



Brevard County Board of County Commissioners

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Legislation Text

F.2
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File #: 1517, Version: 1

Subject:

Amended Memorandum of Understanding with the Florida Department of Health to Evaluate Alternative Nitrogen-Reducing Media for Septic Drainfields.

Fiscal Impact:

Septic upgrade installation costs are included in the adopted Save Our Indian River Lagoon Project Plan (Fund 1260). Monitoring costs will be covered by a Florida Department of Environmental Protection grant.

FY 19/20 \$26,300 per site (construction costs = \$18,000, monitoring costs = \$8,300)

FY 20/21 \$26,300 per site (construction costs = \$18,000, monitoring costs = \$8,300)

Dept/Office:

Natural Resources Management

Requested Action:

It is requested that the Board authorize the Chair to execute the amended Memorandum of Understanding with the Florida Department of Health to Evaluate Alternative Nitrogen-Reducing Media for Septic Drainfields.

Summary Explanation and Background:

The purpose of this amended Memorandum of Understanding (MOU) (Attachment A) is to renew the collaboration between the Florida Department of Health (FDOH) and Brevard County for the installation, operation and evaluation of no more than fifty onsite sewage treatment and disposal systems (OSTDS) using a variety of alternate nitrogen-reducing media.

The amendments incorporated into the MOU include extending the terms from annual to continuous until either party terminates the contract; clarified definitions; clarified type of nitrogen-reducing media allowed; and clarified FDOH's responsibility in reviewing the quality assurance project plan.

This collaboration is benefitting Brevard County and the Save Our Indian River Lagoon Project by allowing for the use of more effective, passive septic systems. Alternative media selected for evaluation will have bench-scale data demonstrating it should meet or exceed the 65% nitrogen reduction standard set by the County Commission's nitrogen reduction septic overlay ordinance (#2018-23). Currently, the only state-approved passive nitrogen reducing septic drainfield uses wood mulch, which has a limited lifespan currently estimated at 10 years. Other nitrogen reducing media used in stormwater systems have a lifespan of 20-30 years, but these media have not been approved by the Florida Department of Health for use in septic drainfields.

Phase 1 of this project is in progress with three Brevard sites using the first alternative nitrogen-reducing media approved by the FDOH for testing. Site selection for conversion to nitrogen reducing septic systems is

based on nutrient impact to the Indian River Lagoon. Volunteers are currently being recruited from owners of septic systems prioritized for upgrade in the Save Our Indian River Lagoon Project Plan (SOIRLPP). Design, permitting, and installation costs will be covered by septic upgrade funds approved in the SOIRLPP. Monitoring expenses will be covered by a Florida Department of Environmental Protection grant for innovative technologies.

This MOU shall begin on the last date signed by the Parties and remain in effect until terminated by either Party.

Clerk to the Board Instructions:

The attached Memorandum of Understanding is to be executed by the Chair and attested by the Clerk. For Pickup, please email Carol Gerundo at carol.gerundo@brevardfl.gov

**BREVARD COUNTY
BOARD OF COUNTY COMMISSIONERS**

CONTRACT REVIEW AND APPROVAL FORM

SECTION I - GENERAL INFORMATION

1. Contractor: Florida Department of Health		2. Amount: 0
3. Fund/Account #: 1260	4. Department Name: Natural Resources	
5. Contract Description: Alternative Media Testing Memorandum of Understanding		
6. Contract Monitor: Anthony Gubler		8. Contract Type: INTERGOVT/STATE
7. Dept/Office Director: Virginia Barker		
9. Type of Procurement: Other		

SECTION II - REVIEW AND APPROVAL TO ADVERTISE

APPROVAL

COUNTY OFFICE

YES

NO

SIGNATURE

User Agency

☒
☐

Purchasing

☐
☐

Risk Management

☐
☐

County Attorney

☐
☐

SECTION III - CONTRACTS MANAGEMENT DATABASE CHECKLIST

APPROVAL

COUNTY OFFICE

YES

NO

SIGNATURE

User Agency

☒
☐

Gubler, Anthony

Digitally signed by Gubler, Anthony
Date: 2020.06.17 12:18:35 -04'00'

