to take place. The applicant shall provide proof of publication to the Tallahassee Office of the Department within seven (7) days of publication. Failure to

**PERMITTEE:** Mr. Jack Shelton, Water Reclamation Director  
City of Cocoa Beach  
Class V, ASR Injection Well System

**WACS ID No.:** 99135  
**Permit ID No.:** 0224301-003-UC/5SR  
**Date:** May 6, 2016

publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

Any interested person may submit written comments on the draft permit within 30 days of the public notice. Written comments may be submitted to the Department of Environmental Protection, Aquifer Protection Program, 2600 Blair Stone Road, MS 3530, Tallahassee, Florida 32399-2400. All comments received within the 30-day period and during the public meeting will be considered by the Department in formulating a final decision concerning this project. If a public meeting is arranged it must be held in the area of the well no less than 30 days after publication of this Notice for the purpose of receiving verbal and written comment concerning this project. If a public meeting is not arranged prior to publication, the Notice must provide an opportunity for a public meeting. If a public meeting is later scheduled, there will be another 30-day notice period for that meeting. Please contact Neil Campbell, Engineering Specialist at 850.245.8612, for additional information.

Executed in Leon County, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



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Joseph Haberfeld  
Aquifer Protection Environmental Administrator  
Division of Water Resource Management

**PERMITTEE:** Mr. Jack Shelton, Water Reclamation Director  
City of Cocoa Beach  
Class V, ASR Injection Well System

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### CERTIFICATE OF SERVICE

The undersigned designated clerk hereby certifies that this NOTICE OF DRAFT PERMIT and all copies were mailed before the close of business on Friday, May 06, 2016, to the listed persons.

### FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section.120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged



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Clerk

Robin A. Babin

May 6, 2016

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Date

Copies Furnished To:

Joseph Haberkfeld, FDEP/TLH  
Neil Campbell, FDEP/TLH  
George Heuler, FDEP/TLH  
Anil Desai, FDEP/CD  
Heath Wintz, P.E./MWH  
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STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

**NOTICE OF DRAFT PERMIT**

The Department of Environmental Protection hereby provides Notice that it has prepared a Draft Permit for the proposed project as detailed in application File No. [0224301-003-UC/5SR](#), WACS ID No. [99135](#), subject to the conditions specified in the draft permit and summarized below. The applicant, City of Cocoa Beach, Mr. Jack Shelton, Water Reclamation Director, 1600 Minutemen Causeway, Cocoa Beach, Florida 32931, applied on February 15, 2015 for a permit for a Class V Aquifer Storage and Recovery (ASR) well system. The project is located at the City of Cocoa Beach Water Reclamation Facility, 1600 Minutemen Causeway, Cocoa Beach, Florida 32931 in the County of Brevard.

The facility will continue to operational testing of one (1) non-hazardous Class V, Group 3 Aquifer Storage and Recovery (ASR) well, TPW-1 for the underground storage of reclaimed water from the City of Cocoa Beach Water Reclamation Facility. Well TPW-1 is completed in the lower Floridan aquifer with a final casing diameter of 18 inches at a depth of 1230 feet below land surface (bls) and a total depth of 1320 feet bls. Monitor wells SMW-1 and SZMW-1 are completed at the depths of 800 to 950 and 1235 to 1320 feet bls, respectively.

The Department has permitting jurisdiction under Chapter 403 of the Florida Statutes and the rules adopted thereunder. The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed work.

Any interested person may submit written comments on the draft permit and may request a public meeting within 30 days after publication of this public notice. A request for a public meeting shall be submitted in writing and shall state the nature of the issues proposed to be raised in the meeting. If a public meeting is later scheduled, there will be another 30-day notice period for that meeting. Written comments or a public meeting request shall be submitted to the Department of Environmental Protection, Aquifer Protection Program, 2600 Blair Stone Road, MS 3530, Tallahassee, Florida 32399-2400, which is the office processing this permit application. All comments received within the 30-day period will be considered in formulation of the Department's final decision regarding permit issuance.

The application, draft permit, and fact sheet are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Protection, [Central District Office](#), 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-376, and at the Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Any additional information concerning this project may be obtained by contacting [Neil I. Campbell](#), Engineering Specialist, at 850.245.8612.



