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EPA REGION III, PHILA. PA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III

In the Matter of:	)	
	)	
U.S. Department of the Navy,	)	Docket No.: SDWA-03-2014-0230-DS
	)	
Respondent.	)	
	)	
	)	
Naval Air Warfare Center Warminster Township Bucks County, Pennsylvania,	)	Proceeding Under Section 1431 of the Safe Drinking Water Act, 42 U.S.C. § 300i.
Facility.	)	
	)	
	)	
	)	
	)	

I. STATUTORY AUTHORITY

1. This Order is issued to Respondent United States Navy (Navy) pursuant to the authority vested in the Administrator of the Environmental Protection Agency (EPA) by Section 1431(a) of the Safe Drinking Water Act (SDWA), 42 U.S.C. § 300i(a).

2. The Administrator of EPA has delegated the authority to take these actions to the Regional Administrator of EPA Region III by EPA Delegation 9-17 (1200-TN-350) (May 11, 1994), and the Regional Administrator has delegated the authority to take these actions to the Water Protection Division Director by Regional Delegation 1200 TN RIII-110 (Sept. 12, 1994).

II. PARTIES BOUND

3. This Order shall apply to and be binding upon the Respondent, and upon its successors and assigns as well as affiliated organizations, agents, contractors, and consultants.

III. DEFINITIONS

4. All other terms, not otherwise defined herein, shall have their ordinary meanings unless defined in SDWA or its implementing regulations, in which case the statutory or regulatory definition shall control.

a. "Contaminant" means "any physical, chemical, biological, or radiological substance or matter in water." *See* 42 U.S.C. § 300f (6).

b. "Contractor" means any person, including the contractors, subcontractors, or agents, retained or hired by Respondent to undertake any Work under this Order.

c. "Day" means a calendar day, unless otherwise specified. When a stated time expires on a Saturday, Sunday or Federal Holiday, the stated time shall be extended to include the next business day.

d. "Facility" means the Naval Air Warfare Center (NAWC) Warminster, an 824-acre facility in Warminster Township and Ivyland Borough, Bucks County, Pennsylvania as depicted in Attachment 1 hereto.

e. "Finished water" shall mean water that has passed through all the processes in a system's water treatment plant and is ready to be delivered to consumers.

f. Micrograms per liter (μg/l) is the same as parts per billion (ppb).

g. "Order" shall mean this Administrative Order issued pursuant to Section 1431(a) of the SDWA, 42 U.S.C. § 300i(a), any attachments and appendices to this Order, and all documents that are to be produced or submitted pursuant to this Order. All attachments or appendices to this Order, and all documents that are to be produced or submitted pursuant to this Order are incorporated into this Order, and shall be enforceable hereunder.

h. "PADEP" shall mean the Pennsylvania Department of Environmental Protection.

i. "Person" means an individual, corporation, company, association, partnership, State, municipality, or Federal agency (and includes officers, employees, and agents of any corporation, company, association, State, municipality, or Federal agency), consistent with 42 U.S.C. § 300f(12).

j. "PFCs" means perfluorinated compounds, which are man-made compounds with multiple carbon-fluorine bonds. PFCs break down very slowly in industrial use and in the environment and include perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS).

k. "PFOA" means perfluorooctanoic acid, CAS #335-67-1, and its salts, including ammonium perfluorooctanoate, CAS # 3825-26-1 (APFO).

l. "PFOS" means perfluorooctanesulfonic acid or perfluorooctane sulfonate, CAS # 2795-39-3.

m. "Private water system" means a system used by individual residents, or one that serves less than 25 persons per year from a well or other surface or ground water source and is not otherwise a Public Water System.

n. "Public Water System" or "PWS" means a system that provides piped drinking water for human consumption to persons within the meaning of Section 1401(4) of the SDWA, 42 U.S.C. § 300 f (4) and 40 C.F.R. § 141.2.

o. "Records of Decision" or "RODs" as used herein refers collectively to EPA's RODs issued for the Naval Air Development Center in Warminster Township, Bucks County, PA, EPA I.D. No PA6170024545 pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 *et*

seq. (CERCLA) on both September 29, 1993 ROD (interim remedy for Operable Unit 1) and September 27, 2000 (final remedy designated as Operable Unit 12).

p. "Underground source of drinking water" or "USDW" means an aquifer or a portion thereof which supplies a PWS, or which contains a sufficient quantity of ground water to supply a PWS and which currently supplies drinking water for human consumption, or contains fewer than 10,000 milligrams per liter total dissolved solids, and is not an exempted aquifer. *See* 40 C.F.R. § 144.3

q. "Vicinity of the Facility" means an approximate one-mile radius extending from the Facility property boundary.

r. "Water source" means any water prior to treatment of any kind.

