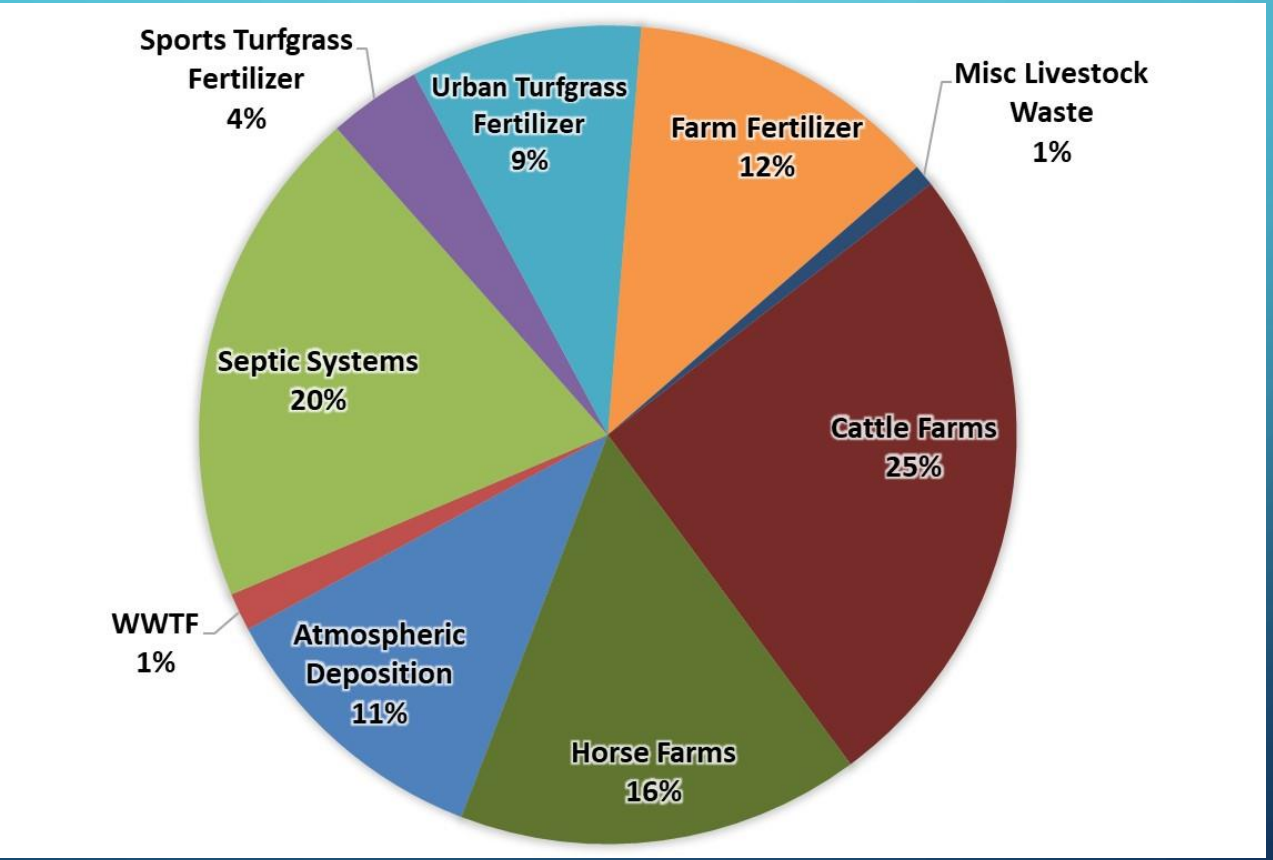
OSTDS ADVANCED TREATMENT OPTIONS FOR NITROGEN REDUCTION

ROXANNE GROOVER

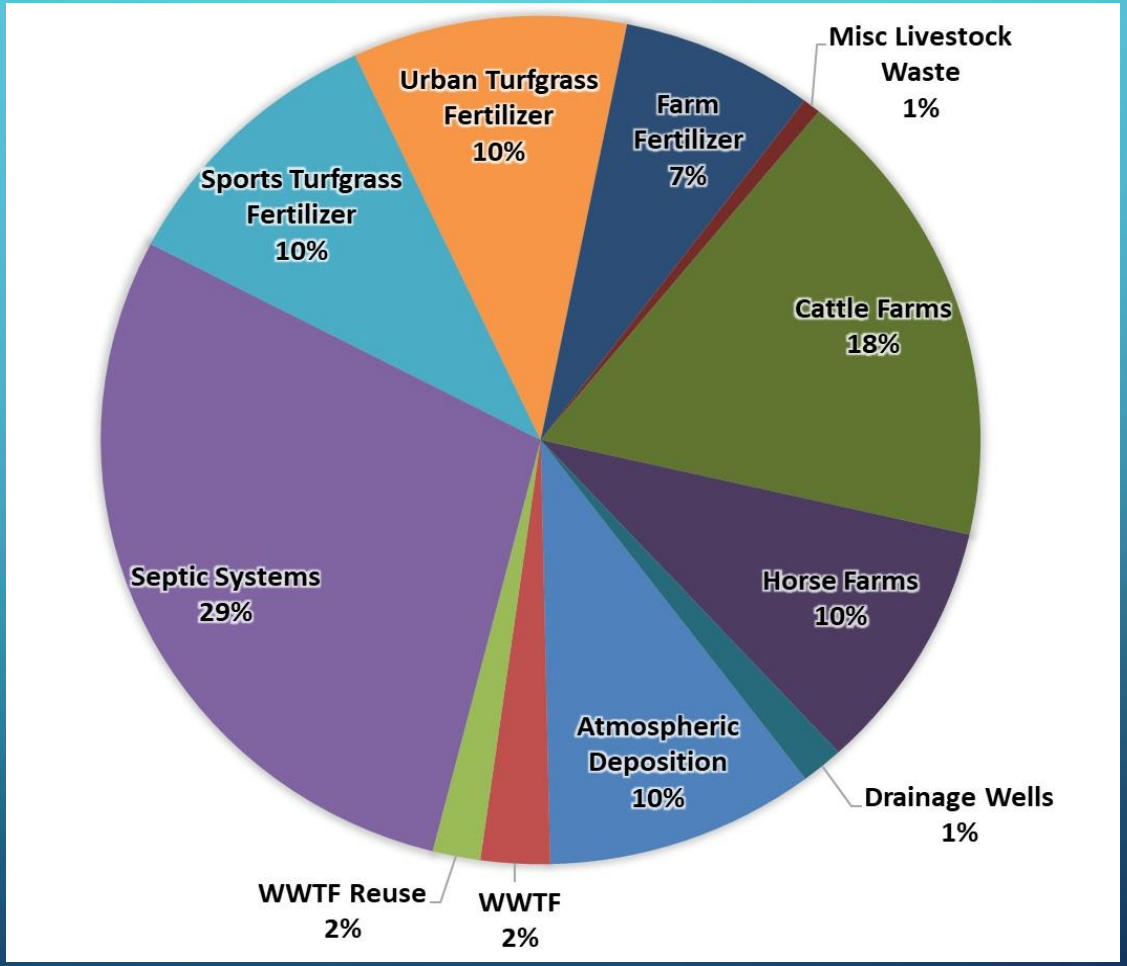
EXECUTIVE DIRECTOR

FLORIDA ONSITE WASTEWATER ASSOCIATION, INC.

RAINBOW SPRINGS NSILT



SILVER SPRINGS NSILT



IT'S MORE THAN SEPTIC TANKS …IT'S AN OSTDS

What's an OSTDS

- Onsite Sewage Treatment and Disposal System
  - The choice of system SHOULD be decided by treatment level needed.
    - Often it's not!!
  - This leads to the perception that OSTDS CAN"T treat wastewater to standards to meet public health and environmental needs !!
    - FALSE

VARIOUS TYPES OF OSTDS

- ATU
  - Aerobic Treatment Units (ATUs)
    - Basically designed to treat BOD & TSS but can be enhanced for nitrogen reduction
    - NSF Standard 40 approved in FL
    - This grouping includes:
      - Suspended
      - Fixed Film
      - Unsaturated Media Filters

PERFORMANCE BASED TREATMENT SYSTEMS (PBTS)

PERFORMANCE STANDARDS

POLLUTANT	BASELINE SYSTEM STANDARDS Septic tank effluent	BASELINE SYSTEM STANDARDS @ base of 24 inch unsaturated zone	AEROBIC TREATMENT UNIT (effluent)	SECONDARY TREATMENT STANDARDS (effluent)	ADVANCED SECONDARY TREATMENT STANDARDS (effluent)	ADVANCED WASTEWATER TREATMENT STANDARDS (effluent)
$CBOD_5$ (Carbonaceous Biochemical Oxygen Demand)	**120-240 mg/l**	**< 5 mg/l**	**=or< 25 mg/l**	**=or< 20 mg/l**	**=or< 10 mg/l**	**=or< 5 mg/l**
TSS (Total Suspended Solids)	**65-176 mg/l**	**< 5 mg/l**	**=or< 30 mg/l**	**=or< 20 mg/l**	**=or< 10 mg/l**	**=or< 5 mg/l**
TN (Total Nitrogen)	**36-45 mg/l**	**15-25 mg/l**	**not applicable**	**not applicable**	**=or< 20 mg/l**	**=or< 3 mg/l**
TP (Total Phosphorus)	**6-10 mg/l**	**< 5 mg/l**	**not applicable**	**not applicable**	**=or< 10 mg/l**	**=or< 1 mg/l**
Fecal coliform		**undetected**	**not applicable**	**=or< 200 fc col/100 ml**	**=or<200 fc col/100 ml**	**BDL for 100 ml**
DRAINFIELD REDUCTIONS	not applicable	not applicable	25% in slightly limited soil	25%	40%	40%
REDUCE: SETBACKS surface water groundwater drains dry retention & swales SEPARATIONS to SHWT	 no change no change no change no change	 no change no change no change no change	 no change no change no change no change	 65 ft no change no change no change	 50 ft 10 ft 10 ft no change	 25 ft 10 ft 10 ft 12 in
INCREASE AUTHORIZED FLOWS	no change	no change	no change	25%	50%	100%

NOTES:

1. Drainfield size reductions depend on achieving the results above for $CBOD_5$ and TSS. TN, TP and fecal coliform do not apply.

f/n: perform/table02.doc
Issue dated 01-15-2002

FLORIDA KEYS STANDARDS

- Treatment Levels
  - CBOD5 & TSS: 10 mg/L
  - TN: 10 mg/L
  - TP: 1 mg/L
  - FC: BDL for 100 ml (injection well)

NSF STANDARD 40 EVALUATION CRITERIA

Influent Wastewater Characteristics:

- BOD_5 = 100 mg/L - 300 mg/L
- TSS = 100 mg/L - 350 mg/L
- pH = 6 – 9
- Temperature = less than 30°C

Effluent Criteria (Class 1; 30-day average):

- $CBOD_5$ = 25 mg/L
- TSS = 30 mg/L
- Color, Odor, Oily Film & Foam (MBAs) – 3 times during test
- pH = 6 – 9
- Temperature = no criteria
- DO = no criteria

THERE ARE 25 SYSTEMS CURRENTLY AVAILABLE FOR USE IN FLORIDA

- Each of these systems will reduce nitrogen
  - Communities have the opportunity to meet their wastewater infrastructure needs by using OSTDS.
  - Key benefit to OSTDS
    - It's not a "ONE SIZE FITS ALL"
    - It can be designed to meet specific needs of the community within the community.
      - Individual sites
      - Decentralized

