



**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:

14 April 2015

Mr. Randall R. LaBauve, Vice President
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, Florida 33408
Randall.R.LaBauve@FPL.com

FDEP File No.: 0330373-001-UC/1EX
FDEP WACS No.: 102139
Okeechobee County
Okeechobee Exploratory Well
Class V Exploratory Permit

NOTICE OF PERMIT

Enclosed is Permit Number: [0330373-001-UC/1EX](#) to construct an exploratory Class V well, at the Florida Power & Light Company Okeechobee Exploratory Well site.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, agency_clerk@dep.state.fl.us; and by filing a copy of the Notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Leon County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Joseph Haberfeld
Aquifer Protection Administrator

PERMITTEE: Mr. Randall R. LaBauve, Vice President
FP&L Company Okeechobee County
Class V, Injection Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

CERTIFICATE OF SERVICE

The undersigned designated clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on Tuesday, April 14, 2015, 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

Clerk

Date

Copies Furnished To:

Joseph Haberkfeld, FDEP/TLH
Neil Campbell, FDEP/TLH
George Heuler, FDEP/TLH
Len Fishkin, FDEP/WPB
Agnes Ramsey, ES/FPL
Matthew Raffenberg, EM/FPL
Andrea Holtz, P.E./Holtz Eng.
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JONATHAN P. STEVERSON
SECRETARY

Underground Injection Control Class V Exploratory Well Permit

Permittee:

Florida Power & Light Company

Responsible Official:

Mr. Randall R. LaBauve, Vice President
700 Universe Boulevard
Juno Beach, Florida 33408
Randall.R.LaBauve@FPL.com

Permit/Certification

Permit ID Number: [0330373-001-UC/1EX](#)
WACS ID Number: [102139](#)
Date of Issuance: [April 14, 2015](#)
Date of Expiration: [April 13, 2020](#)
Permit Processor: Neil I. Campbell

Section/Township/Range: Sec2 / T33S / R35E

Facility

FPL Okeechobee County Site
3193 Northeast 366th Trail
Okeechobee, Florida 34972

Location

County: Okeechobee
Latitude: 27° 38' 00.122" North
Longitude: 80° 47' 42.2749" West

Project: Class V, Exploratory Well

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 CONSTRUCT: One (1), Class V, exploratory well, identified as “EW-1” and an associated dual-zone monitor well, identified as “DZMW-1” to obtain hydrologic and geologic information to determine the design criteria and feasibility of using an injection well system to dispose of non-hazardous construction-related water during construction of a potential new power plant to be located on the site of EW-1 and non-hazardous industrial wastewater from the operation of this potential power generation plant. The proposed EW-1 will have a tubing and packer design consisting of a pit pipe with a minimum diameter of 64-inches and 54-, 44-, 34-, and 24-inch diameter concentric steel casings and a nominal 18-inch (16.60-inch inside diameter) fiberglass reinforced pipe (FRP) tubing set inside the 24-inch diameter casing on a positive-seal packer. It is anticipated that the 24-inch diameter casing will be installed to a depth of approximately 2,600 feet below land surface (bls) and the well will have an anticipated total depth of approximately 3,200 feet bls. The annulus between the 24-inch casing and the FRP tubing will be filled with Baracor 100 mixed to a 1% solution to provide corrosion protection.

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Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

IN ACCORDANCE WITH: The Application to Construct an exploratory well, DEP Form No. 62-528.900(1) received, October 24, 2014, responses to the Department's November 19, 2014, and December 22, 2014 request for additional information, and supporting information submitted to this agency.

LOCATION: FPL Okeechobee County Site, 3193 Northeast 366th Trail, Okeechobee, Florida 34972 in the county of Okeechobee, Florida.

