

<u>Day 5 – Friday 8:00 AM-12:35 PM</u> (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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A - 8:00-9:00

System Repair Standards

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.

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- Change in sewage flow would require and 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.

Repair Application: **Forida**

- 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.

STATE OF FLORIDA PERMIT #	Florida
APPLICANT:	
CONTRACTOR / AGENT:	
TO BE COMPLETED BY FLORIDA REGISTERED ENGINEER, DEPARTMENT EMPLOYEE, SEPTIC TANK CONTRACTOR OR OTHER CERTIFIED PERSON. SIGN AND SEAL ALL SUBMITTED DOCUMENTS. COMPLETE ALL APPLICABLE ITEMS. COMPLETE TANK CERTIFICATION BELOW OR NOTE IN REMARKS WHY THE TANKS CANNOT BE CERTIFIED.	
EXISTING TANK INFORMATION [] GALLONS SEPTIC TANK/GPD ATU LEGEND: MATERIAL: BAFFLED: [Y / N]	

PUMPS:[

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I CERTIFY THAT THE LISTED TANKS WERE PUMPED ON _/ / BY ______, HAVE THE VOLUMES SPECIFIED AS DETERMINED BY [DIMENSIONS / FILLING / LEGEND], ARE FREE OF OBSERVABLE DEFECTS OR LEAKS, AND HAVE A [SOLIDS DEFLECTION DEVICE / OUTLET FILTER DEVICE] INSTALLED.

MATERIAL:

MATERIAL:

SIGNATURE OF LICENSED	CONTRACTOR	BUSINESS	NAME	DATE

LEGEND:

EXISTING DRAINFIELD INFORMATION

] GALLONS DOSING TANK

] GALLONS GREASE INTERCEPTOR LEGEND:

[1	SQUARE	FEES	C 1	PRIMARY DRAI	NF	ELD	SYSTE	M	NO.	OF	TREN	CHES	[]		DIMENSIONS: X
1	1	SQUARE	FEES	٢.				SYSTE	M	NO.	OF	TREN	CHES	[]		DIMENSIONS: X
TYPE O	FS	YSTEM:	1	1	STANDARD		FI	LLED	1] 1	10UND	[1			
CONFIG	URA	TION:	I	1	TRENCH		BEI	D	I	1						
DESIGN	1:		I	1	HEADER		D-1	BOX	I	10	GRAVI	TY S	YSTEM	[]	DOSED SYSTEM
ELEVAT	ION	OF BO	TOM	0	F DRAINFIELD	11	RE	LATION	т то) EI	(ISTI)	NG G	RADE			INCHES [ABOVE / BELOW]

SYSTEM FAILURE AND REPAIR INFORMATION

[1	S	SI	rem	INS	TAL	LAT	TION	DA	TE				TYP	PΕ	OF	WASTE		[] D	OME	ST	IC	[1	COMM	ERC	IAL
I	1	GE	D	EST	IMA	TED	SI	WAGI	E F	LOW	BA	SEI	ON		1	1	METERE	D	WAT	ER	1	1	TABL	E :	1,	64E-	6,	FAC
SITE CONDITIONS	3:	[[]]] DR] SL	AIN. OPI	AGE NG I	S1 PRC	RUC	TUR TY	ES] []]	POOL		ſ	1	PATIO	/	DEC	ĸ	I	1	PARK	IN	G			
NATURE OF FAILURE:		[[1 1	HYD DRA	RAU INA	LIC GE ,	07 I	ÆRLO RUN (OAD OFF] []]	SOIL ROOT	s s	[[]]	MAINTE WATER	NA TA	NCE BLE		[[]]	SYST	EM	D	MAGE		
FAILURE SYMPTOM:		[[1 1	SEW PLU	AGE MBI	ON NG H	GE	ROUNI	D		[[1 1	TANK	0	[1	D BOX/	HE	ADE	R	[1	DRAI	NF	IEI	D		
REMARKS/AI	DD:	ITJ	ON	NAL	CRI	TER	IA																					
8																												
	_																											

 SUBMITTED BY:
 TITLE/LICENSE
 DATE:

 DH 4015, 08/09 (Obsoletes previous editions which may not be used)
 Incorporated 64E-6.001, FAC
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Existing System and System Repair Evaluation.



