### Williamson County Department of Infrastructure On-Site Sewage Facility Program



Guide Updated: 12/11/2020

#### Office Address:

Department of Infrastructure 3151 S E Inner Loop, Ste. B Georgetown, TX 78626

Main Phone: 512.943.3330 Fax: 512.943.3335 E-Mail: ossf@wilco.org

#### OSSF Permit Application Fees

#### **Residential**

Standard OSSF	\$510	
Non-Standard Engineered		
OSSF	\$610	
Aerobic OSSF	\$710	

#### **Commercial**

Non-Aerobic OSSF	\$810
Aerobic OSSF	\$910

#### Subdivision Review

Single Lot Review ....... \$100 Subdivision Review ...... \$125 per plat, plus \$20 per lot

**Note**: \$10.00 of the OSSF permit application fee is for the Texas Commission on Environmental Quality (TCEQ) Fund. Fees effective February 1, 2016. A certificate of compliance permit or floodplain development permit will be required with the Dept. of Infrastructure. If within the Edwards Aquifer Recharge Zone, the TCEQ may require a Water Pollution Abatement Plan. On-Site Sewage Facility (OSSF) Guide for Williamson County

## **OSSF Permit Application Procedures**

#### **On-Site Sewage Facility (OSSF) Permit**

The Department of Infrastructure issues OSSF permits for Williamson County. OSSF applications are only accepted online through My Government Online (www.mygovernmentonline.org). Applicants must upload a warranty deed, property survey, and the OSSF design & soil report during the online application process. The owner is requested to apply for the permit unless a signed permit authorization letter from the owner is provided permitting another person to apply on the owner's behalf. Accepted forms of payment for the permit application fees are by card either online or by phone, or a mailed in check or money order. The permit application will be valid for one year from the date of purchase. Once the application is deemed administratively correct, MGO will automatically email the applicant a tag with a unique permit number to be posted on site. Construction cannot begin on the OSSF until an Authorization to Construct is granted by this office. Upon authorization, a licensed Installer will request inspections at the critical phases of construction. Williamson County staff inspects the OSSF at various points during the installation process. A final inspection must be passed, and a License to Operate will be issued before the system can be used. The process of applying for the OSSF permit and receiving authorization for installation can take some time; please initiate this process well in advance of construction to avoid delays.

#### Subdivision Review or Single Lot Review

Williamson County staff will determine if the applicant needs to be referred to the Williamson County Engineer or a city platting authority for a determination of a subdivision review process exemption. If the property for which an OSSF permit is requested was not properly subdivided, it must first go through a subdivision platting process and a subdivision review with the Dept. of Infrastructure. A single lot review is required for properties newly created, but exempted from the subdivision requirements. All lots created after September 27, 1999, in Williamson County that utilize an OSSF must be at least one (1) acre, if served by public water, and two (2) acres, if not served by public water or if a private (individual) water supply is present. Facilities may be permitted on a lot smaller than the minimum, if lot sizing requirements were met at the time that the lot was created.

#### Overview

On-site wastewater systems can effectively serve our wastewater needs. Current estimates project that approximately 30% of new homes are being served by on-site wastewater systems. Owners, Regulators, Site Evaluators, Designers and Installers work together to ensure that your system will function properly. To make sure your system functions properly the first step is to choose the most appropriate technology for the site. The system will then need to be actively maintained in order to keep your system working properly. We can create effective systems to protect public health and the environment by working together.

