



# Lake Conroe Watershed Protection Plan Stakeholder Group Meeting

Presented by Randy Acreman  
Water Quality Manager

SJRA Boardroom  
July 15, 2014

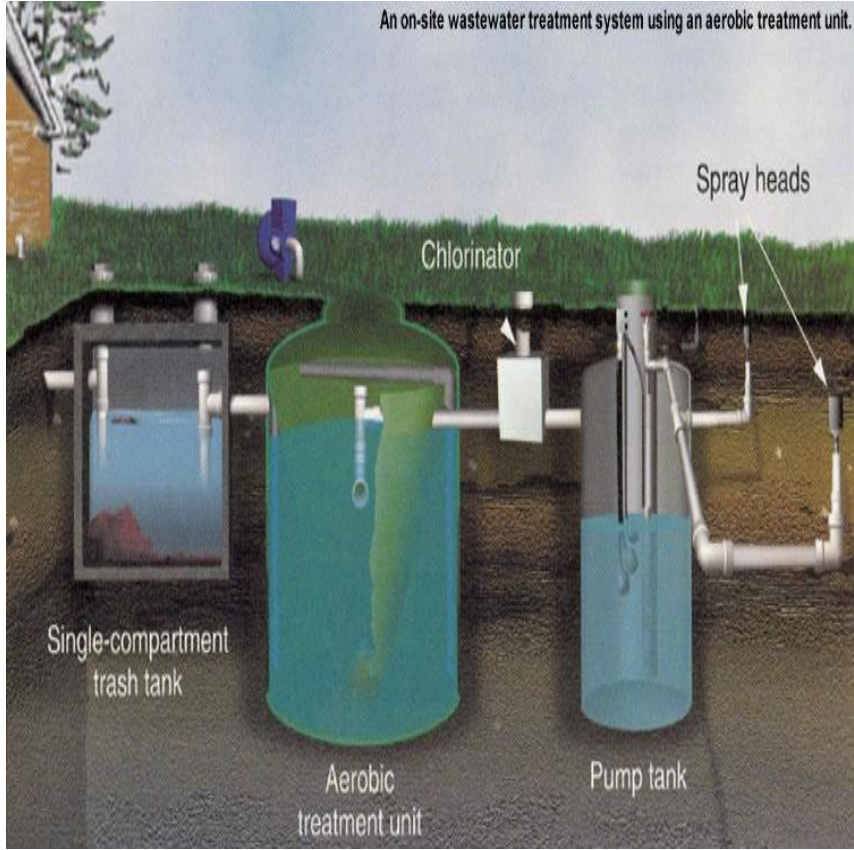
# **On-Site Sanitary Sewage Systems**

- **Used to treat wastewater from a home or businesses and return treated wastewater back into the environment**
- **Conventional OSSFs allow gravity to drain wastewater to a soil adsorption field**
- **Local soils typically not well suited for conventional systems**
- **Aerobic Treatment Units (ATUs) most common new construction**
- **There is a 5,000 gallon per day limit for OSSFs**

# Conventional



# Aerobic



# Historical Background -Texas OSSFs

- **Prior to 1989, no enforcement of OSSF code**
- **1989 – State Law passed to require:**
  - OSSF Permits in entire state
  - Licensing of OSSF installers and local regulators
  - TCEQ adopt minimum construction standards & encourage economically feasible alternatives
  - TCEQ oversight of local OSSF programs

# Historical Background -Texas OSSFs

- **1997 - Soil Evaluation**
  - Soils categorized using soil texture, rather than percolation tests
  - Licensing of site evaluators performing pre-construction soil & site surveys
- **2008 – Licensing individuals maintaining secondary treatment Units**

# TCEQ Regulatory Structure

- **Sets minimum code**
- **Issues licenses**
- **Delegates permitting & enforcement to local governmental entities**
- **Periodically reviews local programs**

