

**APPENDIX A**

**CORRESPONDENCE DOCUMENTING THE CHANGE IN WELLS TO BE  
SAMPLED IN 2008**



**DEPARTMENT OF THE ARMY**  
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE  
CORPS OF ENGINEERS  
P.O. BOX 59  
LOUISVILLE, KENTUCKY 40201-0059

December 12, 2007

Engineering Division

Vicki Deppisch  
Ohio Environmental Protection Agency  
Northeast District Office  
2110 East Aurora Road  
Twinsburg, OH 44087

Dear Ms. Deppisch:

Re: Notification of Annual Sampling Schedule  
Facility-wide Ground water Monitoring Program  
Ravenna Army Ammunition Plant  
Portage/Trumbull Counties, Ohio

This letter is to serve as notification that the United States Army Corps of Engineers (USACE) will be changing the sampling frequency of 36 of the existing Facility-wide Ground Water Monitoring Program (FWGWMP) wells from quarterly sampling to annual sampling. As we discussed yesterday, this change is in accordance with Section 4.2, Sampling Frequency, on page 4-5 of the September 2004 Facility-wide Ground Water Monitoring Program Plan (FWGWMP), which states that the initial monitoring frequency for the FWGWMP wells will be three consecutive quarters, and then it will revert to annual sampling, except for the OD#2 and RQL wells, which will be sampled semi-annually. Our next sampling event for the 36 current FWGWMP wells will occur in October 2008.

During the January, April, and July 2008 sampling events, USACE will sample other monitoring wells that have only been sampled during the Remedial Investigations at Load Lines 1, 2, 3, 4, and 12. These wells are identified in the last column of Table 4 in the October 22, 2007 document entitled "Draft Proposal to Update the Facility-wide Ground Water Monitoring Program", where they are numbered "1" through "36". Throughout this process, USACE will continue to comply with the sampling frequency requirements for the Ramsdell Quarry Landfill and Open Demolition Area #2 wells.

We appreciate your assistance with this matter. Copies have been provided to Eileen Mohr and Bonnie Buthker of Ohio EPA, Glen Beckham, USACE (via email) and John Miller, EQM (via email) and Mark Krivanski USAEC (via email) and Katie Elgin, OHARNG RTLS (via email). Please call Rick Hockett at 502.315.6329 if you have any questions or comments regarding this matter.

Sincerely,

Richard B. Hockett, P.G.  
Geologist, Environmental Branch  
Louisville District

**Subject:** FW: FWGWMP modifications  
**From:** "Hockett, Rick B LRL" <Rick.B.Hockett@usace.army.mil>  
**Date:** Tue, 8 Jan 2008 14:10:27 -0500  
**To:** "John Miller" <jmiller@eqm.com>

Oops! I meant to copy you on this.

Rick

-----Original Message-----

From: Hockett, Rick B LRL  
Sent: Tuesday, January 08, 2008 2:08 PM  
To: 'Vicki Deppisch'  
Cc: 'Eileen Mohr'; Beckham, Glen LRL; Ries, Cynthia A LRL; Chanda, Thomas M LRL; 'Patterson, Mark C Mr CIV USA OSA'; 'Krivansky, Mark E USAEC'  
Subject: FWGWMP modifications

Vicki:

Just got back from lunch and listened to your voice mail message regarding the proposed changes to the FWGWMP. Sounds good! To summarize:

1. New well sampling. It's okay to proceed with rotating the new wells into the January sampling event, and not sample the "old" wells - those which have been sampled quarterly since 2005. The new wells will be all of the non-FWGWMP wells from LL-1, LL-2, LL-3, LL-4, and all but one of the non-FWGWMP wells at LL-12.

2. Annual sampling on old wells. You would prefer to not perform annual sampling on the old wells in October 2008, because that would interrupt the quarterly sampling pattern on the new wells. I agree. We will do four consecutive sampling events on the new wells; January, April, July, and October 2008.

3. Sampling order selection criteria. You requested that we provide a description of how the 196 wells were ordered for sampling (per table 4 of the Draft Proposal to Update the FWGWMP). In a nutshell, I thought it made the most sense to do the major load lines first (LL-1, LL-2, LL-3, LL-4, and LL-12), and then follow that effort with the remaining wells. In order to simplify things for the sampling team, I kept all wells at each AOC together, so that the samplers will not be visiting sites all over the facility during each event. That approach also makes the ground water elevation measurements more useable, since all wells at a given AOC that is being sampled will be measured, and we'll get a good snapshot of the ground water flow conditions at that AOC. That's really about all there was to it - there's just not a lot more to base the sampling order on.

4. Perchlorate. You are not comfortable that the perchlorate sampling performed on the October 2008 ground water samples is sufficient to end the perchlorate sampling altogether. You suggested that we discuss a strategy for additional sampling. I suggest that each time we rotate a new group of wells through the four quarters of sampling, that we sample for perchlorate during one of those events. I would prefer that it not be the first event of the four, other than that, I think we should sample at the second, third, or fourth quarterly event. Let's do each well once, and then evaluate the perchlorate data at the end of the sampling along with all of the other ground water quality data.

You didn't specifically mention it, but it's worth noting that we will continue to sample the five RCRA wells at RQL and ODA#2 on a semi-annual basis - no changes there at all.

Please let me know if any of this isn't correct.

FW: FWGWMP modifications

Thanks.

Rick

Richard B. Hockett, P.G.  
Environmental Branch  
Louisville District  
US Army Corps of Engineers