SUSPENDED ATUS APPROVED IN FLORIDA

Hoot

Nyadic

HydroAction

Norweco

Clearstream

CajunAire

Delta Whitewater

Aero-Tech

AquaKlear

Mighty Mac

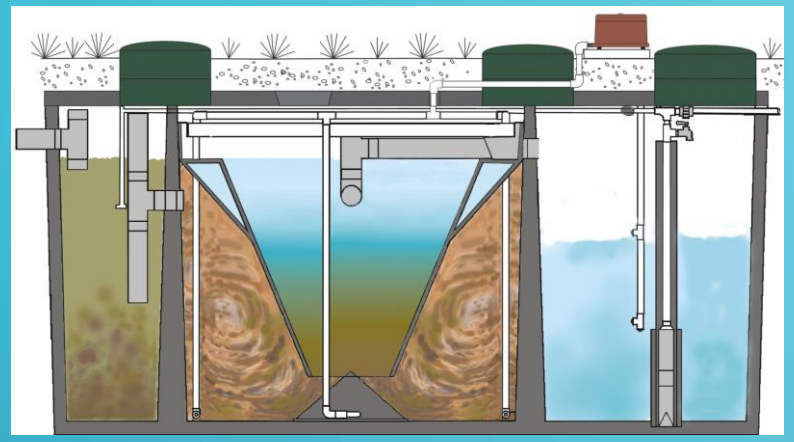
Bionest

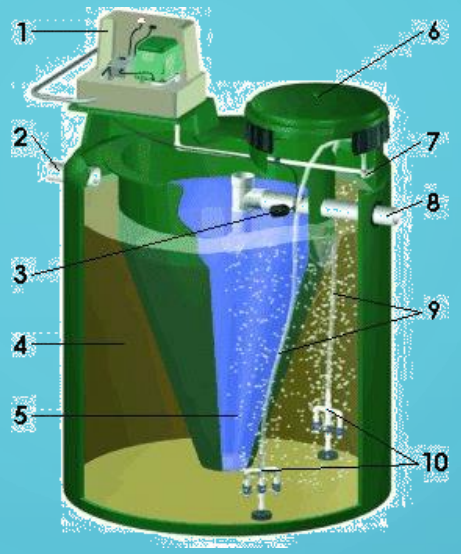
Aqua Safe

SCAT

Aqua Aire

American Wastewater

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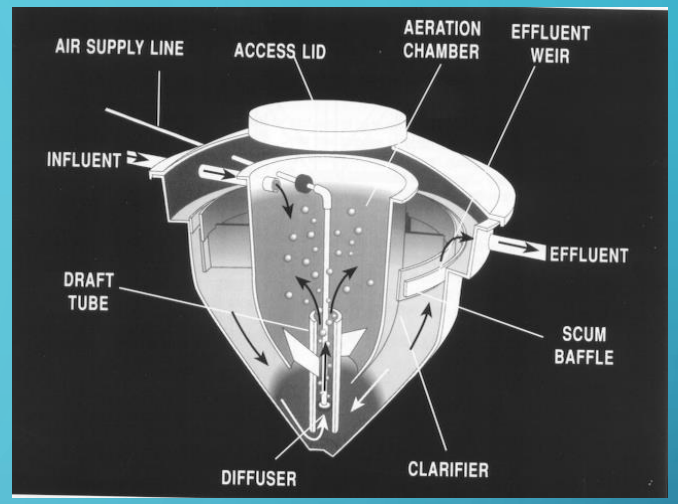
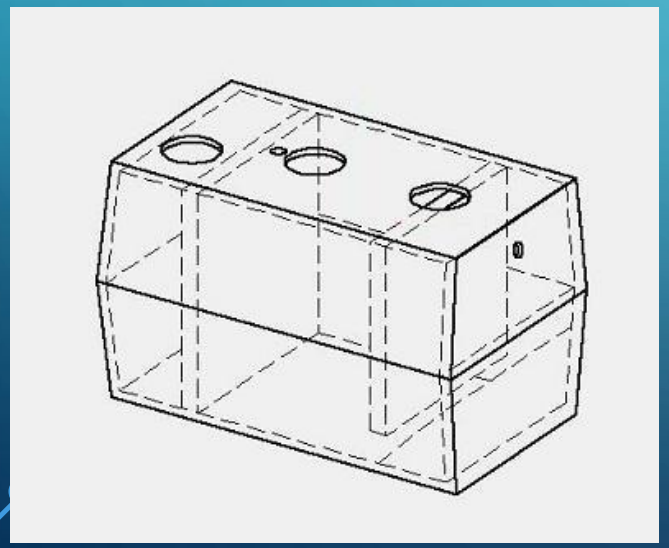
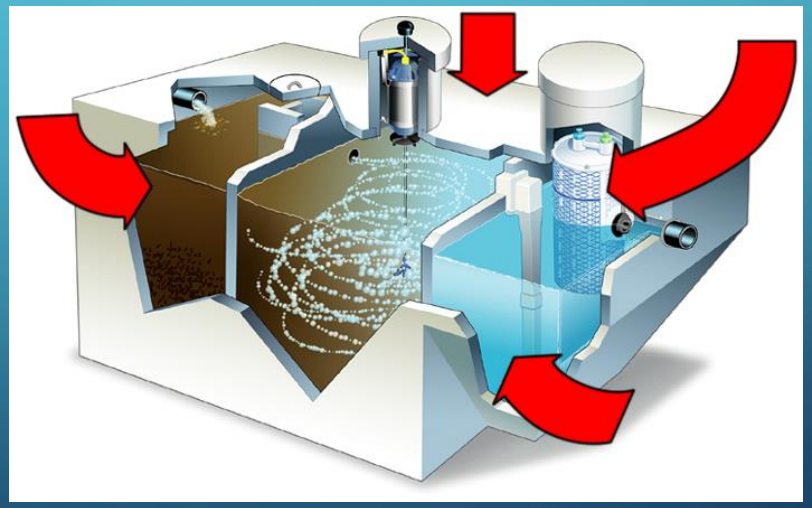
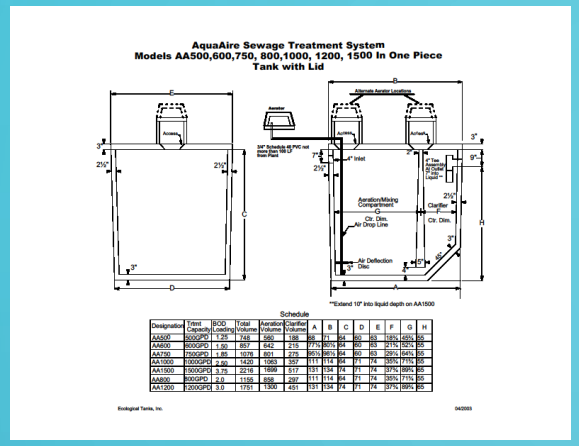

AIR SUPPLY LINE
ACCESS LID
AERATION CHAMBER
EFFLUENT WEIR
INFLUENT
EFFLUENT
DRAFT TUBE
SCUM BAFFLE
DIFFUSER
CLARIFIER






CLEARSTREAM TREATMENT UNIT
REMOVABLE AIR SUPPLY HOSE
TAMPER RESISTANT ACCESSCOVER
SURGE CONTROL WEIR
INLET
OUTLET
CLARIFICATION CHAMBER
FINE BUBBLE DIFFUSER
AERATION CHAMBER
U.S. Pat. No. 5,221,470
Other Patents Pending

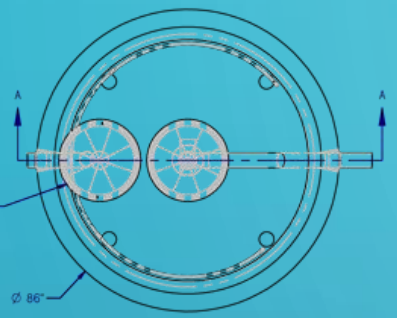


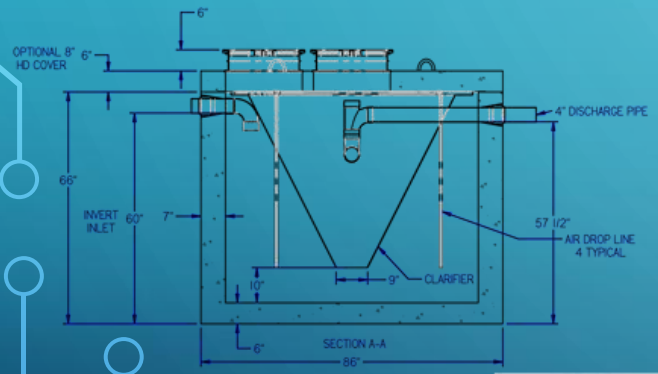
AquaAire Sewage Treatment System
Models AA500,600,750, 800,1000, 1200, 1500 In One Piece Tank with Lid

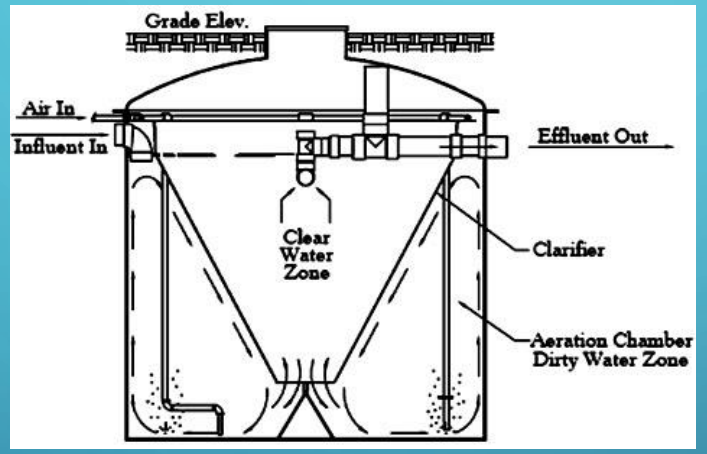
Schedule

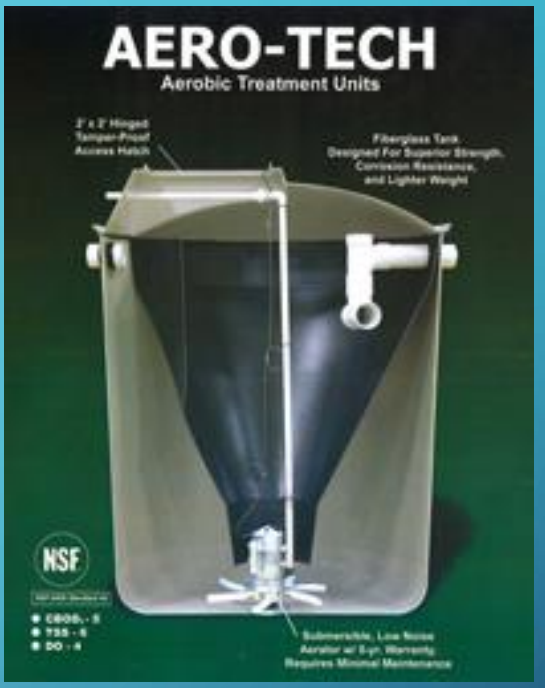
Designation	T/Hrd Capacity	BOD Loading	Total Volume	Aeration Volume	Clarifier Volume	A	B	C	D	E	F	G	H
AA500	500GPD	1.25	748	580	168	68	F1	64	60	63	18%	69%	65
AA600	600GPD	1.50	857	642	215	77½	80½	64	60	63	21%	52%	65
AA750	750GPD	1.85	1078	801	275	95½	98½	64	60	63	25½	64%	65
AA1000	1000GPD	2.50	1420	1063	357	111	114	64	F1	F4	35%	71%	65
AA1500	1500GPD	3.75	2216	1698	517	131	134	F4	F1	F4	37%	69%	65
AA800	800GPD	2.0	1155	858	297	111	114	64	F1	F4	35%	71%	65
AA1200	1200GPD	3.0	1751	1300	451	131	134	F4	F1	F4	37%	69%	65

