Texas Commission on Environmental Quality
Investigation Report
Live Oak Resort, Inc.
CN600699789

LIVE OAK RESORT

Investigation # 1055749
Incident # 178461

Investigator: GEORGE LOGAN

Conducted: 02/06/2013 – 02/06/2013

Program(s): PUBLIC WATER SYSTEM/SUPPLY

Investigation Type: Compliance Investigation

Location: 97510 LONE STAR RD, WASHINGTON, TX 77880

Additional ID(s): 2390050

Address: ; ,

Activity Type: REGION 09 - WACO

PWSCMPL - PWS Complaint

Principal(s):

Respondent
LIVE OAK RESORT INC

Contact(s):

Role
Regulated Entity Contact
Regulated Entity Mail Contact
Participated in Investigation

Title
PRESIDENT
ENVIRONMENTAL INVESTIGATOR

Name
TIFFANY LANDRY
MARK MARZAHN

Phone
(936) 878-2788
(979) 277-6290

Work
(936) 878-2216
Work
(936) 878-2216

Other Staff Member(s):

Role
QA Reviewer
Investigator
Supervisor

Name
RICHARD MONREAL
WILSON SNYDER
FRANK BURLESON

Associated Check List

Checklist Name
PWS COMPLAINT INVESTIGATION
PWS INVESTIGATION - EQUIPMENT MONITORING AND SAMPLING
PWS GENERIC VIOLATIONS

Unit Name
LIVE OAK RESORT
LIVE OAK RESORT
LIVE OAK RESORT

Investigation Comments:

INTRODUCTION

On January 24, 2013, the Texas Commission on Environmental Quality (TCEQ) Waco Regional Office received a complaint (Incident No. 178461) alleging that the Live Oak Resort had made no
changes or upgrades to the water system in response to the compliance investigation conducted three years ago. The complainant was contacted on January 25, 2013.

GENERAL FACILITY AND PROCESS INFORMATION:

The Live Oak Resort public water supply, located at 8751 Lone Star Road in Washington County, 8 miles west of the City of Navasota, is a transient / non-community water system serving 127 connections. Well No. 1, at Plant 1, pumps to the distribution system with a 900 gallon pressure tank floating on the system. Sodium hypochlorite is injected prior to the pressure tank. Well No. 2, at Plant 2, pumps to the distribution system with a 900 gallon pressure tank floating on the system. Sodium hypochlorite is injected prior to the pressure tank. The Live Oak Resort public water supply also has an emergency interconnection with the Northeast Washington County Water Supply.

BACKGROUND INFORMATION:

On August 24, 2006, an announced comprehensive compliance investigation was conducted at the Live Oak Nudist Resort public water supply. As a result, a Notice of Violation letter dated September 1, 2006 was sent to the Live Oak Nudist Resort for seventeen outstanding alleged violations. The violations included:

1. Failure to obtain a sanitary control easement,
2. Failure to properly seal the wellhead for well No. 1,
3. Failure to provide a raw water sampling tap for well No. 1,
4. Failure to provide a meter for well No. 2,
5. Failure to provide a plant operations manual,
6. Failure to provide a site glass for the pressure tank,
7. Failure to provide a pressure release device for the pressure tank,
8. Failure to provide water system records that needed to be reviewed at the time of the investigation,
9. Failure to maintain a supply of calcium hypochlorite disinfectant,
10. Failure to inspect the pressure tanks at least annually,
11. Failure to provide a distribution system map,
12. Failure to provide a chemical and microbiological monitoring plan,
13. Failure to monitor the disinfectant residual in the distribution system at least once every seven days,
14. Failure to provide an intruder-resistant fence or a lockable well house to protect the well,
15. Failure to provide an intruder-resistant fence to protect the well and the pressure tanks,
16. Failure to provide a raw water sampling tap for well No. 2, and
17. Failure to design and maintain a water distribution system to provide at all times a minimum pressure of 35 psi.

Compliance documentation was requested by October 31, 2006. The TCEQ Waco Regional Office files contain a certified mail receipt showing that the water system received the letter on September 13, 2006.