# Regulatory Structure

## Licensing

- **Installer I** – Standard pipe/gravel, leaching chambers
- **Installer II** – All systems including low-pressure dosing and surface application
- **Designated Representative** – Local official who issues permits, investigates complaints, & conducts enforcement actions
- **Site Evaluator** – conducts soil evaluation and site surveys needed for permitting
- **Maintenance Provider** – maintains secondary treatment units

# **SJRA OSSF Program**

- **SJRA is the Authorized Agent within 2075 feet horizontally of the lake shore at elevation 201 feet (MSL)**
- **The program consists of permitting, inspecting, complaint investigation, and enforcement action when necessary**



# OSSF Rules Highlights

- **Require site and soil evaluation and design by a registered sanitarian or professional engineer**
- **Upon approval, construction permit is issued**
- **Requires construction inspection and approval to issue license to operate**
- **With TCEQ approval, local rules (ORDERS) can be amended to include more stringent requirements**

# “Maintenance” Tracking for Secondary Treatment Systems

Presented by Andy Isbell  
Director of Planning and Development  
Walker County

SJRA Boardroom  
July 15, 2014

# “Maintenance” Tracking for Secondary Treatment Systems

# Why is it called Maintenance ?

- While the statute calls it maintenance it is actually an inspection of the wastewater system.
- Inspection of wastewater systems for public health and safety is a well accepted practice at the municipal level, but it a much more difficult administrative, logistical, and political issue at the on-site level.
- On-site system inspection has historically been handled similarly to vehicle inspections, where the state uses thousands of private third party inspection firms paid directly by the user to accomplish safety inspections.
- The wastewater from thousands of these on-site treatment plants are sprayed into the air and over the land of our region each day. The treatment of this water is critical for the health of our citizens, rivers, streams, lakes and bays.

In Walker County alone this calculates on average to over  
**24 million gallons of wastewater per month.**

## **How much is that?**

- You'll understand the data better if you can visualize how much a million gallons is. A good-sized bath holds 50 gallons, so a million gallons would be 20,000 baths.
- If you were a swimming-pool builder and a customer asked you to build a pool that would hold a million-gallons, then they had better have a big yard! You would need to build a pool about 267 feet long (almost as long as a football field), 50 feet wide, and 10 feet deep. The cube on the right side shows you that 1 million gallons would form a cube that is 51.1 feet on each side.

# Why do we track and report maintenance?

- **It's the law.**
- **It provides a documented, chronological record of the operation, problems, and repairs of each individual OSSF.**
- **It represents a regular line of communication between the companies or individuals responsible for repair and maintenance of the OSSF and the state or local agency responsible for enforcement.**
- **Maintenance tracking and reporting allows for the partial privatization of a public sector need.**
- **It aids in creating a level platform for performance within the industry**
- **It allows a portion of the cost for wastewater quality monitoring to be incurred directly by the individuals producing the wastewater.**

# It's the Law

- **30 TAC 285.7 (d) (2)** Contract submittals. Unless the owner maintains the system, as excepted by paragraph (4) of this subsection, a copy of the signed maintenance contract shall be provided by the owner to the permitting authority 30 days before the expiration of the initial two-year service policy. For the time period after the initial two-year service policy, the owner is required to have a new maintenance contract signed and submitted to the permitting authority at least 30 days before the contract expires unless the owner maintains the system, as excepted by paragraph (4) of this subsection.
- **30 TAC 285 (b)(2)** Effective September 1, 2009, the maintenance provider will be responsible for fulfilling the requirements of the maintenance contract. The maintenance provider will be responsible for the work performed by registered maintenance technicians under their direct supervision. Prior to September 1, 2009, the maintenance company will be responsible for fulfilling the requirements of the maintenance contract
- **30 TAC 285 (b)(3)** Effective September 1, 2009, the maintenance provider must sign all maintenance reports.