IV. ALLEGATIONS

5. In 1944, Navy purchased the Facility which was formerly an aircraft manufacturing plant operated by the Brewster Aeronautical Corporation.

6. Beginning in 1949, the overall mission of the Facility underwent a change from a manufacturing operation to research, development, testing and evaluation of Navy aircraft systems, components, coatings, electronics and control devices.

7. In 1989, the Facility was listed on the CERCLA National Priorities List (NPL) due to the threat posed by eight disposal areas to ground water quality from several contaminants including trichloroethylene (TCE), tetrachloroethylene (PCE) and carbon tetrachloride.

8. In 1992, the Facility was renamed as the Naval Air Warfare Center Warminster (NAWC). Previously, the Facility was known as the Naval Air Development Center (NADC).

9. In 1996, NAWC was disestablished and ceased operations pursuant to the requirements of the Defense Base Closure and Realignment Act of 1990 (P.L. 101-510), as amended (BRAC).

10. From 1993 to 2000, EPA Region III issued Records of Decision (RODs) for multiple operable units at the Facility pursuant to CERCLA.

11. As part of the CERCLA remediation required by EPA and in compliance with a Settlement Agreement and Release dated March 10, 1997 between the Navy and the Warminster Township Municipal Authority (WTMA) (hereinafter, Navy–WTMA Settlement Agreement), the Navy was required to install treatment to enable WTMA to pump ground water to control a plume of Volatile Organic Compounds (VOCs) at WTMA Supply Well #26.

12. According to a study conducted for Navy by its contractor TetraTech, the Navy performed numerous activities which may have used perfluorinated compounds associated with, *inter alia,* metal plating, fire-fighting, pest control and paints while NAWC was operational. Some sites at the former NAWC were identified as having hosted potentially PFC-related activities.

13. On or about January 8, 2009, the EPA Office of Water established Provisional Health Advisories (PHA) for PFOA and PFOS, Attachment 1 hereto, with a value of 0.2 μg/l for PFOS and 0.4 μg/l for PFOA in drinking water. The PHA assumed a 20-percent contribution of the contaminant from drinking water.

14. EPA is developing human health effects documents for PFOS and PFOA. Once finalized, EPA anticipates using the documents to derive lifetime health advisories for PFOS and PFOA in drinking water which will supersede the PHA issued in 2009.

15. Studies have found that PFOS and PFOA are highly persistent in the environment with little or no degradation occurring in air, water or soil. Studies indicate that PFOA and PFOS can cause developmental, reproductive, and other adverse effects in laboratory animals. The most consistent findings from epidemiology studies are elevated serum total cholesterol levels among exposed populations with more limited findings related to low infant birth weights.

16. PFOS and PFOA are currently not contaminants for which national primary drinking water regulations, including maximum contaminant levels (MCLs), have been established pursuant to the SDWA.

17. In accordance with DOD Instruction 4715.18 (2009) regarding emerging contaminants, Navy sampled the Facility for perfluorinated compounds (PFC's). Sampling in 2012 and 2013 detected PFOS and PFOA in onsite monitoring wells, extraction wells and WTMA Supply Well #13, which is supplied by water from an aquifer.

18. Ground water monitoring conducted by the Navy during January 2014, in monitoring wells and extraction wells which draw water from an aquifer underlying Areas A and C at the Facility, has identified concentrations of both PFOA and PFOS above the PHA values, with the highest levels in the ground water, or aquifer, of 2.6 μg/l PFOA and at least 15 μg/l PFOS. WTMA Supply Well #13 had a PFOS concentration of 0.21 μg/l.

19. In April 2014, EPA issued "The Third Unregulated Contaminant Monitoring Rule (UCMR 3): Data Summary" (2014 UCMR 3 Summary), which applies to public water supplies. EPA made the 2014 UCMR 3 Summary publicly-available on or about June 2, 2014.

20. Based on Unregulated Contaminant Monitoring Results (UCMR) data compiled by EPA in November 2013 and June 2014, and provided to EPA Region III in June 2014, PFOS

was detected in Warminster Supply Wells #s 10, 13 and 26 in concentrations at or above 0.20 μg/l. The concentrations ranged from 0.16 μg/l to 1.09 μg/l.

21. WTMA inactivated Supply Wells #13 and # 26 on June 5, 2014, in response to the UCMR sample results, and provided Public Notice to their users on June 9, 2014, in accordance with their responsibilities as a PWS.

22. EPA and the Navy are conducting a time-critical response, known as a Removal Action under CERCLA, pursuant to an Interagency Agreement (IAG) and final Statement of Work (SOW) dated June 30, 2014, Attachment 2 hereto, to identify and sample private residential wells in the vicinity of the Facility.

