BEFORE THE STATE OF FLORIDA PALM BEACH COUNTY HEALTH DEPARTMENT

PALM BEACH COUNTY

PALM BEACH COUNTY HEALTH DEPARTMENT FILE NO.: WP-098-12

Petitioner,

v.

CITY OF BOCA RATON,

Respondent.

NOTICE OF VIOLATION AND ORDERS FOR CORRECTIVE ACTION

TO: City of Boca Raton Utilities Department 1401 Glades Road Boca Raton, FL 33432

Certified Mail Number 7011 2000 0002 1964 9723

Pursuant to the authority of Section 403.121(2), Florida Statutes ("F.S.") the Palm Beach County Health Department ("Petitioner") gives notice to City of Boca Raton Utilities Department, ("Respondent") of the following findings of fact and conclusions of law with respect to violations of Chapter 403, Florida Statutes ("F.S.").

FINDINGS OF FACT PARAGRAPHS APPLICABLE TO ALL COUNTS

1. The Petitioner is the delegated local program of the Florida Department of Environmental Protection ("Department") authorized under Section 403.182 F.S., having the power and duty to administer and enforce the provisions of the Florida Safe Drinking Water Act, Sections 403.850, et seq., F.S., and the rules promulgated there under in Title 62, Florida Administrative Code (F.A.C.) within Palm Beach County, Florida.

- 2. The Respondent owns and operates a public water system that includes the Boca Raton Water Treatment Plant ("Plant") located at 1401 Glades Road, Boca Raton, Palm Beach County, Florida and the associated distribution system ("System"). The Plant and the System provide drinking water to approximately 128,000 people. The primary source of the Respondent's water supply is the surficial aquifer (Groundwater). The Plant can produce approximately 70 million gallons per day of drinking water using chemical preparation with filtration, including lime softening, coagulation, direct filtration, nanofiltration and disinfection (chlorine and/or chloramines). The public water system has been assigned PWS ID 4500130 and is classified as a Community Water System.
- 3. The Petitioner has investigated several compliance issues associated with the operation and maintenance of the Respondent's public water system. The petitioner's investigation included the following:
- a. Rule 62-555.360, F.A.C. prohibits cross-connections, as defined in Rule 62-550.200, F.A.C., and requires either the elimination of the cross-connection or the installation of an appropriate back-flow prevention device. Rule 62-555.360(5)(c), F.A.C., identifies dual check valves as acceptable for reducing risks from back-flow at residential properties served by reclaimed water unless local codes, ordinances, or regulations require greater levels of back-flow prevention or other hazards exist on the property that requires a greater level of back-flow prevention.

On March 9, 2009 the Department's Southeast District Office forwarded a complaint to the Petitioner, alleging that Respondent installed single check valves at residential properties served by reclaimed water.

Review of the Respondent's Annual Reuse Report, for October 1, 2005 through September 30, 2006, identified the use of single check valves in the reclaimed water service area, the corrective actions being implemented, and a schedule for completion. The corrective actions included the purchase of more then 500 dual and double check valves. The corrective action schedule also called for the completion of the replacement valves at all residential service connections by October 31, 2007.

Additionally, review of an internal memorandum dated November 7, 2007 from the Respondent's Director of Utility Services to the former employee reporting that the Respondent was aware that single check valves had been installed and as of the date of the memorandum all but seven valves had been replaced.

The Petitioner's investigation concluded that the Respondent was in violation of Rule 62-555.360(5), F.A.C., by failing to install the proper cross connection controls on the residential properties that were provided both potable and reclaimed water services, that the Respondent's use of single check valves resulted in a public drinking water system with a lower level of protection from that required by the regulations and the Respondent's own cross connection control program, that the Respondent, the Respondent's Utility Coordinator and the Respondent's Quality Control Manager were aware of the violation prior to August 13, 2007 and as early as May 23, 2006 with the initial purchase of the replacement backflow prevention devices, and that the violation continued through November 7, 2007 as reported in the internal memorandum.

b. Review of Rule 62-555.350(10)(a), F.A.C., which requires suppliers of water to notify the State Warning Point, the appropriate Department District Office or Approved County Health Department, and water customers immediately (i.e., within two hours) after

discovery of any actual or suspected sabotage or security breach, or any suspicious incident, involving a public water system.