## Law continued

- (d) Maintenance contracts. OSSFs required to have maintenance contracts are identified in §285.91(12) of this title.
- (1) Contract provisions. The OSSF maintenance contract shall, at a minimum:
  - (A) list items that are covered by the contract;
  - (B) specify a time frame in which the maintenance provider or maintenance technician will visit the property in response to a complaint by the property owner regarding the operation of the system;
  - (C) specify the name of the maintenance provider who is responsible for fulfilling the terms of the maintenance contract;
  - (D) identify the frequency of routine maintenance and the frequency of the required testing and reporting;
  - (E) identify who is responsible for maintaining the disinfection unit; and
  - (F) indicate the business physical address and telephone number for the maintenance provider



# Law continued

- Amendments or terminations.
- (A) Effective September 1, 2009, if the maintenance provider discontinues the maintenance contract, the maintenance provider shall notify, in writing, the permitting authority, the manufacturer, and the owner at least 30 days before the date service will cease. Prior to September 1, 2009, if the maintenance company discontinues the maintenance contract, the maintenance company shall notify, in writing, the permitting authority, the manufacturer, and the owner at least 30 days before the date service will cease.
- (B) Effective September 1, 2009, if the owner discontinues the maintenance contract, the maintenance provider shall notify, in writing, the permitting authority and the manufacturer at least 30 days before the date service will cease. Prior to September 1, 2009, if the owner discontinues the maintenance contract, the maintenance company shall notify, in writing, the permitting authority and the manufacturer at least 30 days before the date service will cease.
- (C) Effective September 1, 2009, if a maintenance contract is discontinued or terminated, the owner shall contract with another maintenance provider and provide the permitting authority with a copy of the new signed maintenance contract no later than 30 days after termination, unless the owner meets the requirements of paragraph (4) of this subsection. Prior to September 1, 2009, if a maintenance contract is discontinued or terminated, the owner shall contract with another maintenance company and provide the permitting authority with a copy of the new signed maintenance contract no later than 30 days after termination, unless the owner meets the requirements of paragraph (4) of this subsection.

# Law Continued

- (e) Testing and reporting. OSSFs that must be tested are identified in §285.91(12) of this title.
- (1) Effective September 1, 2009, the maintenance provider shall test and report for each system as required in §285.91(12) of this title. Prior to September 1, 2009, the maintenance company shall test and report for each system as required in §285.91(12) of this title. The report must:
  - (A) include any responses to owner complaints; the results of the maintenance provider's findings as described in §285.90(3) of this title (relating to Figures) and the test results as required in §285.91(4) of this title, including procedures for the maintenance of the unit approved by the executive director; and
  - (B) be submitted to the permitting authority and the owner within 14 days after the date the test is performed.
- (2) To provide the owner with a record of the maintenance check, the maintenance provider shall install a weather resistant tag, or some other form of weather resistant identification, on the system at the beginning of each maintenance contract. This identification shall:
  - (A) identify the maintenance provider;
  - (B) list the telephone number of the maintenance provider;
  - (C) specify the start date of the contract; and
  - (D) be either punched or indelibly marked with the date the system was checked at the time of each maintenance check, including any maintenance check in response to owner complaints.

## Law continued

- **A violation of a rule adopted by the commission under Chapter 366 of the Health and Safety Code represents a violation under Chapter 7 of the Water Code.**
- **The first violation is punishable by a fine of up to \$250.00/\$500.00**
- **The second violation within 12 months is punishable by a fine of up to \$1,000.00 and up to 30 days in jail.**
- **EACH DAY OF CONTINUED VIOLATION REPRESENTS A SEPARATE OFFENSE.**
- **Convictions can cost you your license.**

# Providing a Record

- **When maintenance reports are filled out properly and sent to the Authorized Agent they can provide a valuable record for the Authorized Agent and the maintenance company in identifying “high risk” systems or owners that are not properly utilizing their ossf.**
- **If action is brought against the homeowner over a maintenance issue, such as chlorine residual levels or broken components these reports can be useful to the prosecutor and judge when the case is tried.**
- **Regularly documented maintenance can also provide evidence of product faults or failures that are due to manufacturer or vendor defect, that might otherwise go unnoticed.**

