DATE: March 30, 2012

TO: County Health Department Directors/Administrators
ATTN: Environmental Health and Engineering Directors

THROUGH: Sterling Whisenhunt
Assistant Deputy Secretary for Health

FROM: Patti Anderson, P.E., Interim Director
Division of Environmental Health

SUBJECT: Guidance on Permitting and Inspections of OSTDS Repairs That Use Alternative Repair Methods

ACTION REQUIRED: Review and Implement
DUE DATE: March 30, 2012

This memorandum rescinds memorandums 98-013 and 99-035 and provides guidance on the permitting and inspection of onsite sewage treatment and disposal system (OSTDS) repairs that use an alternative repair method (ARM). This memorandum implements the requirements of section 64E-6.015(3) and (12), Florida Administrative Code (FAC).

Under previous policy when a client requested an ARM, the department wrote a standard repair permit and specified the ARM in the “Other” section of the construction permit form.

This memorandum rescinds that policy. Henceforth, when a client requests an ARM, the construction permit requirements for the tank and drainfield shall be annotated indicating that the existing tank and drainfield will remain in use. The ARM requested by the applicant shall be specified in the “Other” section of the construction permit form.

Guidance on Permitting and Inspections of Alternative Repairs Methods

A “failure” is defined in Rule 64E-6.002(23), FAC, as “a condition existing within an onsite sewage treatment and disposal system which prohibits the system from functioning in a sanitary manner and which results in the discharge of untreated or partially treated wastewater onto ground surface, into surface waters, into ground water, or which results in the failure of building plumbing to discharge properly.” Rule 64E-6.002(47), FAC, defines an OSTDS “repair” as
“replacement of or modifications or additions to a failing system which are necessary to allow the system to function or must be made to eliminate a public health or pollution hazard.”

Except where excluded by rule, a permit is required to correct a failing OSTDS. A repair evaluation must address the entire system. For example, replacing only the drainfield of a failing system that has a corroded and cracked septic tank is prohibited. Excluded from the definition of a repair is making a minor structural correction to a tank or distribution box. If the only required action to bring an OSTDS back into proper functioning condition is to either level a distribution box or make a minor structural repair, a repair permit is not required. However, if a distribution box is to be replaced, a repair permit is required.

An “alternative repair method” is any repair method other than drainfield addition or replacement used on a failing system to restore proper system function. Examples of an ARM include, but are not limited to, high-pressure water “jetting” of drainlines, air injection of the system; physical, chemical, or biological products; or additive treatments. Prior to their use, all ARMs must be reviewed by the Bureau and determined to be in compliance with the regulations. An ARM permit is not required when a property owner for maintenance purposes on a system that is not in failure, introduces an approved additive treatment, through an interior plumbing fixture.

**ARM General Conditions**

In accordance with Rule 64E-6.015, FAC, the use of any ARM requires a repair permit prior to initiating the process.

If an ARM is proposed to repair a failing drainfield that is constructed with alternative drainfield products (e.g., chambers, multi-pipe, foam-bead bundles), the system owner must be notified that they should obtain approval for the proposed ARM from the alternative drainfield product manufacturer.

Where the applicant proposes to repair a failing drainfield by combining an approved ARM and the addition or replacement of drainfield, the repair permit must specify the requirements for both. In these cases, the construction permit would be issued as a conventional permit to add or replace drainfield and the ARM would be annotated in the “Other” section of the construction permit.

An ARM **shall not be permitted** where:

- The infiltrative surface of the existing and failing drainfield is within 6 inches of the wettest season water table.
- The existing and failing drainfield is less than the size required at the time it was originally installed. Repair rules would apply if the applicant can provide written proof that the system was approved in its current size. At a minimum, the applicant would be required to increase the size of the existing drainfield as required in Table 5, Footnote (c), Rule 64E-6.015, FAC.
- The septic tank is not within two tank sizes or it is observed to have defects or leaks. The exception to this is when the tank is replaced with one that meets new tank specifications.
- The setbacks of the existing and failing drainfield do not meet the setbacks required at the time the system was originally constructed.
ARM Permit Conditions for PBTS, NSF Certified Units, and Engineered Systems

Performance-based treatment systems and systems utilizing aerobic treatment units with design wastewater flows in excess of 1500 gpd can be repaired using an ARM provided a professional engineer and the current maintenance entity approves the specified ARM. The ARM by definition does not alter original design and therefore, a complete re-design of the system by the engineer of record is not required.

In situations where an ARM is applied for and the calculations for a drainfield replacement would require the installation of more than 1000 square feet of drainfield product, where the existing system records indicate the system was not engineer-designed when originally installed, and the original installation predates engineering requirements for low pressure-dosing, a complete re-design of the system by the engineer of record is not required, but an engineer must specify and approve the ARM. Engineering approval of an ARM must be documented with a signed and sealed letter, site plan or construction permit.

Alternative repair methods to systems utilizing NSF certified aerobic treatment units can not be made if the ARM will modify the unit’s certification specifications.