Page 2

## **Steps Necessary to Obtain an OSSF Permit**

- 1. APPLICATION FOR OSSF PERMIT: OSSF Applications are now accepted online only via My Government Online (www.mygovernmentonline.org). If the person applying for the permit is not the owner, a signed permit authorization letter from the owner is required. Once the application has been deemed administratively correct by a customer service representative an invoice will be emailed to the applicant for payment. OSSF applications are valid for one year from the date of purchase. After payment, MGO will automatically email a job site identification tag to the applicant, to then be posted at the job site. This tag identifies the location of the property and the permit number but does not permit the applicant or property owner to build the structure or OSSF.
- 2. SITE AND SOIL EVALUATION: At the time of application, the applicant must provide to the Dept. of Infrastructure's office a site evaluation that includes a soil report performed by a licensed Site Evaluator or Professional Engineer. Components of the site evaluation include evaluation of topography, subsoil type, subsoil texture, soil depth, restrictive horizons, and evidence of groundwater, flood hazards, wells, recharge features, and setback requirements. For the site evaluation, the owner of the property is responsible to have excavated a minimum of two profile holes, 24 inches wide and five feet deep, or to a solid rock layer. The holes must be located at opposite ends of the proposed drain field area. The profile holes must remain open for a Williamson County OSSF inspector to verify the accuracy and completeness of the site evaluation. The site evaluation report should include every OSSF type that is acceptable for the soil and site conditions. The site evaluation is crucial for determining the appropriate technologies that will be critical to the system's success. The site evaluation can be used by the property owner to discuss options for the proposed design and system type with the Designer.
- 3. PLAN DESIGN AND REVIEW: Before applying the owner must contact a Professional Engineer or Registered Sanitarian to design the OSSF in accordance with the site evaluation. Residential homeowners or licensed Installers may prepare standard gravity flow type or evapotranspiration (ET) systems unless located within the 100-year floodplain or recharge zone. The design plan must address in detail all components of the OSSF such as tanks, drain fields, cleanouts, drainpipe configuration, valve placement, etc. A scale site plan is required showing all setbacks, with any features identified that may affect the proper operation of the system. Complete planning material including the design and site evaluation should be submitted at the time of application. Other supporting documents including legal lot determinations, water pollution abatement plans, and certificate of compliance permits may be required. Plans for aerobic OSSF's should include a copy of the filed aerobic affidavit and service policy before the plan can be deemed administratively correct. The OSSF design and all supporting planning material are submitted to the Dept. of Infrastructure for review. The Dept. of Infrastructure will review designs in the order received. The initial review process may take up to 30 days. The review ensures compliance with all jurisdictional rules and that good scientific practices are followed. An inspector will provide written confirmation of the results of the review to the owner and Designer.
- 4. AUTHORIZATION TO CONSTRUCT: A written Authorization to Construct must be granted before construction on the system can begin. This authorization allows for the construction of the OSSF either by a licensed Installer or by the property owner if the structure is his/her own single family dwelling. A property owner must receive authorization from the Dept. of Infrastructure to install an OSSF system.
- 5. SYSTEM CONSTRUCTION & INSPECTIONS: The system must be built according to the design and administratively correct planning materials. Any changes must have written approval by the Designer before construction and will require the submittal of an "as-built" drawing for evaluation. The licensed Installer or homeowner is responsible for contacting the Dept. of Infrastructure requesting the appropriate inspections by Williamson County staff at critical phases of installation. If extra inspections are required, additional fees will be charged. Extra inspections may be required if, for example, the system fails an inspection or the system is particularly complex. Except in cases of equipment breakdown or unexpected weather changes, Installers are expected to be ready for inspection during the morning or afternoon for which they arranged the inspection. An inspection green tag will be given to the Installer onsite documenting approval or the need for any corrective action.
- 6. LICENSE TO OPERATE: Upon final authorization and passing of all inspections a Williamson County OSSF Inspector will issue a License to Operate an OSSF in Williamson County.

# Minimum Required Separation Distances for OSSF (Table 1)

FROM	ТО	DISTANCE	
	Septic Tank	50'	
Private Well/Cistern	Drainfield	100'	
	Sewer pipe with watertight joints	20	
	Septic tank/watertight sewer lines	50'	
Public Well	Drainfield	150'	
Water Supply Line & Irrigation Line	Tank, field or watertight sewer pipe	10'	
	Tank	50'	
	Drainfield	75'	
	Surface spray application	50'	
Stream, Pond, Retention Pond, Lake	Drip irrigation (application $Ra \le 0.1$ )	25'	
	Drip irrigation (application Ra > 0.1)	75'	
	Drip irrigation (with disinfection)	50'	
	Tank & field	5'	
Pool	Watertight sewer pipe	5'	
	Surface spray application	25'	
	Tanks & field	5'	
	Sewer pipe with watertight joints	5'	
Foundation & Structure Not Occupied	Surface spray application	0'	
	Drip irrigation field	1' (0' w/ conditions)	
	Tank & field	5'	
	Sewer pipe with watertight joints	0-5' sleeve	
Surface Improvement	Surface spray application	0'	
	Drip irrigation	1' (0' w/ conditions)	
	Tank, field, drip field, sewer pipe	1'	
Underground Easement	Sprinkler head	1'	
-	Surface spray application	0' (not into)	
	Tanks, all field types, sewer pipe	1'*	
Overhead Easement		*No setbacks with permission granted from easement holder	
	Tank	5'	
	Field	25'	
Drainage Easement, Detention Pond	Sewer pipe with watertight joints	10'	
& Special Slopes (Slopes where seeps may occur)	Surface spray application	10'	
	Drip irrigation (application Ra < 0.1)	10'	
	Drip irrigation (application Ra > 0.1)	25'	
	Tank & fields except surface applications	5'	
Property Lines & Occupied Structures	Surface spray application	20', 10'	
	Tank	50'	
Edwards Aquifer Recharge Features	Sewer pipe	50'	
	Fields (except drip & lined ET)	150'	

Table 1 distances do not supersede current minimum standards. See also 30 TAC Chapter 285 & OSSF Rules for the most current rules and setbacks. Private water line/wastewater crossings should be treated per 30 TAC Chapter 290.