Existing Tank Information:

EXISTING TANK INFORMATION

[900]	GALLONS	SEPTIC	TANK/GPD	ATU	LEGEND: 35-015-04D-C3	MATERIAL: Concrete	BAFFLED: [Y / N]
[]	GALLONS	SEPTIC	TANK/GPD	ATU	LEGEND:	MATERIAL:	BAFFLED: [Y / N]
[]	GALLONS	GREASE	INTERCEPT	OR	LEGEND:	MATERIAL:	
[]	GALLONS	DOSING	TANK		LEGEND:	MATERIAL:	# PUMPS:[]

- Tank Size or ATU Capacity (Gallons Per Day)
- Tank Legend (if present)
- Tank Material
- Whether there is a baffle wall present
- (Additional similar information for Dosing tanks, Grease Interceptors, etc.)

Existing Tank Certification:

 I CERTIFY THAT THE LISTED TANKS WERE PUMPED ON 06/25 /10 BY Tom SmithSeptic Tank Service , HAVE

 THE VOLUMES SPECIFIED AS DETERMINED BY [DIMENSIONS / FILLING / LEGEND], ARE FREE OF OBSERVABLE

 DEFECTS OR LEAKS, AND HAVE A [SOLIDS DEFLECTION DEVICE / OUTLET FILTER DEVICE] INSTALLED.

 Jom Smith

 Signature of LICENSED CONTRACTOR

- Date tanks were pumped (inlet and outlet end if multi-chambered).
- Name of authorized company who pumped the tanks.
- How the tank capacity was determined.
- The septic tank contractor, CEHP, or state-licensed plumber who physically inspected and is certifying the tanks.
- The name of the business certifying the tanks.
- The date the tank is certified by the authorized party.

Existing Drainfield Information:

EXISTING DRAINFIELD INFORMATION

[200] SQUARE	FEET	PRIMARY DRAI	NFIE	ELD SYSTE	M	NO.	OF 1	TRENCHES	[3]	DIMENSIONS:	<u>3 X 67 .</u>
[] SQUARE	FEET	-75		SYSTE	М	NO.	OF 1	TRENCHES	[]	DIMENSIONS:	<u>x</u>
TYPE OF SYSTEM:		STANDARD [1	FILLED	[X]] MC	UND	[]			
CONFIGURATION:	[X]] TRENCH []	BED	I	1					8
DESIGN:	[]] HEADER []	D-BOX	[X] GR	NAVI	TY SYSTEM	[] DOSED SYSTEM	
ELEVATION OF BO	TOM (OF DRAINFIELD	IN	RELATION	то	EXI	STI	NG GRADE	18	INCHES [AB	OVE / 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.

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	[] METERED 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.



Site Conditions:



- 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.



Nature of Failure:

NATURE OF	[]	HYDRAULIC OVERLOAD	[]	SOILS	[]	MAINTENANCE	[X	1	SYSTEM DAMAGE
FAILURE:	I	1	DRAINAGE / RUN OFF	[]	ROOTS	[]	WATER TABLE	I	1	

- 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.



Failure Symptom:

FAILURE SYMPTOM:	[X] SEWAGE ON GROUND [] PLUMBING BACKUP	[] TANK []	[] D BOX/HEADER	[] DRAINFIELD
REMARKS/AD	DITIONAL 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.



Submitted By:

SUBMITTED	BY:	John Doe			TITLE/L:	CENSI	e sn	1458320	0 2	DATE: 07/01,	2010)
DH 4015, 0	08/09	(Obsoletes	previous	editions	which may	not	be	used)		5 7		
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• Signed and dated by the authorized person submitting the information.

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.



Table V: Repair System Setback Requirements.