An engineer’s split-flow letter shall not be required for ARM repairs to establishments where flows have been split in a method other than that provided by rule (e.g., a single-family residence with more than one black water system). ARM’s do not alter the original system design, unlike conventional repairs where flows impact the repair standards.

ARM Permit Expiration and Amendments

ARM permits are only for the specific ARM identified in the repair permit application. ARM permits shall be valid for 90 days from issuance of the permit. The permit may be extended for one 90-day period if the failing system is maintained to not discharge untreated or partially treated wastewater onto the ground, into surface water or into ground water. Once the ARM installation receives final approval, the permit is closed. Once closed if the system fails, a new repair application, permit, and fees are required.

Applicants may request an ARM amendment prior to the expiration of the original ARM permit. ARM permit amendments do not change the date of the original ARM permit, however, the applicant can request to change the repair method specified in the permit.

If while conducting an ARM repair, a contractor will need to conduct additional work not specified in the ARM repair permit, the contractor shall apply to the CHD for a permit amendment.

Consecutive ARM repairs are allowed provided the failing system is maintained to not discharge untreated or partially treated wastewater onto the ground, into surface water, or into ground water.

ARM Application and Inspection Process

Application: The application shall include all of the information and exhibits required in a conventional repair as indicated in Rule 64E-6.015(1) and (2), FAC, including water use data, where available. Additionally, the applicant (or their agent) shall provide the information required in Rule 64E-6.015(3), FAC (i.e. proposed process, any manufacturer’s
recommendations, chemical compound or trade name, etc.). When chemical compounds other than air will be introduced into the system, such products shall be identified on the permit application, along with the concentration and quantity to be used and the method of introduction shall be specified.

**Site Plan:** The site plan shall include all of the information and exhibits required for a conventional repair, including the location and size of the existing system. The proposed location and size for a replacement system is not applicable to an ARM. All pertinent site features on the repair site and on adjacent lots required for a conventional repair must also be shown. As indicated in Rule 64E-6.015, FAC, if the chosen repair method will physically disrupt the drainfield area, the applicant must provide a drawing identifying the location and depth of each disruption (e.g., if high-pressure air injection is to be used every five feet along both sides of a drain trench, to a depth of two feet, the location and depth must be shown as such on the site plan or on the attached drawing). Since repair site plans are not required to be drawn to scale, the distances between injection points must be indicated.

**Site Evaluation:** A complete site evaluation must be conducted using page 3 of Form DH 4015. The evaluator shall record all setback information required from the "existing system". The wettest season water table and elevation of the bottom of the existing drainfield at the lowest point of separation from the drainfield bottom to the wettest season water table must be determined by the inspector or private site evaluator conducting the site evaluation. Soil profiles are required in the immediate vicinity of the existing drainfield area or as close to the existing system as possible to properly validate the wettest season water table.

Page 4 of Form DH 4015, Existing System and System Repair Evaluation, shall also be completed, including the certification of the septic tank and the identification of the type and size of existing drainfield.

**Construction Permit:** The construction permit shall be issued annotating that the existing tank and drainfield will remain in use. The repair permit shall document that the applicant has elected to repair the system using an ARM. The ARM elected shall be specified in the “Other” section of the construction permit form and shall declare everything that will be done to repair the system, for example: air injection in the area alongside of the existing drainfield, addition of an outlet filter, fixing a crack, or replacing a seal. The construction permit shall be annotated with a statement to the system owner advising of the possibility of conducting a conventional system repair by the addition or replacement of drainfield material. If the failing drainfield is constructed with alternative drainfield products (e.g., chambers, multi-pipe, foam-bead bundles), the construction permit must be annotated with a statement indicating the system owner was notified by the department to request authorization from the alternative drainfield product manufacturer for the use of the proposed ARM. See Figure 1 for a sample construction permit.

**Inspection:** The CHD or a master septic tank contractor must inspect an ARM to:

1. Confirm that a sanitary nuisance does not exist.
2. Confirm by visual inspection that any work permitted to be done to the system’s tanks meets all tank requirements.
3. Confirm that the existing drainfield meets a minimum 6-inch separation from the wettest season water table when the site evaluation was not conducted by the CHD.
4. Confirm that the size of the existing drainfield is not less than the size required at the time it was originally installed. For existing drainfield size confirmation purposes, the applicant, contractor, or private site evaluator should mark the layout of the existing drainfield.
5. Confirm that the existing drainfield meets all minimum system setbacks when the site evaluation was not conducted by the CHD.

6. Confirm that the contractor completed the repair in the manner proposed in the repair application package.

7. Confirm the ARM was conducted in accordance with the manufacturer’s installation manuals and procedures.

8. Confirm the ARM was conducted in accordance with the conditions of the Bureau’s approval. Detailed information for all approved ARMs is located on the Bureau’s website under Alternative Repair Methods (http://www.doh.state.fl.us/environment/ostds/alternative_drainfield_repair).

