Technical Expert Working Group Conference Call

Friday December 3rd, 2010
10:00 – 11:00 a.m.

CALL SUMMARY

Attendees:

EPA Region 3 and contractors: Jennie Saxe, Laura Dufresne, Ken Klewicki

EPA Cincinnati: Dave Wahman

The Washington Aqueduct and contractors: Lloyd Stowe, Shabir Chouhary, Tom Jacobus, Vanessa Speight

DCWASA and contractors: Rich Giani, Maureen Schmelling, John Civardi, Steve Reiber

City of Falls Church: Robert Etris

Parents for Nontoxic Alternatives: Ralph Scott, Yanna Lambrinidou

Clean Water Action: Paul Schwartz

Agenda and Housekeeping Issues

There were no changes or additions to the agenda. The meeting agenda is included as Attachment A to this call summary. Jennie Saxe noted that the Children's National Medical Center was no longer a regulated public water system and would be removed from the attendees list, although they are still invited to join the calls.

Summary of Discussions by Topic Area

1. Washington Aqueduct Pipe Loop Update

Prior to the call, Mike Chicoine distributed graphs showing total and dissolved lead results for the control pipe loop. In general, historic trends have continued with a decrease in total lead as water temperature decreased over the last several months. There was one outlier value of approximately 75 μg/L for total lead in September. The graphs show that this outlier is mainly particulate lead. The Aqueduct's contractor, CDM, has been looking into the excursion and believes it was caused by a physical disturbance of the pipe loop by maintenance workers in the area. Yanna Lambrinidou asked about the possibility of this type of disturbance and particulate lead spike occurring in the distribution system. Rich Giani responded that DC Water also observed temporary increases in particulate lead in their pipe loops as a result of physical disturbance, so this may be a possibility in the system.

The Aqueduct provided an update on two new pipe loops that are currently being designed and installed by CDM. One will be operated at McMillan, and the other at Dalecarlia. In

response to questions about the new pipe loop configurations, Lloyd Stowe explained that the main difference between the existing and new design is that in the new pipe loops, the lead service lines will be installed horizontally. Lloyd noted that the Aqueduct is working to minimize the length of piping between the finished water withdrawal point and the loops. Part of the feed piping from the finished water reservoir was also replaced with plastic pipe to minimize water quality changes. DC Water provided lead service line sections for the new loops to the Aqueduct several months ago. The Aqueduct has kept the service lines wet and conditioned.

2. DC Water's Pipe Loop Update

Rich Giani distributed DC Water's latest pipe loop data prior to the call. The historic trends in the DC Water control loop are continuing. There was a slight dip in lead levels recently with the colder weather.

3. Preliminary Results of LCR Monitoring

To date, DC Water has analyzed a total of 84 LCR compliance samples for the current sampling round. The sample set has 90th percentile values of 6 μg/L for first draw samples and 10 μg/L for the second draw samples. Of all of the first- and second-draw samples analyzed to date, only 6 samples (2 first-draw and 4 second-draw) exceeded the lead action level of 15 μg/L. Four of these come from residences that are confirmed to have galvanized piping. The other two houses are suspected of having galvanized piping due to correlations of high lead with high iron in the samples.

4. Update on Washington Aqueduct Treatment Changes (Addition of Caustic Soda and Disinfectant Change from Chlorine Gas to Sodium Hypochlorite)

Shabir Choudhary provided an update on the Washington Aqueduct treatment changes. The project is approximately 90 percent complete. The caustic soda and hypochlorite chemical feed systems are expected to be online at Dalecardia by the end of January. The caustic soda feed system will be online at McMillan by the end of February. CDM is evaluating water quality parameters including oxidation reduction potential, pH, alkalinity, orthophosphate, CSMR, and distribution system data provided by DC Water to look for trends.

5. Call Schedule for 2011

Jennie indicated that unless there were other suggestions the calls would continue on a quarterly schedule on the 4th Friday of the second month of each quarter. If that date falls on a holiday weekend, the call will be postponed. TEWG call participants did not object to the schedule, so the tentative call schedule for 2011 is:

- February 25
- June 3
- August 26

- December 2

6. Other Items

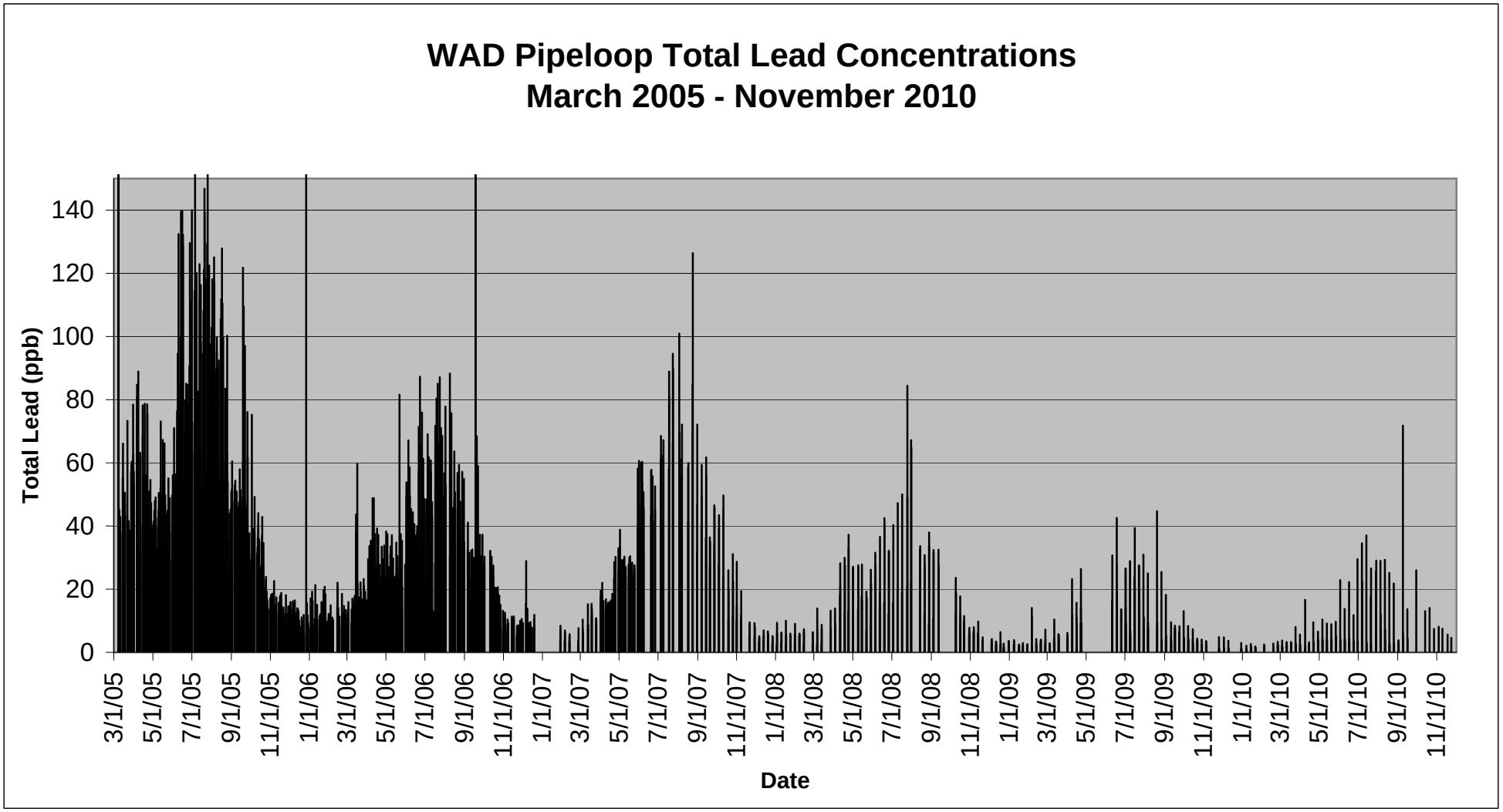
Jennie Saxe asked if the Aqueduct would be posting results of the treatment alternatives study. Lloyd Stowe noted that they are finalizing workshop minutes and will publish them. They are also expecting a final report from Malcolm Pirnie in a few months.

Ralph Scott asked if there would be changes to DC Water's lead service line replacement program as a result of the recent report released by CDC on blood lead levels. Jennie Saxe noted that EPA and DC Water had been aware of the report contents and that DC Water has already responded by offering filters and lead testing. Ralph also asked if the study would have any impacts on revisions to the LCR. Jennie noted that the study would be part of the body of literature reviewed for the long-term revisions.