On October 2, 2006, Mr. Larry Hilderbrand submitted compliance documentation to the TCEQ Waco Regional Office. On October 4, 2006, a file review investigation was conducted. The documentation submitted proved that two of the outstanding alleged violations noted during the investigation were corrected. The violations were, Failure to provide a meter for well No. 2 and Failure to provide a pressure release device for the pressure tank. Mr. Hilderbrand was sent a letter dated October 11, 2006 requesting additional compliance documentation for the remaining fifteen alleged violations. Compliance documentation was requested by November 30, 2006. The TCEQ Waco Regional Office files contain a certified mail receipt showing that the water system received the letter on October 14, 2006.

On January 26, 2007, a file review investigation was conducted because Mr. Larry Hilderbrand did not submit any compliance documentation addressing alleged violations noted during the August 24, 2006, Comprehensive Compliance Investigation. Mr. Hilderbrand was sent a letter dated February 9, 2007, requesting compliance documentation for fifteen outstanding alleged violations.
Compliance documentation was requested by March 9, 2007. The TCEQ Waco Regional Office files contain a certified mail receipt showing that the water system received the letter on February 18, 2007.

On March 28, 2007, a file review investigation was conducted because Mr. Larry Hilderbrand did not submit any compliance documentation addressing alleged violations noted during the August 24, 2006 Comprehensive Compliance Investigation. The Live Oak Nudist Resort was sent a Notice of Enforcement letter as a result of the file review investigation. Formal enforcement action was initiated as a result of three category B violations having exceeded the maximum six month time period to achieve compliance. The category B violations included:

1. Failure to monitor the disinfectant residual in the distribution system at least once every seven days.
2. Failure to provide an intruder-resistant fence or a lockable well house to protect the well (well site No. 1), and
3. Failure to provide an intruder-resistant fence to protect the well and the pressure tanks (well site No. 2).

The TCEQ Waco Regional Office files contain a certified mail receipt showing that the water system received the letter on April 12, 2007.

The enforcement referral resulted in Agreed Order 2007-0644-PWS-E, Case No. 33233 which became effective on January 28, 2008. Although the original compliance dates for Ordering Provision Nos. 2.a.iii, 2.a.iv, 2.b.1, 2.b.ii, 2.b.iii, 2.b.iv, and 2.c had passed, Live Oak Nudist Resort public water supply submitted a request on January 12, 2010, for additional time to achieve compliance with these Ordering Provisions. An amended schedule for compliance dated February 3, 2010, established a due date of July 11, 2010. A second amended schedule for compliance dated September 9, 2010, established a due date of January 6, 2012, with progress reports required every six months starting on January 6, 2011. On February 5, 2012, a review of the status of the technical requirements of this Agreed Order indicated that Ordering Provision Nos. 2.a.iv, 2.b.i, 2.b.ii, 2.b.iv, and 2.c were still in open status and that Ordering Provision No. 2.b.ii requiring the system to provide intruder-resistant fences around wells 1 and 2, was completed on February 5, 2010.

An amended schedule for compliance with the ordering provisions of Agreed Order 2010-0411-PWS-E was issued on December 29, 2010. The amended schedule established a new deadline of June 4, 2012, for Ordering Provisions Nos. 2.a.1, 2.a.ii, 2.b, 2.c.i, 2.c.ii, and 2.d. provided progress reports were submitted every six months starting on June 4, 2011.
A second amended schedule for compliance with the ordering provisions of Agreed Order 2010-0411-PWS-E was issued on June 22, 2012. The second amended schedule established a new deadline of December 4, 2012, for Ordering Provisions Nos. 2.a.i, 2.a.ii, 2.b, 2.c.i, 2.c.ii, and 2.d.

ADDITIONAL INFORMATION:

On February 6, 2013, Investigators Wilson Snyder and Fred Logan conducted an unannounced complaint investigation at the Live Oak Resort. The manager, Ms. Tiffany Landry, was present during the investigation. Mr. Mark Marzahn, Designated Representative for Washington County, was also present. Mr. Logan inspected both water plants at the site. No ground storage tanks or service pumps were observed. The barbed wire on the fences around the water system wells was found to be installed with the wire pointed in the wrong direction. Ms. Landry did not have a map of the water system and sanitary easements and well completion data for wells 1 and 2.