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## Underground Injection Control Class V, Group 3 Aquifer Storage and Recovery (ASR) Construction and Testing Permit

### Permittee

City of Cocoa Beach

### Responsible Official

Mr. Jack Shelton, Water Reclamation Director  
1600 Minutemen Causeway  
Cocoa Beach, Florida 32931  
[JShelton@cityofcocoabeach.com](mailto:JShelton@cityofcocoabeach.com)

### Facility

City of Cocoa Beach WRF  
1600 Minutemen Causeway  
Cocoa Beach, Florida 32931

### Permit/Certification

Permit Number: 0224301-003-UC/5SR  
WACS ID: 99135  
Date of Issuance: Draft  
Date of Expiration: Draft  
Permit Processor: Neil I. Campbell

### Location

County: Brevard  
Latitude: 28° 18' 55.80" North  
Longitude: 80° 38' 4.40" West

**Project:** Class V, Group 3 ASR Well System

This permit is issued under the provisions of Chapter 403, Florida Statutes, and the rules adopted thereunder. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows.

**TO CONTINUE OPERATIONALLY TESTING:** The facility will continue operational testing of one (1) non-hazardous Class V, Group 3 well Aquifer Storage and Recovery (ASR) well, TPW-1 for the underground storage of reclaimed water from the City of Cocoa Beach Water Reclamation Facility. Well TPW-1 is completed in the lower Floridan aquifer with a final casing diameter of 18 inches at a depth of 1230 feet below land surface (bls) and a total depth of 1320 feet bls. Monitor wells SMW-1 and SZMW-1 are completed at the depths of 800 to 950 and 1235 to 1320 feet bls, respectively.

**IN ACCORDANCE WITH:** The Application to Operate DEP Form No. 62-528.900(1) received, February 15, 2016, and supporting information submitted to this agency.

**LOCATION:** City of Cocoa Beach Water Reclamation Facility, 1600 Minutemen Causeway, Cocoa Beach, Florida 32931 in the County of Brevard.

**PERMITTEE:** Mr. Jack Shelton, Water Reclamation Director  
 City of Cocoa Beach  
 Class V, ASR Injection Well System

**WACS ID No.:** 99135  
**Permit No.:** 0224301-003-UC/5SR  
**Date:** May 6, 2016

The injection and monitoring wells at this facility are designated as follows:

**Injection Wells:**

<i>Well Name</i>	<i>WACS Effluent Testsite ID</i>	<i>Total Well Depth *</i>	<i>Casing Diameter (inches)</i>	<i>Casing or Tubing Type</i>	<i>Casing or Interval*</i>
TPW-1	14016	1320	42	Steel	30
			36	Steel	241
			28	Steel	803
			18	FRP	1230
				Open borehole	From 1230 to 1320

\*Feet Below Land Surface

**Monitoring Well System**

<i>Well Name</i>	<i>WACS Testsite ID</i>	<i>Total Well Depth*</i>	<i>Casing Diameter (OD)</i>	<i>Casing Type</i>	<i>Casing Depth*</i>	<i>Monitoring Depth*</i>
SMW-1	29409A	950	20	Steel	30	
			14	Steel	240	
			6	PVC	800	
						From 800 to 950
SZMW-1	29409B	1320	28	Steel	30	
			20	Steel	244	
			14	Steel	800	
			6	Steel	1235	
				Open borehole		From 1235 to 1320

\*Feet Below Land Surface

**SUBJECT TO:** Specific Conditions I-IV and General Conditions 1-24.

**Specific Conditions**

**I. OPERATING REQUIREMENTS**

**A. General**

1. Only water that has received full treatment at the City of Cocoa Beach Water Reclamation Facility may be injected into the ASR well. The injected water shall meet all drinking water standards unless otherwise exempted. This permit does not authorize the construction or operation of any other wells. [62-528.610(1) and (3)]

