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**SURREBUTTAL TESTIMONY
OF
WILLIAM J. MCGLINN, P.E.
ON BEHALF OF THE
PORTSMOUTH WATER AND FIRE DISTRICT**

**In re: Application for Rate Relief
City of Newport Utilities Department, Water Division
Docket No. 3818**

June 19, 2007

1 **Q. Please state your name and business address.**

2
3 A. My name is William J. McGlinn. My business address is 1944 East Main Road, Portsmouth,
4 Rhode Island.

5
6 **Q. Are you the same person that provided direct testimony in this docket on behalf of the**
7 **Portsmouth Water and Fire District (PWFD)?**

8 A. Yes, I am.

9
10 **Q. Do you have any comments regarding the rebuttal testimony by Newport Water**
11 **Department (NWD)?**

12
13 A. Yes, I do. I will comment on the water quality issues discussed in Ms. Forgue's rebuttal
14 testimony.

15
16 **Q. NWD takes exception to you raising water quality issues before the Commission. What**
17 **was your purpose for doing so?**

18
19 A. There have been and continue to be serious water quality issues for Newport Water,
20 Portsmouth Water and the Navy and hence for all water customers on Aquidneck Island. A
21 number of these issues have been addressed in settlement agreements that the Division has
22 agreed to and that the Commission has approved in the last two dockets. The Newport Water
23 capital program in this and prior dockets is earmarked, in part, to address these water quality
24 issues. As testified in Docket No. 3675, the Commission has broad authority to address
25 quality of service, including matters of public health. PWFD chooses to keep the
26 Commission informed of the water quality problems experienced by its customers and others
27 on the island, as well as any progress, or lack thereof, that Newport Water may have made in
28 resolving them.

29
30 **Q. Doesn't RIDOH regulate these water quality matters?**

31

1 A. There is no question that the RIHOH regulates water quality for each public water system.
2 However, RIDOH is limited in its ability to require facility or operational changes to a water
3 system, such as NWD, to ensure that secondary water suppliers such as PWFD and the Navy
4 meet water quality standards in their systems. The case in point is the three TTHM
5 violations experienced by PWFD in 2002 and 2003. NWD was regularly selling water to
6 PWFD at the wholesale meter that exceeded 80 ppb, which made it virtually impossible for
7 PWFD to meet the TTHM water quality standard of 80 ppb in its distribution system without
8 re-treating the water. Consequently, PWFD was in violation of the TTHM standard for the
9 fourth quarter of 2002 and the first and second quarters of 2003. Nevertheless, since NWD
10 did not exceed the TTHM standard in its distribution system, RIDOH was powerless to site
11 NWD for a violation or require any remedial action.

12
13 Unlike RIDOH, the Commission, through its statutory powers can take a system-wide
14 approach to water supply on Aquidneck Island to ensure that the water users in Newport,
15 Middletown, Portsmouth and Navy are not paying for redundant treatment efforts to obtain
16 water that meets water quality standards.

17
18 **Q. Ms. Forgue indicates in her rebuttal testimony that Newport has not changed its**
19 **operating protocol to raise the pH and that routine monitoring data provides no**
20 **evidence that the pH has been increased. Do you wish to comment on this assertion?**

21
22 A. Yes. First, I would like to point out that the purpose of my direct testimony was to update
23 the Commission on the improvement of the pH for water sold to PWFD and to thank the
24 Commission for their support in helping to address the PWFD lead problem. In any event,
25 based on the NWD rebuttal testimony, we apparently have a disagreement over what NWD
26 did to improve the pH. In their rebuttal, NWD provided a graph (Figure 3-4B) to show that
27 the pH has become tighter since improvements were made in January 2006 to the flow
28 pacing system. We agree with this conclusion. We also believe there is a noticeable increase
29 in pH level in the late summer of 2005 following verbal notification to NWD that PWFD's
30 recent lead test results were exceedingly high and subsequent submittal of direct testimony
31 on September 15, 2005 to the Commission in Docket No. 3675 on this matter. This pH

1 improvement follows a thirteen month period from the summer of 2004 to the summer of
2 2005 where the pH swings are significant. Figure 3-4B in NWD's surrebuttal does not show
3 this prior volatile period. PWFD has provided Figure PWFD-1 (attached), which was
4 prepared by NWD's engineer as part of the pH plan, to show the history of NWD pH from
5 2000. PWFD has marked this volatile period on PWFD-1. PWFD has also marked on
6 NWD's Figure 3-4B (attached) to show the dates indicating PWFD's notice to NWD of high
7 lead and PWFD direct testimony in Docket No. 3675 regarding pH and lead.