On December 16, 2008, the Respondent's Director of Utility Services filed a complaint with the Petitioner regarding the construction and operation of a privately owned and maintained chemical injection system connected to the Respondent's drinking water distribution system. The Respondent reported that their investigation found two sheds equipped with chemical storage drums and pumps used to inject chemicals into the drinking water distribution system. The Respondent also reported the name of a local engineer that was allegedly responsible for the design and operation of the chemical injection systems. On December 16, 2008, the Respondent's Director of Utility Services was advised by the Petitioner's Water Programs Administrator to report the security breach to the State Warning Point as soon as possible.

The Petitioner investigated the complaint and located the reported sheds as described by the Respondent. In each shed the Petitioner found the chemical injection systems that included the empty drums and disconnected pumps. Upon further investigation, the Petitioner determined that the chemical injection system was neither permitted nor approved by the Petitioner, was maintained by a person that was not licensed as a drinking water operator, was connected to the Respondent's drinking water system for more than eight (8) years, was subject to vandalism during the eight (8) years of operation, and, the Respondent was aware of the illegal chemical injection systems as early as November 18, 2008.

The Petitioner's investigation concluded that the illegal chemical injection systems represented a serious security breach of the Respondent's drinking water distribution system. The Respondent was required to notify the State Warning Point (SWP), Department

District Office, the Petitioner (approved local health department), and the affected customers immediately (i.e., within two hours) after discovery of any actual or suspected sabotage or security breach, or any suspicious incident, involving a public water system. The Department District Office, the Petitioner (approved local health department), nor the affected customers were informed of the security breach at the time it was discovered. The Respondent did not notify the SWP when it discovered the suspicious incident in November 2008, nor when directed to do so in December 2008. Notification to the Department was received on December 16, 2008, twenty-eight (28) days after the Respondent was notified and verified the illegal chemical injection systems.

c. Review of Rule 62-550.800, F.A.C., which incorporates the Federal regulations (40 CFR Part 141, Subpart I – Control of Lead and Copper) associated with lead and copper into the State regulations by reference. 40 CFR 141.87(d) requires large systems (serving >50,000 population) to measure the applicable water quality parameters in accordance with 40 CFR 141.87(c) every six months with the first six-month period to begin on either January 1 or July 1, whichever comes first following the designation of the optimum values by the State, to determine compliance in accordance with 40 CFR 141.82(g).

On April 3, 2008 the Petitioner, as the approved local health department, designated the optimum water quality parameters for the Respondent's community water system. The sampling period, which began on July 1, 2008 and ended on December 31, 2008, required the Respondent to collect two samples from each sampling tap in accordance with 40 CFR 141.87(c). For the Respondent's community water system, water quality parameters are required to be collected from 25 sampling taps within the distribution system, for a total of 50 samples.

On January 12, 2009, the Petitioner received the results of the Respondent's sampling for water quality parameters. The sampling results included data for the point of entry for every two weeks during the sampling period and for 25 sampling taps. Review of the data for the 25 sampling taps revealed that only one sample was collected by the Respondent during the compliance period, and compliance with 40 CFR 141.82(g) could not be determined. The Petitioner's review of the data concluded that the Respondent failed to collect the required number of samples in accordance with 40 CFR 141.87(c) and (d).

d. Review of Rule 62-555.315(6)(d), F.A.C., which specifies that no disinfected well shall be placed into, or returned to, operation until a bacteriological survey or evaluation has been completed if required by Rules 62-555.315(6)(b) or (c), F.A.C., the results of the survey or evaluation have been submitted to the appropriate Department District Office or approved county health department if a survey or evaluation is required, and said Department District Office or ACHD has approved the well for operation.

