



**NAVAL AIR STATION JOINT RESERVE BASE
(NAS JRB) WILLOW GROVE
Restoration Advisory Board (RAB) Meeting Minutes
RAB Meeting No. 58**

Meeting Date: September 16, 2015
Meeting Time: 6:30 p.m.
Meeting Place: Horsham Township Community Center

<u>Name</u>	<u>Organization</u>
Attendance: Willie Lin (R)	Navy, BRAC PMO (Co-Chair)
Brian Helland (R)	Navy, NAVFAC
Marty Schy	NAS JRB Navy Caretaker's Office
Thuane Fielding	Navy, BRAC PMO
Greg Preston	Navy, BRAC PMO
Lisa Cunningham (R)	EPA
Bruce Beach (R)	EPA
Karen Johnson	EPA
Eduardo Rovira	EPA
Mark Leipert	EPA
Larry Brown	EPA
Roger Reinhart	EPA
Tim Cherry (R)	PADEP
Jessica Kasmari (R)	PADEP
Mary Liz Gemmill (R)	Community Co-Chair
Andrew Frebowitz	Tetra Tech
Lt Col Jacqueline Siciliano	PA Air National Guard
Keith Freihofer	Air National Guard
MSGT Chris Botzum	PA Air National Guard
Andria Allmond	PA Air National Guard
Randy Chambers	Air National Guard
Bob Helverson	ATSDR
Christine Lloyd	ATSDR
Tina O'Rourke	Horsham Water and Sewer Authority
Rachel DeMarzio	Montgomery County Health Department
Bill Walker	Horsham Township
Christian Jones	Warrington Township
Tom Ames	HLRA
Eric Stahl	Weston Solutions
Doug Barber	BB&E
Azeem Merchant	Drexel University
Sam Schneider	Drexel University
Bikash Bhattarai	Temple University
Jill Kovalchik	Leidos
Cathy Dunn	Resident

Dan Dunn	Resident
George Nightlinger	Resident
Joanna Nightlinger	Resident
Kelley Liott	Resident
George DiYenno	Resident
Marielena DiYenno	Resident
Rich Garber	Resident
Mary Robinson	Resident
Michael Corby	Resident
Mr. and Mrs. Joseph Lee	Resident
Frank Wheatley	Resident
Jim Hannon	Resident
Jackie Suchodolski	Resident
William P. Morrison	Resident
Jim Ventrini (R)	Resident
Marie LeFebvre	Resident
Leigh Birkbeck	Business Owner
Marguerite Birkbeck	Business Owner
Harvey Coon	Resident
Ron Kosinski	Resident
Pauline Parise	Resident

(R) Designates RAB Member

Willie Lin, the Navy’s Base Realignment and Closure (BRAC) environmental coordinator and RAB Co-Chair, opened the meeting by greeting the attendees. Mr. Lin acknowledged Mary Liz Gemmill (RAB Co-Chair) and Keith Frehofer (Air National Guard) as present. Mr. Lin indicated that announcements for this meeting were mailed out in August 2015 and posted in the local newspaper, the Horsham Land Redevelopment Authority website, the Horsham Township website, and the Navy’s BRAC website. Mr. Lin explained the meeting format; the Navy presentation will be followed by the Air National Guard presentation.

Mr. Lin asked RAB and government members to introduce themselves.

Mr. Lin indicated the minutes from the last RAB meeting from June 2015 were mailed to all members in August 2015, posted to the BRAC website, and will be placed in the information repository at the Horsham Township Library and on the library website. Mr. Lin asked if there were any comments or questions on the June 2015 meeting minutes. There were no comments.

Mr. Lin stated that he had an announcement to make before starting the formal meeting presentation. The Finding of Suitability of Transfer (FOST) has been finalized for the former Shenandoah Woods housing area. This 55-acre parcel is located in Warminster Township. The Navy will be transferring ownership of the property soon.

Mr. Lin started the Navy presentation. The Navy has been working on a radiological survey. A report identified 18 potential radiologically impacted sites. Scoping surveys and field work was

performed as an initial evaluation to identify if radionuclide contaminants exist. All the field work has been completed. The survey reports will be provided to the regulators in three groups. These include building surveys, surveys of the footprints of former buildings, and landfill sites for a total of 18 sites. Mr. Lin referred to a figure showing the site locations. The building survey reports are anticipated to be submitted to the regulators in October 2015 and building footprint and landfill survey reports are scheduled to be submitted in late 2015. Mr. Lin asked if there were comments or questions about the radiological studies. There were no comments pertaining to the radiological work.

Mr. Lin continued with an update on Site 5, the fire training area. Mr. Lin showed the site location on a slide. The remedial action included well installation in July 2013 followed by a Remedial Action Completion Report (RACR) in September 2014. An Operation and Maintenance (O&M) Plan which included a long-term monitoring plan were completed in May 2015 and the Navy is currently preparing a Site 5 Sampling and Analysis Plan (SAP) for performance monitoring. A biostimulation event was performed in March 2015. This event includes the injection of Lactoil and sodium bicarbonate into the groundwater. Monitoring conducted after the injection showed a satisfactory reducing environment, which are the conditions needed for the treatment. Performance monitoring will be scheduled for fall 2015, and additional treatment injections will be performed if necessary based on the sample results. Mr. Lin asked if there were any questions. There were no questions.

Mr. Lin began the presentation regarding perfluorinated compounds (PFCs). He stated that most of this information has been presented in previous RAB and public meetings but is repeated for the benefit of new attendees. PFCs are known as emerging contaminants. They have recently been found at NAS JRB Willow Grove. PFCs are man-made chemicals which break down slowly. PFCs were used in many different products including Teflon and fire-fighting foams. Two PFCs, perfluorooctane sulfate (PFOS) and perfluorooctanoic acid (PFOA), have provisional health advisory (PHA) levels established by the Environmental Protection Agency (EPA). The PHA level of PFOS is 0.2 micrograms per liter, which is parts per billion (ppb) and the PHA level of PFOA is 0.4 ppb. EPA representatives will be in the back of the room after the meeting to answer individual questions about PFOA and PFOS.