8
9 In any event, the pH situation is much improved since the parties appeared before the
10 Commission in Docket No. 3675. As I testified in my direct testimony, the improved pH
11 treatment practices appear to have made a difference in lead levels in PWFD's system. As
12 required by the approved settlement agreement in Docket No. 3675, NWD has developed a
13 Plan to Stabilize pH Output by switching from lime to sodium hydroxide, which should
14 further improve pH stability. Also, as required by the approved settlement agreement, the
15 monthly pH reports from NWD allow all parties to routinely monitor the pH to ensure
16 proper levels are maintained.

17
18 **Q. Ms. Forgue states in her rebuttal testimony that the goal of the water age study was to**
19 **optimize the configuration and operation of the existing storage structures to provide**
20 **the highest possible water quality – as it relates to water age – to NWD and its**
21 **wholesale customers. Do you agree with the stated goal?**

22
23 A. No. The approved settlement agreement in Docket No. 3675 required NWD to conduct an
24 analysis of the water age issue in order to identify and evaluate the possible options and
25 feasibility of providing Portsmouth with water of the same age as that provided to Newport
26 and the Navy. This analysis has not been done.

27
28 **Q. Can you explain the difference between the NWD study and what was described in the**
29 **approved settlement agreement?**

1 A. Yes. My direct testimony addresses the water age issue and the importance of reducing
2 water age to reduce the formation of TTHMs with the current chlorine treatment and to
3 reduce the potential for nitrification when NWD switches to chloramines. PWFD is the only
4 water supplier to purchase its water from the end of the 4.0-MG reservoir. The Maguire
5 report indicated that PWFD is receiving water that is older than the other water suppliers,
6 which is primarily due to the long detention time in the reservoir.

7
8 In essence, the draft water age study by NWD was merely aimed toward reducing the water
9 age in this 4.0-MG reservoir. The draft study did not identify and evaluate any options for
10 providing Portsmouth with water of the same age as that provided to the other suppliers. One
11 such obvious example would be to have all water users draw from the end of the 4.0-MG
12 reservoir with an evaluation of the impact on water age for each supplier. When this issue
13 was raised by PWFD at the May 15, 2007 meeting with NWD and its engineer, the engineer
14 simply dismissed this option out-of-hand as being too costly. In rebuttal testimony, NWD
15 indicates that it is unlikely that exactly equal water age can be attained between the two
16 storage facilities. That is irrelevant. The study agreed to by the parties in the approved
17 settlement agreement was intended to evaluate the possible options and feasibility of
18 providing Portsmouth with water of the same age as that provided to Newport and the Navy -
19 not to compare the age of the water in the two storage facilities.

20
21 PWFD is in the process of finalizing its comments on this draft study and will forward them
22 to the parties to this docket when complete.

23
24 **Q. Is there a benefit to reducing the water age in the 4.0-MG reservoir as suggested by**
25 **NWD even if it does not provide equal water age for all suppliers?**

26
27 A. Yes, there may be. Nevertheless, without looking at the overall water age issue for the three
28 suppliers as required by the settlement agreement, we do not know that merely reducing the
29 water age in the 4.0-MG reservoir is the best option to improve the water age problem for
30 Portsmouth.

1 **Q. Do you have any other comments?**

2

3 **A.** Yes. As discussed in my direct testimony, PWFD's position is that the approval and capital
4 funding for any construction that may be required to address an agreed upon solution to the
5 water age issue should be provided for in this docket. Otherwise, Newport's conversion to
6 chloramines will have occurred long before the completion of any construction required to
7 address the water age issue, which would not be funded until the next rate filing.