# Line of Communication

- **Regular, accurate maintenance reports forwarded to the Authorized Agent represent a necessary line of communication between the regulatory agency and the private companies in the field.**
- **This line of communication is necessary in many cases to correct ongoing problems or deficiencies found during inspection of OSSF, it allows the regulatory authority and the maintenance company to work together to solve rule violations.**
- **If problems exist, or illegal alterations are made, the maintenance report represents an “unavoidable” method of reporting homeowner neglect or misuse.**

# Partial Privatization

- **The proper maintenance and operation of on-site sewage facilities is at its heart a community or public issue. It is due to the public nature of this issue that laws and rules have been passed at State and local levels to insure proper disposal of wastewater.**
- **Many people lack the knowledge and/or desire to maintain a modern on-site facility, and therefore must rely on an informed resource public or private to meet the repair and maintenance needs of their systems.**
- **The governmental authorities must have an enforcement role in insuring that its rules are met, but enforcement requires detection.**
- **The private maintenance company can fulfill two roles at once, both providing information and services to on-site owners and reporting violations and/or ongoing issues to the regulatory authorities.**
- **One of the benefits of a privatized inspection system is that it allows for maximum efficiency in manpower, in many cases the individual who locates the problem is licensed to repair it immediately.**

# Level Platform

- **If there were no requirement for tracking and reporting in the industry, it would be virtually impossible for enforcement agencies to ensure that maintenance companies were actually performing their duties.**
- **Without some standard for minimum required service there can be no level playing field for businesses to compete within.**
- **Without a level playing field the quality of inspections and maintenance will quickly erode in your region.**
- **Without enforcement of minimum standards you may as well not have them.**

# Cost of Wastewater Management

- **If you live in a city or a rural area served by a centralized sewage treatment facility then you expect to have to pay for sewage. Part of your bill is going to pay for improvements and maintenance of existing components, part of your bill is being used to pay for testing and reporting. You use it, you pay.**
- **If there was no privatized maintenance and all maintenance was supplied by state or local taxes would this be equitable to people who did not use on-site sewage facilities. People on central sewer pay for what they get, privatization of maintenance and repair to a great extent allows ossf owners to bear the burden for the cost and responsibility for their system alone.**



# How to Report Maintenance

- **The basic requirements for reporting maintenance are laid out in TAC 30 Chapter 285.91 (IV and XII) as well as 285.7.**
- **Remember that the results of all required inspection items and testing must be included on the form.**
- **Remember that reports should include responses to owner complaints. (Even if the responses were on a date other than that of the testing or report)**
- **The report shall be submitted to the permitting authority and the OWNER within 14 DAYS of the inspection.**
- **THE SYSTEM MUST HAVE A MAINTENANCE TAG AND THE TAG MUST BE INDELIBLY MARKED AT THE TIME OF INSPECTION INCLUDING ANY RESPONSES TO OWNER COMPLAINTS.**

# How to Track Maintenance

- **Tracking of Maintenance poses a problem for both private companies and regulatory authorities across the state. Some of the roadblocks to maintenance tracking have been improved by technology through reporting software and in some cases remote sensing, however much of the work for tracking and reporting is still being done manually throughout Texas.**
- **Many of the software packages available are either financially out of the reach of local authorities or small companies, or do not provide the flexibility desired by those entities.**
- **There are a wide variety of methodologies being used statewide from complete avoidance to index cards to electronic reporting, the only tracking program that is completely unacceptable is the one that is absent.**
- **The principals of tracking maintenance fall into two main categories: Processing Reports, and Ground Truthing or Field Checks.**

# Processing Reports

- **The permitting authority must develop a method for tracking required reports that meets their needs, for a small county or authority it may be as simple as a rotating index card file or a dated filing system; for a larger county an approach that includes a software component would be the most efficient. Regardless of the exact method used the system must be able to do four things:**
  - a) Identify the system (owner and location)**
  - b) Identify the maintenance company**
  - c) Tell the permitting authority when a scheduled report is overdue**
  - d) Tell the permitting authority when a contract has expired**

