

## **PROGRESS REPORT**

### **RIVIERA BEACH SPECIAL UTILITY DISTRICT**

**February 21, 2017**

**Bevin A. Beaudet, P.E., LLC**

#### **Drinking Water Quality**

During the past month since the last Progress Report all of the District's 40 city-wide drinking water samples continue to meet or significantly exceed water quality standards without exception. The District staff continues to use its successful flushing regime, although as previously reported it is highly manpower intensive. Two items currently being prepared for Board action will greatly assist long-term, reliable water quality in the entire system: improvements to the facilities at Ave U Booster Station and an intensive training program for the Water Treatment Plant operators. The Avenue U facility improvements are on this agenda for Board approval.

#### **Wellfield Rehabilitation**

As a result of the District's on-going well rehabilitation program, progress has been made in bringing more wells into full service. Of the District's 27 drinking water wells, 16 are now fully operational. Seven wells are functional but operating at reduced capacity and are in line to be rehabilitated. Five wells remain out of service and will be repaired. The District has two well contractors working to restore full service to the entire wellfield.

#### **Work at the Water Treatment Plant**

The WTP Unit 3 By-Pass project is underway with a projected late April completion date. Completion of this project will allow the operation of Unit 3 and greatly improve the color and treatability of the District's drinking water. This project is a temporary solution only. Permanent repair of Treatment Unit #3 cannot be achieved until the planned structural repairs are made to the North Chemical Tower. An engineer needs to be selected to design and prepare bid documents for these structural repairs.

The Chem-Scan Ammonia and Chloramine controller has been received and procurement of a control company to install and calibrate the unit is underway. This improvement will greatly assist the water treatment plant operators in controlling finished water quality.

The curricula for a comprehensive training program for the Water Treatment Plant operators is being developed and negotiated with the Florida Rural Water Association. The purpose of this program will be to train the operators in the operation of the plant in its current configuration and to prepare them for their new operational duties as the plant is modified and rehabilitated in the future. The training will also include assistance in developing written operating

procedures. Updated written operating and maintenance procedures are a requirement of the PBCHD Consent Order.

### **Work at Avenue U Pumping Station and Tank**

The Utility District staff has evaluated and chosen the most cost effective and technically efficient way in which to improve water quality leaving the tank and serving the far Western reaches of the distribution system, including Gramercy Park. Staff decided that a design-build approach to the project would be the quickest way to complete these critical improvements. On your February Board meeting agenda is an agreement with Globaltech Design-Builders to perform these improvements, which include the addition of a mixer to the water storage tank, automated water quality sensors, new liquid chlorine and ammonia chemical addition equipment and modification of chemical addition locations. Improving the ability to boost chloramine residual at Ave U is one of the most critical improvements needed for permanent and cost effective compliance with the PBCHD consent order.

### **Consent Order Compliance**

1. FDEP Consent Order WP-15-0459 – The District is in full compliance with the Consent Order at this time. All deadlines to date have been met.
  - The engineering firm BFA Engineers has completed a draft report which updates the condition assessment of all the wastewater force main pipeline aerial crossings over canals in the Utility District. This update will be used as a blueprint to prioritize, design and construct any needed repairs that will decrease the potential for spills.
  - As previously reported, future requirements require the District to adhere to its Capital Plan in conducting system improvements on Lift Stations and pipeline renewal. The rehabilitation of Lift Stations 10 and 50 is a project which the District is committed to complete for Consent Order compliance. The FDEP is being kept apprised of the District's progress in choosing the new contractor for the project, as well as the projected schedule for completion.
  - Repair and replacement of lift station pumps, motors and control equipment is currently underway and significant progress has been achieved in upgrading numerous lift station. There is still much more work to be done in this area, however.
  - The design and preparation of bid specifications of Pump Station 47 is the next major project in the District's Capital Plan needed to be done under the Consent Order. Once a full slate of consulting engineers is selected by the District Board, this engineering work order needs to be assigned as soon as possible. An item is on the February Agenda for the Board with staff's recommendation for consulting engineers based on the CCNA selection performed in January.
2. PBCHD Consent Order WP-020-16 – The District is in full compliance with the Consent Order at this time. All deadlines to date have been met.

- Required monitoring and flushing is being conducted, as is the finalization of a workable flushing plan to be submitted to the PBCHD.
- Repair and replacement of pumps, motors and other electrical and mechanical equipment is being conducted. These repairs are required by the Consent Order based on the US Water Assessment Report.
- As previously reported, improvements to the Ave U repump station and storage tank, as well as the Unit 3 by-pass are underway or will be underway soon.

### **Future Planned Work**

1. Continuation of water quality monitoring, flushing and reporting.
2. Continued work on well repair and rehabilitation.
3. Complete development of a curriculum for a water treatment training program and SOP development and finalize an agreement with skilled trainers to conduct the program.
4. Issuance of an engineering task to finalize the structural repair of the North Chemical Building.
5. Issuance of an engineering task to design and prepare bid documents for the rehabilitation of Pump Station 47.
6. Issuance of an engineering task to modify the completed design of the new disinfection building to include ammoniators. When this task is complete, this project will be ready to be bid and it is a critical project for compliance with the PBCHD Consent Order.
7. Continue to work on priority Issues identified in the Five Year Improvement Plan and to keep the Board informed of obstacles and of progress.
8. Priority needs to be assigned to the replacement and hiring of high level staff.