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THIRD QUARTERLY STATUS REPORT FOR ADMINISTRATIVE ORDER SDWA-03-2014-  
0230-DS WITH TRANSMITTAL LETTER NAWC WARMINSTER PA  
4/30/2015  
BRAC PMO EAST



DEPARTMENT OF THE NAVY  
BASE REALIGNMENT AND CLOSURE  
PROGRAM MANAGEMENT OFFICE EAST  
4911 SOUTH BROAD STREET  
PHILADELPHIA, PA 19112-1303

5090  
Ser BPMOE/15-038  
April 30, 2015

Mr. Roger Reinhart  
U.S. Environmental Protection Agency  
Region III (3WP22)  
1650 Arch Street  
Philadelphia, PA 19103

Dear Mr. Reinhart:

SUBJECT: QUARTERLY REPORT REGARDING ADMINISTRATIVE ORDER DATED  
JULY 7, 2014, EFFECTIVE JULY 13, 2014, DOCKET NO.  
SDW-03-2014-0230-DS

In accordance with Section VI, Paragraph 40 of the subject  
Order, the attached Third Quarterly Report is submitted.

If you have any questions regarding this matter, please  
contact me at 215-897-4904.

Sincerely,

A handwritten signature in blue ink, appearing to read "Willington Lin", is written over a horizontal line.

WILLINGTON LIN, P.E.  
BRAC Environmental Coordinator  
By direction of BRAC PMO

Enclosure: Third Quarterly Report

Copy to:  
EPA Region III (S. Kloss)  
BRAC PMO Files

**3<sup>rd</sup> Quarterly Status Report**  
**Period: January 3, 2015 through April 3, 2015**

**Administrative Order Dated July 7, 2014**  
**(Effective July 14, 2014)**  
**Docket No. SDWA-03-2014-0230-DS**

This quarterly status report provides a summary of the work performed by the Navy, associated entities, and the U.S. Environmental Protection Agency (EPA) [via an Interagency Agreement (IA) with the Navy] over the period of **January 3, 2015** through **April 3, 2015**.

**SUMMARY OF ACTIVITIES**

During this Administrative Order (AO) reporting period, the public and private water systems sampling programs were continued under an agreement for technical support with EPA under the IA, and sampling data was evaluated as it became available.

The Navy completed contractual negotiation of a cooperative agreement grant (CA) with Warminster Township Municipal Authority (WTMA) and this was awarded on March 11, 2015. The CA provides reimbursement to WTMA for:

- activated carbon filtration for water supply wells WMA-10, WMA-13, and WMA-26,
- operations and maintenance costs of the systems,
- installation of a water main and several private connections to the main, and
- replacement water due to the loss of the supply wells.

The Area D extraction wells, which were restarted in October 2014, continue to provide capture/containment of any PFCs originating from this area, with treatment provided by the groundwater treatment plant located in Area A, which has been modified to provide PFC removal through carbon polishing.

In addition, the draft sampling and analysis plan for a Remedial Investigation of perfluorinated compounds was submitted for regulatory review (October 16, 2014); and key worksheets from the draft document were revised in accordance with EPA's comments and sent out for review on December 22, 2014. Review comments were addressed and a revised draft submitted on April 9, 2015. Groundwater sampling of the Shenandoah Woods (Area B) area will be expedited and conducted in April 2015. This sampling will support the planned transfer of the property.

On February 24 and 25, 2015 public meetings were held at the Horsham Township Community Center to update the public on recent PFC-related

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activities associated with both the former NAWC and Former Naval Air Station Joint Reserve Base (NASJRB) Willow Grove.

The following provides additional details regarding the quarter's activities.

**PUBLIC WATER SUPPLIES**

Monitoring: No public water supply (PWS) well sampling was performed by the Navy during this time period.