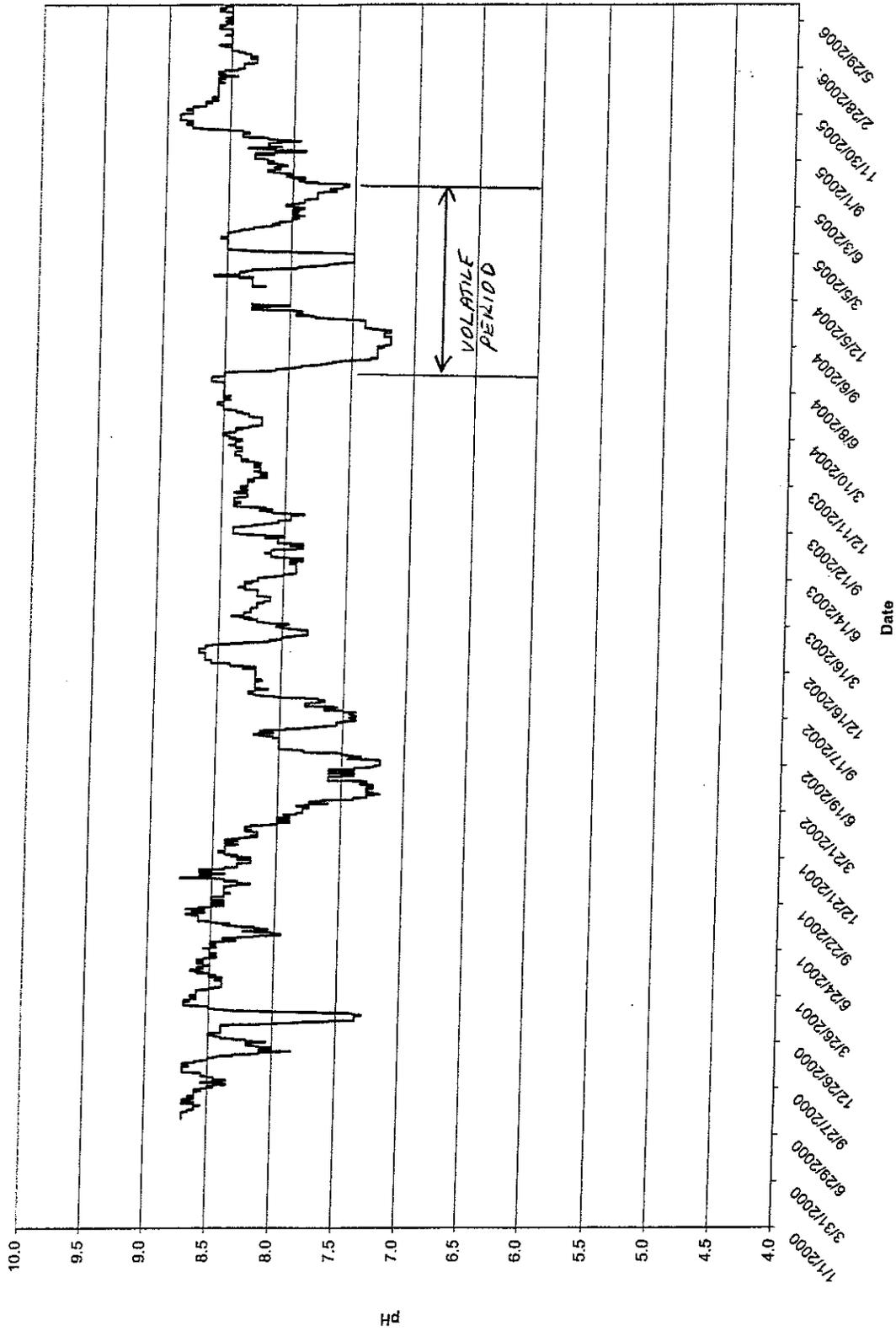


Figure 3-4A
 Lawton Valley WTP
 Finished Water pH History
 30-Day Median (2000 - June 2006)