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

Exploratory Well:

<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>
EW-1	14023	3200	64	Steel	40
			54	Steel	225
			44	Steel	425
			34	Steel	1700
			24	Steel	2600
			18	FRP	2590
			Open hole		From 2600 to 3200

* Estimated Approximate Depth in Feet Below Land Surface (BLS)

Monitoring Well:

<i>Well Name</i>	<i>WACS Testsite ID</i>	<i>Total Well Depth *</i>	<i>Casing Diameter (inches)</i>	<i>Casing Type or Interval</i>	<i>Casing or Interval Depth*</i>
DZMW-1	29465A 29465B	1870	44	Steel	40
			34	Steel	225
			24	Steel	425
			16	Steel	1600
					From 1600 to 1620
			6.625	FRP	1850
			Open Hole		From 1850 to 1870

* Estimated Approximate Depth in Feet Below Land Surface (BLS)

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

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FPL Okeechobee County Site
Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

Specific Conditions

I. CONSTRUCTION REQUIREMENTS

A. General

1. This permit is for FPL Okeechobee County Site to construct one Class V, exploratory well (EW-1), monitoring well (DZMW-1), and water table monitoring wells surrounding the well pads. This permit does not authorize the construction of any other well or wells. [62-528.440(2)(a)]
2. No underground injection is allowed that causes or allows movement of fluid into an underground source of drinking water (USDW) if such fluid movement may cause a violation of any Primary Drinking Water Standard or may otherwise affect the health of persons. [62-528.440(2)(c)]
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 (F.A.C.). 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. If construction is to continue beyond the expiration date of this permit the permittee shall apply for, and obtain a construction permit renewal. The permittee shall apply for renewal of the construction permit at least 60 days prior to the expiration date of this permit. [62-528.307(2)(a)]

II. SITE REQUIREMENTS

1. A drilling pad shall be provided to collect spillage of contaminants and to support the heaviest load that will be encountered during drilling. [62-528.410(9)(b)]
2. No drilling operations shall begin without an approved disposal site for drilling fluids, cuttings, or waste. It shall be the permittee's responsibility to obtain the necessary approval(s) for disposal prior to the start of construction. A detailed disposal plan shall be submitted to the Department prior to the commencement of drilling activities for the exploratory and monitoring wells. [62-528.410(9)(a)]
3. Specific drilling pad dimensions and design drawings for Department record shall be provided prior to commencing construction and shortly after selection of the drilling contractor. [62-528.410(9)(b)]
4. The water table monitoring wells surrounding the well pads shall be sampled and analyzed prior to drilling the test exploratory or monitoring wells and then weekly thereafter. Sampling shall include specific conductance (umhos/cm), pH (standard units), chloride (mg/L), temperature (C) and water level (feet or PSI). [62-528.410(9)(b)]

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FPL Okeechobee County Site
Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

5. Hurricane Preparedness – Upon the issuance of a “Hurricane Watch” by the National Weather Service, the permittee shall secure the site to prevent damage. Preparations to be made include but are not necessarily limited to the following:
 - a. Secure all on-site salt and stockpiled additive materials to prevent surface and/or groundwater contamination.
 - b. Properly secure drilling equipment and rig(s) to prevent damage to well(s) and on-site treatment process equipment.

[62-528.307(1)(f)]

III. CONSTRUCTION AND TESTING REQUIREMENTS

A. General

1. Any construction, modification, repair, or abandonment of a well shall be performed by a Florida licensed water well contractor, licensed under Chapter 62-532, F.A.C., to engage in the business of construction, modification, repair or abandonment of a well. [62-532.200]
2. Well construction shall follow the requirements of Rule 62-532.500 for Water Well Construction Standards. [62-532.500]
3. The measurement points for drilling and logging operations shall be surveyed and referenced to the North American Vertical Datum of 1988 (NAVD 88) prior to the onset of drilling activities for the exploratory well and associated dual zone monitoring well. [62-160.240(2)]
4. Blow-out preventers or comparable flow control devices shall be installed on the wells prior to penetration of the Floridan aquifer system. [62-528.410(9)(c)]
5. The Department shall be notified 7 days prior to the initiation of drilling operations to the site. [62-528.307(1)(g)]
6. Waters spilled during construction or testing of the exploratory well system shall be contained and properly disposed. [62-528.410(9)(b)]
7. If additives that were not approved in the permit application are used during grouting, for lost circulation or for any other reason, information on their properties shall be submitted to the Department for review and approval prior to their use. [62-528.410(5)(c)]