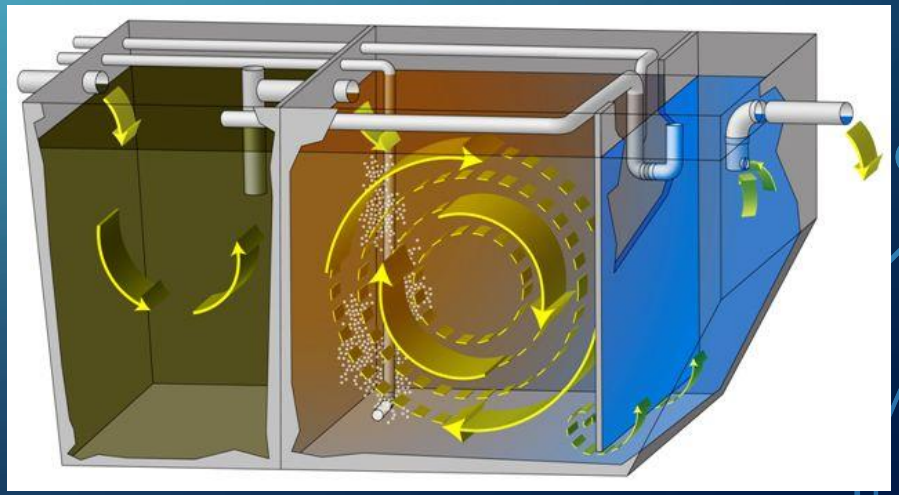
Ecological Tanks, Inc. 04/2003











FIXED FILM ATUS APPROVED IN FLORIDA

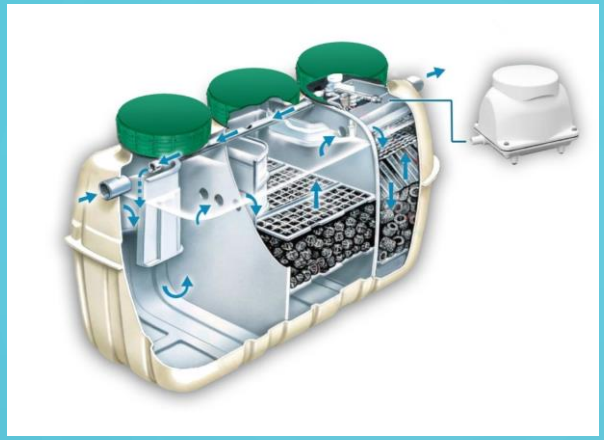
FAST

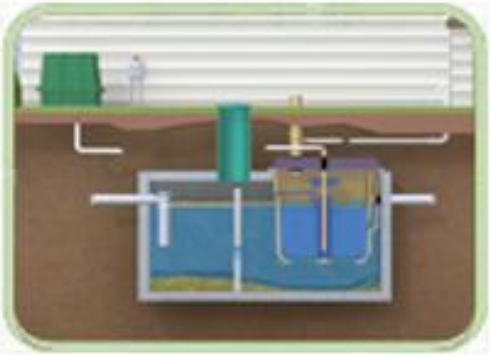
Jet

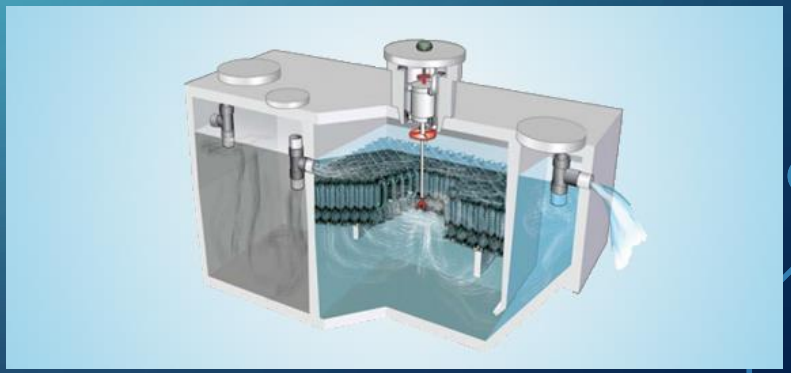
Multiflo

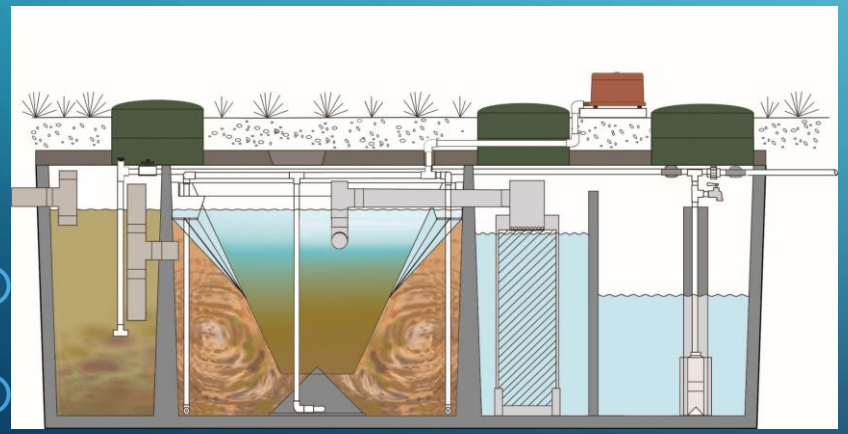
Hoot ANR

FujiClean





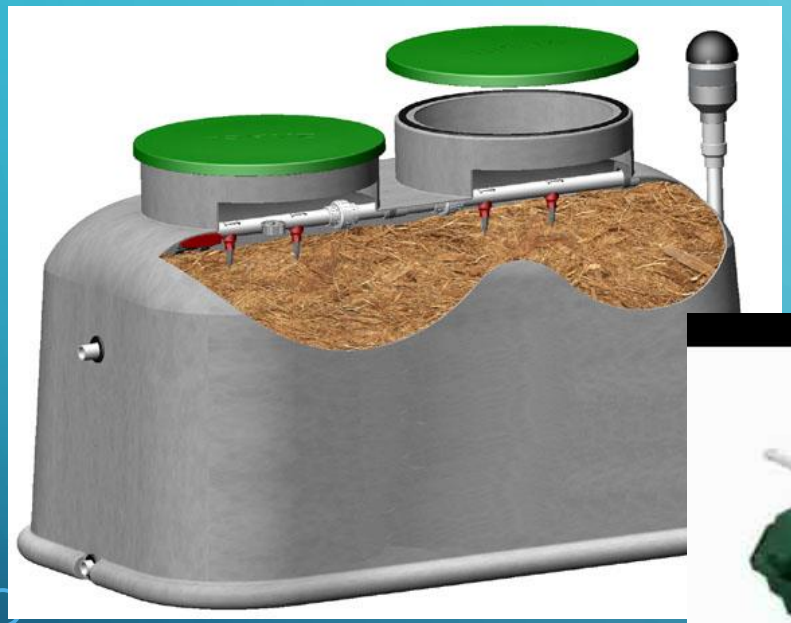


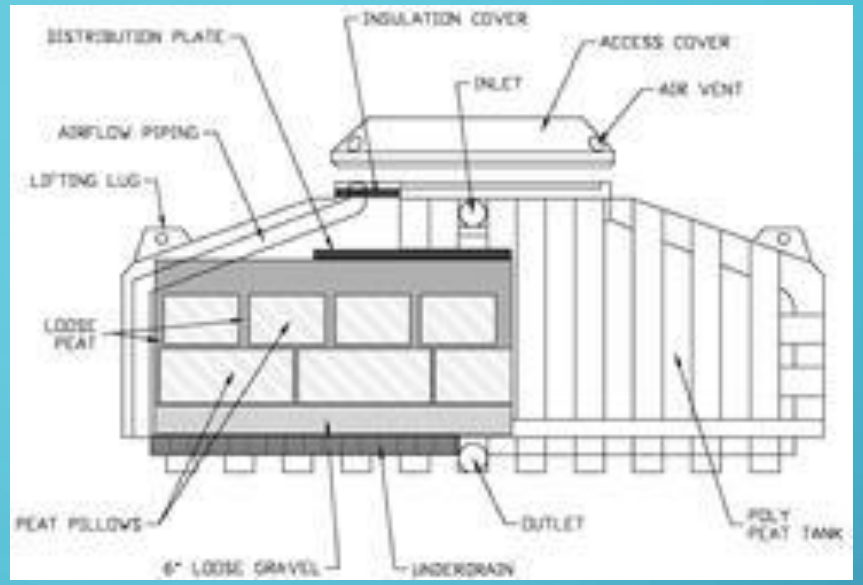


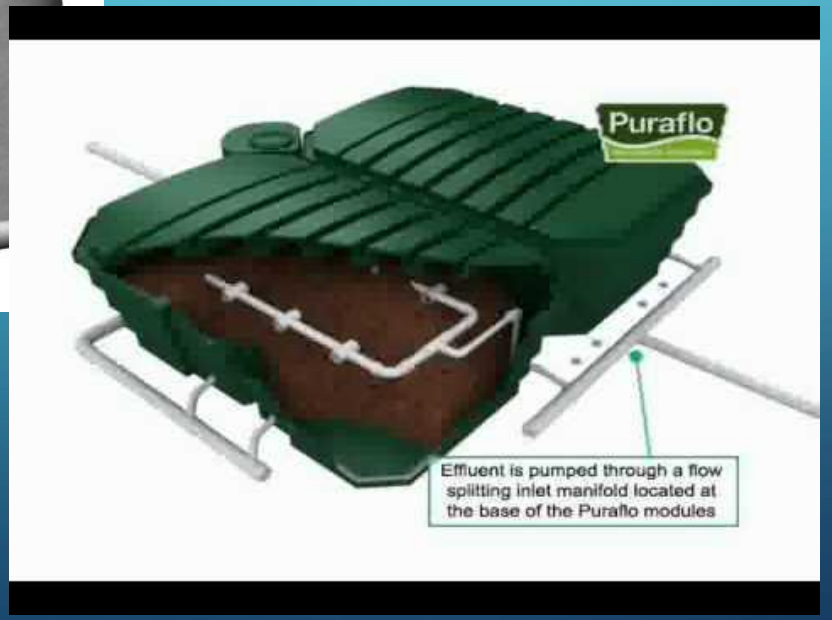
PROPRIETARYMEDIA FILTERS APPROVED IN FLORIDA

- Unsaturated - natural
  - Quanics – coconut coir
  - Ecoflo
  - Ecopure
  - Puraflo
- Unsaturated - artificial
  - Advantex
  - Earthtek
  - Quanics - foam

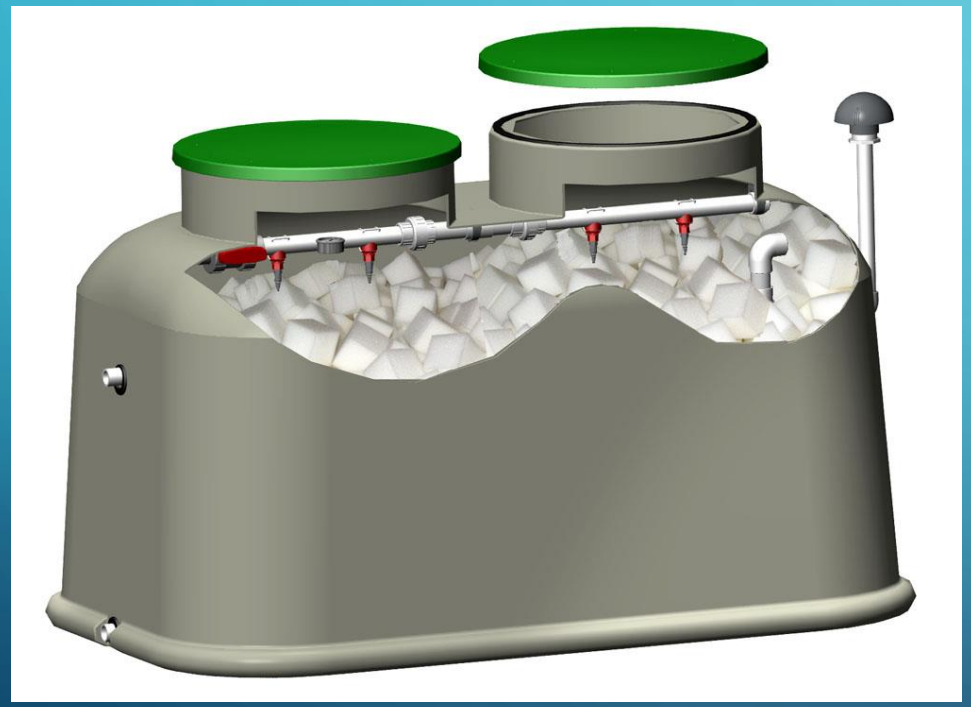
NATURAL MEDIA







ARTIFICIAL MEDIA



NSF STANDARD 245 EVALUATION CRITERIA

- Must have passed NSF 40 or run test concurrently
- Only samples collected during design loading periods used in pass/fail calculations.
- Effluent concentrations averaged over course of testing period shall not exceed:
  - $CBOD_5$ – 25 mg/L
  - TSS – 30 mg/L
  - Total Nitrogen – <50% of average influent TKN
  - pH – 6.0 to 9.0