**PERMITTEE:** Mr. Jack Shelton, Water Reclamation Director  
City of Cocoa Beach  
Class V, ASR Injection Well System

**WACS ID No.:** 99135  
**Permit No.:** 0224301-003-UC/SSR  
**Date:** May 6, 2016

2. All equipment of this facility shall be operated and maintained so as to function consistently as designed in removing pollutants. *[62-528.307(3)(b) and 62-528.400(1)]*
3. In the event a well must be plugged or abandoned, the permittee shall obtain a permit from the Department as required by Chapter 62-528, Florida Administrative Code. When no longer used for their intended purpose, these wells shall be properly plugged and abandoned. Within 180 days of well abandonment, the permittee shall submit to the Department the proposed plugging method, pursuant to Rule 62-528.460, F.A.C. *[62-528.460(1) and 62-528.435(6)]*
4. In accordance with rules 62-4.090 and 62-528.455(3)(a), F.A.C., the permittee shall submit an application for permit renewal at least 60 days prior to expiration of this permit. *[62-528.307(3)(a)]*
5. Hurricane Preparedness: Preparations to be made by permittee upon issuance of a "Hurricane Watch" by the National Weather Service include, but are not limited to:
  - a. Secure all onsite salt and other stockpiled additive materials to prevent surface and/or ground water contamination.
  - b. Properly secure equipment to prevent damage to well(s) and onsite treatment process equipment.*[62-528.307(1)(f)]*
6. Cycle test 3 is approved for the recharge of 240 million gallons (MG) over a maximum 365-day period, and a storage period of 60 days, followed by a recovery period to assess the ability to recover reclaimed water from the ASR zone. Changes in the cycle test plan or additional cycles may be approved by the Department after a written request by the permittee. *[62-528.450(3)(a)]*

## **B. Surface Equipment**

1. The integrity of the monitoring zone sampling systems shall be maintained at all times. Sampling lines shall be clearly and unambiguously identified by monitoring zone at the point at which samples are drawn. All reasonable and prudent precautions shall be taken to ensure that samples are properly identified by monitoring zone and that samples obtained are representative of those zones. Sampling lines and equipment shall be kept free of contamination with independent discharges and no interconnections with any other lines. *[62-528.307(1)(f) and 62-528.307(3)(b)]*
2. The surface equipment for each ASR well shall maintain compliance with Chapter 62-528.450(2)(j), F.A.C. for water hammer control, as well as access for logging and testing, and reliability and flexibility in the event of damage to the well and surface piping. *[62-528.450(2)(j), 62-528.307(1)(f), and 62-528.307(3)(b)]*



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Class V, ASR Injection Well System

**WACS ID No.:** 99135  
**Permit No.:** 0224301-003-UC/5SR  
**Date:** May 6, 2016

3. The surface equipment and piping for the ASR and monitoring wells shall be kept free of corrosion at all times. *[62-528.307(1)(f) and 62-528.307(3)(b)]*
4. Spillage onto the ASR well pad(s) during construction activities, and any waters spilled during mechanical integrity testing, other maintenance, testing or repairs to the system(s) shall be contained on the pad(s) and directed to a sump which in turn discharges to the pumping station wet well or via other approved means to the ASR well system(s). *[62-528.307(1)(f) and 62-528.307(3)(b)]*
5. The ASR well pads are not, unless specific approval is obtained from the Department, to be used for storage of any material or equipment at any time. *[62-528.307(1)(f) and 62-528.307(3)(b)]*
6. The surficial aquifer monitoring wells adjacent to the ASR and monitoring well pads shall be secured, maintained, and retained in service for subsequent sampling that may be needed (i.e., should there be an accidental discharge to the surficial aquifer); alternatively, the facility may submit a request to the Department for cessation of sampling followed by capping, or plugging and abandonment of these wells. *[61-528.307(3)(b) and 62-520.600(6)(k)]*

