

DOCKET NO.: 992015-WU - Application for limited proceeding to recover costs of water system improvements in Marion County by Sunshine Utilities of Central Florida, Inc.

WITNESS: Direct Testimony of Richard S. Lott, of the Department of Environmental Protection, Appearing on Behalf of Staff

DATE FILED: September 12, 2002

DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

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DIRECT TESTIMONY OF RICHARD S. LOTT

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Q. Please state your name and professional address.

A. My name is Richard Shackford Lott and my business address is 3319 Maguire Boulevard, Suite 232; Orlando, FL 32803.

Q. By whom are you employed and in what capacity?

A. I am employed by the Department of Environmental Protection (DEP) as a Professional Engineer III in charge of the Central District Drinking Water Program.

Q. How long have you been employed by DEP?

A. I started working at DEP in December 1993.

Q. Would you state your educational background and experience?

A. My educational background includes a B.A. in Geology from the University of South Florida (1979) and an M.S. in Environmental Engineering from the University of Central Florida (1990). I am presently in the Ph.D. program in Environmental Engineering at the University of Central Florida. Also, I am a Professional Geologist (No. 685) and a Professional Engineer (No. 45930) registered in Florida. My experience includes over twelve years as an environmental scientist, drainage engineer, geologist, stormwater engineer, and drinking water engineer.

Q. Would you explain what your general responsibilities are as Professional Engineer III in charge of the Central District Drinking Water Program?

A. My general responsibilities as Program Manager of the Central District Drinking Water Program include overseeing the permitting, monitoring, compliance and enforcement activities of the drinking water program in accordance with the Florida Statutes and Florida Administrative Code.

1 Q. What is the purpose of your direct testimony?

2 A. The purpose of my testimony is to discuss why a permit was issued by the
3 DEP regarding the inclusion of the carbon filters into the treatment scheme
4 at Sunshine's Lakeview Hills water system.

5 Q. Please state what your understanding of the contamination problem at
6 Sunshine's Lakeview Hills water system is.

7 A. My remembrance of the contamination problem at Sunshine's Lakeview Hills
8 water system is obtained from the information in our files. I have no
9 specific recollection regarding the events or instances of this situation.
10 According to a letter from Steven Yeats of Jones, Edmunds & Associates, Inc.,
11 dated January 7, 2000, 1,1-dichloroethene (1,1-DCE) was found in a raw water
12 supply well in October 1999 near the maximum contaminant level (MCL) of 7
13 parts per billion (ppb). An ancillary engineering report dated April 24,
14 2000, entitled "Sunshine Utilities, Inc. Lakeview Hills Subdivision WTP
15 Revised Engineering Report for the Proposed FDEP Supplied Activated Carbon
16 Filter Units" contains analytical results from Well DPW-49 of the Marion
17 County Davis Landfill sampled on April 1, 1999. The parameter 1,1-DCE had a
18 concentration of 6 ppb.

19 Q. Did the utility modify its treatment process at its Lakeview Hills water
20 system to address this contamination?

21 A. The utility modified its treatment process at its Lakeview Hills water
22 system by applying for a minor modification on January 24, 2000. The Project
23 Description is "The addition of an activated carbon filter system to existing
24 water treatment system to remove 1,1-DCE". Specifically, these are two 1,500
25 lb. activated carbon units, installed in series on the well discharge piping

1 upstream from the existing chlorine injection point. Maximum flow rate is 75
2 gallons per minute. There are also associated 2-inch galvanized steel
3 connecting piping and appurtenances.

4 Q. Did DEP grant Sunshine a permit to install the activated carbon (dual-
5 tower) filter system?

6 A. Yes. DEP issued a permit modification to install the system as
7 described earlier on May 19, 2000 because it met the permit criteria set forth
8 in Chapters 62-555 and 62-550, Florida Administrative Code. The modification
9 was cleared for service on December 27, 2000. A copy of the permit to install
10 the dual-tower filter system is attached to my testimony as Exhibit RSL-1.