PFOA and PFOS are being sampled for the first time in public water systems under a program known as the Unregulated Contaminant Monitoring Rule (UCMR). Under this rule, approximately 30 contaminants are evaluated and PFOA and PFOS are among those. Monitoring of water systems serving greater than 10,000 people has been ongoing since 2013 and will continue through the end of this year. In July 2014, the Horsham Water and Sewer Authority (HWSA) sampled their wells as part of UCMR. Two of the wells, Numbers 26 and 40, were found to have exceeded the PHA level of PFOS. As a result, those wells have been shut down and a public notice was issued.

The Navy has subsequently initiated work with EPA to conduct private well sampling. For those properties that have results at or above the PHA levels have been provided bottled water. Sampling was started in the area HWSA wells Numbers 26 and 40, and, as more information became available, the study area was expanded. EPA representatives from the sampling team are available to discuss individual questions about private well sampling at the end of the meeting.

In addition, PFCs were found in Warrington Township wells, which have since been removed from service. The Air National Guard presentation will provide further information on Warrington Township wells.

Mr. Lin provided an update on the Horsham Township PFC response. More than 200 private wells have been sampled. Thirty six (36) wells are at or above the PHA. These properties have been provided bottled water for drinking and cooking purposes. An additional 30 wells are being monitored that have PFCs in the water, but at levels below the PHA.

Mr. Lin asked if there were questions. An audience member asked why wells with levels just below the PHA were not provided bottled water as any level exposure may be harmful. Mr. Lin indicated that specific health effects questions could be directed to representatives of the Center for Disease Control (CDC) Agency for Toxic Substances and Disease Registry (ATSDR) were available after the meeting. Bob Helverson of ATSDR explained that the PHA levels were based on health and set at levels in the range where no health effects are expected if exposed to concentrations below the PHA. If there are concerns about drinking water below the PHA, Mr. Helverson recommended reducing the amount of exposure by consuming bottled water. Boiling water does not reduce the levels on these compounds. The audience member, identified as a Warrington Township resident, wanted to know if a well with PFCs at levels below the PHA will be resampled. Mr. Lin indicated that there are plans to resample wells that are currently below the PHA but at risk of exceeding the PHA will be monitored, stated that the process for sampling Warrington or Warminster wells will be discussed further by Mr. Freihofer. Mr. Freihofer stated he will meet with the individual after the meeting to discuss specifics.

Greg Preston of the Navy BRAC office added that it is important to note that when results were reviewed, the numbers were rounded up. If the result was 0.15 ppb, the number was rounded up for safety to 0.2 ppb, which is the PHA. So, for example, if the result of a well sample was 0.18 ppb, bottled water would be provided. An audience member asked if the levels for private wells were the same levels that are acceptable in public water. Mr. Lin stated that they are the same numbers. A question was asked about the safety of bathing or swimming in water above the PHA levels. Mr. Helverson replied that these chemicals do not go through the skin, but the water above the PHA levels should not be ingested.

A question was raised about sample scheduling. Some homes on the same block were tested almost a year before others and some were just recently notified for the first time. Mr. Lin replied the Navy and EPA have worked to identify and sample as many homes as possible. There have been public meetings to try to identify as many private well locations as possible. Mr. Lin identified the EPA personnel responsible for private well sampling and indicated they were available to discuss individual circumstances at the end of the meeting.

An audience member asked if wells above the PHA levels would be resampled. Mr. Lin replied that wells located in Horsham Township above PHA levels were supplied bottled water and would not be retested. The goal is to get those properties connected to public water. Mr. Lin indicated Mr. Freihofer would discuss the plans for Warrington and Warminster Township.

Mr. Lin stated the Navy has finalized an agreement with HWSA that will allow the HWSA to take action on public and private wells in their service area. Private wells with levels above the PHA will be connected to the public supply. The Navy will also reimburse HWSA for treatment systems on their supply wells. Connections to the public supply have begun to be offered to private well locations where HWSA mains already exist. Other offers will be coming as soon as HWSA engineers can schedule running new water mains in areas where they do not currently exist. A question about who pays for the connection to Horsham's public supply was raised. Mr. Lin clarified that the homeowner would not pay for the connection from the street to inside the property, assure that the connection is functioning properly, and the property will be restored from any excavation that was needed to run the line from the main to the property. HWSA will work out an access agreement with each property owner. Tina O'Rourke from HWSA stated that the well also be abandoned will also be included after connection to the public supply. Mr. Lin stated that offer letters to connect to the public supply will have specific timelines addressed. There will be plenty of notice so there should be no surprises about scheduling the connection. No one will enter the property until all the access agreements are in place.

Mr. Preston noted that he wanted to make sure that property owners make sure that whoever shows up to do the work are who they say they are. If you're not sure about who is doing the work, please contact Mr. Lin or the HSWA. Don't provide access to your home to anyone if you don't have a letter from HWSA identifying that someone will be working at your property. Mr. Lin added that an offer letter from the Navy signed by Mr. Preston will be sent to the homeowner with a form that must be returned prior to work being performed on a property.

Mr. Lin stated the Navy presentation was concluded and asked if there were questions. An audience member wanted to know why some people were getting bottled water and some were not. It was determined that the area in question was in Warminster Township. Randy Chambers from the Air National Guard (ANG) replied that the ANG has entered the investigation and response later than the Navy, but is working with the Navy, EPA and the township to take action. An audience member asked why their home couldn't be connected immediately since a water main runs down their street. Mr. Chambers replied that there is a process that must be followed. A cooperative agreement needs to be put in place that will create funding for the townships to make connections to individual properties.

