Brown Water Plan of Action - 180-Day Update:

1. **Water System Flushing:** Complete system flushing was accomplished in March and August of 2004. A partial system flushing was performed in late May. Fire flow testing for the Hydraulic Model was completed in October. Another system wide flushing is tentatively scheduled for November 2004. This is an ongoing action and is now part of routine system maintenance.

2. **WTP Routine Maintenance:** The required maintenance was completed in May 2004. The plant is now on-line. A total of 8 employees are assigned to the treatment / production facilities. Currently, the WTP operates 8 hours per day / 5 days per week.

3. **Well #2:** This facility was placed back into production in late March 2004. No additional problems have occurred at this facility since the motor and pump have been replaced. This facility is scheduled for a Variable Frequency Drive (VFD); however, some modifications to the building must be completed prior to the installation of the equipment.

4. **Water Quality RFQ (Request for Qualifications):** Staff received three (3) submittals from consulting engineering firms. Staff selected Black & Veatch as our consultant based on qualifications. $15,000 is allotted in the FY-2005 Operating Budget for these services. A project kick-off meeting was held on Monday, September 13, 2004. A scope of consulting services is currently being developed. This scope includes an evaluation of the historic and current water quality, an evaluation of the level of corrosiveness in the City's system, an evaluation of the pipe types and usage based on the hydraulic model, coupon testing, impact of pending regulations, Lead / Copper Rule compliance, hydraulic model support, and recommendations for the City's annual main rehabilitation/replacement program.

5. **Increase pH concentration from the WTP:** The water being produced from the plant has maintained a pH of 7.8-8.2 since these adjustments were made. As stated previously, we now have the ability to run the plant on a 24/5 schedule, if necessary, on a limited time frame.

6. **Convert WTP to baseline flow:** System wide demand does not warrant placing this facility into baseline flow. The average cost of water produced at the plant is higher than water produced at the other points of entry into the system.

7. **Use of Water Plant SCADA to develop more stable flow scenario:** This action is now part of our normal operating procedures to run a dynamic water system.

8. **Use of the hydraulic model to develop a unidirectional flushing program:** The field data to calibrate the hydraulic model was completed in early October. Whitman Requardt & Associates is currently calibrating the model to reflect the actual field conditions. The final data transfer for this adjustment was completed on Monday, October 25, 2004. The program will be further developed once the model is complete.

9. **Pursue the replacement/ relining of the unlined cast iron section of the distribution system:** To date in FY-2005, the following pipe improvements have been completed:

   - A total of 35 galvanized water services have been replaced.
   - 875 L.F. of 4" cast iron pipe (circa 1940) was disconnected by city crews on West Street.
   - 705 L.F. of 10" cast iron pipe (circa 1971) was replaced with DIP on Walker Road (related to the Walker Road Transportation Project).
   - 250 L.F. of 2" galvanized pipe (circa 1961) was replaced by city crews with 6" DIP on Woodburn Circle.
   - Staff is considering the replacement of approximately 8,000 L.F. of various diameter pipes on South Governors Avenue from Water Street to Webbs Lane with a new 12" DIP water main to improve transmission and remove old pipe.
   - The construction crew is scheduled to replace 770 L.F. of 4" transite pipe with DIP on Sackarackin Avenue during the winter of 2004/2005.
   - Other projects are being developed by City staff at this time.