23. The SOW includes an obligation to identify all private wells within the Vicinity of the Facility and to provide bottled water in the short-term (up to six months) for any private well at or above the PHA for PFOS or PFOA.

24. PADEP has requested that EPA take all necessary action to protect the health of affected persons due to the detection of PFOS and PFOA in WTMA's finished water supply. Therefore, this Order is necessary to protect human health.

25. The detection of PFOS in ground water samples from the aquifer underlying the Facility, demonstrates the release or threat of release of contaminants from the Facility.

26. The aquifer underlying the Facility is an underground source of drinking water (USDW) and supplies both private and WTMA public supply wells for human consumption.

27. The aquifer underlying the Facility is not an exempted aquifer within the meaning of 40 C.F.R. § 146.4.

28. EPA has determined that PFOS and PFOA are contaminants present in or likely to enter a PWS or a USDW which may present an imminent and substantial endangerment to

human health at concentrations at or above 0.2 μg/l for PFOS and 0.4 μg/l for PFOA in drinking water.

V. CONCLUSIONS OF LAW

Based on the foregoing, EPA makes the following Conclusions of Law:

29. Respondent is a Federal agency of the United States Government, and therefore a "person" pursuant to Section 1401(12) of the SDWA, 42 U.S.C. § 300f(12).

30. PFOA and PFOS found in WTMA Well Nos. 10, 13 and 26 and may be present in private wells in the vicinity of the Facility that are at or above the PHA are "contaminants," as that term is defined in Section 1401(6) of SDWA, 42 U.S.C. § 300f(6).

31. The ground water beneath or near the Facility is an "underground source of drinking water," as that term is defined in 40 C.F.R. § 144.3.

32. Concentrations of PFOS at or above 0.2 μg/l and/or PFOA at or above 0.4 μg/l may endanger the health of persons. These contaminants are present in or likely to enter the USDW at the Facility and may present an imminent and substantial endangerment to the health of persons, within the meaning of Section 1431(a) of SDWA, 42 U.S.C. § 300i(a).

33. Respondent has caused or contributed to the endangerment described immediately above.

34. Based on the endangerment described herein, the response actions required by this Order are necessary to protect the health of persons who are or may be users of the USDW in the vicinity of the Facility.

35. PADEP has requested that EPA act on its behalf to establish a plan for the long-term remediation of public and private wells which are not included in the SOW. Therefore, this Order is necessary to protect human health.

36. All requisite conditions have been satisfied for EPA action under Section 1431 (a)(1) of the SDWA, 42 U.S.C. § 300i.

VI. ORDER

Pursuant to the authority given to the EPA Administrator by Section 1431(a)(1) of the SDWA, 42 U.S.C. § 300i(a)(1), and delegated to the Regional Administrators, the Navy is ORDERED to perform the following activities:

37. Public Water Supply Wells. Respondent shall perform the following work as it relates to the Public Water Supply in the vicinity of the Facility:

a. Within five (5) days of the effective date of this Order, in order to contain the contaminant plume in the Vicinity of the Facility, Respondent shall facilitate the pumping of WTMA Supply Well #26 to the WTMA Publicly-Owned Treatment Works (POTW) plant.

b. Within sixty (60) days of the effective date of this Order, Respondent shall install a temporary treatment system at WTMA Supply Well # 26 with the capacity to treat the volume and duration as specified in the RODs and Navy-WTMA Settlement Agreement.

c. Within thirty (30) days of the effective date of this Order, Respondent shall provide a Water Treatment Plan (WT Plan) to EPA, for review and approval, to address the provision of a permanent long-term alternate water supply to WTMA Supply Well #'s 10, 13 and 26. The WT Plan may include the alternatives of installing permanent carbon treatment (CT) on the impacted WTMA wells, procuring water from an interconnecting PWS, and constructing new wells if treatment cannot be installed on existing wells. The treatment and continued operation of WTMA Well # 10 shall be given high priority in the WT Plan. Respondent shall reimburse WTMA for any costs for purchased water and additional treatment and monitoring that may be required. The WT Plan shall include deadlines and interim milestones for completion of activities.

d. Upon EPA approval of the WT Plan, Respondent shall implement such WT Plan in accordance with its terms.

e. For WTMA Wells at which Respondent has installed CT, Respondent shall ensure operation and maintenance of each such CT system in good working order, including but not limited to timely carbon bed changes, until Respondent is able to demonstrate to the satisfaction of EPA that the water source in the system prior

to CT contains less than the PHA values for PFOS and PFOA for four consecutive quarters.