Treatment/Alternate Water Supply: The Navy is currently in the process of implementing the approved Water Treatment Plan for WTMA public water supply wells WMA-10, WMA-13, and WMA-26, which will be executed through the CA with WTMA. In accordance with the plan, the following PWS wells will be provided with carbon treatment:

- WMA-10
- WMA-13
- WMA-26

A temporary carbon treatment system was installed on WMA-26 in July 2014, and this well has been pumped (for plume containment) to waste. The treated waste water is discharged to the WTMA Log College wastewater treatment plant. Wells WMA-10 and WMA-13 are shut down and will remain so until the treatment systems have been installed. WTMA is in the process of permitting and design activities. Updates to the "Public Water Supply Well Treatment Plan" will be submitted to the EPA Technical Project Coordinator for review.

**PRIVATE WATER SYSTEMS**

Monitoring: Approximately 157 samples have been collected from 107 wells to date, with approximately 18 of the samples collected during this reporting period. Under the IA, the EPA collects the samples, provides analysis, validates, and reports the initial results to the private well owners. The private well owner contact information and analytical results are excluded from this public document. As of the end of March 2015, samples from thirteen (13) private wells have analytical results for PFOS at or above the provisional health advisory (PHA) levels and are being supplied alternate water supply (bottled water) by the EPA. To date, no detections of PFOA in private water systems meet or exceed the associated PHA levels.

Treatment/Alternate Water Supply: An updated Private Water System Water Treatment Plan was submitted by the Navy on February 19, 2015; and approved by EPA on February 26, 2015. Although the Navy has awarded a contract to Tetra Tech EC for implementation of private

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water system connections to public water supply, the CA with WTMA also provides public water connections for those in WTMA's service area.

Of the thirteen properties that are at/above the PHA levels, twelve property owners were offered, and ten have accepted a permanent alternate water supply (PWS hookup) during this report time period. An eleventh property accepted the offer on April 14<sup>th</sup>. The remaining property is a business, not residential. The Navy is communicating with them on a solution and continues to supply their workers with bottled water for drinking and cooking purposes. There were no rejections of the offer. A residential private well, which was being re-sampled, recently was found to be at/above the PHA levels for PFOA. The Navy is working with the Warminster Municipal Authority on the feasibility of a connection, before offering a PWS connection.

No private water supply treatment system sampling was performed. WTMA is preparing designs, developing access agreements, and obtaining permits for public water connections. An updated timetable for the "Private Water System Treatment Plan" will be provided in May 2015.

**NAVY PFC INVESTIGATION STATUS**

Responses to EPA and PADEP review comments for the October 2014 Draft Unified Federal Policy Sampling and Analysis Plan (UFP SAP), Remedial Investigation for Perfluorinated Compounds (PFCs) and Vapor Intrusion Evaluation, Former NAWC Warminster, Pennsylvania have been prepared. A revised draft UFP SAP is anticipated to be finalized in May 2015 and executed in the summer of 2015.

A report of PFC sampling at extraction wells in Areas A, C, and D from the November 2014 LTM sampling round is under preparation.

Concurrent with and in support of the UFP SAP revisions the USGS is preparing borehole logging of selected wells in Area C, including OB-11 and OB-13.

In addition, supplemental groundwater investigation work will be performed on an expedited schedule in Area B to support the transfer of the Shenandoah Woods housing area property. Three well pairs were installed in March, and the wells will be sampled for PFCs in April 2015. Soil samples will also be collected for PFC analysis during this Area B investigation work. Analytical results are pending.

**UPCOMING ACTIVITIES FOR THE NEXT REPORTING PERIOD**

Over the next 3 months, the Navy plans to perform the following activities:

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- WTMA continues permit and design activities for public well activated carbon treatment system installations for wells WMA-10, WMA-13, and WMA 26.
- WMTA continues permit and design activities for water line extension in the Newtown Road area.
- WMTA initiates connections to properties that have accepted the Navy's offer of a connection to a public water system.
- Continue with periodic sampling of select private water systems (through the IA with EPA or by Navy contractor) and public water supply wells. Based on consultation with EPA, private wells with PFOS concentrations greater than 25% of the PHA levels will be periodically resampled to monitor that concentrations remain below the PHA levels.
- Continue to supply private well locations which are at/above the PHA levels with bottled water until permanent solutions can be implemented.
- Finalize the UFP SAP for a remedial investigation of PFCs and initiate the associated field work.

The next reporting period will cover the April 4 - July 3, 2015 time frame.