Purchasing

☐
☐

Risk Management

☒
☐

Lairsey, Matt

Digitally signed by Lairsey, Matt
Date: 2020.06.18 07:46:37 -04'00'

County Attorney

☒
☐

Valliere, Christine

Digitally signed by Valliere, Christine
Date: 2020.06.18 16:09:00 -04'00'

SECTION IV - CONTRACTS MANAGEMENT DATABASE CHECKLIST

CM DATABASE REQUIRED FIELDS	Complete ✓
Department Information	☐
Department	☐
Program	☐
Contact Name	☐
Cost Center, Fund, and G/L Account	☐
Vendor Information (SAP Vendor #)	☐
Contract Status, Title, Type, and Amount	☐
Storage Location (SAP)	☐
Contract Approval Date, Effective Date, and Expiration Date	☐
Contract Absolute End Date (No Additional Renewals/Extensions)	☐
Material Group	☐
Contract Documents Uploaded in CM database (Contract Form with County Attorney/ Risk Management/ Purchasing Approval; Signed/Executed Contract)	☐
"Right To Audit" Clause Included in Contract	☐
Monitored items: Uploaded to database (Insurance, Bonds, etc.)	☐



Kimberly Powell, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001
Fax: (321) 264-6972
Kimberly.Powell@brevardclerk.us

July 8, 2020

M E M O R A N D U M

TO: Virginia Barker, Natural Resources Management Director

RE: Item F.2., Amended Memorandum of Understanding (MOU) with the Florida Department of Health (FDOH) to Evaluate Alternative Nitrogen-Reducing Media for Septic Drain Fields

The Board of County Commissioners, in regular session on July 7, 2020, authorized the Chair to execute the amended MOU with the FDOH to evaluate alternative nitrogen-reducing media for septic drain fields. Enclosed are two executed MOU's.

Upon execution by FDOH, please return the fully-executed MOU to this office for inclusion to the official minutes.

Your continued cooperation is greatly appreciated.

Sincerely yours,

BOARD OF COUNTY COMMISSIONERS
SCOTT ELLIS, CLERK

for: Donna Scott
Kimberly Powell, Deputy Clerk

/sm

Encls. (2)

cc: Finance
Budget

MEMORANDUM OF UNDERSTANDING

between the

Florida Department of Health

and

The Board of County Commissioners of Brevard County, Florida

This Memorandum of Understanding (MOU) is made between the Florida Department of Health (Department) and The Board of County Commissioners of Brevard County, Florida (County), jointly referred to as the "Parties".

WHEREAS, section 381.0065(3)(c), Florida Statutes, authorizes the Department, through its Bureau of Environmental Health, to develop and maintain a comprehensive regulatory program for onsite sewage treatment and disposal systems (OSTDS) in the State of Florida;

WHEREAS, the Department has recently established standards for in-ground nitrogen-reducing biofilters in Rule 64E-6.009(7), of the Florida Administrative Code. The rule requires a nitrogen-reducing media layer, which is composed of certain materials or alternative nitrogen-reducing media demonstrated in Florida-based studies to be effective at providing a substrate for denitrification, as part of the OSTDS;

WHEREAS, the County has adopted Ordinance 2018-23, requiring the use of nitrogen-reducing treatment systems, including in-ground nitrogen reducing biofilters, in certain locations;

WHEREAS, the County has expressed concerns about the long-term effectiveness of the nitrogen-reducing media specified in Rule 64E-6.009(7)(a)8 and 11, of the Florida Administrative Code, and desires to install and test the effectiveness of alternate nitrogen-reducing media and share its results with the Department;

Now therefore, in consideration of the mutual promises contained herein, the Parties agree as follows:

- A. Authority:** Sections 381.0011 and 381.0065(3)(j), Florida Statutes.
- B. Purpose:** The purpose of this MOU is to establish the general conditions and processes for collaboration between the Department and the County for the installation, operation, and evaluation of no more than fifty OSTDS using a variety of alternate nitrogen-reducing media.
- C. Term:** This MOU shall begin on the last date signed by the Parties and remain in effect until terminated by either Party.