## **II. QUALITY ASSURANCE/QUALITY CONTROL**

1. The permittee shall ensure that the operation of this ASR well system shall be as described in the application and supporting documents. Any proposed modifications to the permit, construction procedures, testing procedures, completion procedures, operation procedures, or any additional work not described in the application or supporting documents shall be submitted in writing to the Aquifer Protection Program for review and clearance prior to implantation. Changes of negligible impact to the environment and staff time will be reviewed by the program manager, cleared when appropriate and incorporated into this permit. Changes or modifications other than those described above will require submission of a completed application and appropriate processing fee as per Rule 62-4.050, F.A.C. *[62-528.100, 62-4.050]*
2. Proper operation and maintenance include effective performance and appropriate quality assurance procedures; adequate operator staffing and training; and adequate laboratory and process controls. *[62-528.307(3)(b)]*
3. All water quality samples required by this permit shall be collected in accordance with the appropriate Department Standard Operation Procedures (SOP), pursuant to Chapter 62-160, F.A.C., Field Procedures. A certified laboratory shall conduct the analytical work, as provided by Chapter 62-160, F.A.C., Laboratory Certification. Department approved test methods shall be utilized, unless otherwise stated in this permit. All calibration procedures for field testing and laboratory equipment shall follow manufacturer's instrumentation manuals and satisfy the requirements of the Department



**PERMITTEE:** Mr. Jack Shelton, Water Reclamation Director  
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Class V, ASR Injection Well System

**WACS ID No.:** 99135  
**Permit No.:** 0224301-003-UC/5SR  
**Date:** May 6, 2016

SOPs. A listing of the SOPs pertaining to field and laboratory activities is available at the FDEP website at: <http://www.dep.state.fl.us/water/sas/sop/sops.htm>. [62-4.246 and 62-160]

4. All indicating, recording and totalizing devices associated with the ASR well system shall be maintained in good operating condition and calibrated annually at a minimum. The pressure gauges, flow meter, and chart records shall be calibrated using standard engineering methods. [62-528.307(1)(f) and 62-528.307(3)(b)]
5. All reports submitted to satisfy the requirements of this permit shall be signed by a person authorized under Rule 62-528.340(1), F.A.C., or a duly authorized representative of that person under Rule 62-528.340(2), F.A.C. All reports required by this permit which are submitted to the Department shall contain the following certification as required by Rule 62-528.340(4), F.A.C.:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

[62-528.340(1), (2), and (4)]

6. Analyses shall be conducted on unfiltered samples, unless filtered samples have been approved by the Central District office as being more representative of ground water conditions. [62-520.310(5)]

### **III. TESTING AND REPORTING REQUIREMENTS**

#### **A. General**

1. The permittee shall submit monthly to the Department the results of all injection well and monitoring well data required by this permit no later than the last day of the month immediately following the month of record. The report shall include:
  - a. A cover page summarizing the current status of all monthly activities, including the certification and signature required in condition II.5.
  - b. Operational and water quality data in a tabular format. Standardized forms for the project will be provided by the Department.
    - i. Facility Name
    - ii. Well Name
    - iii. UIC Permit Number
    - iv. WACS Facility ID

**PERMITTEE:** Mr. Jack Shelton, Water Reclamation Director  
City of Cocoa Beach  
Class V, ASR Injection Well System

**WACS ID No.:** 99135  
**Permit No.:** 0224301-003-UC/5SR  
**Date:** May 6, 2016

- v. WACS Testsite ID (on appropriate data sheet) as provided on the Injection Well and Monitoring Well tables on pages 2 and 3 of this permit.
  - c. Laboratory pages and supporting documentation.
2. The report may be sent via electronic mail in Adobe™ (.pdf) format to the following Program e-mail addresses:

Central District

[CD\\_UIC@dep.state.fl.us](mailto:CD_UIC@dep.state.fl.us)

Tallahassee— Aquifer Protection Program

[Tal\\_UIC@dep.state.fl.us](mailto:Tal_UIC@dep.state.fl.us)

If a paper copy of the report is submitted, it should be sent to Department staff at the following addresses:

Central District

3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803-3767

Tallahassee—Aquifer Protection Program

2600 Blair Stone Road, MS 3530  
Tallahassee, Florida, 32399-2400

*[62-528.307(3)(d)]*

## **B. Monitoring**

1. The ASR system shall be monitored in accordance with Rules 62-528.425(1)(g) and 62-528.430(2), F.A.C. The following ASR well performance data and monitor zone data shall be recorded and reported in the monthly operating report (MOR) as indicated below during each recharge, storage and recovery phase. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. *[62-528.307(3)(d) and 528.430(2)]*
2. Sampling of well TPW-1 is not required during storage periods. During extended storage periods (greater than 30 days) the monitoring well water quality parameters listed below as bi-weekly may be sampled and analyzed monthly. *[62-528.615(2)]*