A water sample was taken from the distribution system at the bath house with the following results:

- Pressure: 45 psi
- Residual disinfectant: 1.27 mg/l free

An exit interview was conducted with Ms. Landry on February 6, 2013, and she was informed that the Live Oak Resort public water system would receive a Notice of Enforcement letter.

On April 5, 2013, compliance documentation was received from Ms. Tiffany Landry that is adequate to resolve one of the alleged violations identified during the investigation, namely; Failure to calibrate the well flow meters.

On April 22, 2013, photographs were received from the Live Oak Resort water system that are adequate to resolve one of the alleged violations identified during the investigation, namely; Failure to have an intruder-resistant fence at the well sites.

The Live Oak Resort will be sent an NOE for violation of an Agreed Order. Currently the water system has no ground storage or service pump capacity as required by the second amended schedule for compliance with the Agreed Ordering Provisions Nos. 2.c.i and 2.c.ii respectively of Agreed Order Docket No. 2010-0411-PWS-E. The Live Oak Resort also did not have documentation as required by Ordering Provisions of Agreed Commission Order Docket No. 2007-0644-PWS-E, namely: the sanitary control easements for wells 1 and 2 (Ordering Provision No. 2.b.ii), a map of the distribution system (Ordering Provision No. 2.a.iv), and well completion data for wells 1 and 2 (Ordering Provision No. 2.b.iv).

**NOTICE OF ENFORCEMENT**

OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF ENFORCEMENT

Track No: 499981

Compliance Due Date: To Be Determined
Violation Start Date: 1/15/2010

30 TAC Chapter 290.45(c)(1)(B)(ii)
REG 2390050, Provision No. 2.c.i.
Failure to comply with the Ordering Provisions of Commission Agreed Order Docket No. 2010-0411-PWS-E.

Alleged Violation:
Investigation: 1055749

Comment Date: 05/28/2013

Failure to provide a ground storage capacity of 35 gallons per connection.

Agreed Commission Order Docket No. 2010-0411-PWS-E was effective on December 4,
2010, and Ordering Provision No. 2.c.i was to be completed by June 2, 2011. An amended schedule for compliance dated December 29, 2010, established a due date of June 4, 2012. A second amended schedule for compliance dated June 22, 2012, established a due date of December 4, 2012. During the investigation on February 6, 2013, no ground storage tanks were observed at the public water supply.

**Recommended Corrective Action:** Submit documentation of a ground storage capacity of at least 35 gallons per connection.

**Track No:** 499980  
**Compliance Due Date:** To Be Determined  
**Violation Start Date:** 1/15/2010

30 TAC Chapter 290.45(c)(1)(B)(iii)  
REG 2390050, Provision No. 2.c.ii.

Failure to comply with the Ordering Provisions of Agreed Commission Order Docket No. 2010-0411-PWS-E.

**Alleged Violation:**
**Investigation:** 1055749  
**Comment Date:** 05/28/2013

Failure to provide two or more service pumps which have a total capacity of 1.0 gpm per connection.

Agreed Commission Order Docket No. 2010-0411-PWS-E was effective on December 4, 2010, and Ordering Provision No. 2.c.ii. was to be completed by June 2, 2011. An amended schedule for compliance dated December 29, 2010, established a due date of June 4, 2012. A second amended schedule for compliance dated June 22, 2012, established a due date of December 4, 2012. During an investigation on February 6, 2013, no service pumps were observed at this public water system.

**Recommended Corrective Action:** Submit documentation of two or more service pumps which have a total capacity of at least 1.0 gpm per connection.

**Track No:** 500387  
**Compliance Due Date:** To Be Determined  
**Violation Start Date:** 2/6/2013

30 TAC Chapter 290.38(37)  
30 TAC Chapter 290.41(c)(3)(O)

**Alleged Violation:**
**Investigation:** 1055749  
**Comment Date:** 05/29/2013

Failure to provide an intruder-resistant fence around wells 1 and 2.

290.38(37)- Intruder-resistant fence--A fence six feet or greater in height, constructed of wood, concrete, masonry, or metal with three strands of barbed wire extending outward from the top of the fence at a 45 degree angle with the smooth side of the fence on the outside wall.