D. Definitions:

1. **Alternate Nitrogen-Reducing Media:** Alternative to the nitrogen-reducing media that is mixed with fine aggregate as described in Rule 64E-6.009(7)(a)8 and 11, Florida Administrative Code.
2. **Alternative System:** Any approved onsite sewage treatment and disposal system used in lieu of, including modifications to, a standard subsurface system as defined in Rule 64E-6.002, Florida Administrative Code.
3. **Data:** For purposes of this MOU, data includes information about construction materials, including alternate nitrogen-reducing media; information about installation details such as geometry; methods and materials at an evaluation site; observations of system use (such as water use and house occupation) and system behavior, such as surfacing; measurements of physical and chemical aspects of the system and sewage flowing in and out of it; and characteristics of the quality of the data, such as completeness and variability.
4. **DH 3144:** A Department form agreement, available at <http://www.floridahealth.gov/environmental-health/onsite-sewage/forms-publications/documents/dh3144.pdf>, that acknowledges the property owner's assent to the installation of an innovative OSTDS and access to the property by Department personnel, Brevard County Health Department personnel, and the manufacturer.
5. **Evaluation Site:** A property located in Brevard County where the County will install an OSTDS using alternate nitrogen-reducing media.
6. **In-ground Nitrogen-Reducing Biofilter (INRB):** An alternative system including a sand fill layer and a nitrogen-reducing media layer as described in Rule 64E-6.009(7), Florida Administrative Code.
7. **National Environmental Laboratory Accreditation Program (NELAP):** A program fostered by the National Environmental Laboratory Accreditation Conference Institute to implement the accreditation of environmental laboratories in the United States so that the data generated by the environmental laboratories are of known and documented quality. In Florida, this program is implemented by the Department and the accredited labs are listed at https://flideploc.dep.state.fl.us/aams/org_search.asp.
8. **Nitrogen-Reducing Media Layer or Media Layer:** A layer providing denitrification and installed underneath a nitrification sand fill layer as described in Rule 64E-6.009(7)(a), Florida Administrative Code.
9. **Nitrogen-Reducing Treatment System:** An OSTDS that can achieve at least 65 percent nitrogen removal. In Florida, nitrogen-reducing treatment systems include the INRB system as specified in Rule 64E-6.009(7), of the Florida Administrative Code, and aerobic treatment units that are certified under the National Sanitation Foundation's NSF 245 standard or engineer-designed performance-based treatment systems capable of reducing nitrogen by at least

50 percent before discharge to a drain field that is at least 24 inches above the wet season water table.

10. **Onsite Sewage Treatment and Disposal Systems (OSTDS):** As defined in section 381.0065(2)(k), Florida Statutes.
11. **Quality Assurance Project or Study Plan (QAPP):** A written document that outlines the procedures the monitoring project will use to ensure that the samples the County collects and analyzes, the quality of the data storage and processing, and the reports they write are of high enough quality to meet project needs.
12. **Quarter:** A three-month period of the MOU, which begins from the date of execution.

E. Responsibilities of the Parties

1. The County will:
 - a. Select at least one alternate nitrogen-reducing medium that meets the requirements of Rule 64E-6.0151, Florida Administrative Code. Submit the selection of media to be tested within 30 days of execution of this MOU to the Department for approval. Submit the selection of all other alternate nitrogen-reducing medium that meets the requirements of Rule 64E-6.0151, Florida Administrative Code to the Department for approval prior to installing it in an OSTDS and INRB. This can consist of a complete mix of media and fine aggregate. Provide to the Department documentation on characteristics of the media, including the major components of the media, component volume or mass ratios, grain size distribution of each media component. The County can provide the information to the Department directly or request the media manufacturer to provide the information to the Department. If the fine aggregate component, texture or its volume fraction is not in compliance with the existing Rule 64E-6.009(7)(a), FAC, the media cannot be approved after successful testing until this is addressed. The manufacturer may petition for a variance according to Chapter 120, Florida Statutes.
 - b. Create a QAPP and submit it within 30 days of execution of this MOU to the Department for approval. Ensure that no properties are selected, OSTDS installed, or samples taken until the QAPP has been approved by the Department. At a minimum, the QAPP will:
 - 1) Provide a method to establish how much nitrogen reduction each of the installed INRBs using alternate nitrogen-reducing media achieves.
 - 2) Provide procedures for installation of sampling equipment.
 - 3) Provide procedures for monitoring, data collection, and analysis for the INRB to measure nitrogen going into, through, and out of the INRB. Data collected during monitoring will include the quantity and quality of sewage flowing into the INRB; the quality of

sewage after treatment by the nitrification layer and alternate nitrogen-reducing media layer of the INRB; the quality of shallow groundwater underneath the INRB; the hydraulic function and indicators of degradation of the alternate nitrogen-reducing media, such as subsidence.