NSF 245 SYSTEMS

- Acquired Wastewater Technologies, LLC
- Adelante Consulting, Inc.
- Anua
- Bio-Microbics, Inc. (2)
- Bionest Technologies Inc
- Busse Innovative Systeme GmbH
- Delta Treatment Systems
- E-Z Treat
- Ecological Tanks, Inc.
- Fuji Clean USA, LLC
- Hoot Aerobic Systems, Inc.
- Hydro-Action Industries
- Norweco, Inc. (3)
- Orenco Systems Inc.
- Premier Tech Aqua
- SeptiTech®
- SOSystems LLC

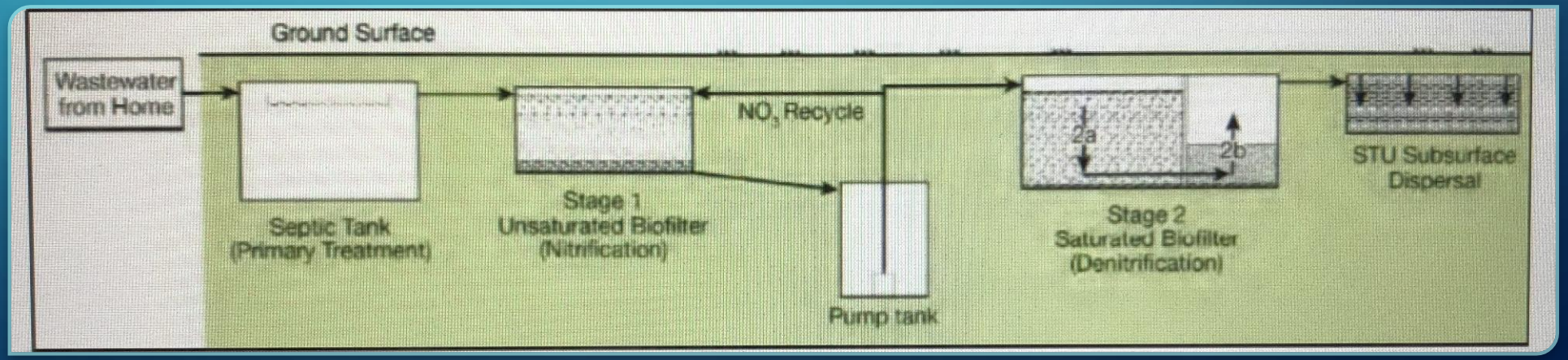
FLORIDA ONSITE SEWAGE NITROGEN REDUCTION STRATEGIES STUDY (FOSNRS)

HTTP://WWW.FLORIDAHEALTH.GOV/ENVIRONMENTAL-HEALTH/ONSITE-SEWAGE/RESEARCH/NITROGEN-REDUCTION.HTML

- In 2008, the Florida Legislature directed the Department of Health to develop a tool box of cost-effective nitrogen reduction strategies for onsite sewage treatment and disposal systems (OSTDS). The project had two main areas of focus: development of passive nitrogen reduction technologies; and evaluation and prediction of the fate and transport of nitrogen from OSTDS. Objectives included:
- Development of cost-effective, passive strategies for nitrogen reduction from onsite sewage systems
- Characterization of nitrogen removal in the soil and shallow groundwater
- Development of simple models to determine fate and transport of nitrogen from OSTDS in soil and groundwater

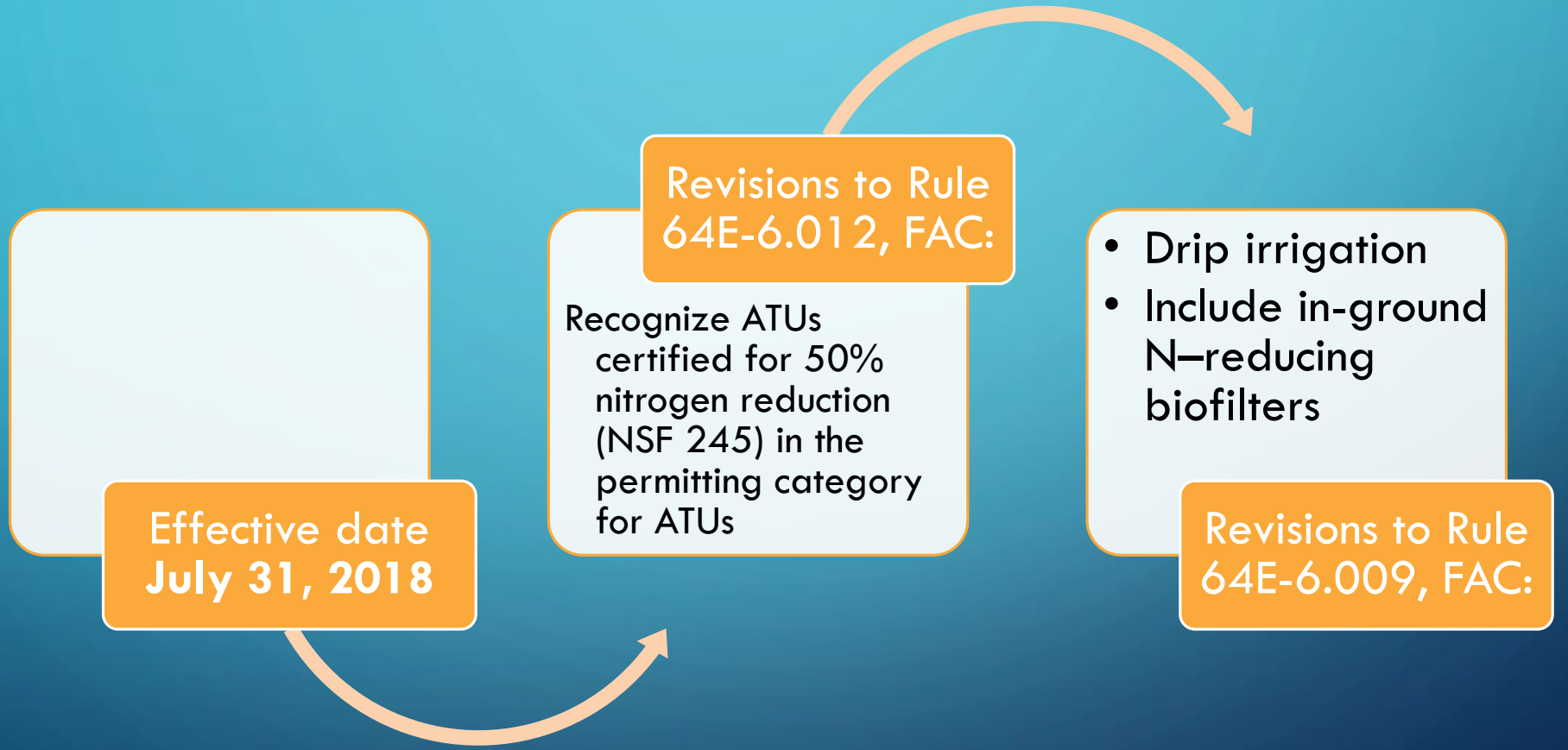
CURRENT STATUS OF PROJECT

- The Department submitted the final Legislative report to the Governor, Speaker of the House, and President of the Senate on December 31, 2015.
  - RRAC meetings were held to develop rule language for system.
- A "non-linered" system was placed into rule on July 31, 2018.
- The remaining systems should be added through additional language under current PBTS rule.



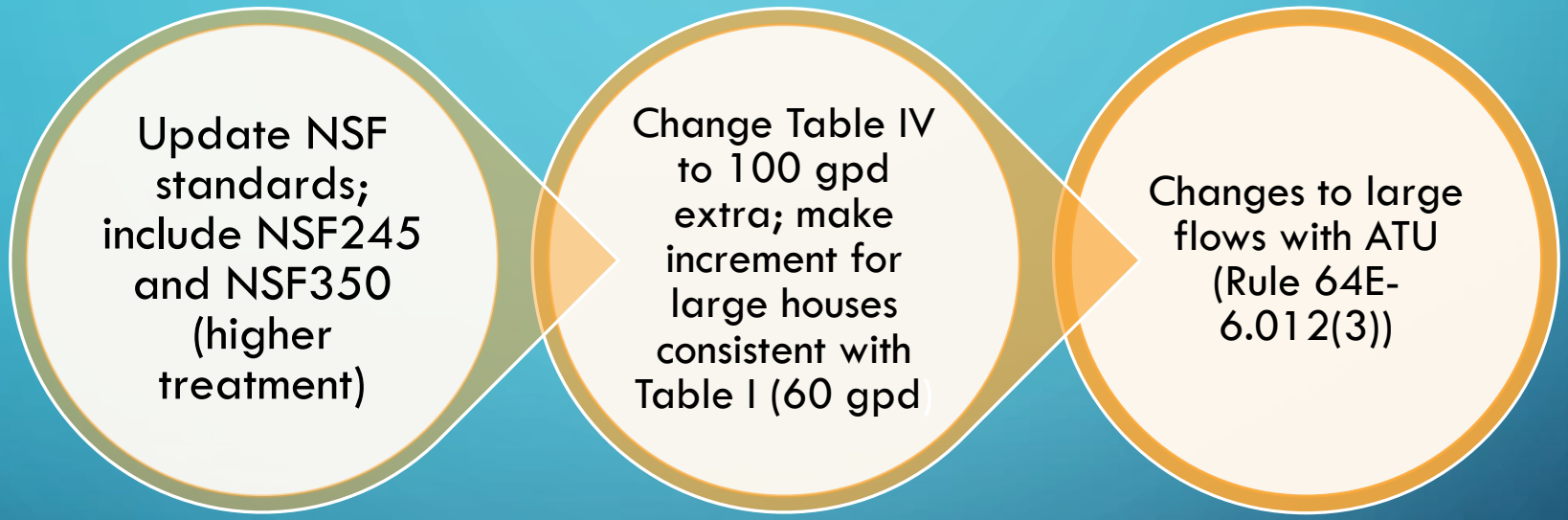
SO WHERE ARE WE TODAY?

PROPOSED RULE REVISIONS TO CHAPTER 64E-6, FAC.



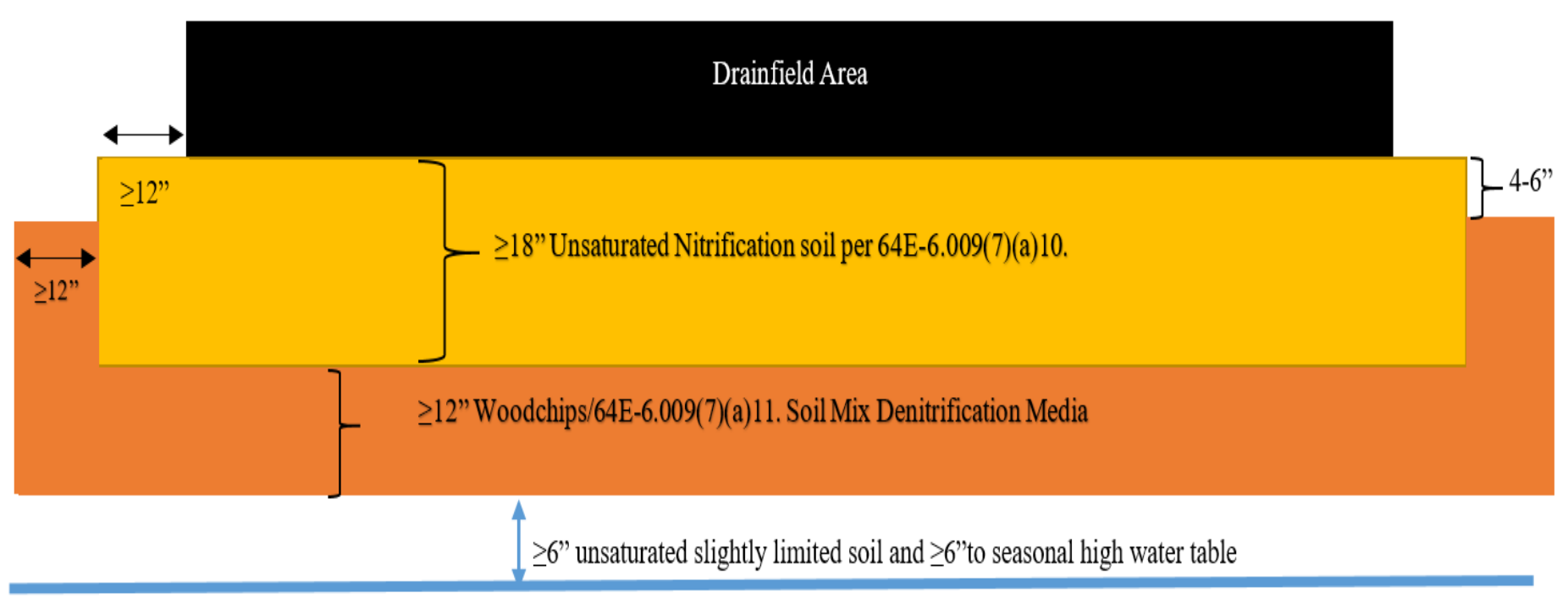
N = Nitrogen
ATU=Aerobic Treatment Unit

RULE 64E-6.012, FAC.