A question was asked if there was a list of everything that was detected in Horsham Township public water supply. Ms. O'Rourke stated that there is an annual report with the data and she would take contact information after the meeting to get copies of the report out to interested parties. A question was asked about the possible health effects from consuming the water over a lifetime. Mr. Helverson stated that he didn't have information of what contaminants were in the water, but could talk specifically about PFCs. There is limited, and sometimes, conflicting information regarding health effects from PFC exposure. Exposure to PFCs can result in increased cholesterol levels and increased uric acid levels in the body. An audience member asked how long the PFCs have been in the water. Mr. Helverson replied it is unknown since sampling for these compounds has only recently been started.

A question regarding why testing for PFCs was started was raised. Karen Johnson of EPA confirmed that EPA did not require testing for these compounds until recently. EPA is only

allowed to add 30 new contaminants for testing every 5 years. EPA has been trying to get PFCs on the list since 2006 and was finally successful for this most recent update. Monitoring has been ongoing since 2013. It was only recently that there was laboratory analysis capable of detecting these compounds. A question was asked if PFCs were added based on observing health problems in this area. Ms. Johnson replied that they weren't added based on health effects. EPA has worked on PFCs at several DuPont and 3M facilities. Research showed that these compounds are very persistent in the environment and had potential health effects, so EPA worked to get these compounds included on the sampling list. Since PFOA and PFOS were used in fire-fighting foams we are now finding these compounds in proximity to airports, fire training centers and landfills where these materials were disposed.

An audience member asked if it was known when the Navy started using the foam. Ms. Johnson replied in the late 1940's and early 1950's many products used these materials and were commonly found in homes in carpets and food products. It's in the atmosphere and water, but we haven't started to look for it until 2013. Ms. Johnson was asked about the health advisory and she responded that EPA is expected more health effects data late this year to supplement information in the PHA that came out last year. It is known that it takes a long time to get out of our systems. The health effects information has been evolving. There have been many studies but there is no clear cancer data. Ms. Johnson stated the effects mentioned by Mr. Helverson are the only effects where there are some links to these compounds. Mr. Helverson indicated that he is available at the end of the meeting to discuss health effects with individuals.

Mr. Frehofer commenced with the ANG presentation starting with site restoration activities at ST-01, the former Air Force petroleum tank area. In response to a question, Mr. Frehofer indicated it was on the north side of the base near Graeme Park. Remediation by biosparging is ongoing and next year persulfate and Epsom salt will be injected to enhance the cleanup. The tanks are planned for demolition in 2016. If petroleum contaminated soils are encountered under the tanks during demolition, they will be cleaned up at that time. A fact sheet for this site is available for meeting attendees.

Mr. Frehofer continued with an update on the Privet Road Compound and showed the location on a slide. This was a former waste management area where low levels of trichloroethene (TCE) and tetrachloroethene (PCE) have been detected in groundwater. A new contract for long-term monitoring has recently been awarded.

Mr. Frehofer proceeded with an update on the PFC investigation being conducted by the ANG. A preliminary assessment has been completed to identify potential PFC sources or releases. Potential sources include buildings that contained fire-fighting foam, such as aircraft hangers, and areas that may have received runoff from releases. These areas include a storm water basin on the north side of the base, a former waste water treatment plant, and area where waste water treatment sludge was stored. The ANG is currently in the process of conducting an investigation, including sampling, of all the PFC areas that were identified.

ANG is negotiating a cooperative agreement with EPA to continue bottled water delivery and well sampling. ANG is also negotiating a cooperative agreement with Warrington Township to connect residents with PFCs at or above the PHA level to the municipal supply. ANG will also

be paying for Warrington to install carbon filters on their water supply wells. ANG is also negotiating agreements with Horsham and Warminster to make connections to the public supply for residents with levels at or above the PHA. Mr. Frehofer presented a slide that showed the area of responsibility covered by ANG.

Mr. Frehofer was asked if there was any ground contamination from the petroleum tanks. Mr. Frehofer replied that they will investigate further after the tanks are removed next year.

An audience member asked if there will be follow-up after properties are connected to public water. Mr. Frehofer replied that for those properties that are connected, the wells will be closed and the homes will be served by public water so there should not be issues with contamination.

Mr. Frehofer was asked if a plan for addressing contamination in Warminster was available as ANG indicated at the last RAB meeting a plan would be available in 60 days. Mr. Frehofer replied that the plan has been submitted to EPA and posted on the ANG website; the website address is on the handouts and agenda.

An audience member asked about the TCE and PCE contamination at the Privet Road Compound and if the groundwater is being monitored. Mr. Frehofer explained that the levels are low and sampling shows they are contained within the ANG property.

An audience member asked about the schedule for connection to the public supply. Mr. Frehofer replied that the cooperative agreements are currently being negotiated with the townships and are in review by the townships. After the agreements are signed, there will be funding to start the work and a timeline will be established. A conversation between an audience member and Mr. Frehofer clarified the area of ANG responsibility. This was not formally determined during the earlier public meetings creating some uncertainty who would be taking action. Mr. Frehofer went back to the slide showing the areas of Horsham, Warrington, and Warminster Townships that were being addressed by the ANG.

A question was asked why, since PFCs were found at NAWC Warminster, it took so long to look for these compounds at Willow Grove. Mr. Lin replied that the Navy learned from the work at Warminster and immediately applied that to Willow Grove. This was the same time HWSA was conducting their UCMR testing. An audience member asked if the PFC findings effect the property transfer. Mr. Lin replied that PFCs do have to be considered in the process and Navy is working through these issues. When asked about the timeframe for property transfer, Mr. Lin replied that a specific schedule cannot be determined at this time.

There were no other questions. Mr. Lin reiterated that representatives of Navy, ANG, EPA, and ATSDR were available in the back of the room to answer individual questions.

Meeting adjourned.