- 4) Establish procedures to notify the Department when the County has completed the installation of an OSTDS.
 - 5) Establish selection criteria for the evaluation sites.
 - 6) Establish quality assurance and quality control (QA/QC) processes for sample collection, preservation, and transportation that follow the standard operating procedures of the Florida Department of Environmental Protection (DEP). All samples must be analyzed by NELAP-certified laboratories.
 - 7) Specify procedures for documenting, censoring, and storing field measurements and laboratory results.
 - 8) Specify statistics, including the central tendency and frequency of achieving or failing of the evaluation target, and data analysis procedure for the alternate nitrogen-reducing media to meet to demonstrate efficiency.
 - 9) A timeframe created upon mutual agreement between the Parties that includes, but is not limited to, the selection of the evaluation sites, enrollment of the evaluation sites, installation of the OSTDS, and sampling of the OSTDS. Sampling will be conducted at least quarterly with at least four sample results per sample location.
- c. Select properties for evaluation sites in accordance with the approved QAPP and its timeframe as follows:
- 1) Inform the Department of the proposed enrollment of a property in the evaluation study according to the approved QAPP.
 - 2) Ensure the property owner completes the DH 3144 form. Maintain a copy of the completed DH 3144 form throughout the term of the MOU.
 - 3) Ensure the property owner allows for access for sampling of evaluation sites not controlled by the County.
 - 4) Complete the construction permit application for the installation of the OSTDS that includes the approved alternate nitrogen-reducing media that will be used in the INRB. Simultaneously, submit the completed construction permit application to the Brevard County Health Department for approval, along with the completed DH 3144 form, and allowance by the property owner for access for

sampling of the evaluation site and a copy of each to the Department.

- 5) Pay all applicable construction permit fees to the Brevard County Health Department.
 - 6) The Brevard County Health Department's issuance of the system construction permit will complete the enrollment.
- d. Have licensed contractors install the OSTDS and the INRB with the approved alternate nitrogen-reducing media, in accordance with Rule 64E-6.009(7), Florida Administrative Code, and permit requirements, at each evaluation site after the Brevard County Health Department has approved the construction permit application. Have licensed contractors request construction inspections from the Brevard County Health Department during construction and address any violations or missing items within 15 days after the inspection; after addressing the violations or missing items, request additional construction inspections from the Brevard County Health Department. Coordinate with system installation to install sampling equipment in accordance with the QAPP. The County may subcontract with licensed subcontractors to install the sampling equipment.
 - e. Document how the OSTDS is installed with the alternate nitrogen-reducing media at each evaluation site and submit a copy of it to the Department at the end of each quarter. Maintain a copy of the documentation throughout the term of the MOU.
 - f. Collect and analyze samples in accordance with the approved QAPP after the Brevard County Health Department issues the final approval of the construction for each OSTDS. The County may subcontract with qualified entities for sample collection.
 - g. Evaluate each evaluation site in accordance with the QAPP to determine the effectiveness of the alternate nitrogen-reducing media.
 - h. Create a quarterly progress report that includes any draft and final project report, sampling results, documentation of laboratories' NELAP certification, or any other data or documentation from the project. Submit the quarterly progress report to the Department by the end of each quarter.
 - i. Directly pay for or reimburse a property owner for converting an installed system to a system that complies with the state standard if the installed system experiences a hydraulic failure sufficient to create a sanitary nuisance during the term of this MOU.
 - j. If an evaluated INRB meets state standards but fails to meet the county's 65 percent nitrogen reduction requirement, the County may choose one of the following ways to address this. The County will be responsible for costs associated with this:

- 1) Require that the system be replaced with a Department-approved system that meets the county's 65 percent nitrogen reduction requirement;
- 2) Work with the property owner to modify the constructed INRB system to improve its ability to meet the 65 percent nitrogen reduction requirement and continue the monitoring; or
- 3) Leave the system in place if the system is achieving between 60 percent and 65 percent nitrogen reduction.