290.41(c)(3)(O)- All completed well units shall be protected by intruder-resistant fences, the gates of which are provided with locks or shall be enclosed in locked, ventilated well houses to exclude possible contamination or damage to the facilities by trespassers. The gates or wellhouses shall be locked during periods of darkness and when the plant is unattended.

During an investigation on February 6, 2013, the fences on the two wells were not intruder-resistant. The barbed wire at the top of the fence was installed straight up instead of at a 45 degree angle to the outside.

**Recommended Corrective Action:** Submit photographic documentation that the fence has been modified to comply with the requirements of an intruder-resistant fence.
On April 11, 2013, photographs were received from Live Oak Resort demonstrating that the barbed wire at both well sites had been modified to point outward at a 45 degree angle. This is adequate to resolve this violation.

Track No: 500391  
Compliance Due Date: To Be Determined  
Violation Start Date: 2/6/2013

30 TAC Chapter 290.46(f)(2)

Alleged Violation:  
Investigation: 1055749  
Comment Date: 05/30/2013

Failure to provide water system records that needed to be reviewed at the time of the investigation. At the time of this investigation, the following records were not available for review:

1. NSF 60 certificate for the sodium hypochlorite, and
2. Calibration certificates for the flow meters on wells 1 and 2.

On April 5, 2013, meter flow calibration certificates for the well flow meters were received in the TCEQ Waco Regional Office. This is adequate to resolve Item 2 of this violation.

Recommended Corrective Action: Submit a copy of the NSF 60 certificate for the sodium hypochlorite.

Track No: 503071  
Compliance Due Date: To Be Determined  
Violation Start Date: 8/24/2006

30 TAC Chapter 290.46(n)(3)

REG 2390050, Provision No. 2.b.iv.
Failure to comply with the Ordering Provisions of Agreed Commission Order Docket No. 2007-0644-PWS-E.

Alleged Violation:  
Investigation: 1055749  
Comment Date: 05/30/2013

Agreed Commission Order Docket No. 2007-0644-PWS-E was effective on January 28, 2008, and Ordering Provision No. 2.b.iv. was to be completed by March 28, 2008. An amended schedule for compliance dated February 3, 2010, established a due date of July 11, 2010. A second amended schedule for compliance dated September 9, 2010, established a due date of January 6, 2012. During an investigation on February 6, 2013, no well completion data was available for these wells.

Recommended Corrective Action: Submit well completion data for wells 1 and 2.

Track No: 503078  
Compliance Due Date: To Be Determined  
Violation Start Date: 8/24/2006

30 TAC Chapter 290.46(n)(2)

REG 2390050, Ordering Provision No. 2.a.iv.
Failure to comply with the Ordering Provisions of Agreed Commission Order Docket No. 2007-0644-PWS-E.

Alleged Violation:  
Investigation: 1055749  
Comment Date: 05/28/2013

Agreed Commission Order Docket No. 2007-0644-PWS-E was effective on January 28, 2008, and Ordering Provision No. 2.a.iv. was to be completed by February 27, 2008. An

Recommended Corrective Action: Submit a map of the distribution system of this public water supply.

Track No: 503130  Compliance Due Date: To Be Determined
Violation Start Date: 8/24/2006

30 TAC Chapter 290.41(c)(1)(F)
REG 2390050, Ordering Provision No. 2.b.ii.
Failure to comply with the Ordering Provisions of Agreed Commission Order Docket No. 2007-0644-PWS-E.

Alleged Violation:
Investigation: 1055749  Comment Date: 05/28/2013
Failure to obtain a sanitary control easement that covers the land within 150 feet of the wells 1 and 2 or an exception to the easement requirement that is approved by the Commission for wells 1 and 2.

Agreed Commission Order Docket No. 2007-0644-PWS-E was effective on January 28, 2008, and Ordering Provision No. 2.b.ii. was to be completed by March 28, 2008. An amended schedule for compliance dated February 3, 2010, established a due date of July 11, 2010. A second amended schedule for compliance dated September 9, 2010, established a due date of January 6, 2012. During an investigation on February 6, 2013, no well completion data was available for these wells.

Recommended Corrective Action: Submit copies of the sanitary control easements covering the land within 150 feet of the wells.

Signed ___________________________  Date 5/29/13
Environmental Investigator

Signed ___________________________  Date 5/31/13
Supervisor