**NAS JRB
WILLOW GROVE
RESTORATION
ADVISORY BOARD
(RAB)**

September 16, 2015



Navy RAB Agenda



- Welcome Community RAB Members
- Radiological Status
- Environmental Restoration Status
- Perfluorinated Compounds Status
- Navy Closing Remarks



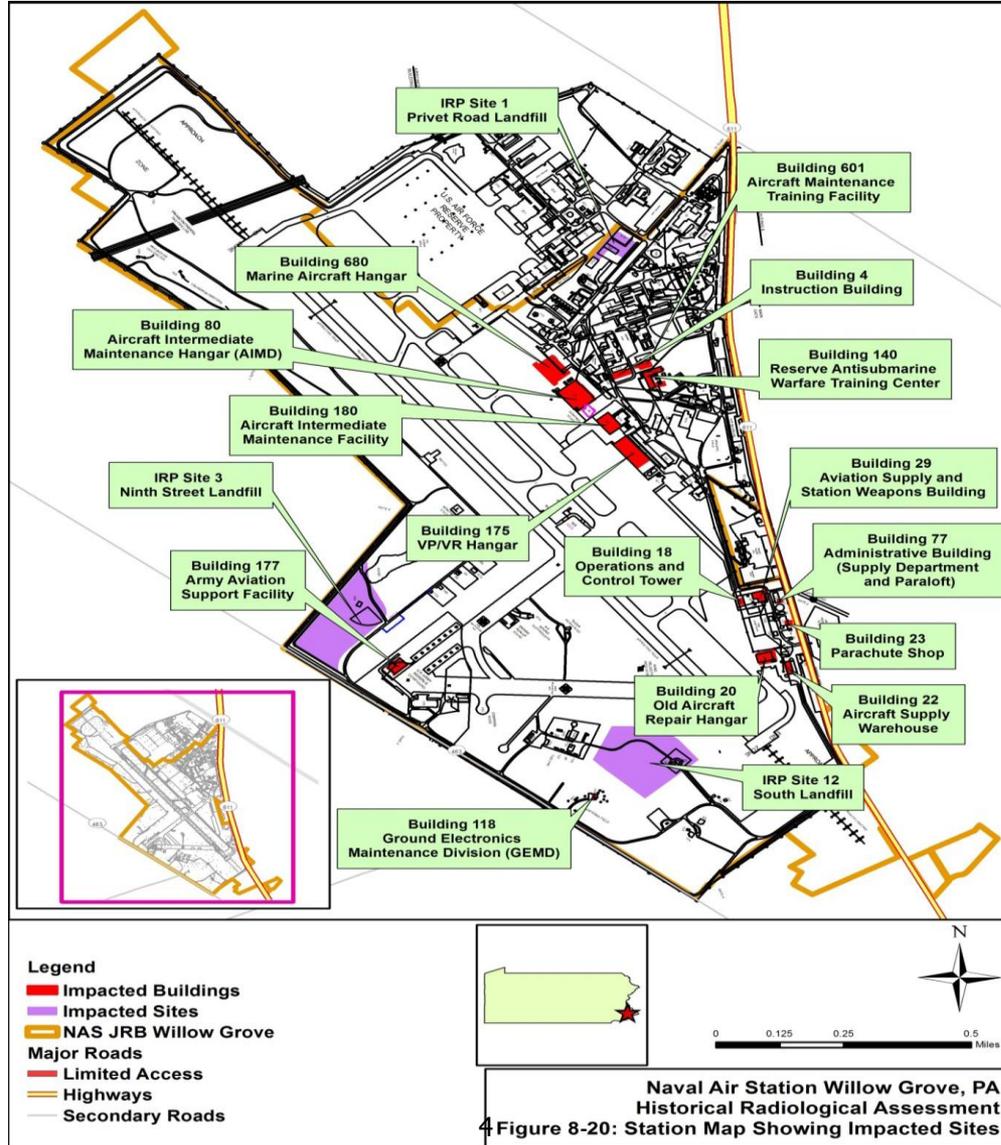
Radiological Update



- 18 potential radiological impacted sites were identified
- A scoping survey was performed as an initial evaluation to identify if radionuclide contaminants exist. All field work is complete.
- The scoping survey reports for the 18 sites will be submitted to regulators review in three groups:
 - Building Surveys. (10 Buildings)
 - Building Footprints. (5 Former Buildings)
 - Landfills. (3 Sites)



Radiological Investigation Potentially Impacted Sites



Naval Air Station Willow Grove, PA
Historical Radiological Assessment
4 Figure 8-20: Station Map Showing Impacted Sites



Radiological Update



- Building surveys reports are anticipated to be submitted to EPA/PADEP in October 2015
- Building footprint and landfill survey reports will be submitted in late 2015



Site 5 – Fire Training Area Groundwater





Site 5 Groundwater Remedial Design/Remedial Action



- Remedial Action
 - Well Installation Completed July 2013
 - Remedial Action Completion Report finalized September 2014

- Operation, Maintenance, and Monitoring (OM&M) Plan and Long-Term Monitoring (LTM) Plan
 - OM&M and LTM Plan finalized May 2015
 - Sampling and Analysis Plan being prepared



Site 5 Groundwater Current Conditions



- Biostimulation conducted late March to early May 2015
 - Injection of Lactoil and sodium bicarbonate
 - Groundwater monitoring showed satisfactory anaerobic environment
- Performance monitoring to be conducted in accordance with OM&M Plan in Fall 2015
- Additional injections will be conducted based on monitoring results



NASJRB Willow Grove PFCs

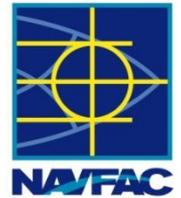


- Emerging contaminants known as perfluorinated compounds (PFCs) have been found recently at NASJRB Willow Grove.
- PFOS and PFOA are man-made chemicals, break-down slowly, and are used in many different products including cookware and fire-fighting foams.
- Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) have provisional health advisory (PHA) values established by EPA.
 - PFOS: 0.2 $\mu\text{g/L}$ (parts-per-billion)
 - PFOA: 0.4 $\mu\text{g/L}$ (parts-per-billion)



PFOA / PFOS Background

(Information presented at Public Meetings)



- PFOA, PFOS and other emerging contaminants are unregulated contaminants that are being sampled for the first time in Public Water Systems. EPA uses the Unregulated Contaminant Monitoring Rule (UCMR) program to collect data for contaminants suspected to be present in drinking water.
 - UCMR Monitoring is required for public water systems serving greater than 10,000 persons.
 - UCMR Data collection runs from 2013 through 2015.
 - EPA is working to improve its understanding of the prevalence and toxicity of these chemicals to determine if safe drinking water regulatory limits are needed.
 - The PHA values are reasonable health based concentrations, above which actions should be taken to reduce exposure. PHA values include many safety factors to protect vulnerable populations (e.g., children).



