

Proposed Changes for Designing and Siting OSSFs

**Texas On-Site Wastewater Treatment Research Council
Conference
March 5, 2008
Session I – 11:15 to 12:00**

**James McCain
OSSF Team, MC-178
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-4777**



Rulemaking Milestones

- Download the proposed rule package at:
<http://www.tceq.state.tx.us/rules/pendprop.html>
- Proposed rules on TCEQ Agenda – March 19th
- Comment period begins – April 4th
- Public Hearing – April 29th
- Comment period ends – May 5th
- Anticipated date for Adoption – August 20th
- Anticipated effective date – September 11th

Rulemaking Process

- TCEQ gathered input from regulated community and compiled issues identified over time
- TCEQ formed a workgroup consisting of installers, maintenance companies, DRs, manufacturers and homeowners

Proposed Design and Setback Changes

- Sizing of Aerobic Treatment Units

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- Setback Requirements (Changes in Table X)

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- Setback Requirements (Changes in Table X)
- Design Requirements for Food Service Establishments

Sizing of Aerobic Units

Required Aerobic Unit Treatment Capacity Based on Size of Home

Number of bedrooms/living area of home	Minimum Aerobic Unit Treatment Capacity (gallons per day)
Four bedrooms or fewer and < 3,500 sq. ft.	480
Five bedrooms and < 4,500 sq. ft. or Less than five bedrooms and 3,500 < sq. ft. < 4,501	600
Six bedrooms and < 5,500 sq. ft. or Less than six bedrooms and 4,500 < sq. ft. < 5,501	720
Seven bedrooms and < 6,500 sq. ft. or Less than seven bedrooms and 5,500 < sq. ft. < 6,501	840
For each additional bedroom above seven or 1,500 additional sq. ft. of living area above 6,500	120

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Seven bedrooms and < 6,500 sq. ft. or Less than seven bedrooms and 5,500 < sq. ft. < 6,501	840
For each additional bedroom above seven or 1,500 additional sq. ft. of living area above 6,500	120

Practical Effects of Proposed Sizing Changes

Home Size	Existing Rules	Proposed Rules	Any Change?
Two Bedroom Home < 3,500 sq. ft.	500	500	No Change
Three Bedroom Home < 3,500 sq. ft.	500	500	No Change
Four Bedroom Home < 3,500 sq. ft.	500	500	No Change
Five Bedroom Home < 4,500 sq. ft.	500	600	<i>Bigger Aerobic Unit</i>
Six Bedroom Home < 5,500 sq. ft.	500	750	<i>Bigger Aerobic Unit</i>
Seven Bedroom Home < 7,000 sq. ft.	500	900 -1,000	<i>Bigger Aerobic Unit</i>

Proposed Setback Changes

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Addition of Retention Ponds

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Addition of Retention Ponds

Addition of Detention Basins

Proposed Setback Changes

Addition of Retention Ponds

Addition of Detention Basins

Dividing Easement into two categories and lessening setbacks

Proposed Setback Changes

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Dividing Easement into two categories and lessening setbacks

Sewer Pipe with Watertight Joints – Driveways and sidewalks

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Dividing Easement into two categories and lessening setbacks

Sewer Pipe with Watertight Joints – Driveways and sidewalks

Sewer pipe containing secondary effluent - Foundations

Retention Pond Vs Detention Pond/Basin

Retention pond - designed to hold runoff for a long period of time.

A retention pond is essentially a man-made pond and will be treated like a pond/lake/river for setbacks

Detention basin - designed to temporarily hold runoff.

A detention basin will fill up after a rain and begin to empty soon after and will be treated like a drainage easement for setbacks

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Proposed Inclusion of Retention Ponds

Existing Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Streams, Ponds, Lakes, Rivers, & Salt Water Bodies	50	75	50	20	50	25 or 75

Proposed Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Streams, Ponds, Lakes, Rivers, Salt Water Bodies, & Retention Ponds	50	75	50	20	50	25 or 75

Proposed Changes for Detention Basins

Existing Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Streams, Ponds, Lakes, Rivers, & Salt Water Bodies	50	75	50	20	50	25 or 75

Proposed Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Detention Basin, Drainage Easement	5	25	5	10	10	10 or 25

Proposed Changes for Underground Easements

Existing Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Easements	5	5	5	5	0	0

Proposed Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Underground Easements	1	1	1	1	1	1

Proposed Changes for Overhead Easements

Existing Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Easements	5	5	5	5	0	0

Proposed Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Overhead Easements	none with perm. from easement holder	none with permission from easement holder	none with perm. from easement holder	none with permission from easement holder	none with permission from easement holder	none with perm. from easement holder

Proposed Changes for Sewer Pipe with Watertight Joints/Surface Improvements

Existing Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Surface Improvements				5		

Proposed Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Surface Improvements				Pipe may run beneath driveways and sidewalks if sleeved in Schedule 40 pipe		

Proposed Changes for Sewer Pipe with Secondary Effluent/Foundations

Existing Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Surface Improvements				5		

Proposed Rules

	Tanks	Soil Absorption Systems and Unlined ET Beds	Lined ET Beds	Sewer Pipe With Watertight joints	Surface Application Edge or Spray Area	Drip Irrigation
Surface Improvements				Pipe containing secondary effluent has no setbacks from building foundations		

OSSF Designs for Restaurants

- When designing for restaurants, food service establishments, or similar activities, the minimum design strength value shall be 1,200 mg/l Biochemical Oxygen Demand (BOD) after a properly sized grease interceptor

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- When the disposal area is a non-drip irrigation, sub-surface disposal system, the designer must plan to reduce the effluent to 140 mg/l BOD

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- When the disposal area is a non-drip irrigation, sub-surface disposal system, the designer must plan to reduce the effluent to 140 mg/l BOD prior to entering the disposal field
- The designer must set aside twice the area needed to contain treatment units in case the initial sewage strength estimate was too low

Questions

