

# ONSITE SEWAGE PROGRAM ACCELERATED CERTIFICATION TRAINING

## ONSITE WASTEWATER CONCEPTS, MATERIALS, REGULATIONS & THE APPLICATION PROCESS

### MASTER CONTRACTOR PART I

#### AGENDA

#### Day 1 – Monday 8:00 AM – 3:45 PM (6 CEUs)

8:00 – 8:15 Welcome, Introduction and Course Overview

8:15 – 9:30 **A - Basic Concepts In Wastewater Treatment** (1.25 Credit Hours: R, M, and C)

##### Overview

- Advantages and Importance of Onsite Wastewater Treatment Systems

##### Wastewater Composition

- Human Body Wastes and Characteristics, Water Use and Wastewater Segregation
- Pollutant Concentrations in Wastewater, Waterborne Pathogens associated with Sewage
- Nitrate Contamination, Phosphorus, Volatile Organic Compounds
- Septic Tank Functions and Effluent Characteristics
- Biomat and Treatment
- Advanced Treatment Systems (Constituents, Treatment Levels)
  - Aerobic Treatment Units and Performance Based Treatment Systems

9:30 – 10:15 **B - Onsite Sewage Systems Methods & Materials** (0.75 Credit Hours: R, M, and C)

- Treatment Receptacles, concrete, fiberglass and polyethylene (plastic)
  - Septic, laundry, grease traps and dosing receptacles
  - Legends, manholes, seals, sealants and filters
- Distribution methods and materials
  - Gravity and lift-dosing (d-boxes and headers), mound, filled and standard systems
  - Pressure (Low pressure and drip system materials)
- Baseline (soil based) and alternative drainfields and drainfield materials
  - Mineral aggregate and alternative drainfield products, classroom demonstration of aggregate samples
  - Reductions vs. comparable ratings
  - Absorption bed vs. trench

10:15 – 10:30 **BREAK**

10:30 – 11:00 **B - Onsite Sewage Systems Methods & Materials – Continued** (0.5 Credit Hours: R, M, and C)

11:00 – 12:00 **C - State Regulations of Onsite Sewage Treatment and Disposal Systems** (1.0 Credit Hours: R, M, and C)

- Chapters 120, 381 and 489, Florida Statutes (Regulations not specifically in rule such as Suwannee/Aucilla River and roof-runoff requirements, time frames, rights to hearings, 381 variances, jurisdiction, sewer availability)
- EH Technical Manual 150-4
- Chapter 64E-6, Florida Administrative Code State Regulations of Onsite Sewage Treatment and Disposal Systems
- Interagency Agreements in the Onsite Sewage Program (DEP, DBPR, DACS, DCF, APD, AHCA), Operating Permits

12:00 – 1:00 **LUNCH**

1:00 – 2:00 **D - New Permit Applications and Site Plans** (1.0 Credit Hours: R, M, and C)

- Permit Application, Agent Authorization, Property Ownership, Sizing Criteria: property size, water supply, date lot subdivided or recorded, estimated sewage flow, authorized sewage flow
- Site Plan, Setbacks

2:00 - 2:15 **BREAK**

2:15 - 3:15 **E - Site Plan Review Classroom Exercise** (1.0 Credit Hours: R, M, and C)

- Sample applications and site plans

3:15 - 3:45 **Review and Questions** (0.5 Credit Hours: R, M, and C)