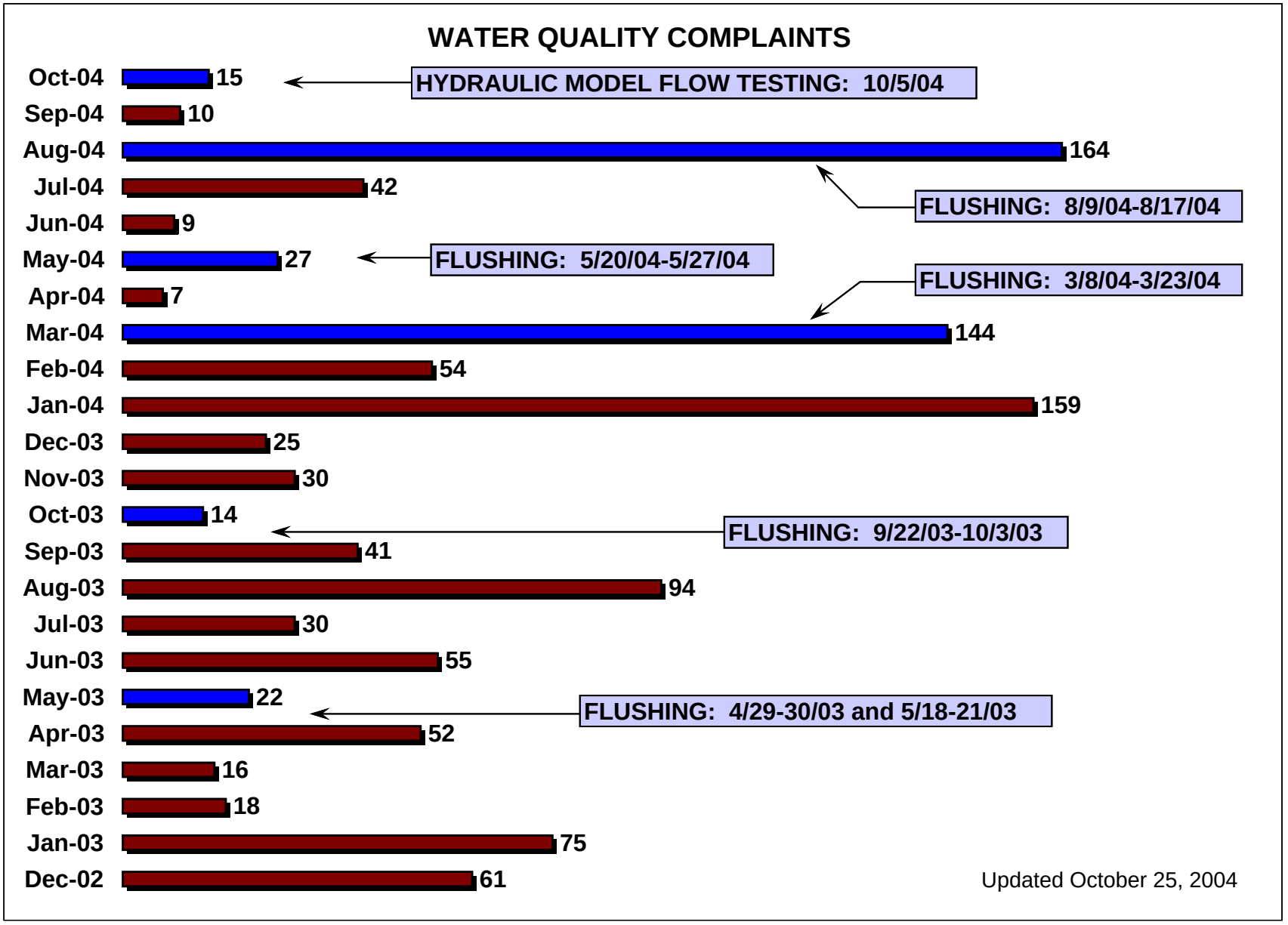
10. **Corrosion Inhibitors:** The evaluation of corrosion inhibitors will be part of the work to be conducted by Black & Veatch. The preliminary scope of work being developed at this time also includes information referenced previously in this document.

Prepared by Scott D. Koenig, P.E., Director of Public Works
Updated October 25, 2004

WATER SYSTEM PLAN OF ACTION SUMMARY

ACTION ITEM	COMPLETE	IN PROGRESS	INACTIVE	COMMENTS
1. System Flushing				Quarterly – Maintenance Operations
2. WTP Maintenance				Annual – Maintenance Operations
3. Well #2 Online				VFD Installation Pending
4. Water Quality RFQ				Consultant Selected September 2004
5. pH Control				Continuous - Operations
6. WTP Baseline Flow				Future Strategy
7. Improve Stable Flow				Continuous – Maintenance Operations
8. Unidirectional Flushing				Related to Master Plan
9. Reline/Replace Pipe				Long Term Program Being Developed
10. Corrosion Inhibitor				Part of Water Quality Consultant Scope of Work

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WATER QUALITY COMPLAINTS
Oct-04
15
HYDRAULIC MODEL FLOW TESTING: 10/5/04
Sep-04
10
Aug-04
164
Jul-04
42
FLUSHING: 8/9/04-8/17/04
Jun-04
9
May-04
27
FLUSHING: 5/20/04-5/27/04
FLUSHING: 3/8/04-3/23/04
Apr-04
7
Mar-04
144
Feb-04
54
Jan-04
159
Dec-03
25
Nov-03
30
Oct-03
14
FLUSHING: 9/22/03-10/3/03
Sep-03
41
Aug-03
94
Jul-03
30
Jun-03
55
May-03
22
FLUSHING: 4/29-30/03 and 5/18-21/03
Apr-03
52
Mar-03
16
Feb-03
18
Jan-03
75
Dec-02
61
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FOR IMMEDIATE RELEASE

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City of Dover, Delaware, Hires New Electric Director

DOVER, DE – October 25, 2004 – Steven R. Sax has been hired as the City of Dover's Electric Director, replacing Mr. Lester Blakeman who will be retiring the end of January 2005.

Mr. Sax received a Bachelor of Science degree in Electrical Engineering from Purdue University and a Master's Degree in Utility Planning from Georgia Institute of Technology.

Mr. Sax has over 25 years' experience in Utility Management and Operations. He is the current Chairman of the Tennessee Valley Authority Public Power Association's Emergency Response Team and has been instructing senior management level training classes for rural electric systems across the country. He is the former General Manager, Fort Payne, Alabama Improvement Authority and also held positions in Community and Industrial Relations and Development at the Tennessee Valley Authority.

Mr. Sax has been active with the Fort Payne and Colbert County Chamber of Commerce and has been involved with the Colbert County Convention and Visitors' Bureau, DeKalb County Tourism Association and Fort Payne Rotary Club.

Mr. Sax will be starting as the City of Dover Electric Director on November 15, 2004. He and his wife, Patsy, will be relocating to the Dover area.

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