

**ONSITE SEWAGE PROGRAM ACCELERATED CERTIFICATION TRAINING**



ONSITE SYSTEM CONSTRUCTION PERMITS AND INSPECTIONS (MASTER CONTRACTOR PART III)

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**Day 5 – Friday 8:00 AM-12:35 PM (6 CEUs)**

- Objectives:
  - To give a clear understanding of the System Repair and Existing System Modification permitting process.
  - To give a clear understanding of the Septic Tank Contracting Licensing and Enforcement duties and regulations of the DOH.

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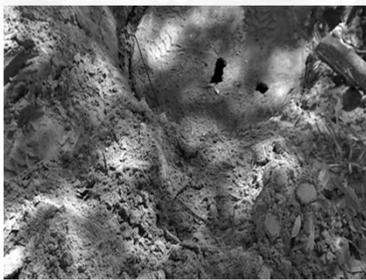
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A - 8:00-9:00  
System Repair Standards

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### System Repair Standards

- Repair Application and Forms (Is it really a Repair?)
- Original Installation Date (Most recent date system was installed under new system requirements)
- Existing Tank Certification
- Site Evaluation
- Repair Site Plans
- Sample Forms

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### Repair Application and Forms (Is it really a Repair?)

- Systems in failure require repair in order to prevent or abate a sanitary nuisance. The use of a repair permit assumes:
  - There will be no change in estimated sewage flow.
    - Change in sewage flow would require an Existing System Evaluation.
  - There has been no unpermitted change in flow since the original system installation or modification.
    - An unpermitted change in the original permit conditions voids the original approval and would require a new system construction permit.
  - Minor structural adjustments, or replacement of mechanical components do not require a repair permit.
- None of this would allow for the continued existence of a sanitary nuisance at the site.

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### Repair Application:

- Applications for repairs follow the same general guidelines as for new system construction. There are a few key differences:
  - Site plans do not need to be scaled, and items to be shown are those within proximity to the system, not the property lines.
    - Because of this, all pertinent dimensions must be shown.
  - Floor plans are not required.
    - Because of this, the existing structure information is verified with other sources, such as the property appraiser's information.
  - There is one additional form (DH4015pg4) which gives us information about the existing OSTDS.

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### Existing Drainfield Information:

**EXISTING DRAINFIELD INFORMATION**

[ 200 ] SQUARE FEET PRIMARY DRAINFIELD SYSTEM NO. OF TRENCHES [ 3 ] DIMENSIONS: [ 3 ] X [ 67 ]  
 [ ] SQUARE FEET SYSTEM NO. OF TRENCHES [ ] DIMENSIONS: [ ] X [ ]  
 TYPE OF SYSTEM: [ ] STANDARD [ ] FILLED [X] MOOSE [ ]  
 CONFIGURATION: [X] TRENCH [ ] BED [ ]  
 DESIGN: [ ] HEADER [ ] D-BOX [X] GRAVITY SYSTEM [ ] DOSED SYSTEM  
 ELEVATION OF BOTTOM OF DRAINFIELD IN RELATION TO EXISTING GRADE: [ 18 ] INCHES [ ABOVE / BELOW ]

- The total square-footage of drainfield area present.
- The number of drainline trenches.
- The length and width if a bed system. The trench width and total length of all trenches present.
- Whether the system is subsurface or other.
- Whether the drainfield is installed in a bed or trenches.
- What type of distribution the system uses.
- Elevation of the bottom surface of the drainfield relative to undisturbed native soil.

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### System Failure and Repair Information:

**SYSTEM FAILURE AND REPAIR INFORMATION**

[ 05/28/82 ] SYSTEM INSTALLATION DATE TYPE OF WASTE [X] DOMESTIC [ ] COMMERCIAL  
 [ 300 ] GPD ESTIMATED SEWAGE FLOW BASED ON [ ] METERS WATER [X] TABLE 1, 64E-6, FAC

- Date this system was most recently installed under a NEW SYSTEM or MODIFICATION permit.
- Whether the waste is domestic or commercial.
- Total estimated sewage flow generated by the existing structure.
- How the total estimated sewage flow was determined.

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### Site Conditions:

**SITE CONDITIONS**

[ ] DRAINAGE STRUCTURES [ ] POOL [ ] PATIO / DECK [ ] PARKING  
 [X] SLOPING PROPERTY [ ]

- Whether conditions are present that may impact the system:
- Drainage structures: (Ditches, swales, gutters, etc.)
- Pool (may be leaking, saturating the area).
- Is the system under a patio or deck?
- Is the system in an area subject to parking?
- Does the property slope, or is it flat?
- Other conditions which may be impacting the system or further reduce the available area.

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## Nature of Failure:

NATURE OF FAILURE:  HYDRAULIC OVERLOAD  SOILS  MAINTENANCE  SYSTEM DAMAGE  
 DRAINAGE / RUN OFF  ROOTS  WATER TABLE

- What has caused the system to fail?
  - These items become important when considering what the repair permit must address.
  - There are specific rules to address systems failing due to excessive hydraulic loading and root clogging.

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## Failure Symptom:

FAILURE SYMPTOM:  SEWAGE ON GROUND  TANK  D BOX/HEADER  DRAINFIELD  
 PLUMBING BACKUP

REMARKS/ADDITIONAL CRITERIA \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- What evidence is there of the system failure?
  - These items serve to help verify the cause of the failure, as well as to further document items that need to be addressed during the repair.