38. Private Drinking Water Wells. Whereas the Navy has entered into an IAG with EPA for certain response activities at private drinking water wells in the Vicinity of the Facility, Respondent shall perform the following work:

a. Provision of Alternate Drinking Water. For those private wells identified under the SOW required by the EPA-Navy IAG, included as Attachment 2 hereto and incorporated herein, where existing validated data demonstrated levels of PFOS or PFOA are at or above the PHA in their finished water, Respondent shall provide a permanent drinking water supply as soon as practicable, but in any event no later than one hundred and eighty (180) days after the execution of this Order. A "permanent drinking water supply" shall mean: water from some other source, acceptable to EPA, that meets the water quality requirements of 40 CFR Part 141 and has a level of PFOS less than 0.20 µg/l and/or PFOA less than 0.40 µg/l in finished water where applicable; is in sufficient quantity for drinking and cooking, and is provided in a manner convenient to the users. The alternate source may include connecting the private water supply to a public water system or installation of carbon treatment (CT) as follows:

a. Water Treatment Plan for Private Systems. If any private water systems covered by this Order are determined to contain PFOS or PFOA at or above the PHA levels, Respondent shall, within 30 days of receipt of validated data, submit to EPA for approval, a written generic WT Plan which addresses the installation, operation and maintenance of CT for these private water systems, The Private Water Treatment Plan (Private WT Plan) shall include:

1. a written offer to install and provide for operation and maintenance of CT (including a draft operation and maintenance agreement);
2. identification and compliance with all necessary permits;
3. designation of appropriate monitoring frequency;
4. a schedule for design and implementation of the CT system; and
5. identification of technical and other information needed from the owner or operator of the water source in order for Respondent to design and install the system.
6. Respondent shall perform all monitoring using a UCMR approved laboratory using Method 537 for PFCs, or other EPA-approved analytical method.

b. Implementation of Private Water Treatment Plan (Private WT Plan). Upon EPA approval, Respondent shall implement the Private WT Plan for any private water system whose owner or operator accepts Respondent's offer. Respondent shall as soon as practicable, design treatment, seek necessary regulatory permits, and install CT or an alternate treatment approved by EPA. If an owner or operator rejects Respondent's offer, either through express rejection or silence, Respondent shall inform EPA of this rejection and provide documentation no later than 5 days following notice of such rejection.

b. Private Water Systems Receiving Treatment. For private systems at which Respondent has installed treatment under Paragraph 38(a) herein, Respondent shall provide for operation and maintenance of each CT system in good working order, including but not limited to timely replacement of carbon filters, until it demonstrates to the satisfaction of EPA that the source prior to CT contains less than 0.20 μg/l PFOS and/or 0.40 μg/l PFOA for four consecutive quarters. Respondent may also elect to satisfy any ongoing obligation under Paragraph 38 (a) herein by connecting a particular location to a public water supply system that contains less than the PHA for PFOS and PFOA in finished water.

39. Based on the findings of the ground water sampling of private water supplies, Respondent may be required to conduct further site assessment to determine whether there are additional sources of PFOA and/or PFOS beyond that already characterized in Areas A and C. Depending on the findings, remediation may be necessary to protect the USDW from endangerment.

40. Reporting. Within ninety (90) days of the effective date of this Order, and every 90 days thereafter, Respondent shall submit to EPA for review, quarterly reports which identify all work completed in conjunction with the IAG and this Order, including but not limited to monitoring, installation of carbon treatment systems on WTMA supply wells and private wells and the identification of any residences which are connected to PWSs and any residents who rejected such connection. The Report shall include a summary of the activities to comply with this Order and a summary of all analytical data generated during each quarter.

41. EPA Reservation of Rights. Notwithstanding any other provisions of this Order, the EPA reserves the right to modify the PHA if information previously unknown to EPA is received and EPA determines that the PHA may not be protective of human health, and Respondent reserves all right and defenses should EPA take action under this Paragraph.

VII. DESIGNATION OF SUPERVISING CONTRACTOR AND PROJECT COORDINATOR

42. Within **ten (10) days** after the effective date of this Order, Respondent shall retain the services of a qualified and experienced Supervising Contractor for the purpose of performing the work required by this Order in accordance with the terms and conditions of the WT Plan and private WT plan described in Paragraphs 37 and 38. Within the same **ten (10) day** period, Respondent shall notify EPA in writing of the name, address, and qualifications of the proposed Supervising Contractor and the name and telephone number of the Supervising Contractor's primary contact person. Respondent shall also notify EPA of the identity and qualifications of any other contractor(s) or subcontractor(s) to be used at least **five (5) days** in advance of their performing any work under this Order.