**PERMITTEE:** Mr. Jack Shelton, Water Reclamation Director  
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 Class V, ASR Injection Well System

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<b>Cocoa Beach ASR Sampling and Monitoring Schedule</b>					
<b>PARAMETER</b>	<b>UNIT</b>	<b>RECORDING FREQUENCY OR SAMPLE METHOD</b>	<b>FREQUENCY OF ANALYSES</b>		
			<b>TPW-1</b>	<b>SZMW-1</b>	<b>SMW-1</b>
Flow Rate, max.	gpm	continuous	a		
Flow Rate, min.	gpm	continuous	a		
Flow Rate, avg.	gpm	continuous	a		
Total Volume Recharged	mg	daily/monthly			
Total Volume Recovered	mg	daily/monthly			
Net Storage	MG	monthly			
ASR Well Pressure, max.	psi	continuous	a		
ASR Well Pressure, min.	psi	continuous	a		
ASR Well Pressure, avg.	psi	continuous	a		
Water Level or Pressure, max.	ft. (NAVD) or psi	continuous		a	a
Water Level or Pressure, min.	ft. (NAVD) or psi	continuous		a	a
Water Level or Pressure, avg.	ft. (NAVD) or psi	continuous		a	a
Total Iron	mg/L		M	M	M
Total Alkalinity	mg/L		M	M	M
Sulfate	mg/L		M	M	M
Color	PCU		M	M	M
Odor	TON		M	M	M
Total Trihalomethanes	mg/L		M	M	
Fecal Coliform	CFU/100ml		M	M	M
Total Coliform	CFU/100ml		M	M	M
Gross Alpha	pCi/L		M	Q	Q
Specific Conductivity <sup>b</sup>	µmhos/cm		SM	SM	M
pH <sup>b</sup>	std. units		SM	SM	M
Temperature <sup>b</sup>	°C		SM	SM	M
Dissolved Oxygen <sup>b</sup>	mg/L		SM	SM	M
Oxidation-Reduction Potential <sup>b</sup>	mV		SM	SM	M
Arsenic	µg/L		SM	SM	M
Total Dissolved Solids	mg/L		SM	SM	M
Chloride	mg/L		SM	SM	M
Cryptosporidium	Oocysts/100 ml		A*		
Giardia lamblia	Cysts/100 ml		A*		

See ASR well and monitoring well tables at beginning of permit for more information.

M – monthly; SM – semi-monthly (twice per month); Q – quarterly; A – annually

<sup>a</sup> – Operational data reporting for flows, pressures and water levels: daily max, min and average from continuous reporting; monthly max, min and average (calculated from daily averages).

<sup>b</sup> – Field samples

\* Recharge water only

3. Pertaining to the evacuation (purging) of monitoring wells, which is required prior to the collection of samples for the Monthly Operating Reports (MORs), the facility may elect to follow either one of the following two purging protocols:
  - a. The protocol stated below:

A minimum of three well volumes of fluid shall be evacuated from the monitoring systems prior to sampling for the chemical parameters listed above. Sufficient purging shall have occurred when either of the following has occurred:

    - 1) pH, specific conductance and temperature when sampled, upon purging the third or subsequent well volume, each vary less than 5% from that sampled upon purging the previous well volume; or
    - 2) Upon purging the fifth well volume.
  - b. The following protocol taken from DEP-SOP-001/01(Field Procedures):
    - 1) Purge until the water level has stabilized (well recovery rate equals the purge rate), then purge a minimum of one well volume, and then collect the first set of stabilization parameters, namely pH, specific conductance and temperature;
    - 2) Thereafter, collect stabilization parameters  $\geq$  every  $\frac{1}{4}$  well volume;
    - 3) Purging shall be complete when either of the following have occurred:
      - a) 3 consecutive readings of the parameters listed below are within the following ranges<sup>[1]</sup>:
        - i. pH  $\pm$  0.2 Standard Units
        - ii. Specific Conductance  $\pm$  5.0% of reading
        - iii. Temperature  $\pm$  0.2°C
      - b) Upon purging the fifth well volume.