- No fecal coliform standard
- Sampling for CBOD5 and TSS semiannually

GENERAL STRUCTURE OF THE IN-GROUND NITROGEN-REDUCING BIOFILTER



This is a system for areas with slightly-limited soil.

The construction site must have slightly limited soil

from the ground surface to at least 6 inches below the bottom of the media layer.

SYSTEM REGULATED THE SAME WAY AS THE CONVENTIONAL DRAINFIELD

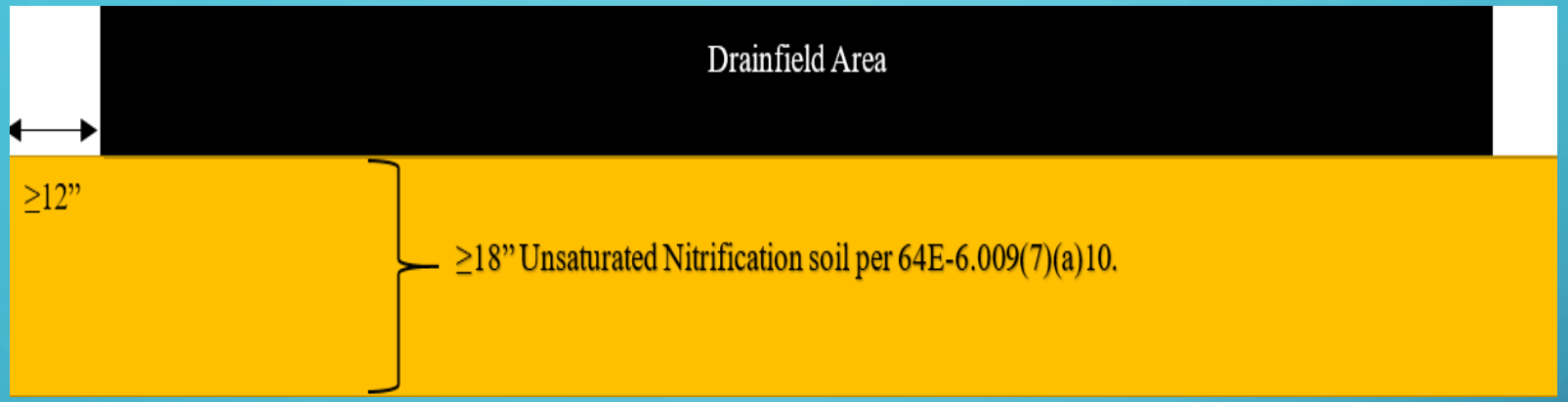
Receives septic tank effluent.

Any Department-approved drainfield material.

Any Department-approved effluent distribution method.

- Dosing may extend media longevity and nitrogen reduction efficiency.

NITRIFICATION LAYER



Sand or Fine sand

- No material with a color value <=4 with chroma <=3.
- No material with colors on the Gley Charts.

No less than 18 inches thick.

Extends 12 inches beyond the perimeter

DENITRIFICATION LAYER – MIXTURE OF LIGNOCELLULOSIC MATERIAL AND FINE AGGREGATE

Lignocellulosic material

- Chips or shavings of untreated lumber
- Blended urban waste wood mulch
- Yellow pine sawdust
- 2-inch to 3-inch wood chips
- Other material demonstrated in Florida studies to be effective at denitrification

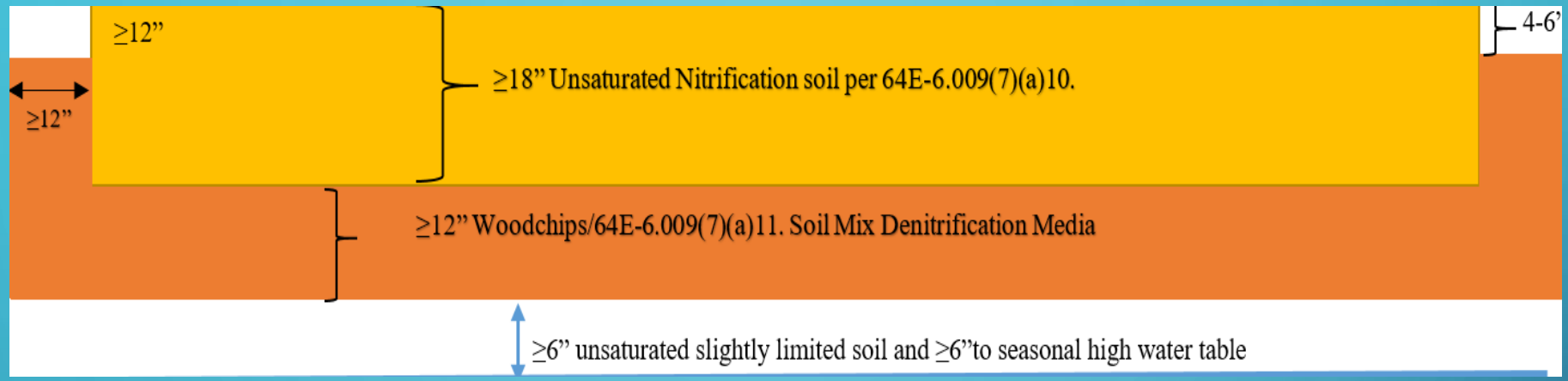
DENITRIFICATION LAYER – MIXTURE OF LIGNOCELLULOSIC MATERIAL AND FINE AGGREGATE - CONTINUED

Fine Aggregate

- Coarse sandy loam, sandy loam, loamy sand, fine sandy loam, very fine sand, loamy fine sand, or loamy very fine sand
  - No material with a color Value <=4 with Chroma <=3.
  - No material with colors on the Gley Charts.

Uniformly mixed 40%-60% by volume

DENITRIFICATION LAYER - DIMENSION



- No less than 12 inches thick.
- Extends 12 inches beyond the perimeter of the sand/fine sand layer.
- The outer 12 inches wraps upward 12 inches.
- Media layer bottom must be 6 inches above the wettest season high water table.

OTHER REQUIREMENTS

Inspection of media layer is required in addition to regular construction inspection and final inspections.

Setbacks from media are reduced so that tank and drainfield remain as the setback determinants.

Requires filing a public records notice regarding the nitrogen-reducing media requiring special repair or maintenance procedures.

REPAIRS OF SYSTEM INCORPORATING IN-GROUND NITROGEN-REDUCING BIOFILTERS

Meet current standards for nitrogen-reduction

Meet separation/elevation requirements for In-ground Nitrogen-reducing Biofilters

Must be inspected by Department of Health

Does not require media replacement if less than 10 years old or if sampling shows it still achieves 65% nitrogen reduction

INSPECTION ISSUES

Additional Inspection (upon completion of the denitrification media layer but before covering the media layer)

Adaptations of current procedures

DENITRIFICATION LAYER: PLAN VIEW

Measure the area for the nitrogen-reducing media layer (4 FT wider and longer than the proposed drainfield configuration or 2 FT on all sides)

Establish how you will find the area of the layer once it is covered

Reduced setback distances from edge of nitrogen-reducing layer (Rule 64E-6.009(7)(a)14)

LIGNOCELLULOSIC DENITRIFICATION MATERIAL

Validate the lignocellulose material meets the standards in Rule 64E-6.009(7)(a)8 (“lignocellulosic material such as chips or shavings of untreated lumber, blended urban waste wood mulch, yellow pine sawdust, or 2-inch to 3-inch wood chips”)

- Bill of lading
- Contractor leaves raw material out separately
- Observation

FINE AGGREGATE DENITRIFICATION MEDIA

Validate that the “sand” material meets the standards in (Rule 64E-6.009(7)(a)11) (“coarse sandy loam, sandy loam, loamy sand, fine sandy loam, very fine sand, loamy fine sand, and loamy very fine sand”, subject to color restrictions)

- Bill of lading
- Texture
- Observation that it is finer than material of the nitrification layer

DENITRIFICATION MEDIA LAYER: ELEVATIONS

Measure elevations at least at three locations:

- Elevation top of nitrogen-reducing layer
- Elevation bottom of the nitrogen-reducing media layer
  - Use a shovel or auger and carefully removing the media to one side until the bottom is exposed.
  - Probe the difference between the media and the slightly limited soil beneath,
    - This could be accomplished by using the probe and tape measure

DENITRIFICATION MEDIA LAYER: ELEVATIONS

Measure elevations at least at three locations (Cont.):	Difference (thickness) must be at least 12 inches
	Validate slightly limited soil beneath bottom of media must be at least 6 inches
	Validate wet season water table, must be at least six inches below bottom of the media

DENITRIFICATION MEDIA LAYER

Measure the width and height of the “shoulder” area at the perimeters of the nitrogen-reducing media layer.

This should have a minimum width of 12-inches and a height of at least 12-inches to 14-inches above the horizontal layer

all the way around the perimeter

DENITRIFICATION MEDIA LAYER

Once the nitrogen-reducing media has been installed, inspected and given the approval to proceed,

the installer will then complete the drainfield installation

NITRIFICATION LAYER AND ABOVE

Next inspection: top of nitrification layer = bottom of conventional absorption surface

Validate that fill material has correct texture (sand, fine sand)

NITRIFICATION LAYER AND ABOVE

Validate that thickness is sufficient (minimum 18 inches throughout) and that area is large enough (at least 12 inches beyond drainfield material)

Inspect drainfield as usual

Document results of the inspection in the EXPLANATION OF VIOLATIONS / REMARKS section on the inspection form and in EHD

OTHER REQUIREMENTS

Execute notice in public property records properties

Large (>1500 SF) systems, engineer must address and monitor mounding by use of an observation port

WITH THESE ADDITIONS….

- Over 30 OSTDS options to meet communities needs.

FL DOH DATABASE OF APPROVED TECHNOLOGIES

HTTP://WWW.FLORIDAHEALTH.GOV/ENVIRONMENTAL-HEALTH/ONSITE-SEWAGE/PRODUCTS/_DOCUMENTS/PBTS-COMPONENTS.PDF

AEROBIC TREATMENT UNITS

Certified Aerobic Treatment Units (ATUs) in Florida **(Rule 64E-6.012, Florida Administrative Code)**

Manufacturer	Equipment Series Approved in Florida	Tested Model	NSF 40-Certified?	NSF 40-Certified Models	NSF 245-Certified?	NSF 245-Certified Models
Acquired Wastewater Technologies, LLC	Alliance	500	x	500S/T, 600T, 750S/T, 1000S/T[1]		
Acquired Wastewater Technologies, LLC	Cajun Aire Advanced	500	x	500S/T, 600S/T, 750S/T, 1000T		
Acquired Wastewater Technologies, LLC	Cajun Aire Basic	500	x	500S/T, 750S/T, 1000S/T[1]		
Aero-Tech	Aero-Tech	AT-500	x	AT-500, AT-600, AT-750, AT-1000, AT-1500		
American Wastewater Systems, Inc.	B.E.S.T. 1 AWS 500	500	x	B.E.S.T.1 AWS-500, 800, 1000, 1200		
Anua	Puraflo P150N	Puraflo P150N*3B	x	P150N*3B, P150N*4B, P150N*5B, P150N*6B, P150N*7B, P150N*8B, P150N*9B, P150N*10B		
Aquaklear, Inc.	AquaKlear	AK6PT	x	AK6PT, AK6PTC, AK6S245C AK10S245C	x	AK6S245C, AK10S245C

http://www.floridahealth.gov/environmental-health/onsite-sewage/products/_documents/certatu.pdf

PERFORMANCE DATA FOR COMPONENTS OF PBTS

Table 2. Test Center Testing Results, which have been used in evaluating components proposed for nutrient- and fecal coliform reducing performance-based treatment systems.