43. The Respondent shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants retained in connection with this Order within **ten (10) days** after the Order's effective date or of such retention, whichever is later. Respondent shall ensure that all such contractors, subcontractors, laboratories and consultants will perform all work in conformity with SDWA, and the terms and conditions of this Order. Respondent shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work in accordance with this Order.

VIII. TECHNICAL PROJECT COORDINATORS

44. The EPA Technical Project Coordinator (EPA TPC) will administer EPA's responsibilities and receive all written notices, reports, plans and other documents required by this Order. Unless EPA otherwise informs Respondent in writing, the EPA TPC shall be, and all submissions required by this Order shall be sent to:

Roger Reinhart
United States Environmental Protection Agency, Region III
1650 Arch Street (3WP22)
Philadelphia, PA 19103
Email: reinhart.roger@epa.gov

45. EPA's TPC shall have the authority to modify the work plan in writing.

46. Within seven (7) days of the effective date of this Order, the Navy shall also designate a Navy TPC and provide all necessary contact information for the Navy TPC to EPA's TPC. The Navy TPC shall administer the Navy's responsibilities and provide all written notices, reports, plans and other documents required by this Order to the EPA TPC. EPA will deem the Navy's TPC receipt of any notice or communication from EPA relating to this Order as receipt by the Respondent.

IX. INCORPORATION AND ENFORCEABILITY OF DOCUMENTS

47. Upon approval by EPA, all plans, reports, specifications, schedules, or other items required by or developed under this Order shall be deemed incorporated into, and made an enforceable part of, this Order.

X. QUALITY ASSURANCE/SAMPLING

48. Immediately upon receipt, Respondent shall submit to EPA the results of all sampling or tests and all other data generated by the Respondent, its contractor(s), or on the Respondent's behalf in the course of implementing this Order. Respondent shall also provide documentation of the quality assurance/quality control procedures followed by all sampling

teams and laboratories performing data collection and/or analysis. All sampling methods and analysis shall be in accordance with the UCMR sampling protocol for PFC sampling using Method 537 or equivalent.

49. On request, Respondent shall allow EPA, PADEP, or their authorized representatives to take split or duplicate samples of any samples collected by the Respondent while performing work under this Order. In addition, EPA shall have the right to take any additional samples that it deems necessary.

XI. NOTICE OF INTENT TO COMPLY

50. Respondent shall provide, within **five (5) days** of the effective date of this Order, written notice to EPA stating whether Respondent will comply with the terms of this Order.

XII. RECORD PRESERVATION CONFIDENTIALITY CLAIMS

51. For a period of at least five (5) years following completion of all work conducted by Respondent pursuant to this Order, Respondent shall preserve all documents, records, and information of whatever kind, nature or description in its possession or control or that of its employees, agents, accountants, contractors, attorneys, successors and assigns, that relate in any way to the performance of work under this Order, or relate in any way to releases or threatened releases of contaminants from Facility. After this five (5) year period has expired, the Respondent shall provide EPA with thirty (30) days advance written notice prior to the destruction of any such records, documents, or information. Respondent shall send such notice, accompanied by a copy of this Order, to the EPA TPC. On request, Respondent shall provide to EPA copies of all such records, documents or information.

52. Respondent may assert a confidentiality claim, if appropriate, covering the information required by or requested by EPA under this Order, pursuant to Section 1445(d)(1) of

SDWA, 42 U.S.C. § 300j-4(d)(1). However, no documents, reports, or other information generated or created pursuant to the requirements of this Order shall be withheld from EPA on the grounds of any privilege. In addition, pursuant to Section 1445(d)(2) of SDWA, 42 U.S.C. § 300j-4(d)(2), any information shall be disclosed to the public to the extent that it deals with the level of contaminants in drinking water.

XIII. AMENDMENTS

53. This Order, other than the SOW, WT Plan, and Private WT Plan, may only be amended in writing by signature of the Water Protection Division Director of EPA Region III. Amendments to the WT Plan and Private WT Plan may be made in writing by the EPA TPC.

XIV. OTHER APPLICABLE LAWS

54. Respondent shall undertake all actions required pursuant to this Order in accordance with the requirements of all applicable local, state, and federal laws and regulations, including but not limited to, the laws relating to occupational health and safety and worker's compensation.

XV. ENFORCEMENT: PENALTIES FOR NONCOMPLIANCE

55. Any violation of this Order, or failure or refusal to comply with this Order, may subject the Respondent, as appropriate, to:

a. a civil action under Section 1447(b) of the SDWA, 42 U.S.C. § 300j-6, for civil penalties of up to sixteen thousand five hundred dollars ($16,500) for each day in which such violation occurs or failure to comply continues; or

b. a citizen's civil action under Section 1449 of SDWA, 42 U.S.C. §300j-8.