*[62-160.210(1) and 62-528.430(2)]*

#### **IV. ABNORMAL EVENTS**

1. In the event the permittee is temporarily unable to comply with any of the conditions of a permit due to breakdown of equipment, power outages or destruction by hazard of fire, wind, or by other cause, the permittee of the facility shall notify the [Central District office](#). *[62-528.415(4)(a)]*
2. Notification shall be made in person, by telephone, or by electronic mail (e-mail) within 24 hours of breakdown or malfunction to the [Central District office](#)—3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767. *[62-528.307(1)(x)]*
3. A written report of any noncompliance referenced in Specific Condition (1) above shall be submitted to the [Central District office](#) and the Tallahassee office within five days after its occurrence. The report shall describe the nature and cause of the breakdown or

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<sup>[1]</sup> Provided dissolved oxygen in the groundwater of the zone being monitored is  $\leq$  20% of saturation for the measured temperature and turbidity is  $\leq$  20 NTUs. This assumption holds true for groundwater in most zones of the Floridan aquifer.

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**WACS ID No.:** 99135  
**Permit No.:** 0224301-003-UC/SSR  
**Date:** May 6, 2016

malfunction, the steps being taken or planned to be taken to correct the problem and prevent its reoccurrence, emergency procedures in use pending correction of the problem, and the time when the facility will again be operating in accordance with permit conditions. [62-528.415(4)(b)]

### General Conditions

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are "permit conditions" and are binding and enforceable pursuant to section 403.141, F.S. [62-528.307(1)(a)]
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action. [62-528.307(1)(b)]
3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit. [62-528.307(1)(c)]
4. This permit conveys no title to land, water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-528.307(1)(d)]
5. This permit does not relieve the permittee from liability for harm to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties there from; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. [62-528.307(1)(e)]
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, or are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [62-528.307(1)(f)]
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

**PERMITTEE:** Mr. Jack Shelton, Water Reclamation Director  
City of Cocoa Beach  
Class V, ASR Injection Well System

**WACS ID No.:** 99135  
**Permit No.:** 0224301-003-UC/5SR  
**Date:** May 6, 2016

- a. Have access to and copy any records that must be kept under conditions of this permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
  - d. Reasonable time will depend on the nature of the concern being investigated.  
*[62-528.307(1)(g)]*
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- a. A description of and cause of noncompliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent the recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.  
*[62-528.307(1)(h)]*
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules. *[62-528.307(1)(i)]*
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. *[62-528.307(1)(j)]*
11. This permit is transferable only upon Department approval in accordance with rules 62-4.120 and 62-528.350, F.A.C. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. *[62-528.307(1)(k)]*
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.  
*[62-528.307(1)(l)]*
13. The permittee shall comply with the following:
- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records shall be extended automatically unless the Department determines that the records are no longer required.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including calibration and maintenance records

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- and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
    - 1) the date, exact place, and time of sampling or measurements;
    - 2) the person responsible for performing the sampling or measurements;
    - 3) the dates analyses were performed;
    - 4) the person responsible for performing the analyses;
    - 5) the analytical techniques or methods used;
    - 6) the results of such analyses.
  - d. The permittee shall furnish to the Department, within the time requested in writing, any information which the Department requests to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
  - e. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.  
*[62-528.307(1)(m)]*
14. All applications, reports, or information required by the Department shall be certified as being true, accurate, and complete. *[62-528.307(1)(n)]*
15. Reports of compliance or noncompliance with, or any progress reports on, requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each scheduled date. *[62-528.307(1)(o)]*
16. Any permit noncompliance constitutes a violation of the Safe Drinking Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *[62-528.307(1)(p)]*
17. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *[62-528.307(1)(q)]*
18. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit. *[62-528.307(1)(r)]*
19. This permit may be modified, revoked and reissued, or terminated for cause, as provided in 40 C.F.R. sections 144.39(a), 144.40(a), and 144.41 (1998). The filing of a request by the permittee for a permit modification, revocation or reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. *[62-528.307(1)(s)]*