Equipment Series	Equipment	type of test	in TN (mg/L)	out TN (mg/L)	TN removal (%)	in TP (mg/L)	out TP (mg/L)	in fecal coliforms (CFU/100mL)	out fecal coliforms (CFU/100mL)	Vendor	Innovative Status
Advantex	Advantex 20x Mode 1	N-testing concurrently with NSF-40, Squamish, B.C.	33	12	64%	-	-	-	-	Orenco Systems	Yes
	Advantex 20x Mode 3	N-testing after NSF-40, Squamish, B.C.	35	12	66%	-	-	-	-		Yes
Aerocell	Aerocell ATS SCAT-8-AC-C500	NSF+Nitrogen, Waco	40	9.3	77%	-	-	-	-	Quanics	Yes
Aqua Safe	Aqua Safe 500	~31 N-tests during NSF-40 test	30.78	14.9	52%	8.21	5.87	-	2200 median	Ecological Tanks, Inc.	Yes
Clearstream Model D	Clearstream 500 D	NSF 245 Prairieville, LA (June-November 2012)	42	19	53%	-	-	2,601,272 colonies/100 ml (geomean)	243 colonies/100 ml (geomean)	Clearstream Wastewater Systems, Inc.	Yes
		Prairieville, LA after NSF 245 (December 2013 – May 2014)	42.3	10.7	74.8%	-	-	-	-		
CE	Fuji Clean CE 5	NSF-40+Nitrogen, Waco	47.6	15.7	67%	-	-	-	-	Fuji Clean USA, LLC	Yes
CEN	Fuji Clean CEN 5	NSF 245 (for TN), testing concurrent with NSF40 (for fecal coliform)	40	10.4	74%	-	-	2.0E+6 to 1.2E+9 (30-day geomean)	2.7E+4 to 6.3E+5 (30-day geomean)	Fuji Clean USA, LLC	Yes
								2.7E+4 to	70 geomean (6 to		

At least 50% removal to accept engineer's certification

Permit as "baseline + 50% reduction"

Some are innovative; coordinate with program office

BMAP-OSTDS DOH PERMITTING PROCESS

FROM PRESENTATION GIVEN AT THE 2018 FOWA CONVENTION AND TRADE SHOW

PROHIBITION FOR NEW SYSTEMS

Upon BMAP adoption, OSTDS remediation plans **prohibit NEW conventional** systems on **lots of less than 1 acre within the PFAs**

Must be N-reducing system

Exempt if permit applicant demonstrates that sewer connection will be available within 5 years.

N = Nitrogen
PFA= Priority Focus Area

CHD SPRINGS PERMITTING PROCEDURES IN PFAS

New OSTDS construction in Chapter 64E-6, FAC are:

- Installation of a system where a system has never been installed.
- Installation of a system where the previous system was abandoned when use of the property was discontinued.
- Installation of a system when the previous DEP-regulated treatment facility is decommissioned.
- Installation of a system to serve a house addition rather than modifying the existing system.

CHD SPRING PERMITTING PROCEDURES IN PFAS

New OSTDS (Cont.)

Installation of a system to serve additional structure on the property.

Installation of a complete system to replace a system where the existing structure is being expanded into the location of the existing system, or where the placement of a pool, outbuilding or other structure is impacting the location of the existing system.

An increase in the existing domestic sewage flow of over 20% at a non-residential establishment.

Any increase in commercial sewage flow (e.g., restaurant, nail salon, commercial laundromat).

EXISTING SYSTEMS

For now, no change to existing systems!

Agriculturally dominated BMAP:

- No plans for existing system remediation requirements (**Jackson Blue, Wacissa, Santa Fe, Suwannee River**)

NITROGEN-REDUCING SYSTEMS

DOH-approved: Treatment systems disposing into a drainfield capable of meeting or exceeding the NSF International Standard **245 nitrogen removal rate (50%).**

- Treatment systems with removal rates **< 65%, are required to meet a minimum of 24-inch separation to the WSWT.**
- Examples: aerobic treatment units (ATU) and performance- based treatment systems (PBTS)

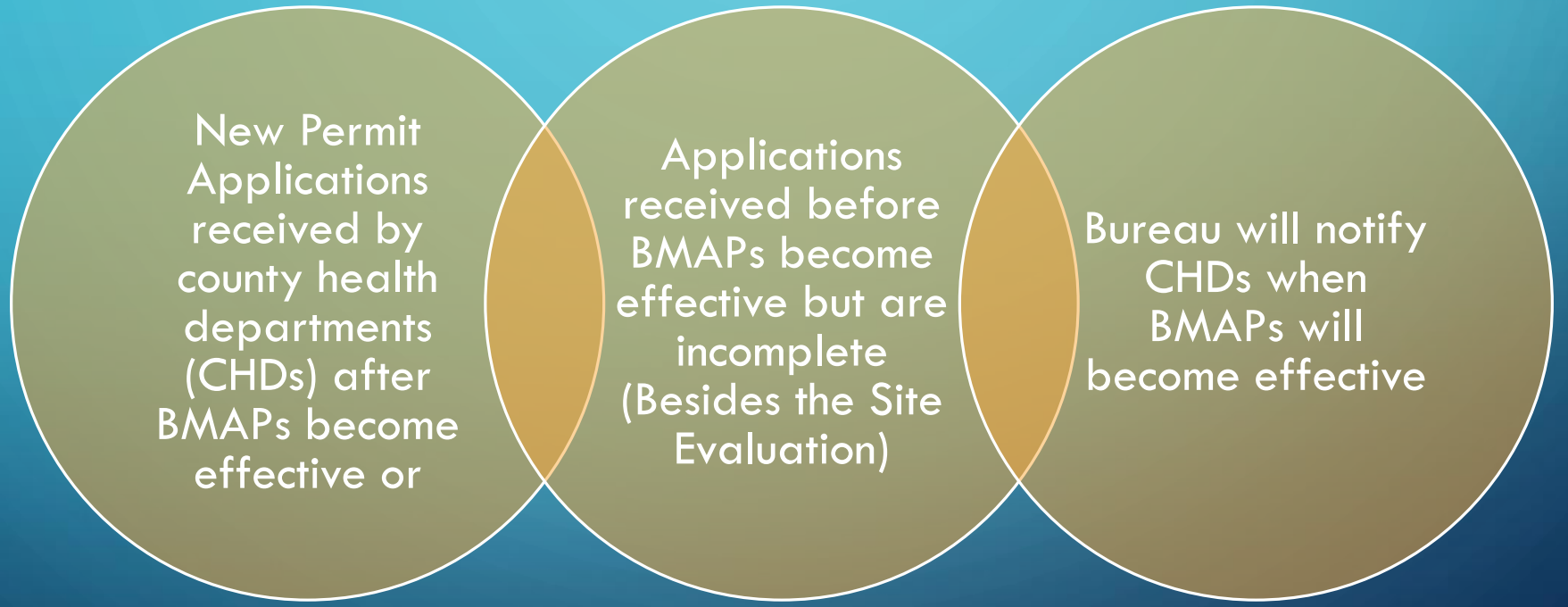
WSWT = Wet Season Water Table.

NITROGEN-REDUCING SYSTEMS

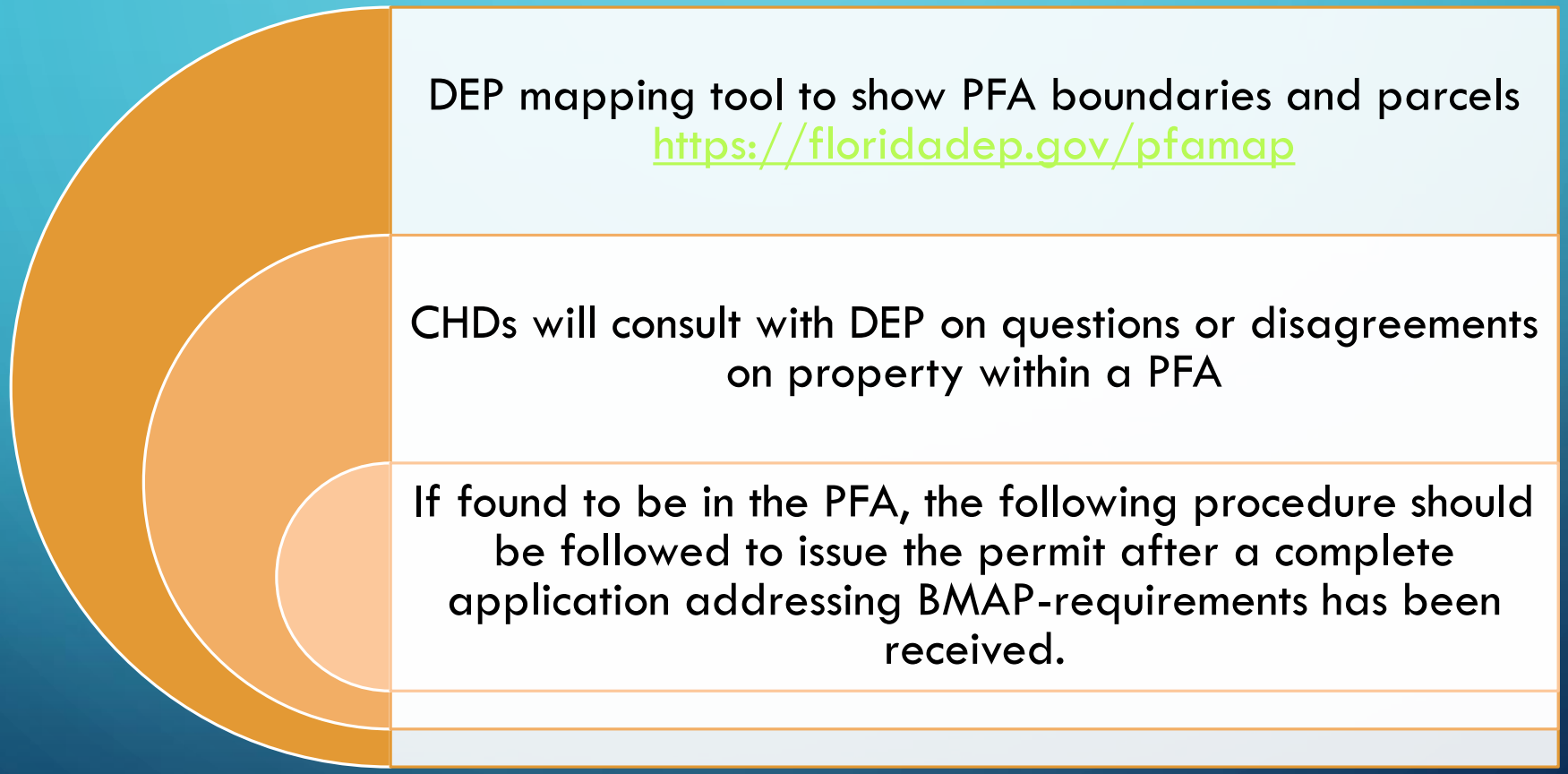
DOH-approved: INRB or media layer system	• **65% N-removal rate**
In-tank Nitrogen-reducing Biofilters permitted as PBTS	• **65% - 93% N-removal rate**
Others type of systems or system components proven to reduce nitrogen.	

INRB = In-ground Nitrogen-reducing Biofilter
FOSNRSS = Florida Onsite System Nitrogen Removal Strategy Studies
PBTS = Performance-based Treatment System
N = Nitrogen

WHEN DO REQUIREMENTS APPLY?