NASJRB Willow Grove PFCs



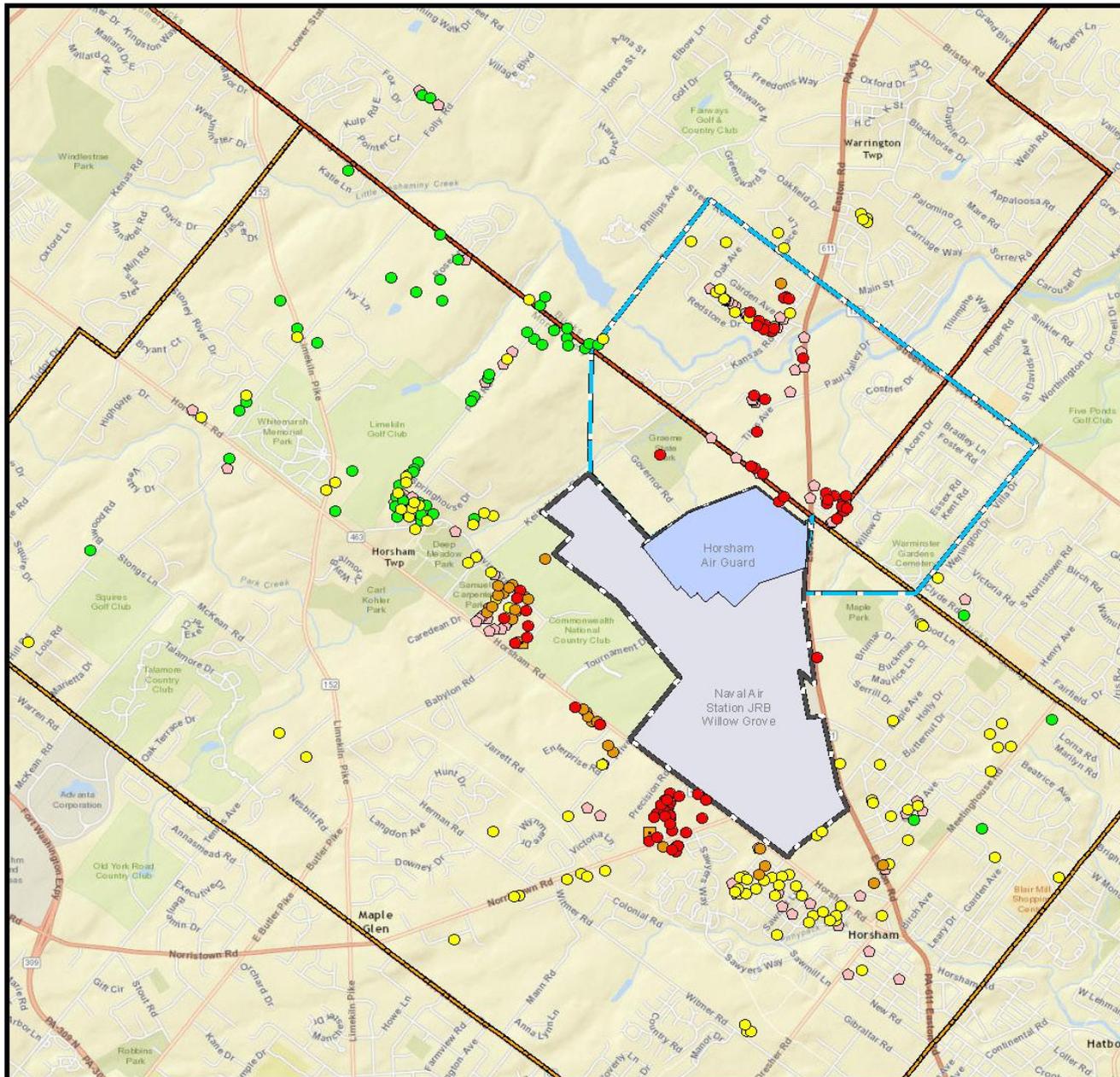
- In July 2014, Horsham Water and Sewer Authority (HWSA) sampled public water wells under the UCMR program. HWSA wells 26 and 40 were shut down due to exceedance of PFOS and a public notice was issued.
- In September 2014, EPA, on behalf of the Navy, initiated private well sampling and provision of interim bottled water, as needed. Private well sampling started near HWSA wells #26 and #40, but the area expanded as more information became available.
- On October 7th, 2014, open house public meeting held at Horsham Community Center, over 300 attended. ATSDR, EPA, Navy, Air National Guard, PADEP, Montgomery County Health Department, and HWSA participated.



NASJRB Willow Grove PFCs



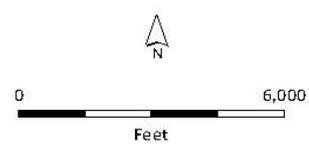
- In November 2014, PFC found in adjacent Warrington Township. Three public wells were removed from service and a public notice issued. Private wells in Warrington Township were sampled for PFCs.
- On February 24 and 25, 2015, an open-house public meeting was held for residents of Horsham, Warrington, Warminster and other local townships and boroughs. Approximately 150 attended. All agencies and local water suppliers participated.
- More than 200 private wells around NASJRB Willow Grove have been sampled for PFCs by the Navy.
 - 36 private wells are at/above the PHA levels and are provided bottled water for drinking and cooking purposes.
 - 30 additional private wells, that are below but near the PHA levels, are being monitored.