**PERMITTEE:** Mr. Jack Shelton, Water Reclamation Director  
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20. The permittee shall retain all records of all monitoring information concerning the nature and composition of injected fluid until five years after completion of any plugging and abandonment procedures specified under rule 62-528.435, F.A.C. The permittee shall deliver the records to the Department office that issued the permit at the conclusion of the retention period unless the permittee elects to continue retention of the records. *[62-528.307(1)(t)]*
21. All reports and other submittals required to comply with this permit shall be signed by a person authorized under rules 62-528.340(1) or (2), F.A.C. All reports shall contain the certification required in rule 62-528.340(4), F.A.C. *[62-528.307(1)(u)]*
22. The permittee shall notify the Department as soon as possible of any planned physical alterations or additions to the permitted facility. In addition, prior approval is required for activities described in rule 62-528.410(1)(h). *[62-528.307(1)(v)]*
23. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or injection activity which may result in noncompliance with permit requirements. *[62-528.307(1)(w)]*
24. The permittee shall report any noncompliance which may endanger health or the environment including:
  - a. Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water; or
  - b. Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.  
*[62-528.307(1)(x)]*

Issued this \_\_\_\_\_ day of \_\_\_\_\_ 2016

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

Draft

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Joseph Haberfeld  
Aquifer Protection Environmental Administrator  
Division of Water Resource Management

## FACT SHEET

Cocoa Beach Water Reclamation Facility (WRF) ASR

Permit ID Number: 0224301-003-UC/5SR

WACS ID Number: 99135

May 4, 2016

### 1. General Information

#### A. Statutory Basis For Requiring/Issuing Permit

The Department has permitting jurisdiction under Chapter 403, Florida Statutes (F.S.), and the rules adopted thereunder. The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the project.

#### B. Name and Address of Applicant

Mr. Jack Shelton  
Water Reclamation Director  
City of Cocoa Beach  
1600 Minutemen Causeway  
Cocoa Beach, Florida 32931

#### Facility Location

City of Cocoa Beach Water Reclamation Facility  
1600 Minutemen Causeway  
Cocoa Beach, Florida 32931  
Brevard County

#### C. Description of Applicant's Operation

To continue operational testing of one non-hazardous Class V, Group 3 well Aquifer Storage and Recovery (ASR) well, TPW-1 for the underground storage of reclaimed water from the City of Cocoa Beach Water Reclamation Facility. Well TPW-1 is completed in the lower Floridan aquifer with a final casing diameter of 18 inches at a depth of 1230 feet below land surface (bls) and a total depth of 1320 feet bls. Monitor wells SMW-1 and SZMW-1 are completed at the depths of 800 to 950 and 1235 to 1320 feet bls, respectively.

#### D. Permitting History of this Facility

1. Permit No.05-0224301-001-UC, April 14, 2011 – April 13, 2016

#### E. Documents Used in Permitting Decision

1. City of Cocoa Beach, Water Reclamation Facility, Aquifer Storage and Recovery System Permit Renewal Engineering Report, by MWH, Inc., April 2016
2. Response to Request for Additional Information, MWH, April 13, 2016

## 2. Reasons Permit was Issued

### A. Area of Review (Rule 62-528, 440(6), F.A.C.)

A 2-mile radius Area of Review (AOR) was conducted which encompasses well TPW-1. The surveys of wells within the AOR located 348 wells, primarily located at depths between 30 and 240 feet bls. The deepest wells do not penetrate depths below the Upper Floridan aquifer, and no wells were delineated which were improperly plugged and abandoned. The Latitude/Longitude coordinates at the facility are 28 degrees 18 minutes 55 seconds North and 80 degrees 38.4 minutes 4.4 seconds West. *See Document 1, Section 3 for details.*

### B. Mechanical Integrity Demonstration (Rule 62-528.300.(6), F.A.C.)

Not required by Chapter 62-528, F.A.C., for Class V wells.

### C. Confinement (Rule 62-528.405(2), F.A.C.)

The middle confining unit of the Avon Park Formation, composed of primarily limestone and dolomite, provides confinement from overlying aquifers. *See Document 1 for details.*

### D. Underground Source of Drinking Water (Rule 62-528.405(1)(a), F.A.C.)

The Underground Source of Drinking Water (USDW), which contains water with total dissolved solids (TDS) less than 10,000 mg/L, was documented at Cocoa using background water quality of the monitoring zones, geophysical logging, water samples from pilot hole drilling, and packer tests. The USDW at well TPW-1 occurs at 1060 feet bls.