BMAP-OSTDS PERMITTING PROCESS



BMAP-OSTDS PERMITTING PROCESS

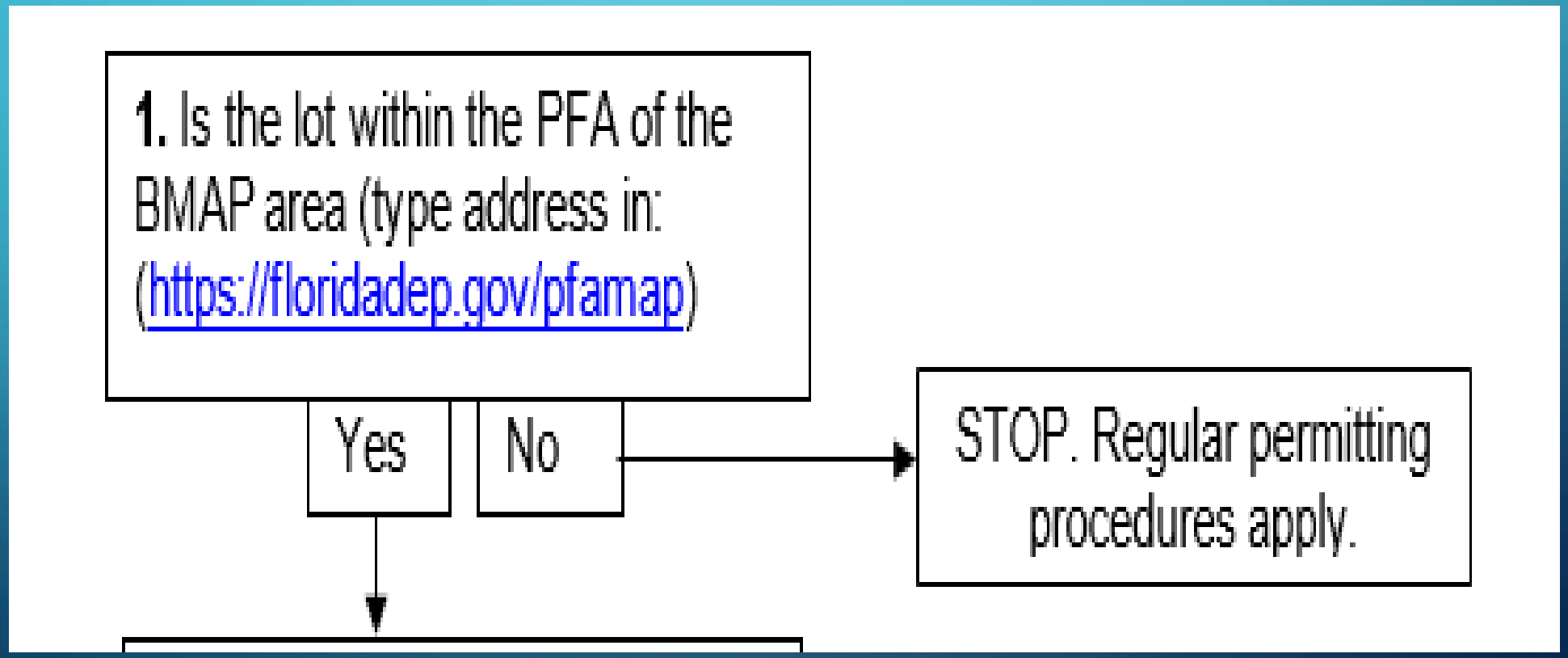
Application Requirements and the forms at http://www.floridahealth.gov/environmental-health/onsite-sewage/_documents/ostds-app-form-info.docx.

Applications must contain **all** information required by Chapter 64E-6, Florida Administrative Code (FAC).

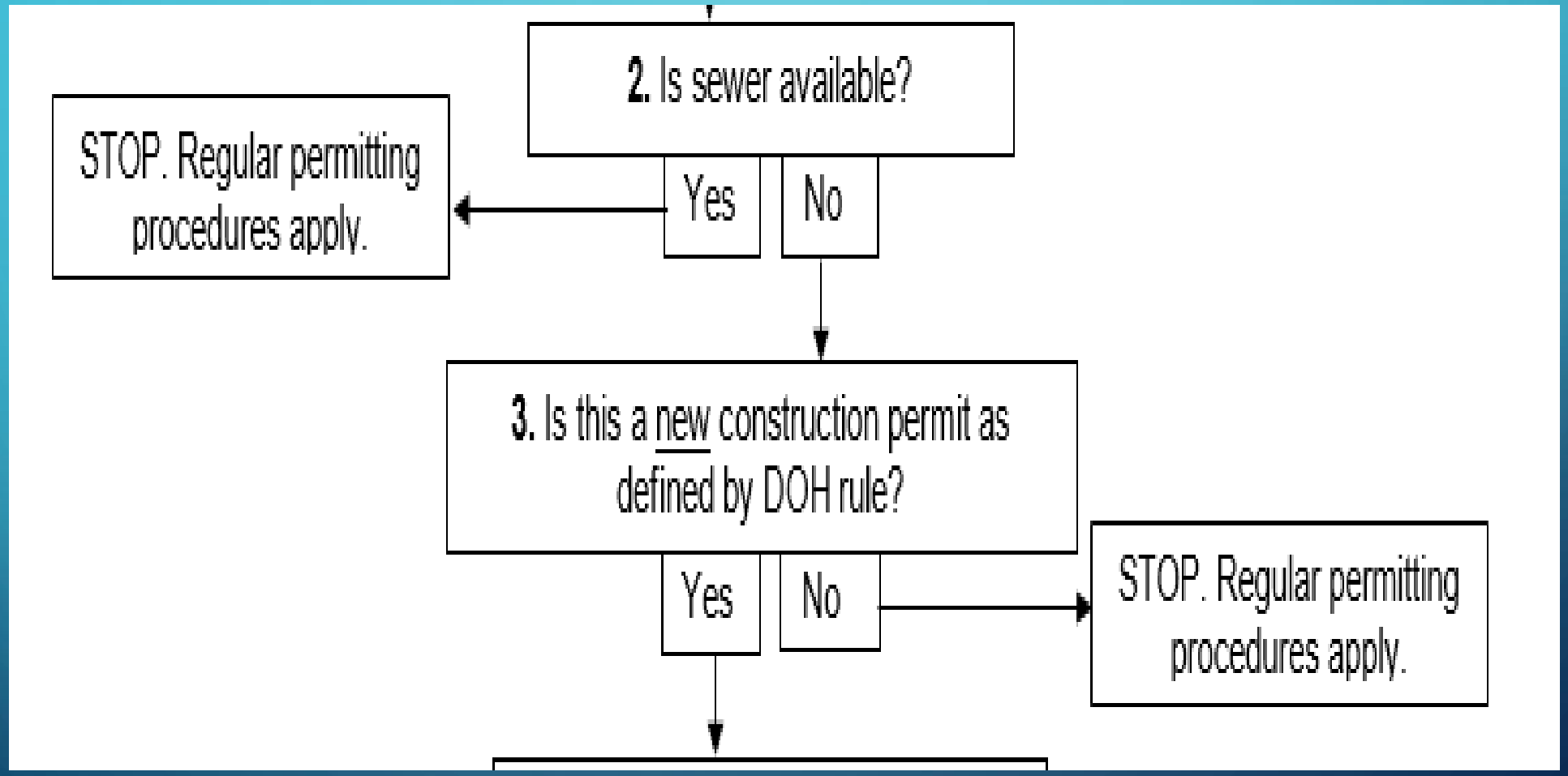
Incomplete, inaccurate or illegible application results in unnecessary delays.

CHD PERMITTING PROCEDURES IN PFAS

- Determine if the OSTDS Remediation Plan applies to the permit application.



CHD SPRINGS PERMITTING PROCEDURES IN PFAS



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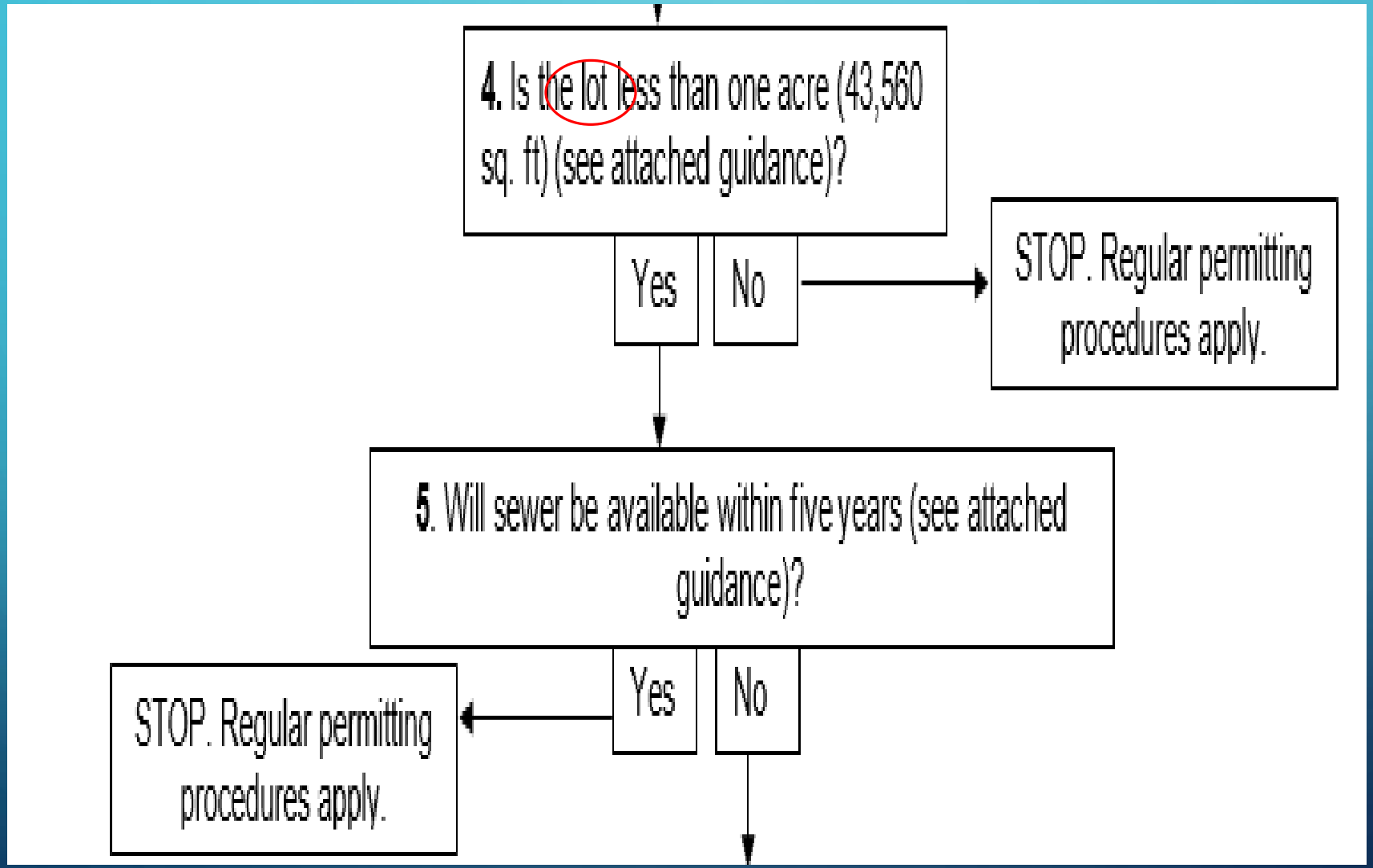