- Legend**
- Provisional Health Advisory Level (PHAL)
PFOA 0.4 µg/L, PFOS 0.2 µg/L
 - PFOS and/or PFOA detected at/above the PHALs
 - PFOS and/or PFOA detected at/above 1/4 the PHALs
 - PFOS and/or PFOA detected at/above 1/4 the PHALs (supplied water)
 - PFOS and/or PFOA detected but below 1/4 the PHALs
 - Non-detect for PFOS or PFOA
 - Location sampled (no results yet)
 - Not scheduled for sampling yet
 - Horsham Air Guard
 - Former NAS JRB Willow Grove
 - Air Force Administrative Order Boundary
 - Horsham Township
 - Warrington Township

Imagery: ESRI, GeoEye,
Digital Globe 2013
Sample Data: Weston Generated

Coordinate System:
WGS84 UTM Zone 18N Feet



Willow Grove Naval Air Station Site

Figure 1
PFC Sample Location Map
as of 09/01/2015

TDD#: W501-15-07-022/027
Contract: EP-S3-15-02
Prepared: 9/3/2015





NASJRB Willow Grove PFCs



- The Navy has finalized an agreement with HWSA on public and private wells in HWSA's service area that are at/above the PHA levels for PFOA or PFOS. The Navy will reimburse for treatment systems on HWSA wells, and connect private well users to public water.
- The Navy has formally offered connections to private well locations where water mains already exist. Other offers will be coming as soon as new water mains are completed.
- The Navy and EPA can answer questions about your individual Horsham Township private well after the RAB meeting.
- PFC actions at public and private wells in Warrington Township and other specific locations will be addressed separately by the Air Force/Air National Guard.



NAS JRB Willow Grove RAB Meeting



- Closing Navy Remarks
- Questions or Comments From The Community?
- Next Meetings
 - December 9, 2015; time TBD