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## Submitted By:

SUBMITTED BY: John Doe TITLE/LICENSE: SH1458320 DATE: 07/03/2018  
DK 4015, 08/09 (Obsoletes previous editions which may not be used) Incorporated 648-6.001, FAC Page 4 of 4

- Signed and dated by the authorized person submitting the information.

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## Site Evaluation




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## Site Evaluation for Repairs:



- Are held to the same standards as for new system construction permits.
- Require a benchmark that is specific in both location and elevation.
- Requires careful measurement of the existing setbacks.
  - These must be referenced to Table V to determine the minimum proposed setbacks.

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## Table V: Repair System Setback Requirements.



| Percent Difference of Original System | Description of Setback (Separation)     | Protection Factor | Current Required Setback | Absolute Minimum Setback  |
|---------------------------------------|---|-------------------|--------------------------|---|
| Prior to 1-1-72                       | Systems to a Private Potable Well       | 6                 | 75 feet                  | Greater of the Following:<br>a) Minimum Setback (75 feet and -50 feet)<br>b) Original Setback (if 50 feet or 50 feet) |
|                                       | Systems of Driveway Abandonment Surface | 5                 | 24 inches                | Greater of the Following  |

• Table V lists reduced setbacks given for repairs only.  
 • These are based on the year of original system installation.  
 • If the existing setback is greater than the minimum setback, the existing setback must be maintained.

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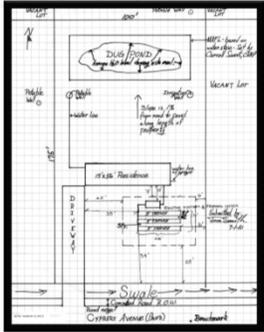
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## Repair Site Plans




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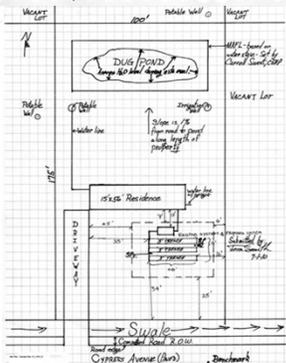
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### The Repair Site Plan:




- Is not required to be to scale.
- Shows all dimensions.
- Shows the existing OSTDS.
- Shows the proposed OSTDS.
- Shows the setbacks for both.
- Shows the benchmark and auger boring locations.
- Shows all features requiring setbacks if they are:
  - In proximity to the system.
  - Will affect system installation.
- Defers to Table V for setback requirements.
- Serves to document the existing and the proposed system location and setbacks that will be used for the system permit and inspection.

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## System Repair Permit:




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### System Repair Permit:

- In order to write the repair permit, we must first determine the following parameters of the existing system, which will be used to determine the repair permit specifications:
  - What is the existing tank size?
    - The tank must be within 2 tank sizes of that required for the total flow.
  - Is the tank structurally sound?
    - The tank must be free of observable defects and constructed of approved materials.
  - Is there an existing outlet device or filter?
    - If one was not present, it must be installed prior to final approval.
  - What is the existing drainfield size?
    - The permit drainfield size can be no less than the existing size.
  - What are the existing system setbacks to all pertinent features?
    - The permitted drainfield cannot have lesser setbacks than the existing system.
    - If the existing setbacks are less than the Table V minimums, a variance is required.
    - Items not listed in Table V, have no setback reductions and must meet current rule requirements.

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### System Repair Permit:

- In order to write the repair permit, we must first determine the following parameters of the existing system, which will be used to determine the repair permit specifications:
  - What is the existing drainfield elevation compared to natural grade?
    - The permit drainfield elevation can be no lower, while maintaining the WSWT separation determined via Table V.
  - When was the system originally installed?
    - This information is used to determine the Table V setbacks, and sizing criteria.
  - What is the sizing criteria?
    - Determined using the number of bedrooms for pre-83 systems, or Table I for systems installed from 1983 onward.
  - What is the nature of the failure?
    - If caused by root clogging or hydraulic overload, there are special provisions.

All of this information is obtained from the Application, Site Plan, Site Evaluation, and Existing System and Repair Evaluation forms. It is used to determine the minimum repair system specifications.

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### Alternative Repair Methods:

- Chemical Treatment (any product used must be in compliance with 64E-6.0151, F.A.C.).
- Air injection/Physical Disruption of the Drainfield.
- Water "Jetting" of drain lines.
- Installation of an "Aerobic Bacteria Generator."

The use of these methods requires a repair permit prior to initiating the process and an inspection prior to final approval. (see Memo HSES 12-005 for further details on permitting & inspecting an "ARM").

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**Master Contractor Inspection of Repairs:**

- Master ST contractors may schedule **inspections** within the normal duty schedule of the CHD. If the CHD is not on site within 30 minutes of scheduled time, the master ST contractor on site may document a System Repair Certification on Form DH 4016, Page 3, and cover the system.
  - If the system has been previously inspected by the CHD, and violations are found in need of correction, the Master Contractor may not inspect and cover the system.
- The CHD issues a **FINAL APPROVAL** based on this certification on form DH4016, Page 4.
  - Form DH4016, Page 4 can only be completed by a DOH employee certified per 381.0101, FS.
- The Master Contractor Program does **not** allow any work without permits or certifications after normal duty hours or on weekends and holidays.
  - There are no "after-the-fact" permits.

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**System Repair Inspection and Approval on form DH4016pg4:**

- Requirements for repair drainfield inspections are the same as for new system construction inspections.
- If the existing drainfield remains part of the system, its size and configuration must also be verified.
- If an alternative repair method is employed, the inspection requirements will be method-specific, but must still document compliance with rule requirements.

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