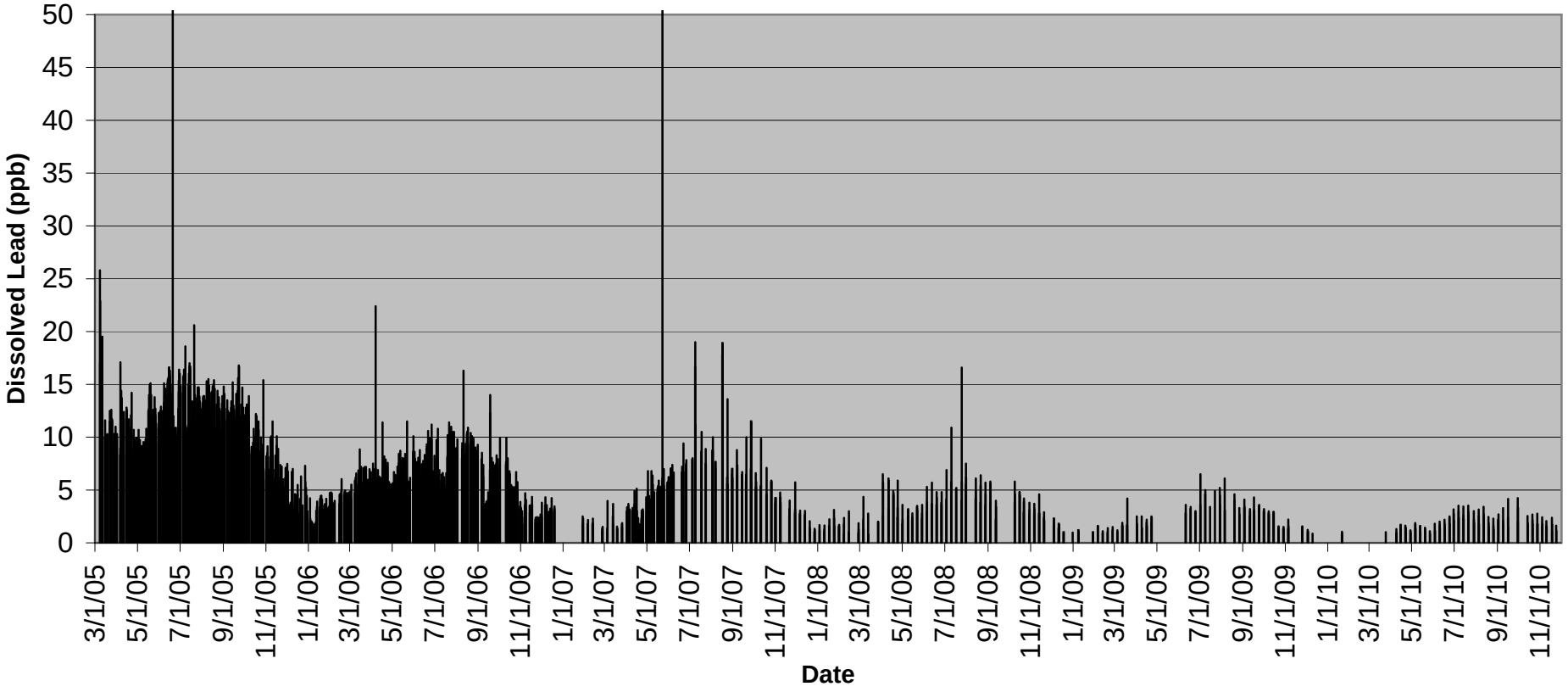
Attachment A: Call Agenda

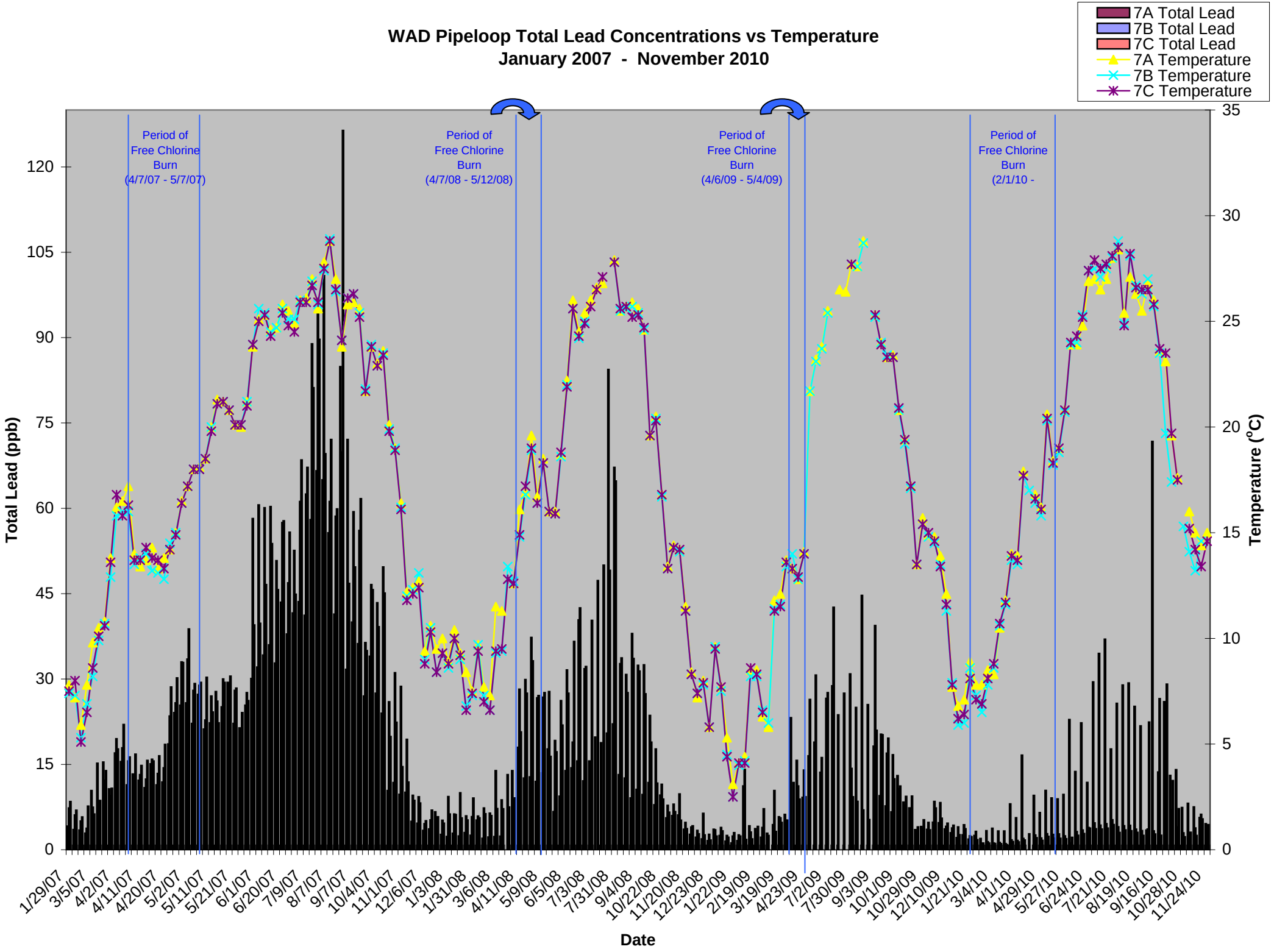
1. Washington Aqueduct pipe loop update
2. DC Water pipe loop update
3. DC Water LCR update
4. Washington Aqueduct update on caustic/hypo project
5. Call schedule for 2011