TABLE V Repair System S Permit Date of Original System	Setback Requirements Description of Setback (Separation)	Protection Factor	Current Required Setback	Absolute Minimum Setback
Prior to 1-1-72	System to a Private Potable Well	6	75 feet	Greatest of the Following: a) Maximum Setback (<75 feet and >50 feet) b) Original Setback (if >50 feet) c) 50 feet
	Bottom of Drainfield Absorption Surface	5	24 inches	Greatest 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.

Repair Site Plans





The Repair Site Plan:



•Is not required to be to scale.

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- •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.

System Repair Permit:

STATE OF FLORIDA DEPARTMENT OF HEALTH ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM CONSTRUCTION PERMIT	PERMIT NO. <u>10-1000-N</u> DATE PAID: <u>7/1/2010</u> FEE PAID: RECEIPT #:
CONSTRUCTION PERMIT FOR: [x] New System [] Existing System [] Holding Tank [] Repair [] Abandonment [] Temporary	[] Innovative []
APPLICANT: Tom Smith	
PROPERTY ADDRESS: 312 Cypress Ave., Geneva, FL 32765	
LOT: 5 BLOCK: NA SUBDIVISION: OVIGEO OAKS [SECTION, TOWNS PROPERTY ID #: 293031000782 [OR TAX ID NUMB	HIP, RANGE, PARCEL NUMBER] ER]
SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS AND STA F.S., AND CHAPTER 64E-6, F.A.C. DEPARTMENT APPROVAL OF SYSTEM DOES PERFORMANCE FOR ANY SPECIFIC PERIOD OF TIME. ANY CHANGE IN MATERIA BASIS FOR ISSUANCE OF THIS PERMIT, REQUIRE THE APPLICANT TO MODI SUCH MODIFICATIONS MAY RESULT IN THIS PERMIT BEING MADE NULL AND VOI DOES NOT EXEMPT THE APPLICANT FROM COMPLIANCE WITH OTHER FEDERAL, REQUIRED FOR DEVELOPMENT OF THIS PROPERTY.	NDARDS OF SECTION 381.0065, NOT GUARANTEE SATISFACTORY LIFACTS, WHICH SERVED AS A FY THE PERMIT APPLICATION. D. ISSUANCE OF THIS PERMIT STATE, OR LOCAL PERMITTING
SYSTEM DESIGN AND SPECIFICATIONS T [900] GALLONS / GPD GAPACITY MUL A [] GALLONS / GPD CAPACITY MUL N [] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY K [] GALLONS DOSING TANK CAPACITY [] GALLONS 0 [] DOSE	TI-CHAMBERED/IN-SERIES [] TI-CHAMBERED/IN-SERIES [] SINGLE TANK: 1250 GALLONS] S PER 24 HRS # FUMPS []
D [250] SQUARE FEET PRIMARY DRAINFIELD SYSTEM R [] SQUARE FEET	
F LOCATION OF BENCHMARK: Disc in CL of Road near SE property corner I ELEVATION OF PROPOSED SYSTEM SITE [12.00] [INCHES/FT] [ABOVE/BELOW E BOTTOM OF DRAINFIELD TO BE [30.00] [INCHES/FT] [ABOVE/BELOW L D FILL REQUIRED: [36.00] INCHES EXCAVATION REQUIRED: [48.00] INCH] BENCHMARK/REFERENCE POINT] BENCHMARK/REFERENCE POINT ES
O The licensed contractor installing the system is responsible for in T category of tank in accordance with s. 54E-6.013(3)(f), FAC.	nstalling the minimum
E R	
SPECIFICATIONS BY: Carroll Sweet	ironmental Specialist I
APPROVED BY: John Forest, RSTITLE: Environmental	Manager Sunshine CHI
DATE ISSUED: 7/6/2010 EXPIRA	ATION DATE: 1/2/2012
DH 4016, 08/09 (Obsoletes all previous editions which may not be used Incorporated: 64E-6.003, FAC	d) Page 1 of 3



System Repair Permit: HEALTH

- 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?

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- 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.

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").

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 <u>not</u> allow any work without permits or certifications after normal duty hours or on weekends and holidays.
 - There are no "after-the-fact" permits.

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.