On January 21, 2010, the Petitioner notified the Respondent, in writing, that as a result of the triggered monitoring conducted on the source water wells, Wells 26 and 40 West had to be disinfected and surveyed for bacteriological contamination. On February 9, 2010, the Petitioner and Respondent met and discussed the disinfection and sampling requirements. As a result of the meeting, it was agreed that only Well 26 West needed to be disinfected and surveyed. Following the meeting the Petitioner approved a sampling schedule reducing the 20 day sampling (one sample per day) to two samples per day on 10 consecutive days, as allowed by regulations.

On March 17, 2010, the Petitioner received the microbiological survey results from Well 26. The results were determined to be invalid because the Respondent failed to

monitor and report the disinfectant residual (chlorine) levels within the well as required. The Petitioner notified the Respondent of the invalidation, on March 18, 2010, and returned the survey results. The Respondent reported to the Petitioner that Well 26 West had been placed back in service, on March 18, 2010, without verifying approval, and that the raw water from Well 26 West was diverted out of the Plant feed on March 19, 2010.

The Petitioner's review of the data concluded that the Respondent failed to determine the disinfectant residual levels within the well water during the collection of the bacteriological samples during the survey and placed the well into service without approval from the Petitioner as required by Rule 62-555.315(6)(d), F.A.C.

COUNT I

4. The Respondent used single check valves as a back-flow prevention device on residential properties in areas with reclaimed water systems between May 23, 2006 and November 7, 2007 (533 days). The regulations do not consider single check valves as back-flow prevention devices. In areas with reclaimed water systems the regulations have identified the use of a dual check valve as acceptable for reducing risks from back-flow unless local codes, ordinances, or regulations require greater levels of back-flow prevention or other hazards exist on the property that requires a greater level of back-flow prevention. Single check valves are not approved for use as a back-flow prevention devices, and do not provide a greater level of back-flow protection from the dual check valves specified by Rule 62-555.360(5), F.A.C.

COUNT II

5. The Respondent investigated and discovered an illegal chemical injection system connected to the drinking water distribution system that was being operated and maintained by an unlicensed operator under the direction and control of a local engineer. Upon discovery of the

public water system's security breach, the Respondent had a duty to immediately (i.e., within two hours) notify the State Warning Point, the Petitioner (Approved County Health Department) and the water customers. The Respondent notified the Petitioner twenty-eight (28) days after discover, and never notified the State Warning Point or the water customers.

COUNT III

6. The Respondent collected an insufficient number of tap water samples for determining compliance with the State specified optimum water quality parameters in accordance with the Federal Lead and Copper regulations. The regulations required the collection of a minimum two samples from each of the 25 sampling taps. During the sampling period, the Respondent collected only one sample from each of the 25 sampling taps.

COUNT IV

7. The Respondent, following the bacteriological survey of Well 26 West and submittal of the sampling results, placed the water supply well into service prior to obtaining approval from the Petitioner. The Respondent's sampling results were found to be invalid because residual disinfectant levels were not measured or recorded during the collection of the sample as required. Upon notification of the invalidation of the sampling results, the Respondent reported to the Petitioner that they had placed the well in service for two days.

COUNT V

8. The Department has incurred expenses to date while investigating this matter in the amount of not less than \$2,500.00.

CONCLUSIONS OF LAW

The Petitioner has evaluated the Findings of Fact with regard to the requirements of Chapter 403, F.S. and F.A.C. Title 62. Based on the foregoing facts the Petitioner has made the following conclusions of law:

- 1. Respondent is a "person" within the meaning of Section 403.852, F.S.
- 2. Respondent operates a public water system as defined in Section 403.852(2), F.S., Rule 62-550.200(70), F.A.C., and 40 CFR 141.2.
- 3. The facts related in Count I constitute a violation of Rule 62-555.360, F.A.C., which prohibits cross-connections as defined in Rule 62-550.200, F.A.C., unless the appropriate back-flow prevention device is installed. The facts also constitute a violation of Section 403.859(2), F.S., which makes it a violation to fail to comply with Department rules. The violation is subject to a maximum penalty of \$5,000 per day as allowed by Section 403.860(1), F.S. for each day the single check valves were in use.
- 4. The facts related in Count II constitute a violation of Rule 62-555.350(10), F.A.C., which requires the Respondent to notify the State Warning Point (SWP) immediately (i.e., within two hours) after discovery of any actual or suspected sabotage or security breach, or any suspicious incident, involving a public water system. The facts also constitute a violation of Section 403.859(2), F.S., which makes it a violation to fail to comply with Department rules. The violation is subject to a maximum penalty of \$5,000 per day as allowed by Section 403.860(1), F.S.
- 5 The facts related in Count III constitute a violation of 40 CFR 141.87(a)(2)(i), as adopted, which requires each large water system to collect two tap samples from each site for applicable water quality parameters during each six month monitoring period. The facts also