1. Washington Aqueduct pipe loop update



WAD Pipeloop Dissolved Lead Concentrations
March 2005 - November 2010




WAD Pipeloop Total Lead Concentrations vs Temperature
January 2007 - November 2010
7A Total Lead
7B Total Lead
7C Total Lead
7A Temperature
7B Temperature
7C Temperature
Period of Free Chlorine Burn (4/7/07 - 5/7/07)
Period of Free Chlorine Burn (4/7/08 - 5/12/08)
Period of Free Chlorine Burn (4/6/09 - 5/4/09)
Period of Free Chlorine Burn (2/1/10 -
Total Lead (ppb)
Temperature (°C)
Date
0
15
30
45
60
75
90
105
120
0
5
10
15
20
25
30
35
1/29/07
3/5/07
4/2/07
4/11/07
4/20/07
5/2/07
5/11/07
5/21/07
6/1/07
6/20/07
7/9/07
8/7/07
9/7/07
10/4/07
11/1/07
12/6/07
1/3/08
1/31/08
3/6/08
4/11/08
5/9/08
6/5/08
7/3/08
7/31/08
9/4/08
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11/20/08
12/23/08
1/22/09
2/19/09
3/19/09
4/23/09
7/2/09
7/30/09
9/3/09
10/1/09
10/29/09
12/10/09
1/21/10
3/4/10
4/1/10
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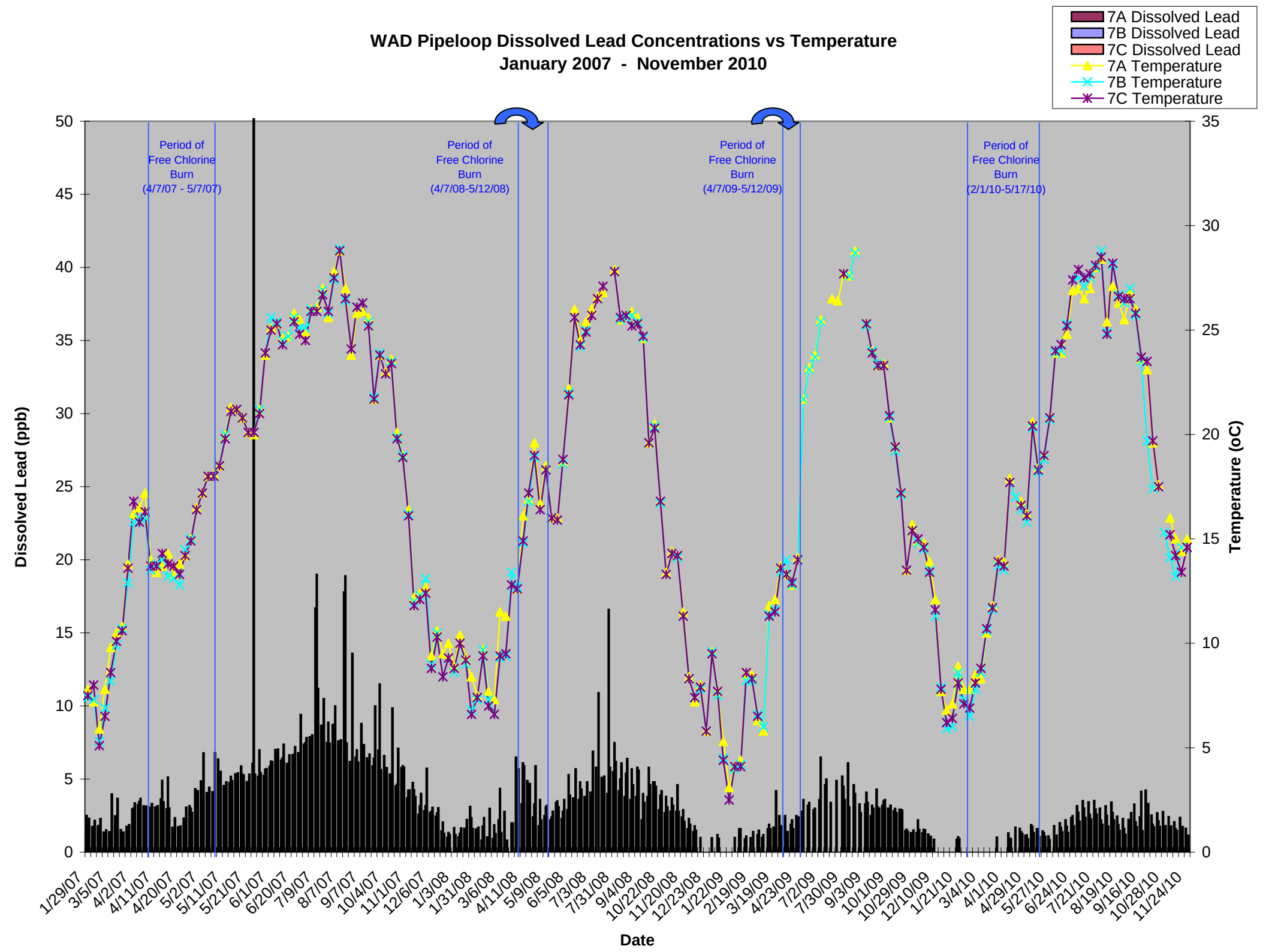
10/28/10
11/24/10


WAD Pipeloop Dissolved Lead Concentrations vs Temperature
January 2007 - November 2010
7A Dissolved Lead
7B Dissolved Lead
7C Dissolved Lead
7A Temperature
7B Temperature
7C Temperature
Period of Free Chlorine Burn (4/7/07 - 5/7/07)
Period of Free Chlorine Burn (4/7/08-5/12/08)
Period of Free Chlorine Burn (4/7/09-5/12/09)
Period of Free Chlorine Burn (2/1/10-5/17/10)
Dissolved Lead (ppb)
Temperature (oC)
Date
0
5
10
15
20
25
30
35
40
45
50
1/29/07
3/5/07
4/2/07
4/11/07
4/20/07
5/2/07
5/11/07
5/21/07
6/1/07
6/20/07
7/9/07
8/7/07
9/7/07
10/4/07
11/1/07
12/6/07
1/3/08
1/31/08
3/6/08
4/11/08
5/9/08
6/5/08
7/3/08
7/31/08
9/4/08
10/22/08
11/20/08
12/23/08
1/22/09
2/19/09
3/19/09
4/23/09
7/2/09
7/30/09
9/3/09
10/1/09
10/29/09
12/10/09
1/21/10
3/4/10
4/1/10
4/29/10
5/27/10
6/24/10
7/21/10
8/19/10
9/16/10
10/28/10
11/24/10

2. DCWater pipe loop update