### E. Injection Zone Testing (Rule 62-528.405(2)(3), F.A.C.)

The storage zone for TPW-1 extends from 1230 feet to 1320 feet bls, and provides excellent transmissivity beneath the confining unit in this portion of the lower Floridan aquifer. The storage zone is within the Avon Park Formation and is composed of dolomite and limestone. *See Document 1 for details.*

### F. Well Construction

#### TPW-1

42" steel pit casing, .375-inch thick, set to 30' bls  
36" steel surface casing, .375-inch thick, set to 241' bls  
28" steel intermediate casing, .375-inch thick, set to 803' bls  
18" FRP casing, .66-inch thick, set to 1230' bls  
Open hole from 1230' to total depth of 1320' bls

#### SZMW-1

28" steel pit casing, .375-inch thick, set to 30' bls  
20" steel surface casing, .375-inch thick, set to 244' bls  
14" steel intermediate casing, .375-inch thick, set to 800' bls  
6" final PVC casing to 1235' bls  
Total depth to 1320' bls

SMW-1

20" steel pit casing, .375-inch thick, set to 30' bls

14" steel casing, 0.375-inch thick, set to 240' bls

6" final PVC casing, to 800'

Total depth to 950' bls

*See Document 1, Figures 4-1 through 4-3 for details*

G. Monitor Plan (Rule 62-528.425(1), F.A.C.)

Monitor wells SZMW-1 (1235'-1320' bls) and SMW-1 (800'-950' bls) monitor the storage zone and overlying zone, respectively. Cycle testing will require monitoring of the Monitoring Wells and TPW-1, which includes recharge and recovery volume during each cycle phase, and monitoring for chemical parameters as listed in the permit. See Draft permit for details, and Document 1, Appendix C, Proposed Monitoring Plan.

H. Financial Responsibility (Rule 62-528.435(9) and 62-528.455(3)(b)8. and (c)3., F.A.C.)

Not required by Chapter 62-528, F.A.C. for Class V wells.

I. Emergency Discharge (Rule 62-528.450(2)(k), F.A.C.)

Not required by Chapter 62-528, F.A.C. for Class V wells.

3. Agency Action

A draft permit will be issued as per Rule 62-528.310, F.A.C.

4. Public Rights (Rules 62-528.310, 62-528.315, 62-528.325, F.A.C.)

Public notice of this draft permit will include the details of a public meeting, or will state that any interested person may request a public meeting within 30 days of the public notice. A request for a public meeting shall be in writing and shall state the nature of the issues proposed to be raised at the meeting. If a public meeting is later scheduled, there will be another 30-day notice period for that meeting. Any interested person may submit written comments on the draft permit within 30 days of the public notice or through the public meeting date, as appropriate. Written comments or a public meeting request may be submitted to the Department of Environmental Protection, Aquifer Protection Program, 2600 Blair Stone Road, MS 3530, Tallahassee, Florida 32399-2400. All comments received within the 30 day period and through the public meeting date will be considered in formulation of the Department's final decision regarding permit issuance.

After the conclusion of the public comment period and public meeting described above the Department may revise the conditions of the permit based on such public comment. Then the applicant will publish Notice of the Proposed Agency Action. A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing). Accordingly, the Department's final action may be different from the position taken by it in the Notice of the Proposed Agency Action. The petition must conform to the requirements specified in the Notice and be filed (received) within 14 days of publication of the Notice in the Office of General Counsel, M.S. 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000. The failure of any person to file a Petition within

the appropriate time period shall constitute a waiver of that person's right to request an administrative (hearing) under Section 120.569 and Section 120.57 of the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will only be at the discretion of the presiding officer upon filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

The application, draft permit, and fact sheet are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Protection, [Central District Office](#), 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-376, and at the Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Any additional information concerning this project may be obtained by contacting [Neil I. Campbell](#), Engineering Specialist, at 850.245.8612.

5. Agency Contact

[Neil I. Campbell](#)

Engineering Specialist, Aquifer Protection Program  
Florida Department of Environmental Protection  
2600 Blair Stone Road, MS 3530  
Tallahassee, Florida 32399-2400  
Phone: 850.245.8612