2. The Department will:

- a. Review, comment on, and approve the alternative nitrogen-reducing media selected by the County to be evaluated, and the QAPP and any revisions submitted by the County.
- b. Allow the County to evaluate alternate nitrogen-reducing media in OSTDS in accordance with the provisions of Rule 64E-6.009(7), Florida Administrative Code, Chapter 381, Florida Statutes, and the QAPP.
- c. Review the research the County conducts, such as the quarterly progress reports or monitoring data, on the evaluation of alternate nitrogen-reducing media.
- d. Review the construction permit application within 15 days of submittal by the County.
- e. Not publish data submitted by the County or use the collected data for purpose of press releases until the County completes the study and final quarterly progress report, or upon termination or expiration of this MOU.
- f. Review and evaluate documentation submitted by the County for alternate nitrogen-reducing media according to Rule 64E-6.0151, Florida Administrative Code.
- g. Approve in writing, as provided by Rule 64E-6.009, Florida Administrative Code, the alternate nitrogen-reducing media that successfully meets the requirements of Rule 64E-6.009(7)(a)8 and 11, Florida Administrative Code, and may be permitted as part of an INRB.

F. Special Provisions

1. **Cost:** Each Party will be responsible for their own individual costs related to the performance of their respective obligations under this MOU.
2. **Sovereign Immunity:** Nothing in this MOU is interpreted as a waiver of sovereign immunity, beyond that which is statutorily permitted, or consent by a state agency or political subdivision to suit by third parties.

3. **Amendments:** Any amendment to this MOU must be in writing and agreed to by the Parties.
4. **Complete Agreement:** This MOU embodies the entire agreement and understanding between the Parties, on the subject hereof.
5. **Independent Contractors:** The Parties are independent contractors with respect to each other, and this MOU does not create the relationship of an employer/employee, joint venture, partnership, or association between the Parties.
6. **Termination:** This MOU may be terminated by the Department upon no less than twenty-four hours' notice in writing to the County, with or without cause, unless a lesser time is mutually agreed-upon in writing by both Parties. Such notice will be delivered by certified mail, return receipt requested, or in person with proof of delivery.
7. **Waiver:** The failure of the Department, in any respect, to exercise, or delay in exercising any right, power, or privilege provided for hereunder will not be deemed a waiver thereof; nor will any single or partial exercise of any such right, power or privilege preclude any other, or further exercise thereof, or the exercise of any other right, power, or privilege under this MOU. No Party will be deemed to have waived a right, power, or privilege provided for hereunder, unless such waiver is made in writing, and signed by the Party against whom such waiver is sought. The provision herein does not limit the Department's right to remedies at law or in equity.
8. **Disputes:** Venue will be in Florida, as determined by Florida law.
9. **Compliance with Applicable Laws:** If any provision of this MOU is held to be invalid under any applicable statute or rule of law, such provision, or portion thereof, is to that extent deemed to be omitted and the remaining provisions of this MOU will remain in full force and effect.
10. **Notices:** All mail notices required or desired to be made by either Party to this MOU shall be sent by prepaid, certified mail, return receipt requested to the following respective addresses. A change to either Party's designated representative does not require an amendment to the MOU:

Department: Florida Department of Health
Division of Disease Control and Health Protection
4052 Bald Cypress Way, Bin A08
Tallahassee, Florida 32399

The County: Board of County Commissioners of Brevard County,
Florida
c/o Natural Resources Management Department
2725 Judge Fran Jamieson Way, Building A
Viera, Florida 32940

IN WITNESS HEREOF, the Parties have caused this MOU to be executed by the following duly authorized officials:

**BOARD OF COUNTY COMMISSIONERS OF
BREVARD COUNTY, FLORIDA**

By: Bryan Andrew Lober
Bryan Lober, Chair

Date: 7/7/2020

As approved by the Board during regular session

on: July 7, 2020

ATTEST

By: [Signature]
Scott Ellis, Clerk

FLORIDA DEPARTMENT OF HEALTH

By: _____
Carina Blackmore, DVM, PhD. Dipl. ACVPM
State Epidemiologist, Director
Division of Disease Control and Health
Protection

Date: _____