constitute a violation of Section 403.859(2), F.S., which makes it a violation to fail to comply with Department rules. The violation is subject to a maximum penalty of \$5,000 per day as allowed by Section 403.860(1), F.S.

- 6. The facts related in Count IV constitute a violation of Rule 62-555.315(6)(d), F.A.C., which requires Department approval prior to placing a well back in service after a bacteriological survey required under Rule 62-555.315(6)(b), F.A.C., as required under Rule 62-555.315(6)(f), F.A.C. The facts also constitute a violation of Section 403.859(2), F.S., which makes it a violation to fail to comply with Department rules. The violation is subject to a maximum penalty of \$5,000 per day as allowed by Section 403.860(1), F.S. for each day the well was in service.
- 7. The costs and expenses related in Count V are reasonable costs and expenses incurred by the State while investigating this matter, which are recoverable pursuant to Section 403.141(1) F.S.

ORDERS FOR CORRECTIVE ACTION

The Petitioner has alleged that the activities related in the Findings of Fact constitute violations of Florida law. The Orders for Corrective Action state what you, Respondent, must do in order to correct and redress the violations alleged in this Notice.

The Petitioner will adopt the Orders for Corrective Action as part of its Final Order in this case unless Respondent files a timely petition for a formal hearing or informal proceeding, pursuant to Section 403.121, F.S. (See Notice of Rights.) If Respondent fails to comply with the corrective actions ordered by the Final Order, the Petitioner is authorized to file suit seeking judicial enforcement of the Petitioner's Order pursuant to Sections 120.69, 403.121 and 403.131, F.S.

Pursuant to the authority of Sections 403.061(8) and 403.121, F.S., the Petitioner proposes to adopt in its Final Order in this case the following specific corrective actions that will redress the alleged violations:

- 1. Respondent shall forthwith comply with all Department rules regarding public water systems. Respondent shall correct and redress all violations in the time periods required below and shall comply with all applicable rules in Chapters 62-4, 62-550, 62-555 and 62-560, F.A.C.
- 2. Commencing immediately and henceforth, Respondent shall comply with the requirements of Rule 62-555.360, F.A.C., and shall immediately (i.e., within 24 hours) eliminate any cross-connections as defined in Rule 62-550.200, F.A.C., through the use of the appropriate back-flow prevention device or discontinue service until the contaminant source is eliminated.
- 3. Commencing immediately and henceforth, Respondent shall comply with the requirements of Rule 62-555.350(10)(a), F.A.C., and notify the State Warning Point immediately (i.e., within two hours) after discovery of any actual or suspected sabotage or security breach, or any suspicious incident, involving the public water systems.
- 4. Commencing immediately and henceforth, Respondent shall comply with the requirements of Rule 62-550.800, F.A.C. (40 CFR Part 141, Subpart I Control of Lead and Copper) and shall demonstrate compliance with the optimum water quality parameters as specified by Petitioner.
- 5. Commencing immediately and henceforth, Respondent shall comply with the requirements of Rule 62-555.315(6)(d), F.A.C., and shall obtain approval from the Petitioner prior to placing any well that required approval into service.