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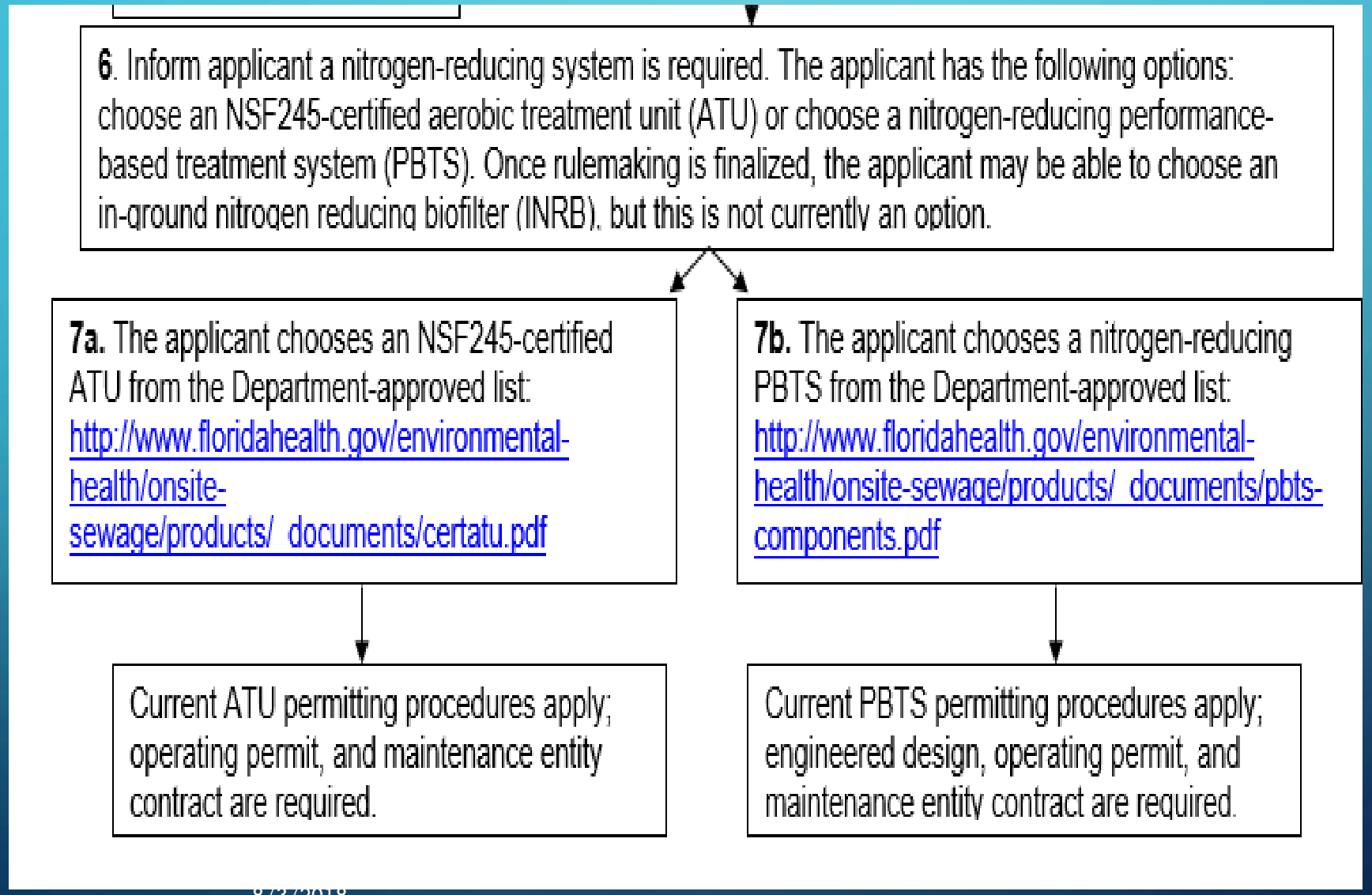
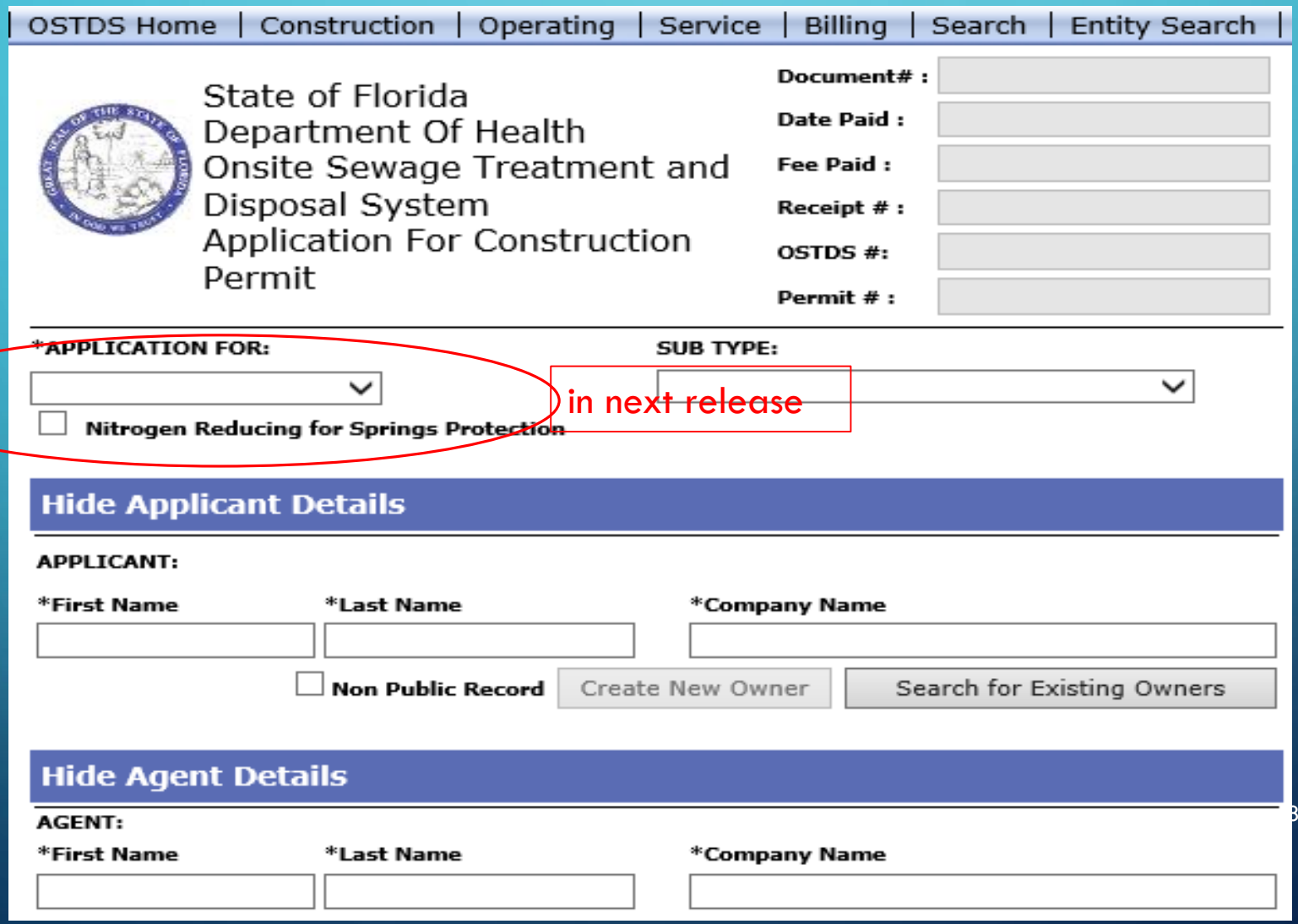
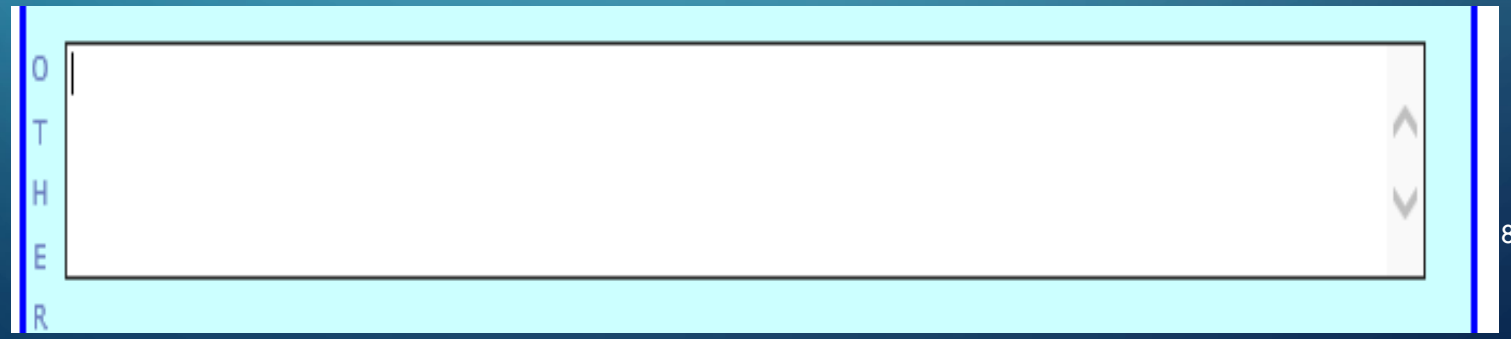


SPRINGS PERMIT TRACKING IN ENVIRONMENTAL HEALTH DATABASE (EHD)



SPRINGS PERMIT TRACKING EHD

- In comments, summarize how nitrogen reduction is met:
- Springs nitrogen-reduction is met by
  - NSF245 ATU
  - PBTS (use 50% as TN-standard) + 24”
  - INRB (in-ground nitrogen-reducing biofilter)



THE BIG QUESTION….

HOW DO WE ADDRESS THE COSTS???

SPRINGS RESTORATION FUNDING

HTTPS://FLORIDADEP.GOV/SPRINGS/RESTORATION-FUNDING

FINANCIAL ASSISTANCE

SEPTIC UPGRADE INCENTIVE PROGRAM

To improve water quality and protect Florida's outstanding springs, the Florida Department of Environmental Protection has created an incentive program that encourages the enhancement of conventional septic systems by adding advanced features to reduce nitrogen pollution. This incentive program is designed to offset homeowner costs by providing certified installers and licensed plumbers with up to $10,000 after the installation of enhanced nitrogen-reducing features to existing septic systems located in targeted areas within eligible counties. This incentive is passed on to the homeowner to reduce their cost for the septic system enhancement. Participating in this program will help protect the environment by reducing excessive nutrients in Florida's waterways.

The program offers incentives, only in designated areas within one of these counties: Citrus, Hernando, Leon, Marion, Orange, Pasco, Seminole, Volusia or Wakulla – identified and delineated by the department as Priority Focus Areas (PFAs), in amounts up to $10,000 per system. The incentives are available for payment directly to septic system installers and licensed plumbers retained by homeowners to update existing systems, and must be pre-approved by the department prior to the commencement of work. Visit www.FloridaDEP.gov/pfamap, to see if a home location is in an eligible area.

Septic system installers and licensed plumbers may apply to participate in and receive reimbursement for eligible upgrades under the program by completing and submitting the application (including all required attachments), registering as a vendor with the state at Vendor.myFloridaMarketplace.com and completing a Florida Substitute W-9 at FLvendor.myFloridaFCO.com.

Vendor applications must be submitted to the department:

Email
SepticProgram@FloridaDEP.gov

Regular Mail
Department of Environmental Protection
Division of Water Restoration Assistance
Water and Springs Restoration Program
3900 Commonwealth Boulevard, MS 3602
Tallahassee, FL 32399

**Funding is anticipated to be available for distribution beginning mid-September, 2018.
To request information or an application, visit
FloridaDEP.gov/SepticUpgrade or call 866-601-6910.**

BUT DON'T FORGET…
DECENTRALIZED OSTDS CONCEPT

COMMUNITY ONSITE WASTEWATER CLUSTER SYSTEM

SO WHAT NOW?

1

Determine community treatment needs

2

Research ALL technologies that meet needs

3

Conduct an “HONEST” Cradle-to-Grave Feasibility Study

- Central Sewer vs. OSTDS

DON'T BE AFRAID TO THINK "OUTSIDE THE BOX"

QUESTIONS/COMMENTS

FOWA WOULD BE HAPPY TO ARRANGE FOR FIELD TRIPS TO THE TRAINING CENTER TO VIEW THE OSTDS TECHNOLOGIES AVAILABLE IN FLORIDA

THANK YOU

Roxanne Groover

FOWA Training Center

5115 State Road 557

Lake Alfred, FL 33850

rgroover@FOWAonsite.com

321-363-1590 (O)