# Processing Reports (continued)

- **Once the Permitting Authority is able to determine which reports are overdue or missing it can begin to investigate and/or penalize those companies or system owners who are not meeting their legal obligations for testing and reporting. This is the first step to any successful report tracking program, to identify those systems that are not being reported.**
- **The reports received must be checked for compliance with approved standards, testing levels should fall within required ranges if this is not the case then it should be noted and notice sent to the system owner.**
- **If maintenance companies are having continuous problems with a particular system or the owner is unwilling to have the system repaired this should be noted in the report, and in many cases a call might be placed to the permitting authority.**
- **The permitting authority should work with maintenance companies to make sure that defects or violations do not continue unrepaired.**

# Field Checks

- **Field inspections are absolutely necessary to a successful maintenance tracking program. All the reports in the world will not benefit a regulatory authority unless they represent actual on the ground inspections. The regulatory authority cannot assume that all reports are accurate or truthful; a system of sampling must be set up to monitor maintenance companies reporting.**
- **One of the biggest advantages to areas that do not allow or limit homeowner maintenance is that you have a limited number of individuals submitting and performing maintenance reports. Having a limited field of maintenance companies allows permitting authorities to sample instead of checking every system.**
- **A permitting authority does not need to check every report received from an individual maintenance company, just to take a sample or percentage of their systems and check those for problems. This may not be the optimal method for verifying maintenance report, but it is the most practical.**

# Enforcement

- **The rules are only as good as their enforcement.**
- **Permitting authorities must cite both system owners and maintenance companies for failure to comply with rules. Without enforcement there will be some companies and individuals who will comply and others who will not, this does not create an even playing field for those who conduct their businesses within the rules.**
- **Most violations of rules within 30TAC Chapter 285 can be prosecuted under Chapter 7 of the Water Code, check with your local District Attorney for clarification.**
- **If owners are cited for violations this gives maintenance company's warnings of needed repairs or maintenance to have some added weight. Citations give an answer to the "or what?" system owners.**

MONITORING REPORTS ARE SUBMITTED ALONG WITH A SUBMITTAL FEE TO THE PERMITTING AUTHORITY (LOCAL JURISDICTION)



NO REPORT MAY BE RECEIVED WITHOUT THE ACCOMPANYING SUBMITTAL FEE, AND NO FEE SHOULD BE RECEIVED WITHOUT THE ACCOMPANYING REPORT.



SUBMITTAL FEES ARE \$5.00 PER REPORT PER SYSTEM FOR REPORTS CONDUCTED AND SUBMITTED WITHIN 15 DAYS OF THE REQUIRED INSPECTION DATE.



REPORTS ARE CHECKED FOR COMPLIANCE ISSUES BY A DESIGNATED REPRESENTATIVE



ALL SUBMITTAL FEES MUST BE PAID AT THE TIME OF SUBMITTAL. DROPPING OFF OR MAILING IN REPORTS WITHOUT THE REQUIRED FEES WILL RESULT IN THE REPORT BEING RETURNED WITHOUT PROCESSING.



AN ADDITIONAL \$2.00 LATE SUBMITTAL FEE IS REQUIRED FOR EACH BUSINESS DAY AFTER THE INITIAL 15 SUBMITTAL PERIOD.



REPORTS SHOWING FULL COMPLIANCE ARE ENTERED IN TO THE DATABASE AND NEXT REPORT DATE IS UPDATED. REPORTS SHOWING COMPLIANCE ISSUES ARE FOLLOWED UP WITH PHONE CALL AND LETTER TO SYSTEM OWNER.



AFTER INITIAL ATTEMPT TO REMEDY REPORTED NON-COMPLIANCE THE REPORT IS TURNED OVER TO ENFORCEMENT.