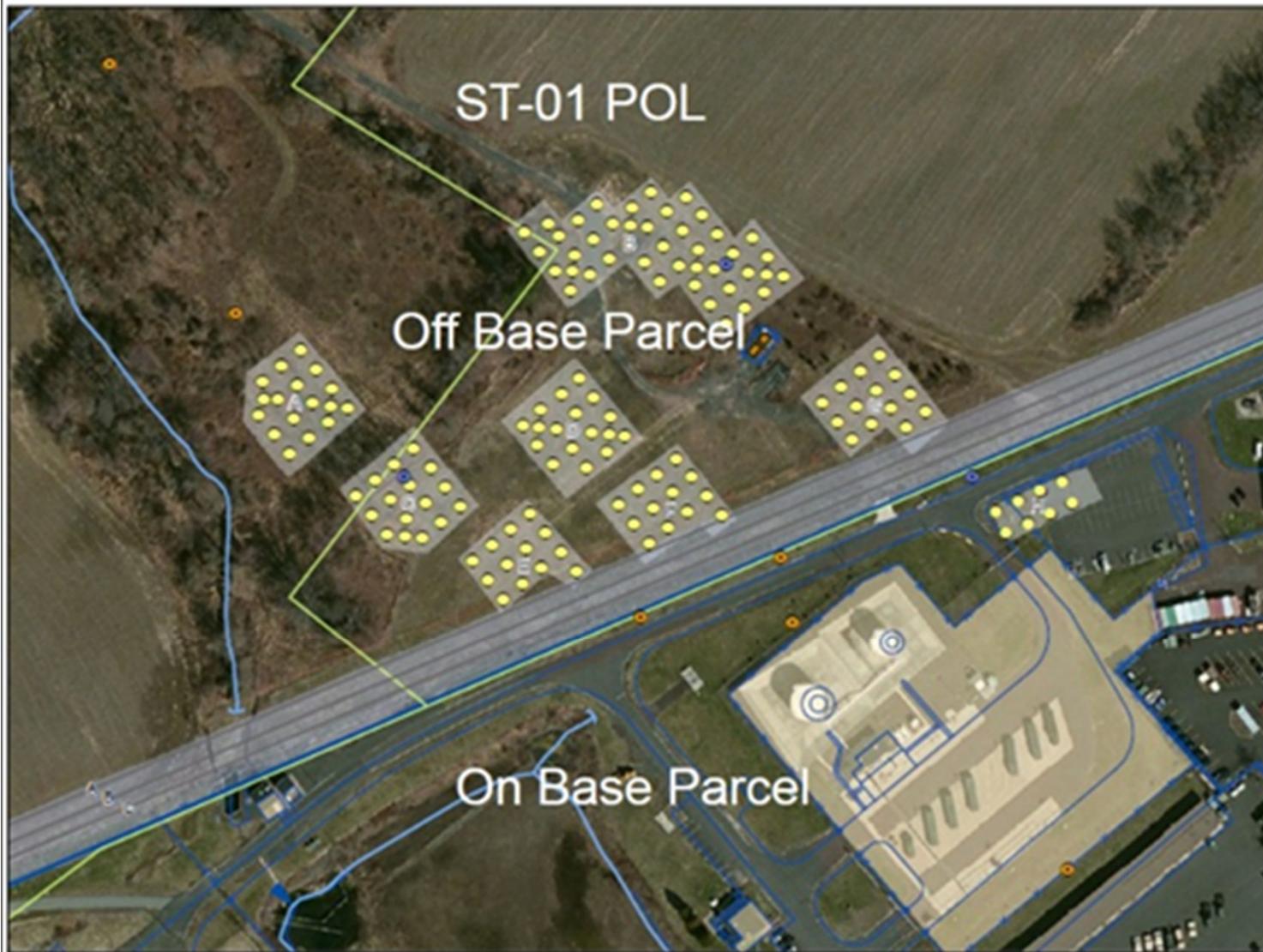
Navy Meeting Adjourned

Restoration Advisory Board Horsham Air Guard Station



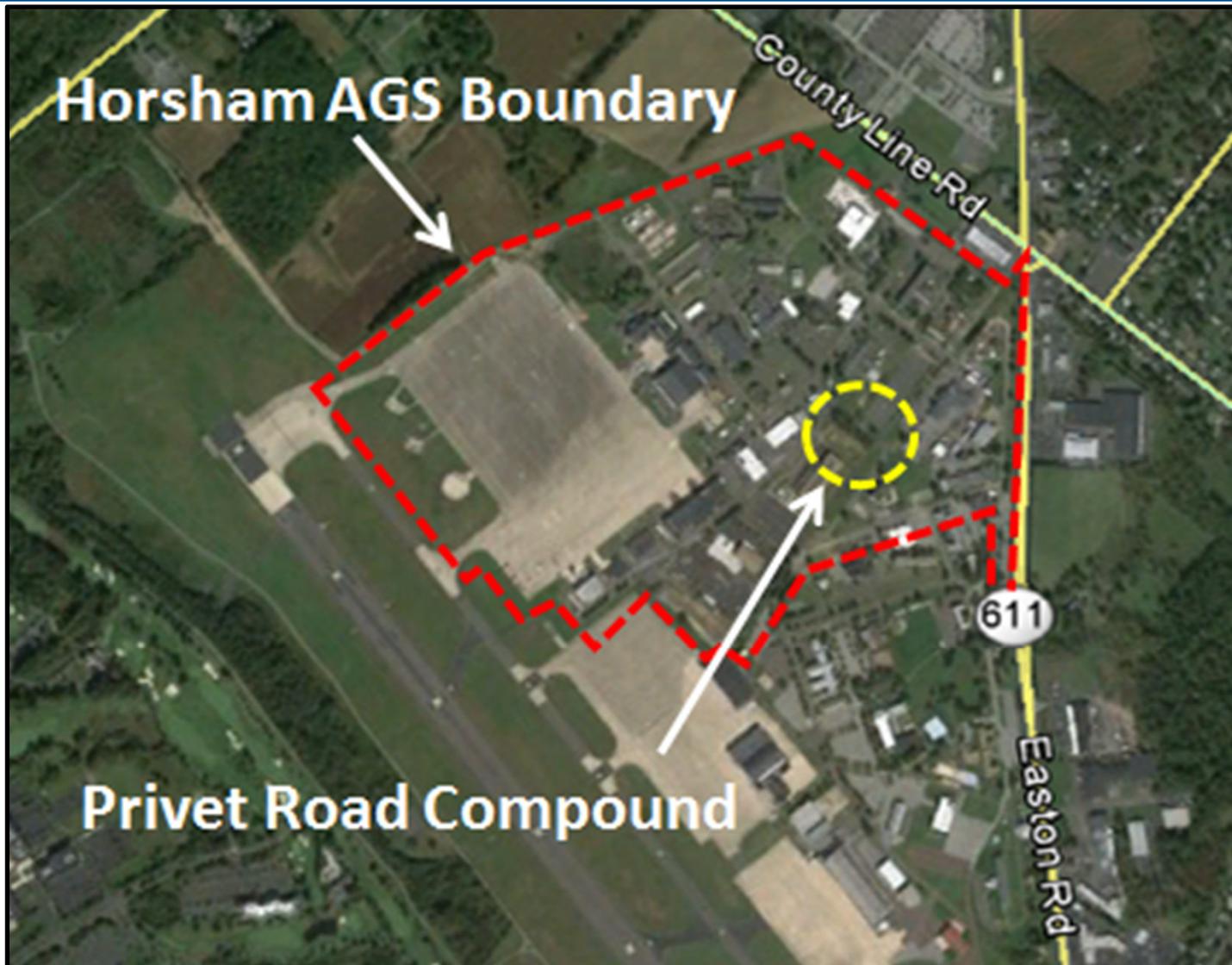
Keith Freihofer
Environmental Restoration
Program Manager
Air National Guard Readiness Center
Joint Base Andrews, MD

Air Force ST-01 POL



- Former Air Force Reserve Petroleum Tank Area
 - Site originated from a jet fuel spill in the 1970's
 - Off Base biosparge remediation continues
 - Injections of persulfate and Epsom salt to replace the biosparge system in 2016
 - Petroleum tanks to be dismantled in 2016 allowing for removal of any petroleum impacted soil that may be present under the tanks.
 - Fact sheet available

Privet Road Compound



Privet Road Compound

- Former waste management area for Naval Air Station Joint Reserve Base Willow Grove.
- Sampling completed in 2013 and 2014 indicates low levels of trichloroethene (TCE) and tetrachloroethene (PCE) exist in the groundwater.
- New contract awarded to Leidos, Inc. for continued Long Term Monitoring.
- Fact sheet available
- Air National Guard Administrative Record:
<http://afcec.publicadmin-record.us.af.mil/Search.aspx>