11 Q. Does DEP believe that the dual-tower filter system provides reasonable
12 assurance of the removal of the 1,1-DCE?

13 A. Yes. I signed the permit that the dual-tower filter system provided
14 reasonable assurance to remove the 1,1-DCE because it is a volatile chemical
15 that may be removed by carbon. Further, the units are arranged in series in
16 case breakthrough of the 1,1-DCE is reached in the first unit and can be taken
17 off-line without shutting the well down.

18 Q. Does a breakthrough of 1.06 ug/L after the second filter cause you any
19 concern as to the reliability of the filter system?

20 A. No. The concentration of 1.06 ug/L is equivalent to 1.06 ppb. Since
21 the MCL for 1,1-DCE is 7ppb, the 1.06 ppb concentration after the second
22 filter does not pose a health concern nor does it call into question the
23 reliability of the filter system.

24 The filter system is set up so that raw water flows from the well into
25 the first carbon unit, then into the second carbon unit and then into the

1 | distribution system after it has been chlorinated. When breakthrough is
2 | reached in the first carbon unit, it is taken "off-line" and the media is
3 | replaced. During the replacement time, the raw water goes through the second
4 | carbon unit. When the carbon in the first unit has been replaced, it is
5 | placed back "on-line" and the system operates as before. The second unit is
6 | necessary because otherwise the flow from the well would have to be
7 | discontinued during the filter replacement of the first unit. This would
8 | translate into a loss of pressure in the distribution system and make it
9 | possible for contamination of the water to occur due to backsiphonage by
10 | possible cross-connections. The second unit therefore ensures the reliability
11 | and public safety of the system.

12 | Q. Until the 1,1-DCE plume from the groundwater near the Lakeview Hills
13 | water system is somehow removed, does the dual-tower filter system treat the
14 | water for the 1,1-DCE in compliance with the State and Federal MCLs for water
15 | quality standards?

16 | A. Yes.

17 | Q. Does this conclude your testimony?

18 | A. Yes, it does.

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Jeb Bush
Governor

Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL
7099 3400 0001 9214 0072

Sunshine Utilities, Inc.
10230 SE Highway 25
Bellevue, Fl. 34420

Attention: James Hodges, Jr.

Marion County - PW
Lakeview Hills



Dear Mr.

Enclosed is Permit Number WC42-0080688-003 to construct water plant modifications issued pursuant to Section 403.861(9), Florida Statutes.

The Department's proposed agency action shall become final unless a timely petition for an administrative hearing is filed under sections 120.569 and 120.57 of the Florida Statutes before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions by the applicant or any of the parties listed below must be filed within fourteen days of receipt of this written notice. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the notice or within fourteen days of receipt of the written notice, whichever occurs first.

Under section 120.60(3) of the Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within fourteen days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Frank Huttner Lakeview Hills

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Governor

Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

Permittee:

Sunshine Utilities, Inc.
10230 SE Highway 25
Bellevue, Fl. 34420

Permit Number: WC42-0080698-003

Expiration Date: 05/15/05

County: Marion

Utility: Lakeview Hills

Project: Activated Carbon

Attention: James Hodges, Jr.

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule 62-555, (F.A.C.). The above named permittee is hereby authorized to perform the work shown on the application and approved drawing, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

This project consists of modifying the water treatment plant serving Lakeview Hills Subdivision to include an activated carbon filter system to remove 1,1-Dichloroethene (1,1-DCE). Included are:

- Two 1,500 lb activated carbon units, installed in series on the well discharge piping upstream from the existing chlorine injection point. Maximum flow rating is 75 gpm.
- Associated 2-inch galvanized steel connecting piping and appurtenances

In accordance with the project design engineer recommendations, the following actions and monitoring schedule are incorporated into the permit:

- Replacement of the activated carbon when 1,1-DCE results show breakthrough concentrations in excess of 3.0 ppb (less than 50% of the MCL of 7.0 ppb).
- Sampling every 60 days for 1,1-DCE.
- Monitoring of head loss across the activated carbon filter unit and possible buildup of biological slime growth on the activated carbon media. Excessive biological slime and pressure losses will require removal of the carbon for cleaning and disinfection, and subsequent return of the cleaned carbon media to the filter vessel.