REPORTS ARE RANDOMLY SELECTED BY MAINTENANCE COMPANY FOR GROUND TRUTHING BY INSPECTION STAFF.

# Why require system reporting fees?

- The purpose of the system reporting fee is to cover some of the basic administrative costs of tracking system inspection reports, a fee based system allows for the on-site wastewater community to pay for regulatory requirements in much the same way as a municipal wastewater user would.



# Why require late submittal fees?

- Maintenance companies that do not submit reports timely increase the cost of compliance and monitoring for the regulating jurisdiction.
- Late submittal fees help to provide each maintenance provider a cost for service based on their encumbrance to the administrative system.
- Late submittal fees also seek to minimize the increased cost to the tax payer incurred by the failures of a paid third party maintenance provider.

Questions?



# Lake Conroe Watershed Protection Plan Stakeholder Group Meeting

Presented by David Parkhill  
Director of Raw Water Enterprises

SJRA Boardroom  
July 15, 2014

# **SJRA OSSF Program Changes**

- **Historical Background –SJRA Program**
- **SJRA Staff – Recommend Proposed Changes**
  - **OSSF Rules (Order)**
  - **Inspection/Enforcement Policies**
  - **Funding Requirements**
- **Stakeholder Group’s Role**
  - **Review and Comment on Changes**
  - **Provide Input to Board**
- **Board of Director’s Role**
  - **Adopt Rules and Set Policy**
  - **Approve Funding**

# **OSSF Program Modifications**

- **Maintenance requirements.**
- **Routine inspections.**
- **Enforcement rules and regulations.**

# TCEQ General Regulations For Maintenance Contracts

- List items that are covered by the contract.
- Specify a time frame in which the maintenance provider will visit the property in response to a homeowner request.
- Identify the frequency of routine maintenance. (*TCEQ only requires installers of ATUs to provide an initial two-year maintenance contract.*)
- Identify who is responsible for the disinfection unit.
- Install a weather resistant tag to be indelibly marked or punched with the date the system was checked.

# TCEQ Maintenance Service Frequency

- ATUs are required to be serviced three times per year. (*The number of required tests may be reduced to two per year for all systems having an electronic monitoring and automatic telephone or radio access device installed.*)
- Standard systems require no further inspection after the construction inspection.

# **SJRA Options for ATU Maintenance**

- **Require maintenance after initial two-year period.**
- **Licensed service providers and/or licensed homeowners.**
- **Residential versus commercial.**
- **Frequency of service calls.**
- **Capacity verification.**
- **Contract renewal process.**
- **Maintenance provider administrative fees.**



# OSSF Program Modifications

- Maintenance requirements.
- **Routine inspections.**
- Enforcement rules and regulations.

# **SJRA Options for Routine Inspections**

- **Required-Construction.**
- **Required-Complaints.**
- **Option-Further inspections at regular frequency vs random inspection.**
- **Option-Enforcement process, citations.**
- **Option- Enforcement costs/funding.**
  - **Administration**
  - **Inspection Staff**
  - **Legal Services**

# OSSF Program Modifications

- **Maintenance requirements.**
- **Routine inspections.**
- **Enforcement rules and regulations.**

# **SJRA Options for Enforcement Regulations**

- Require connection to central systems?
- Right to inspect standard systems at any time?
- Special provisions for residential/commercial facilities adjacent to the lake shoreline?
- Inspectors to issue citations?

# General Regulations

	<b>TCEQ</b>	<b>SJRA Lake Conroe</b>	<b>Walker Co.</b>	<b>Montgomery Co.</b>
<b>On-going Maintenance</b>	Not Required	Not Required	<b>Required</b>	<b>Required</b>
<b>Central Sewer Connection</b>	Not Required	Not Required	<b>Required</b>	<b>Required</b>
<b>Right to Issue Citations</b>	<b>Yes</b>	<b>Not Authorized</b>	<b>Yes</b>	<b>Yes</b>