Updated 7/11/06

CDM

PWFD-1

*PWFD DIRECT
TESTING ONLY
(# 3675)*

*APPROXIMATE
NOTICE TO NWD*

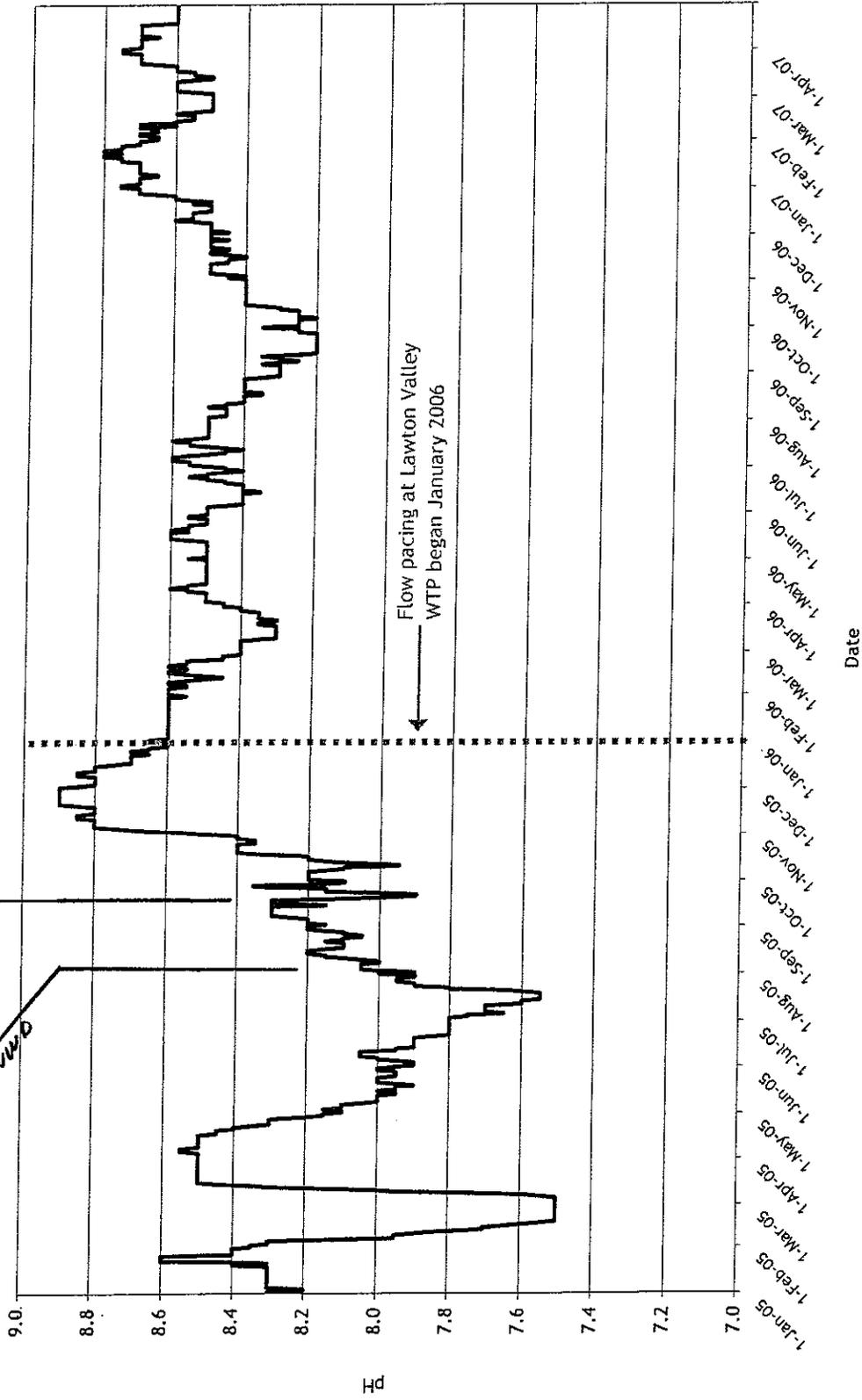


Figure 3-4B
Lawton Valley WTP
Finished Water pH History
30-Day Median (2005 - April 2007)

PWFD-2