B. Evaluation and Testing

1. The construction, geophysical logging program, and packer testing program shall be implemented in accordance with this permit and as proposed in the following submittals:
 - [October 24, 2014](#), “Well Construction Application”;
 - [November 19, 2014 \(received December 19, 2014\)](#), Response to RFI;
 - [December 22, 2014 \(received December 23, 2014\)](#), Response to RFI;

[62.528.307(1)(b)]
2. Exact depths of casing seats and monitoring intervals will be determined based on field conditions and the results obtained during the construction and testing program, and are subject to the conditions of this permit. The exploratory well will be constructed first followed by the monitoring well. [62-528.410(4)(c)]
3. Packer tests shall be conducted in EW-1 and DZMW-1 to identify confinement and the base of the USDW.
 - a. The EW-1 packer testing program shall, at a minimum include seven packer tests, at intervals which are to be field determined.
 - b. At least one packer test shall be conducted in both the proposed upper and lower monitoring intervals of DZMW-1.
 - c. Packer tests shall be conducted in the anticipated confining intervals, between the lowermost zone of the USDW to the top of the potential injection zone. Results from the packer tests will contribute to the demonstration of confinement. To the extent feasible, the packer tests shall be performed over intervals that are sufficiently narrow so as not to include high hydraulic conductivity beds.
 - d. Water samples shall be collected from each packer test, and analyzed for total dissolved solids, chlorides, conductivity, ammonia, total Kjeldahl nitrogen, and sulfate.

[62-528.405(1)(a) and (2)(a)]
4. Department approval is required for item a. below prior to initiating construction or prior to initiating any changes to Department-approved contract documents and for items b. – g. prior to completing the referenced activity :
 - a. Technical Specifications and spud date
 - b. Intermediate (34-inch) casing seat in the exploratory well
 - c. Final (24-inch) casing seat in the exploratory well
 - d. Final seat for tubing and packer in the exploratory well
 - e. Intermediate (16-inch) casing seat in the monitoring well
 - f. Final (6.625-inch O.D.) casing seat in the monitoring well
 - g. Monitoring zone selection (upper and lower zones)

[62-528.410(4)(c) and 62-528.420(4)(c)]

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Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

5. The depth of the USDW and the background water quality of the monitoring zones shall be determined during drilling and testing using the following information:
 - a. Water samples from packer test data with analysis and interpretation.
 - b. Geophysical logging upon reaching the total depth of the appropriate pilot hole interval including the following logs: caliper, gamma, dual induction, borehole compensated sonic, pumping flowmeter, temperature, and fluid resistivity.
 - c. Plots of sonic porosity and apparent formation fluid resistivity (RWA). Interpretation will include calculation of sonic porosity and RWA. The input parameters used to make this calculation shall be provided.
[62-528.405(1)(a) and 62-528.405(3)(b)]
6. The upper monitoring interval shall be positioned at or slightly below the base of the USDW. This zone must be established within the lowermost portion of the USDW unless it can be demonstrated that no zone is present that can produce adequate water for collection of representative ground water samples. It is acceptable for the total dissolved solids concentration of this zone to be slightly greater than 10,000 mg/L.
[62-528.425(1)(g)4.]
7. The lower monitoring interval shall be positioned in a zone below the base of the USDW that can produce adequate water for collection of representative ground water samples. The purpose of the lower monitor zone is to verify the effectiveness of the confining unit and external mechanical integrity of the potential injection well. This zone shall be placed far enough below the base of the USDW to function as an early warning for fluid movement. *[62-528.425(1)(g)4.]*
8. The data and analysis supporting the selection of the monitoring intervals shall be submitted to the Department after the collection, interpretation, and analysis of all pertinent cores, geophysical logs, packer tests and analysis of fluid samples. The Department shall approve the final selection of the specific upper and lower monitoring intervals prior to monitor well completion. *[62-528.420(3)(c)]*
9. To identify the upper and lower monitoring zones, the following information from the injection well and all available on-site sources of data shall be analyzed, interpreted and submitted for Department review and approval:
 - a. Borehole televiewer or downhole television survey.
 - b. The characteristics of the transition zone (especially regarding total dissolved solids) in the vicinity of the USDW.
 - c. Packer test data including water quality (total dissolved solids, chlorides, sulfate, specific conductance, ammonia, and total Kjeldahl nitrogen, at a minimum).
 - d. The specific capacity of the proposed upper and lower monitoring zones based on packer testing results.
 - e. The identification of the base of the USDW.
[62-528.420(4)(c)]