# ONSITE SEWAGE PROGRAM ACCELERATED CERTIFICATION TRAINING

## INTRODUCTION TO FLORIDA SOILS AND THE SITE EVALUATION PROCESS

### MASTER CONTRACTOR PART II

#### AGENDA

#### Day 2 – Tuesday 8:00 AM – 3:45 PM (6.25 CEUs)

- 8:00 – 8:15 Welcome, Introduction and Course Overview
- 8:15 – 9:15 **Site Evaluation Requirements** (1.0 Credit Units: R, M, and C)
- Net Usable Lot Area Determinations, Unobstructed Area Determinations
  - Establishing a Benchmark, System Setback
  - Water Table and Soil Determinations and Documentation (Site Evaluation Form and EH Database)
  - Soil Sizing Criteria
  - Ramifications of Soil Profile Refusals (Worst Case Scenarios in System Sizing)
  - Excavation and Fill Determinations
  - Frequent Flooding Determinations
  - Surface Water Boundaries (MAFL / MHWL)
- Introduction to Florida Soils**
- 9:15 – 10:00 **USDA Soil Basics** (0.75 Credit Units: R, M, and C)
- Define and describe allowable methodology for determination of soil textures
  - Describe DOH reference and proper use of United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS) methodology
- 10:00 – 10:15 **BREAK**
- 10:15 – 11:15 **Soil Components and Texture** (1.0 Credit Units: R, M, and C)
- Define and describe allowable methodology for determination of soil textures
  - Describe proper use of USDA NRCS texturing methodology for soils
- 11:15 – 12:00 **Soil Colors and Their Interpretation** (0.75 Credit Units: R, M, and C)
- Define and describe methodology for determination of soil color
  - Describe proper use of Munsell color book
  - Describe methodology for determination of soil color contrast
- 12:00 – 1:00 **LUNCH**
- 1:00 – 2:00 **Seasonal High Water Tables – Non-hydric** (1.0 Credit Units: R, M and C)
- Define terms necessary to identify seasonal high water table indicators
  - Define and describe soil redoximorphic indicators for the non-hydric soil grouping
- 2:00 – 3:45 **Seasonal High Water Table Indicators – Hydric** (1.75 Credit Units: R, M, and C)
- Define and describe:
    1. Hydric soils indicator (HSI) usage, terminology and identification methodology
    2. Methodology for determining SHWT when using hydric soil indicators
    3. Focus on the most common indicators used in Florida
- NOTE: Examples that apply the presentation concepts will be distributed for student use and will be reviewed the next morning.

**ONSITE SEWAGE PROGRAM ACCELERATED CERTIFICATION TRAINING**  
**INTRODUCTION TO FLORIDA SOILS AND THE SITE EVALUATION PROCESS**  
**MASTER CONTRACTOR PART II**

**AGENDA**

**Day 3 – Wednesday 8:00 AM- 11:45 AM (3.5 CEUs)**

- 8:00 – 9:00     **Review and Homework** (1.0 Credit Units: R, M, and C)
- Review of material from previous day
- 9:00 – 10:00     **Soil Profile Documentation** (1.0 Credit Units: R, M, and C)
- Define and describe requirements for correct soil profile documentation for OSTDS permitting
- 10:00 – 10:15     **BREAK**
- 10:15 – 11:15     **Web Soil Survey and Soil Classification Information** (1.0 Credit Units: R, M, and C)
- Define and describe web soil survey and its use
  - Describe USDA NRCS soil classification system
- 11:15 – 11:45     **Review and Questions** (0.5 Credit Units: R, M, and C)

**ONSITE SEWAGE PROGRAM ACCELERATED CERTIFICATION TRAINING**  
**ONSITE SYSTEM CONSTRUCTION PERMITS AND INSPECTIONS**  
**MASTER CONTRACTOR PART III**

**AGENDA**

**Day 4 – Thursday 8:00 AM - 1:30 PM (4.0 CEUs)**

- 8:00 – 8:15 Welcome, Introduction and Course Overview
- 8:15 – 10:15 **Baseline System Construction and Operating Permits** (2.0 Credit Hours: R, M, and C)
- Tank size determinations and permitting
  - Drainfield size determinations and permitting
  - Drainfield Elevation Permitting
  - Fill, Mound and Excavation Permitting
  - Maintenance Requirements
- 10:15 – 10:30 **BREAK**
- 10:30 – 12:00 **Baseline System Inspection Requirements & Field Standardization Classroom Review**  
(1.5 Credit Hours: R, M, and C)
- 12:00 – 1:00 **LUNCH**
- 1:00 – 1:30 **Baseline Systems and Commercial / IM Zone** (0.5 Credit Hours: R, M, and C)
- Operating Permit Requirements
  - Annual Operating System Inspections
  - Maintenance Entities
  - System Maintenance Requirements
- Aerobic Treatment Units (ATU) and Performance-Based Treatment Systems (PBTS)**
- Operating Permit Requirements
  - Annual Operating System Inspections
  - Maintenance Entities
  - System Maintenance Requirements

**ONSITE SEWAGE PROGRAM ACCELERATED CERTIFICATION TRAINING**

**ONSITE SYSTEM CONSTRUCTION PERMITS AND INSPECTIONS**

**MASTER CONTRACTOR PART III**

**AGENDA**

**Day 5 – Friday 8:00 AM- 11:15 AM (3.0 CEUs)**

- 8:00 - 9:00 **System Repair Standards** (1.0 Credit Hours: R, M, and C)
- 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
- 9:00 - 9:15 **BREAK**
- 9:15 - 10:15 **Existing System / Modification Standards** (1.0 Credit Hours: R, M, and C)
- Application Forms (Is it really a Modification?)
  - Existing Tank Certification
  - Existing System Information and Decision tree
  - Permit Specifications
  - Classroom Exercise
- 10:15 - 10:45 **Septic Tank Contracting and Enforcement** (0.5 Credit Hours: R, M, and C)
- Licensing Requirements
  - Enforcement Requirements
- 10:45 - 11:15 **Review and Questions** (0.5 Credit Hours: R, M, and C)