XVI. RESERVATION OF RIGHTS BY EPA

56. The United States reserves all rights it may have to take any further civil or criminal enforcement action against the Respondent and all other persons pursuant to any available legal authority. Nothing in this Order shall preclude EPA from taking any additional enforcement actions, including modification of this Order or issuance of additional Orders, or additional actions as EPA may deem necessary, or from requiring Respondent in the future to perform additional activities pursuant to SDWA, or any other applicable law.

57. EPA further expressly reserves the right both to disapprove work performed by the Respondent and to request or order the Respondent to perform tasks in addition to those detailed in this Order.

58. Notwithstanding any other provision of this Order, EPA shall retain all of its information gathering, entry, inspection, and enforcement authorities and rights under any applicable law, regulation, or permit.

XVII. OPPORTUNITY TO CONFER

59. Within **three (3) days** after receipt of this Order by Respondent, the Respondent may request a conference with the Water Protection Division Director of EPA Region III or his designee to be held no later than **six (6) days** after Respondent's receipt of this Order. Requests for a conference shall be submitted to:

Roger Reinhart
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103
Phone: (215) 814-5462
Email: reinhart.roger@epa.gov

60. The purpose and scope of the conference shall be to discuss the issue(s) that Respondent would like the Water Protection Division Director to consider in connection with

Respondent also shall notify EPA in writing within **seven (7) days** after the date Respondent first became aware of the circumstances which may delay or prevent any performance of any activity required by this Order. Such written notice shall be accompanied by all available pertinent documentation including, but not limited to, third-party correspondence, and shall contain: 1) a description of the circumstances and the Respondent's rationale for interpreting such circumstances as being beyond their control; 2) the actions (including pertinent dates) Respondent have taken or intend to take to minimize any delay; and, 3) the date or time period Respondent propose to complete the delayed activities. Such notification shall not in and of itself relieve Respondent of any obligations under this Order. Respondent's failure to timely and properly notify EPA as required by this paragraph shall nullify any claim of "force majeure" and resulting entitlement to any extension of time therefore. Respondent shall have the burden of proving to EPA's satisfaction that an event constituting "force majeure" has occurred.

XIX. EFFECTIVE DATE - COMPUTATION OF TIME

64. This Order constitutes a final agency action which shall become effective within **seven (7) calendar** days of receipt of this Order if no conference with the Water Protection Division Director for EPA Region III is requested pursuant to Section XVII of this Order. If a conference with the Water Protection Division Director is requested in the time and manner provided in Section XVII, this Order shall become effective within five (5) calendar days unless the Water Protection Division Director revises the Order and sets some other effective date. All times for performance of Work under this Order shall be calculated from the effective date.

XX. ANTI-DEFICIENCY ACT

65. Nothing in this Order shall require the Respondent Navy to violate the Anti-Deficiency Act.

this Order. Respondent should submit copies of all necessary information regarding the issue(s) to be discussed. The conference is not an evidentiary or adversarial hearing and is not part of any proceeding to enforce or challenge the Order. At any conference held pursuant to this Section, the Respondent may appear in person or by attorney or other representative.

XVIII. EXCUSED DELAY - *FORCE MAJEURE*

61. Respondent's activities under this Order shall be performed within the time limits set forth herein, or otherwise established or approved by EPA, unless performance is delayed or prevented by events which constitute "force majeure." For purposes of this Order, "force majeure" is defined as any event arising from causes beyond a Respondent's control. "Force majeure" shall not include any inability of Respondent to pay the costs or expenses associated with complying with this Order, or increases in such costs or expenses, except as provided in Section XX herein, Anti-Deficiency Act.

62. When an event constituting "force majeure" occurs, Respondent shall perform the affected activities within a time period not to exceed the time provided in this Order and the period of delay attributable to "force majeure." Respondent shall use their best efforts to avoid or minimize any delay or prevention of its performance of their obligations under this Order, and to discover and keep apprised of any and all circumstances which may result in a delay or prevention of the work required under this Order.

63. Respondent shall verbally notify the EPA's TPC as soon as possible, and not later than forty-eight (48) hours, after the discovering that circumstances have occurred or are likely to occur that may delay or prevent the performance of any activity required by this Order, regardless of whether or not those circumstances constitute a "force majeure." If the TPC cannot be reached, Respondent shall leave a telephone message or electronic mail at the TPC's office.