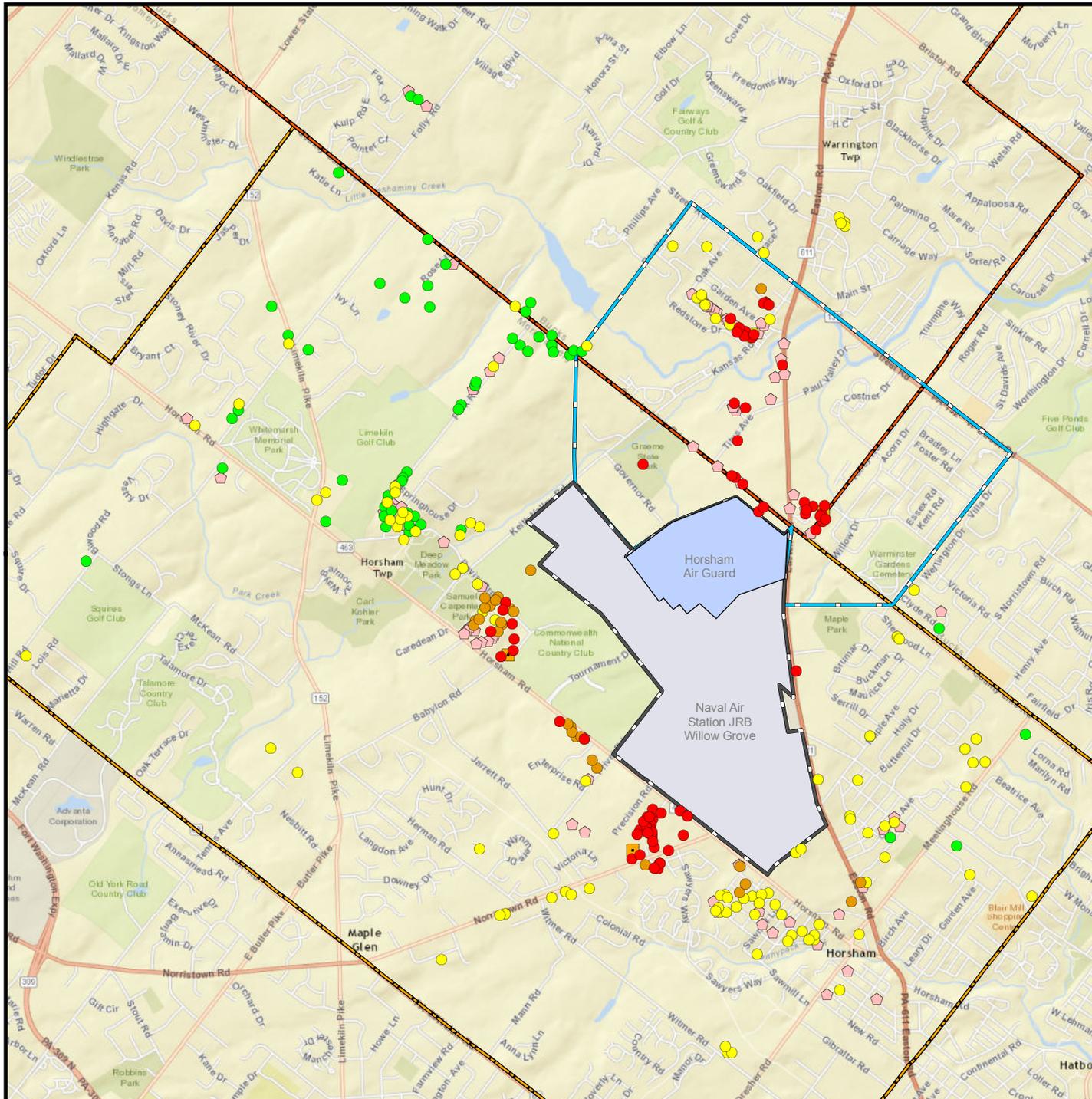
- Update on PFC Investigation on HAGS:
 - Completed a Preliminary Assessment of potential Perfluorinated Compound (PFC) release sites
 - Findings include buildings that contained foam fire suppression systems and areas that may have received runoff from foam releases: stormwater sediment basin, former waste water treatment plant, and an area that wastewater treatment plant sludge was stored.
 - Air National Guard (ANG) is currently in procurement process for a thorough investigation of these areas to include collecting soil and groundwater samples.

- Update on Drinking Water Actions
 - Air National Guard is negotiating an interagency agreement with the EPA to continue providing PFC testing of private drinking water wells and supplying bottled water to customers with PFCs at or above the provisional health advisory level (PHAL) for residents within our area of responsibility in Horsham, Warminster, and Warrington Townships.

- Update on Drinking Water Actions (cont.)
 - **Warrington:** ANG is negotiating a cooperative agreement with the Town of Warrington to connect residents with private drinking water wells containing PFCs at or above the PHAL to municipal water. Additionally, the Air National Guard will fund the installation and maintenance of carbon filters on the town water supply system.
 - **Horsham and Warminster:** ANG is negotiating cooperative agreements with these townships to connect residents with private drinking water wells containing PFCs at or above the PHAL to municipal water.

QUESTIONS?

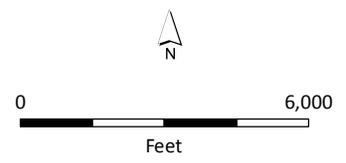
Air National Guard Administrative Record:
<http://afcec.publicadmin-record.us.af.mil/Search.aspx>



- Legend**
- Provisional Health Advisory Level (PHAL)
PFOA 0.4 µg/L, PFOS 0.2 µg/L
 - PFOS and/or PFOA detected at/above the PHALs
 - PFOS and/or PFOA detected at/above ¼ the PHALs
 - PFOS and/or PFOA detected at/above ¼ the PHALs (supplied water)
 - PFOS and/or PFOA detected but below ¼ the PHALs
 - Non-detect for PFOS or PFOA
 - Location sampled (no results yet)
 - ◇ Not scheduled for sampling yet
 - Horsham Air Guard
 - Former NAS JRB Willow Grove
 - Air Force Administrative Order Boundary
 - Horsham Township
 - Warrington Township

Imagery: ESRI, GeoEye,
Digital Globe 2013
Sample Data: Weston Generated

Coordinate System:
WGS84 UTM Zone 18N Feet



Willow Grove Naval Air Station Site

Figure 1
PFC Sample Location Map
as of 09/01/2015

TDD#: W501-15-07-022/027
Contract: EP-S3-15-02
Prepared: 9/3/2015