## 3151 S E Inner Loop, Ste. B Georgetown, TX 78626

## **Summary**

When choosing a site for an OSSF, Owners/Designers should consider several issues. The OSSF should be in a level area with ample sunshine. Also, see table 1 for minimum setback distances that should be considered. Before you select a system type, a preconstruction site evaluation should be conducted by a licensed Site Evaluator or Professional Engineer. The site evaluation includes a soil evaluation, a survey of the lot, and an evaluation of suitability for a standard OSSF system. Owners are encouraged to be involved in the type of system and technologies for treatment and dispersal because they will be responsible for the maintenance of their system. Typically, the water quality requirements for final dispersal determine what types of pretreatment can be used. Standard type gravity flow absorptive drainfields and evapotranspiration systems require only a 2-compartment septic tank and will have limited maintenance requirements. Non-standard systems with low-pressure dose dispersal methods usually add a pump chamber and pump, which will require low maintenance and upkeep. Surface applications or systems utilizing drip irrigation tubing will typically require advanced treatment with disinfection devices, aerobic treatment units, sand filters, gravel filters, or constructed wetlands. These treatment devices will require routine maintenance and will require an ongoing service policy with a licensed maintenance provider and additional permitting requirements including a renewal of the license with the Dept. of Infrastructure every 2 years.

#### **Treatment Type OSSF**

ТҮРЕ	ADVANTAGES	DISADVANTAGES
Septic Tank (2 Compartment)	Low maintenance, no electrical components, low installation cost.	Low treatment.
Constructed Wetlands	No electrical components, high effluent treatment. May allow decreases from groundwater/restrictive layer setbacks.	Requires maintenance contract, affidavit and possibly disinfection. High installation costs. Some homeowner maintenance, upkeep and gardening.
Aerobic Treatment Unit (ATU)	High effluent treatment. Decreases groundwater/restrictive layer setbacks.	Requires maintenance contract, affidavit, and possible disinfection. Utilizes electricity for aerator, pumps, and alarms. High homeowner oversight.
Sand or Gravel Filters	Minimal electrical components. High effluent treatment and filtration. Decreases groundwater/restrictive layer setbacks.	High installation costs. Maintenance of sand filter varies with size of filter.

#### **Disposal Type OSSF**

ТҮРЕ	ADVANTAGES	DISADVANTAGES
Standard Absorption	No requirements for electrical components, low maintenance costs, and low installation costs.	Increased setbacks from restrictive impermeable layers and ground water. Only allowed in suitable soil conditions.
Leaching Chambers / Gravel-less Pipe	Like standard system without rock or pipe. Increased storage capacity, low installation cost, reduction in size requirements.	Increased setbacks from restrictive impermeable layers and ground water. Possible increase over standard system depending on your area.
Standard Evapotranspiration	No electrical components, low maintenance cost.	Increased setbacks from restrictive layers and ground water. High installation cost. Large/dual drain field areas. Relies on evaporation for disposal.
Low Pressure Dose (LPD) Mound/LPD	Decreased setbacks from restrictive layers. Better treatment, even distribution. Low maintenance; no maintenance contract required.	Utilizes pump with some maintenance. Some have less storage capacity than standard systems. High installation cost for mound.
Drip Irrigation	Low groundwater/restrictive layer setbacks. High effluent treatment. More even distribution. Efficient irrigation at root zone of plants.	Utilizes pump or pump and compressor. Requires secondary treatment, maintenance contract, testing and reporting, filing of affidavit regarding special requirements. Higher maintenance cost and license renewals with the Dept. of Infrastructure.
Surface Irrigation	Low groundwater/restrictive layer setbacks. High treatment, low installation costs.	Utilizes pump or pump and compressor. Requires secondary treatment, maintenance contract, testing and reporting, disinfection and filing of affidavit. High maintenance cost. License renewals required.