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Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

10. Confinement shall be demonstrated using at a minimum, directly measured lithologic properties, geophysical evidence, and tests performed while pumping the formation. [62-528.405(2)(c)]
11. Test results pertaining to confinement shall include and/or specifically reference the following informational and quality control items:
 - a. Information that documents the calibration of tools, including field checks prior to testing.
 - b. The conditioning/development of the borehole prior to logging, including the techniques used and the time periods in which they were applied, and
 - c. Pertaining to packer/pump testing - recording the pumping rate regularly throughout the test to account for possible variations in the pumping rate, and providing information regarding the detection of packer leaks, if any, during testing.[62-528.405(2)(c)]
12. Representative samples of circulation fluid shall be collected when drilling with water, air, or reverse air during the drilling of the pilot holes of Exploratory Well EW-1 and Dual-Zone Monitoring Well DZMW-1. Representative samples of circulation fluid shall be collected at a minimum of every 90 feet in drilling. The circulation fluid samples shall be analyzed for chloride and specific conductance and any other parameters the Department directs in writing. [62-528.405(3)(b)]
13. If effluent is encountered or suspected during pilot hole drilling and testing, the Department shall be notified immediately by telephone and in writing and immediate appropriate precautionary measures shall be taken to prevent any upward fluid movement. [62-528.440(2)(d)]
14. The Permittee shall obtain Department approval prior to performing the short term injection test to use a groundwater source with total dissolved solids concentration greater than 3,000 mg/L. In such case, the Permittee shall provide documentation to the Department indicating the total dissolved solids concentration of the water to be used.

C. Mechanical Integrity

1. Mechanical Integrity.
 - a. Injection is prohibited until the permittee affirmatively demonstrates that the well has mechanical integrity and a construction permit has been applied for and issued for a Class I injection well. Note that for this Class V exploratory well, injection is not allowed even after demonstrating mechanical integrity.
 - b. If the Department determines that the injection well lacks mechanical integrity, the Department will notify the permittee in writing.[62-528.307(2)(f)]

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Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

2. Mechanical integrity of each potential injection well shall be determined pursuant to Rule 62-528.300(6)(b) and (c), F.A.C. For wells with a fluid-filled casing/tubing annulus, this includes both continuous annular monitoring and a pressure test of the casing/tubing annulus every 5 years.
3. Verification of pressure gauge calibration must be provided to the Department representative at the time of the test and in the certified test report. [62-528.300(6)(f)]
4. The Department's Southeast District office must be notified a minimum of seventy-two (72) hours prior to pressure testing of the final casing, annular pressure testing after installation of the FRP tubing, and performance of radioactive tracer testing on the potential injection well. The testing procedure must be approved by the Department before testing begins. All testing must be initiated during daylight hours, Monday through Friday. An evaluation of all test results must be submitted with all test data. [62-528.300(6)(f)]

D. 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 and piping for the potential injection and monitoring wells shall be kept free of corrosion at all times. [62-528.307(1)(f) and 62-528.307(3)(b)]
3. Spillage onto the exploratory 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 discharged to an approved means of disposal. [62-528.307(1)(f) and 62-528.307(3)(b)]
4. The exploratory well pad shall be maintained and retained in service for the life of the well. The exploratory well pad is 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)]
5. Four surficial aquifer monitoring wells, identified as Pad Monitoring Wells (PMWs), shall be located near the corners of the pads to be constructed for EW-1 and DZMW-1, and shall be identified by location number and pad location, i.e. NW, NE, SW, and SE. If located in a traffic area the well head(s) must be protected by traffic bearing enclosure(s) and cover(s). Each cover must lock and be specifically marked to identify the well and its purpose. The PMWs shall be sampled as follows:

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FPL Okeechobee County Site
Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

- a. During the construction and associated testing phases, the PMWs shall be sampled weekly for chlorides (mg/L), specific conductance ($\mu\text{mho/cm}$ or $\mu\text{S/cm}$), temperature, and water level relative to the North American Vertical Datum of 1988 (NAVD 88).
Initial PMW analyses shall be submitted prior to the onset of drilling activities.
- b. The PMWs shall also be sampled for total dissolved solids (mg/L) during the first four weeks of PMW sampling and at all times when specifically requested by the Department.
- c. The results of the PMW analyses shall be submitted to the Department in the weekly progress report. The PMWs shall be retained in service throughout the construction phase of the project. Upon completion of construction, the permittee may submit a request to the Department for cessation of sampling followed by capping, or plugging and abandonment of these wells.

[62-528.410(9)(b)]

IV. QUALITY ASSURANCE/QUALITY CONTROL

1. The permittee shall ensure that the construction of this exploratory well system shall be as described in the application and supporting documents. Any proposed modifications to the permit shall be submitted in writing to the Tallahassee office of the Aquifer Protection Program for review and clearance prior to implementation. 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(2)(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 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, 62-160]
4. 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)]

5. Analyses shall be conducted on unfiltered samples, unless filtered samples have been approved by the Southeast District Office as being more representative of ground water conditions. *[62-520.310(5)]*
6. A professional engineer registered pursuant to Chapter 471, Florida Statutes (F.S.), shall be retained throughout the construction period to be responsible for the construction operation and to certify the application, specifications, completion report and other related documents. The Department shall be notified immediately of any change of engineer. *[62-528.440(5)(b)]*
7. Continuous on-site supervision by qualified personnel (engineer and/or geologist, as applicable) is required during all testing and geophysical logging operations. *[62-528.440(5)(b)]*

V. REPORTING REQUIREMENTS

A. General

1. The drilling and construction schedule, site layout of drilling pad, and pad monitoring well locations shall be submitted to the Department during site preparation but prior to drilling operation commencement for the injection well system. *[62-528.430(2)(a)]*
2. Weekly progress reports shall be submitted to the Department's Tallahassee and Southeast District offices throughout the construction period for each well. These reports, which may be submitted by electronic mail, shall be submitted within 48 hours of the end of the period of record and shall include at a minimum the following information:
 - a. A cover letter summary of the daily engineer report, driller's log and a projection for activities in the next reporting period.
 - b. Daily engineers reports and driller's/work logs with detailed descriptions of all drilling progress, cementing, testing, logging, and casing installation activities.

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Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

- c. Description of daily footage drilled by diameter of bit or size of hole opener or reamer being used.
 - d. Collection of drilling cuttings every 10 feet and at every formation change.
 - e. Description of work during installation and cementing of casing, including amounts of casing and cement used. Details of cementing operations shall include the number of cementing stages, and the following information for each stage of cementing: the volume of cement pumped, the theoretical fill depth, and the actual tag depth. From both the physical tag and the geophysical logs, a percent fill shall be calculated. An explanation of any deviation between actual versus theoretical fill shall be provided.
 - f. Details of the additions of salt or other materials to suppress well flow, including the date, depth and amount of material used.
 - g. Description of testing accomplished including (but not limited to) pumping and packer tests.
 - h. Lithologic logs and core descriptions with cuttings description, formation and depth encountered.
 - i. Geophysical logs, video logs, and deviation survey results.
 - j. Water quality analyses, including but not limited to the weekly water quality analysis and water levels for the PMWs.
 - k. Well development records.
 - l. Description of any construction problems that developed during the reporting period and current status.
 - m. Interpretations included with all test results and logs submitted.
 - n. Documentation of disposal of drilling fluids, cuttings, formation water, or waste as per specific condition II.2.
 - o. Description of any construction problems that developed during the reporting period and current status.
 - p. Description of any deviation survey conducted.
- [62-528.430(1) and 62-528.410(9)(a)]*
3. The final selection of specific potential injection and monitoring intervals must be approved by the Department. In order to obtain an approval, the permittee shall submit a written request to the Department's Tallahassee office. All casing seat requests for the injection well(s) and the monitoring well(s) shall be accompanied by technical justification. To the extent possible, each casing seat request should address the following items:
- a. Lithologic and geophysical logs with interpretations, as the interpretations relate to the casing seat.
 - b. Water quality data (including but not necessarily limited to total dissolved solids concentrations).
 - c. Identification of confining units, including hydrogeologic data and interpretations.
 - d. Identification of monitoring zones.
 - e. Casing depth evaluation (mechanically secure formation, potential for grout seal.)
 - f. Lithologic drilling rate and weight on bit data, with interpretations (related to the casing seat).