- 6. Within 90 days of the effective date of this Order, Respondent shall submit to the Petitioner a revised Cross-Connection Control Program for review and approval. The revised program shall include the following:
- a. Draft revisions to the City Ordinance governing cross-connections with the public water system that ensures compliance with Rule 62-555.360, F.A.C., and is consistent with the requirements and definitions of the regulations and the American Water Works Associations Manual M14, second edition, as adopted.
- b. Inventory of all residential properties provided reclaimed water service within the reclaimed water system. The inventory shall include, for each residential property, the street address, the manufacturer's name and model number of the back-flow prevention device, the size, the type, the installation date and the last visual inspection date.
- c. An enhanced inspection program for the reclaimed water service area. The program shall, as a minimum, include visual inspections of the area, complaint investigation procedures, notification procedures, and annual visual inspections of all non-testable double check valve assemblies being used as dual check valves.
- 7. By no later then December 31, 2013, the Respondent shall replace all dual check valves that have been in use within the reclaimed water service area for 5 or more years with either new dual or new/repaired double check valves.

During replacement, the Respondent shall document the street address, the manufacturer's name and model number, the size, the type of dual or double check valve removed and re-installed. The Respondent's inventory shall be revised monthly and submitted to the Petitioner with the Monthly Operations Report.

8. By no later then December 31, 2013, the Respondent shall replace all non-testable double check valve assemblies currently in use at residential properties within the reclaimed water service area with either new dual check valves or new/repaired double check valves. Each double check valve removed from service shall be tested in accordance with standard procedures and a pass/fail rate determined. During replacement, the Respondent shall document, the size, type, manufacturer and model number of each double check valve removed from service and the size, type, manufacturer and model number of the dual or double check valve installed.

Beginning Calendar Year 2014, the Respondent shall replace the double check valves at a rate of no less then 20 percent of per calendar year (Every 5 years) based on an annual failure rate of no greater then ten percent. If the failure rate exceeds ten percent, the Respondent shall increase the replacement rate to 50 percent per year (Every 2 years).

The Respondent shall calculate the failure rate based on a cumulative total for each Calendar Year beginning with the initial test results of the first 15 double check valves removed from service. The failure rate shall be reported to the Petitioner within the Monthly Operations Report.

9. Within 180 days of the effective date of this Order, the Respondent shall hire a consultant(s) to review and assess the existing systems (Procedures, policies, verbal orders, staff interviews, etc..) in place within the Utilities Department that are used to monitor and report actual or suspected sabotage, security breaches, or suspicion incidents, notify the appropriate

staff and agencies, and investigate occurrences. The review and assessment shall be conducted in accordance with the following:

- a. The selected consultant(s) shall have no actual or perceived conflict of interest with the Respondent's Utilities Department. This includes any pending contracts, existing contracts or past contracts (within the past seven years) with the Utilities Department.
- b. The selected consultant(s) shall include at least three individuals including one security professional with experience in drinking water plant and distribution system security; one licensed drinking water plant operator (Class A) with experience with systems of similar size and complexity, and one licensed distribution system operator with experience monitoring distribution system security issues. No member of the assessment team may be a current or former employee of the Respondent's Utilities Department (Within the past 10 years).
- c. Within 90 days of selection, the consultant shall submit a final report on their findings and recommendations to the Petitioner and the Respondent.
- d. Within 180 days of receipt of the assessment report, the Respondent shall initiate any corrective actions recommended by the consultant. All corrective actions shall be fully implemented with 365 days of receipt of the assessment report.
- 10. Within 30 days of the effective date of this Order, Respondent shall make payment to the Petitioner for costs and expenses in the amount of \$2,500. Payment shall be made by cashier's check or money order payable to the "Palm Beach County Health Department" and shall include thereon the File number assigned to this case and the notation "Program 58 Costs" The payment shall be sent to Palm Beach County Health Department, Attn: Pamela Lape, 4th Floor, 800 Clematis Street, West Palm Beach, Florida 33401.

NOTICE OF RIGHTS

Respondent's rights to negotiate or litigate this action are described below. Please read them carefully.

Right to Negotiate

1. This matter may be resolved if the Petitioner and Respondents enter into a Consent Order, in accordance with Section 120.57(4), Fla. Stat., upon such terms and conditions as may be mutually agreeable.