XXI. SEVERABILITY

66. The provisions of this Order shall remain in full force and effect until all actions required by this Order have been completed and EPA has notified the Respondent, in writing, that the actions required by this Order have been completed. Respondent shall notify EPA in writing at such time as they believe that all such actions have been completed. EPA shall have sole discretion in determining whether all such actions have in fact been completed. Failure to complete all actions required hereunder as directed by EPA shall be deemed a violation of this Order. EPA's provision of written notice to Respondent pursuant to this paragraph shall not be construed as a waiver of any of EPA's rights to take further enforcement action under SDWA or any other laws.

IT IS SO ORDERED. Issued at Philadelphia, Pennsylvania this 7 day of July, 2014.

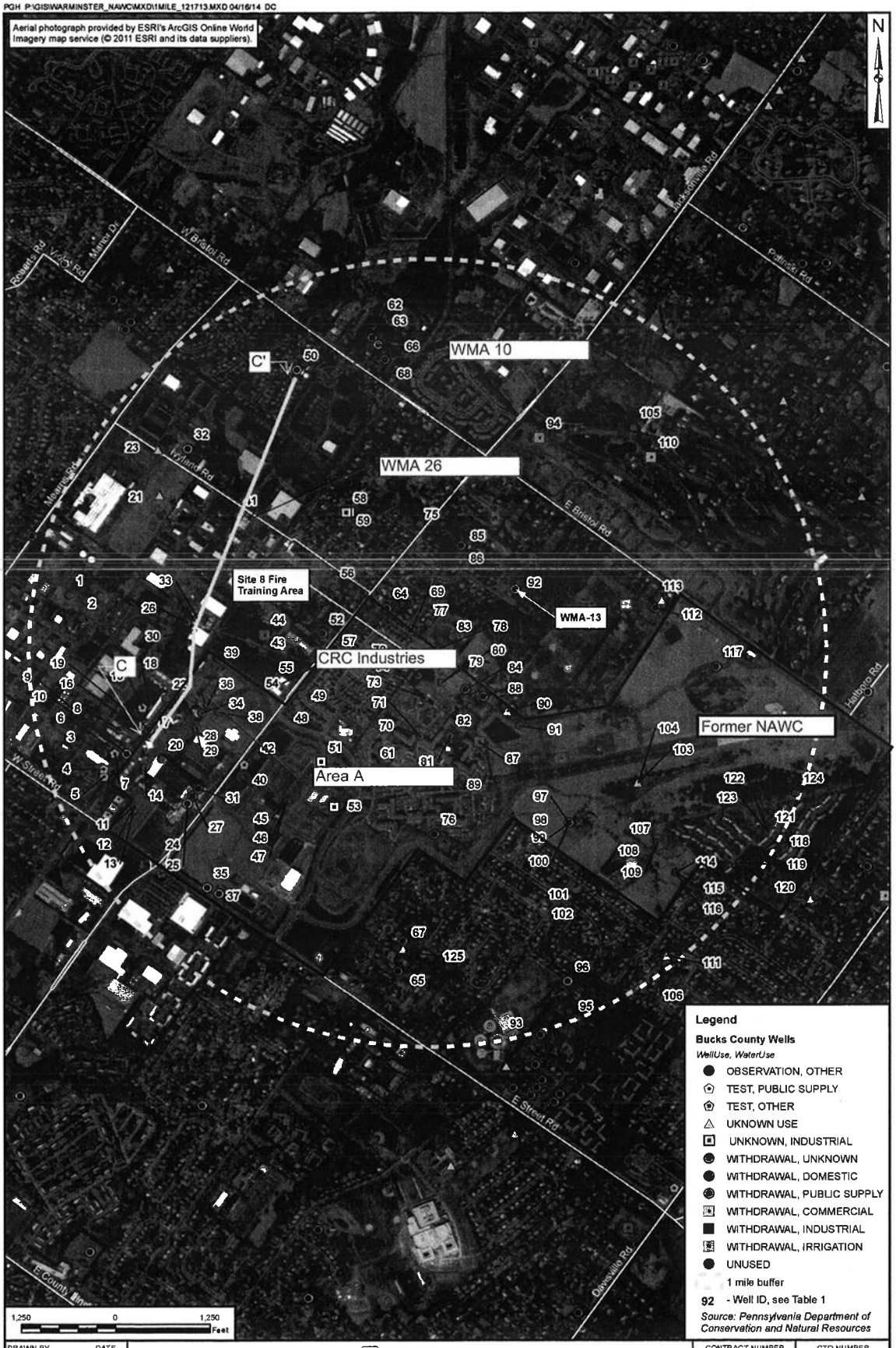
Jon M. Capacasa, Director
Water Protection Division
U.S. Environmental Protection Agency, Region III
Philadelphia, PA

Table of Attachments

1. TetraTech for U.S. Navy. Aerial Photograph, Wells within 1 Mile of Site8, WMA-13, Former NAWC, Warminster, Pennsylvania (April 16, 2014).