It is estimated by the project design engineer that the proposed unit will provide treatment up to 8.5 months before breakthrough occurs, and that the maximum pumping rate will decline from 75 gpm to 70 gpm due to head losses from the filter bed and additional piping.

General Conditions are attached to be distributed to the permittee only.
DEP FORM 62-1.201(5) Effective November 30, 1982 Page 1 of 5

Frank Huttner/Lakeview Hills *"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violations of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any conditions or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

Permittee:

Sunshine Utilities, Inc.
10230 SE Highway 25
Belleview, Fl. 34420

Permit Number: WC42-0080698-003

Expiration Date: 05/15/05

County: Marion

Utility: Lakeview Hills

Project: Activated Carbon

Attention: James Hodges, Jr.

SPECIFIC CONDITIONS:

1. General condition number 13 does not apply.
2. **A LETTER OF CLEARANCE MUST BE ISSUED BY THE DEPARTMENT PRIOR TO PLACEMENT OF THIS PROJECT INTO SERVICE. FAILURE TO DO SO WILL RESULT IN THE PERMITTEE BEING SUBJECT TO APPROPRIATE ENFORCEMENT ACTION.**

To obtain clearance of the facilities for service, the engineer of record shall submit the enclosed "Request for Letter of Release to Place Water Supply System into Service" [DEP Form 62-555.900(9)] to the Department, a copy of this permit, and a copy of satisfactory bacteriological sample results taken on two consecutive days from the following locations:

1. Between each filter.
2. After the filters.
3. Where water and sewer mains cross with less than 18" vertical clearance, the sewer will be 20' of either ductile iron pipe or concrete encased vitrified clay or PVC pipe, centered on the point of crossing. When a water main parallels a sewer main, a separation (measured edge to edge) at least 10' should be maintained. Where this is not practical, alternate construction methods or materials may be used but must be approved in advance by the Department.
4. This permit does not pertain to any wastewater, stormwater or dredge and fill aspects of this project.
5. The permittee will promptly notify the Department upon sale or legal transfer of the permitted facility. In accordance with General Condition #11 of this permit, this permit is transferable only upon Department approval. The new owner must apply, by letter, for a transfer of permit within 30 days.
6. Replacement of the activated carbon shall be implemented when 1,1-DCE results show breakthrough concentrations in excess of 3.0 ppb (less than 50% of the MCL of 7.0 ppb).
7. Sampling between the filters shall be performed every 60 days for 1,1-DCE.
8. Monitoring of head loss across the activated carbon filter unit and possible buildup of biological slime growth on the activated carbon media shall be performed. Excessive biological slime and pressure losses will require removal of the carbon for cleaning and disinfection, and subsequent return of the cleaned carbon media to the filter vessel.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the Department permit identification number and the county in which the subject matter or activity is located;
- (b) A statement of how and when each petitioner received notice of the Department action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;
- (f) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under section 120.573 of the Florida Statutes is not available for this proceeding.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this order will not be effective until further order of the Department.

Any party to the order has the right to seek judicial review of the order under section 120.68 of the Florida Statutes, by the filing of a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department.

Permittee:

Sunshine Utilities, Inc.
10230 SE Highway 25
Bellevue, FL 34420

Permit Number: WC42-0080698-003

Expiration Date: 05/15/05


County: Marion

Utility: Lakeview Hills

Project: Activated Carbon

Attention: James Hodges, Jr.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


for Christianne C. Ferraro, P.E.
Program Administrator
Water Facilities

ISSUED 5-18-05

CCF:fh:mn

Copies furnished to:

Steven A. Yates, P.E.

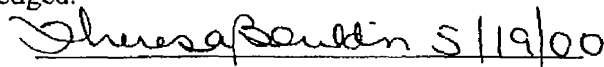
Paul Morrison, DEP Compliance/Enforcement

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certified that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by Certified Mail before the close of business on 5-19-05 to the listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


Theresa Baudin 5/19/05

Clerk

Date