Right to Request a Hearing

- 2. Respondent has the right to a formal administrative hearing pursuant to Sections 120.569 and 120.57(1), F.S., if Respondent disputes issues of material fact raised by this Notice of Violation and Orders for Corrective Action ("Notice"). At a formal hearing, Respondent will have the opportunity to be represented by counsel or other qualified representative, to present evidence and argument on all issues involved, and to conduct cross-examination and submit rebuttal evidence.
- 3. Respondent has the right to an informal administrative proceeding pursuant to Sections 120.569 and 120.57(2), F.S., if Respondent does not dispute issues of material fact raised by this Notice. If an informal proceeding is held, Respondent will have the opportunity to be represented by counsel or other qualified representative, to present to the agency written or oral evidence in opposition to the Petitioner's proposed action, or to present a written statement challenging the grounds upon which the Petitioner is justifying its proposed action.
- 4. If Respondent desires a formal hearing or an informal proceeding, Respondent must file a written responsive pleading entitled "Petition for Administrative Proceeding" within

20 days of receipt of this Notice. The petition must be in the form required by Rule 28-106.2015, F.A.C. and include the following:

- (a) The Petitioner's Notice identification number and the county in which the subject matter or activity is located;
- (b) The name, address, and telephone number, and facsimile number (if any) of each petitioner;
- (c) The name, address, telephone number, and facsimile number of the attorney or qualified representative of respondent, if any, upon whom service of pleadings and other papers shall be made;
- (d) A statement of when petitioner received the Notice; and
- (e) A statement requesting an administrative hearing identifying those material facts that are in dispute. If there are none, the petition must so indicate.

A petition is filed when it is <u>received</u> by the Petitioner's Office of General Counsel, 800 Clematis Street, West Palm Beach, Florida 33401.

Right to Request Mediation

5. Respondent may request mediation after filing a petition for hearing. Requesting mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The mediation will be held if the parties enter a written agreement, which is described below, within 30 days after receipt of the NOV. The mediation must be completed within 60 days of the agreement unless the parties otherwise agree.

The agreement to mediate must include the following:

- (a) The names, addresses, and telephone numbers of any persons who may attend the mediation;
- (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;
 - (c) The agreed allocation of the costs and fees associated with the mediation;
- (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;
- (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;
- (f) The name of each party's representative who shall have authority to settle or recommend settlement; and
 - (g) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Petitioner must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Petitioner have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above, and must therefore file their petitions within 21 days of receipt of this notice. If mediation terminates without settlement of the dispute, the Petitioner shall notify the Respondent in writing that the administrative hearing processes under

sections 120.569 and 120.57 remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

Waivers

6. Respondent will waive the right to a formal hearing or an informal proceeding if a petition is not filed with the Petitioner within 20 days of receipt of this Notice. These time limits may be varied only by written consent of the Petitioner.

General Provisions

- 7. The allegations of this Notice together with the Orders for Corrective Action will be adopted by the Petitioner in a Final Order if Respondent fails to timely file a petition for a formal hearing or informal proceeding, pursuant to Section 403.121, F.S. A Final Order will constitute a full and final adjudication of the matters alleged in this Notice.
- 8. If Respondent fails to comply with the Final Order, the Petitioner is authorized to file suit in circuit court seeking a mandatory injunction to compel compliance with the Order, pursuant to Sections 120.69, 403.121, 403.131, and 403.860, F.S. The Petitioner may also seek to recover damages, all costs of litigation including reasonable attorney's fees and expert witness fees, and civil penalties of not more than \$5,000 per day for each day that Respondent has failed to comply with the Final Order.
- 9. This matter may be resolved if the Petitioner and Respondent enter into a Consent Order, in accordance with Section 120.57(4), F.S., upon such terms and conditions as may be mutually agreeable.
- 10. The Petitioner is not barred by the issuance of this Notice from maintaining an independent action in circuit court with respect to the alleged violations. If such action is

warranted, the Petitioner may seek injunctive relief, damages, civil penalties of not more than \$5,000 per day, and all costs of litigation.

Interim Director

STATE OF FLORIDA

DEPARTMENT OF HEALTH

Division of Environmental Public Health

Copies furnished to:

L. Brien, FDEP - Southeast District Office