2. Interagency Agreement Scope of Work between EPA and Navy (June 30, 2014).

PGH P:\GIS\WARMINSTER_NAWC\MXD\1MILE_121713.MXD 04/16/14 DC



DRAWN BY	DATE	TETRA TECH	CONTRACT NUMBER	CTO NUMBER
D. COUCH	04/14/14		2206	—
CHECKED BY	DATE	WELLS WITHIN 1 MILE OF SITE 8	APPROVED BY	DATE
J. ORIENT	04/16/14	WMA-13	—	—
REVISED BY	DATE	FORMER NAWC	APPROVED BY	DATE
—	—	WARMINSTER, PENNSYLVANIA	—	—
SCALE AS NOTED			FIGURE NO. 1 - 9	REV 0

Statement of Work for USEPA Effort
Perfluorinated Chemicals at
Former Naval Air Warfare Center Warminster Pennsylvania

This statement of work is developed for an Interagency Agreement between the U.S. Navy (Navy) and the Environmental Protection Agency (EPA) regarding perfluorinated chemicals at former Naval Air Warfare Center Warminster, PA (NAWC). Per the Federal Facilities Agreement for former NAWC, the Navy is the lead agency.

Task 1: Public Outreach and Communication: EPA efforts will include communication support, preparation and distribution of fact sheets, public notices, press releases, and Action Memoranda. Public outreach includes communication with stakeholders including residents and business owners for gaining access for sampling under Task 2; and distribution of analytical results received under Task 3. The Navy will coordinate and provide input on fact sheets, public notices, press releases, and all forms of public communications. The Navy may issue its own public outreach and communications independently of this Interagency Agreement (IA).

Task 2: Water well sampling: EPA will conduct all necessary efforts (including preparation, access, sampling, custody, and shipment) to sample drinking water sources which are at risk of immediate exposure to potential perfluorinated compounds (PFCs) and/or volatile organic compounds (VOC) contamination. This effort includes approximately thirty Zone 1 wells already identified, and approximately sixty Zone 2 and 3 wells to be identified by the Navy. Water wells are defined, to include residential, irrigation, commercial, industrial and other supply, remediation or extraction wells (whether in use or not currently pumped) within Zones 1-3. A map showing Zones 1, 2, and 3 is attached. At least two rounds of sampling may be conducted at all wells. Based on the initial sampling results from Zones 1, 2, and 3, additional sampling zones may be created upon agreement between the USEPA and the Navy.

Task 3: Laboratory and Analytical: EPA will provide support to include analysis, validation, data management and reporting of the following VOCs and six PFCs, subject to Unregulated Contaminant Monitoring Rule Part 3 (UCMR3) by EPA method 537 (or a method that supersedes 537) in all three zones. These are:

VOCs

- Tetrachloroethlyene (PCE)
- Trichloroethylene (TCE)
- Cis-1,2-Dichloroethylene (cis-1,2 DCE)
- Vinyl chloride

PFCs:

perfluorooctanesulfonic acid (PFOS)
perfluorooctanoic acid (PFOA)
perfluorononanoic acid (PFNA)
perfluorohexanesulfonic acid (PFHxS)
perfluoroheptanoic acid (PFHpA)
perfluorobutanesulfonic acid (PFBS)

This task includes data management and reporting in electronic form for distribution to the public stakeholders in Task 1. Data will also be distributed to the Pennsylvania Department of Environmental Protection (PADEP) and the Navy to manage electronically for future data evaluations.

Task 4: Short term alternate water supply: EPA efforts include provision of alternate water for drinking and cooking (e.g. bottled water service) on a short term basis to private potable well owners (or commercial entities using water for cooking or consumption) if the sampling results collected in accordance with this Interagency Agreement from their well in Task 3 show levels of PFOS or PFOA at or above EPA's Provisional Health Advisory in any round of sampling.

END STATEMENT OF WORK

BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In Re:

U. S. Department of the Navy	:	**Docket No.: SDWA 03-2014-0230-DS**
Respondent.	:	
Naval Air Warfare Center	:	
Warminster Township	:	
Bucks County, Pennsylvania	:	
Facility.		

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that, on the date provided below, I served an Administrative Order to the following persons as specified::

By Telefacsimile and Overnight Delivery Service:

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U.S. Environmental Protection Agency
1650 Arch Street
Philadelphia PA 19103

Date Jul 7, 2014

Cheryl L Jamieson
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Office of Regional Counsel, 3RC20
U.S. EPA, Region III