9. For air injection repairs, water jetting, and alternative repairs that physically disrupt the area alongside of the drainfield, the CHD must confirm that:

   a. There is no readily recognizable evidence that any part of the system has been modified to be in violation of the requirements as a result of the ARM.
   b. The contractor performed all injection sites, water jetting, or soil disruptions at the locations indicated on the permitted site plan.
   c. The depth of injection by random probing of the soil penetrations at the soil disruption sites, to confirm that they are not greater than specified for the approved ARM. The contractor shall mark the location of each injection site in an easily identifiable manner as required in Rule 64E-6.015(12) FAC.

Please note the department’s regulatory compliance determination and allowance of a product or additive treatment process is not an endorsement of the product or additive manufacturer’s claims with respect to the benefit, effectiveness, or performance of the product or method.

Please distribute this memorandum to your local contractors. If you have any questions please call your Bureau consultant in Tallahassee or Orlando.
STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
CONSTRUCTION PERMIT

APPLICATION #: 01-SA-999816
DATE PAID: AP933502
FEE PAID: RECEIPT #:
DOCUMENT #: PR783041

CONSTRUCTION PERMIT FOR: OSTDS Repair
APPLICANT: Test Example
PROPERTY ADDRESS: 1234 SE Anywhere Ave Gainesville, FL 32641
LOT: BLOCK: SUBDIVISION: Kincaid Road
PROPERTY ID #: 00000-000-00 [SECTION, TOWNSHIP, RANGE, PARCEL NUMBER]

SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS AND STANDARDS OF SECTION 381.0065, F.S., AND CHAPTER 64E-6, F.A.C. DEPARTMENT APPROVAL OF SYSTEM DOES NOT GUARANTEE SATISFACTORY PERFORMANCE FOR ANY SPECIFIC PERIOD OF TIME. ANY CHANGE IN MATERIAL FACTS, WHICH SERVED AS A BASIS FOR ISSUANCE OF THIS PERMIT, REQUIRE THE APPLICANT TO MODIFY THE PERMIT APPLICATION. SUCH MODIFICATIONS MAY RESULT IN THIS PERMIT BEING MADE NULL AND VOID. ISSUANCE OF THIS PERMIT DOES NOT EXEMPT THE APPLICANT FROM COMPLIANCE WITH OTHER FEDERAL, STATE, OR LOCAL PERMITTING REQUIRED FOR DEVELOPMENT OF THIS PROPERTY.

SYSTEM DESIGN AND SPECIFICATIONS

T [ 900 ] GALLONS / GPD Use Existing Tank CAPACITY
A [ 0 ] GALLONS / GPD CAPACITY
N [ 0 ] GALLONS GREASE INTERCEPTOR [MAXIMUM CAPACITY SINGLE TANK:1250 GALLONS]
K [ ] GALLONS DOSING TANK CAPACITY [ ]GALLONS @[ ]DOSES PER 24 HRS #Pumps [ ]

D [ 225 ] SQUARE FEET Use Existing Drainfield SYSTEM
R [ 0 ] SQUARE FEET SYSTEM
A TYPE SYSTEM: [x] STANDARD [ ] FILLED [ ] MOUND [ ]
I CONFIGURATION: [x] TRENCH [ ] BED [ ]

N
F LOCATION OF BENCHMARK: Nail in oak tree at NE corner of property
I ELEVATION OF PROPOSED SYSTEM SITE [ 3.00 ] [INCHES] FT [ABOVE] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [ 22.00 ] [INCHES] FT [ABOVE] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [ 0.00 ] INCHES EXCAVATION REQUIRED: [ ] INCHES

Applicant has elected to repair the system using the following alternative repair method (ARM): Soil disruption beside the drainfield at the location specified in the approved site plan, adding a solids deflection device to existing tank.

BE ADVISED:
Should applicant elect to repair the system by the addition or replacement of drainfield material, a permit amendment is required. If the drainfield is an alternative drainfield product, failure to obtain the product manufacturer's approval prior to performing this alternative repair may invalidate any product warranty.

SPECIFICATIONS BY: Barry L Brown TITLE: Environmental Specialist II
APPROVED BY: TITLE: Alachua CHD

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)
NOTICE OF RIGHTS

A party whose substantial interest is affected by this order may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. Such proceedings are governed by Rule 28-106, Florida Administrative Code. A petition for administrative hearing must be in writing and must be received by the Agency Clerk for the Department, within twenty-one (21) days from the receipt of this order. The address of the Agency Clerk is 4052 Bald Cypress Way, BIN # A02, Tallahassee, Florida 32399-1703. The Agency Clerk’s facsimile number is 850-410-1448.

Mediation is not available as an alternative remedy.

Your failure to submit a petition for hearing within 21 days from receipt of this order will constitute a waiver of your right to an administrative hearing, and this order shall become a ‘final order’.

Should this order become a final order, a party who is adversely affected by it is entitled to judicial review pursuant to Section 120.68, Florida Statutes. Review proceedings are governed by the Florida Rules of Appellate Procedure. Such proceedings may be commenced by filing one copy of a Notice of Appeal with the Agency Clerk of the Department of Health and a second copy, accompanied by the filing fees required by law, with the Court of Appeal in the appropriate District Court. The notice must be filed within 30 days of rendition of the final order.