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Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

- g. Identification of the base of the USDW using water quality, RWA plots, and geophysical log interpretations.
 - h. A certified evaluation of all logging and test results, submitted with test data.
 - i. Transmissivity or specific capacity of proposed monitoring zone.
 - j. Packer test drawdown curves and interpretation.
- [62-528.410(4)(c), 62-528.420(4)(c) and 62-528.605(2)]*
- 4. Upon completion of analysis of cores and sample cuttings recovered during the construction of wells covered by this permit (when no longer needed by the well owner), the permittee shall contact the Geological & Geotechnical Data Acquisition Program of the Florida Geological Survey (FGS) to arrange for the transfer of the cores and cuttings. The FGS shall also be contacted to arrange for the collection of 100 ml water samples, with nitric acid preservative for metal analysis, at the end of each packer test (where sufficient water is available) and aquifer background sample collection events. *[62-528.450(5)]*
 - 5. All cores, cuttings, and water samples for FGS shall be shipped to the Florida Geological Survey, Geological & Geotechnical Data Acquisition Program, 3915 Commonwealth Boulevard, Tallahassee, Florida 32399. All cores and samples shall clearly identify the site name, well name/number, depths of samples/cores, and the latitude/longitude location of the well(s) using the form in this permit. *[62-528.450(5)]*
 - 6. A final report of the construction and testing of the exploratory well(s) and monitoring well(s), shall be submitted no later than 120 days after the wells are completely constructed or with the Class I construction permit application, pursuant to Rule 62-528.430(1)(e), F.A.C. In addition, a copy of the cover letter for the report shall be sent to the U. S. Environmental Protection Agency, Region 4, UIC program, 61 Forsyth St. SW, Atlanta, GA 30303-8909. This report shall include as a minimum, definitions of the injection interval, all relevant confining units, the depth of the base of the USDW, and all monitoring zones, including all relevant data and interpretations. *[62-528.450(5)]*

VI. 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 [Southeast](#) 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 [Southeast](#) District office. *[62-528.307(1)(x)]*
- 3. A written report of any noncompliance referenced in Specific Condition (1) above shall be submitted to the [Southeast](#) District office and the Tallahassee office within five days

PERMITTEE: Mr. Randall R. LaBauve, Vice President
FPL Okeechobee County Site
Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

after its occurrence. The report shall describe the nature and cause of the breakdown or 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. Randall R. LaBauve, Vice President
FPL Okeechobee County Site
Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

- 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 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)]*
- 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

PERMITTEE: Mr. Randall R. LaBauve, Vice President
FPL Okeechobee County Site
Class V, Exploratory Well System

WACS ID Number: 102139
Permit Number: 0330373-001-UC/1EX
Date: April 14, 2015

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)]

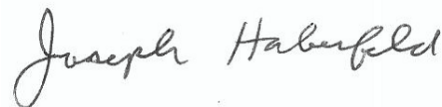
21. All reports and other submittals required to comply with this permit shall be signed by a person authorized under rules 62-528.340(1) or (2), F.A.C. All reports shall contain the certification required in rule 62-528.340(4), F.A.C. [62-528.307(1)(u)]
22. The permittee shall notify the Department 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 14th day of April 2015

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Joseph Haberfeld
Aquifer Protection Program Administrator
Division of Water Resource Management