

Grayling Army Airfield Groundwater Investigation

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U.S. Environmental Protection Agency

Safe Drinking Water Act

- Every five years the Unregulated Contaminant Monitoring Rule (UCMR3) requires EPA to issue a list of 30 unregulated contaminants to be monitored by public water systems.
- UCMR3 was issued on May 2, 2012 which required monitoring for 30 contaminants (28 chemicals (including Perfluorinated Compounds PFCs) and two viruses). This monitoring provides a basis for future public health decisions.
- The 30 contaminants are collected from all Public Water Systems serving more than 10,000 people plus 800 representative Public Water Systems serving fewer than 10,000 people from January 2013 through December 2015.



National Guard Bureau Response to UCMR3

2016 DATA CALL

- Identify drinking water source at every training facility, camp, fort and armory.
- Identify water sources that have analyzed their water for PFCs or have submitted samples as part of U.S. EPA UCMR3.
- Identify potential areas of PFC use such as firefighting training sites or historic fire incidents.





Michigan Army National Guard Response to UCMR3

Construction and Facilities Management Office - Environmental Section

- Identified drinking water sources for all installations in Michigan.
- Investigated potential PFC containing materials, fire training and historic fire incidents. Identified historic Fire Crash/Rescue training site at the Grayling Army Air Field utilized by military and civilian entities.
- Collected five PFC samples from ongoing TCE cleanup operation at Grayling Army Air Field. Analytical problem made sample data questionable.
- Collected ten additional samples at same and additional TCE monitoring wells.
- Detected PFCs in some of the samples. Decision was made to set 20 wells along fence line to determine extent of PFCs. Groundwater samples were collected at same depth of residential wells, half way between first sample and the top of the groundwater and at the top of groundwater or water table.



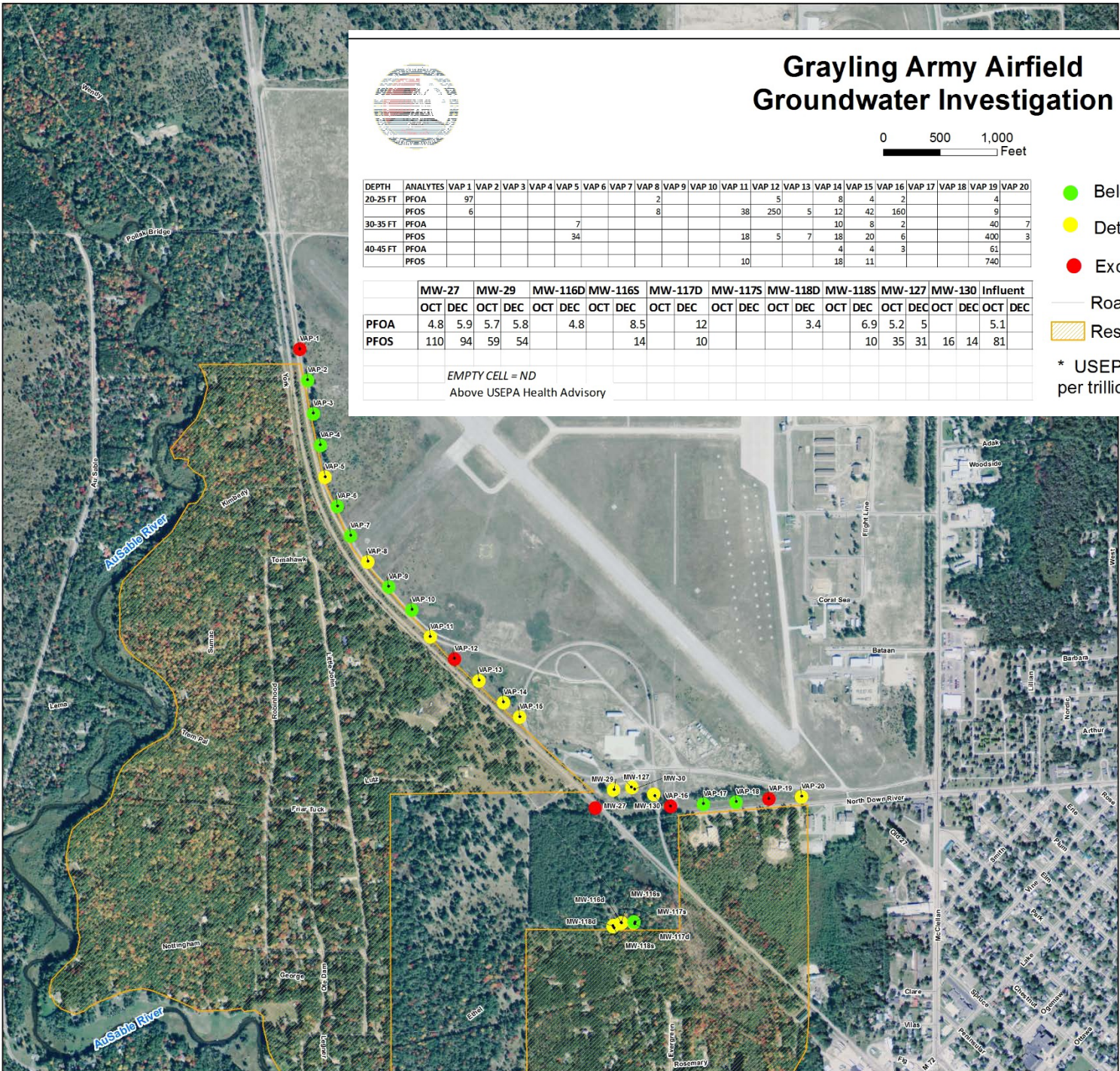


20 - wells installed
along fence line

60 - groundwater
samples collected

29 - samples detected
PFCs (below advisory
level)

5 – exceed U. S. EPA
health advisory for
PFOS/PFOA





Next Actions

(ANNOUNCED AT 18 MAY TOWN HALL MTG)

- Michigan Army National Guard notified National Guard Bureau, state agencies and local health department of analytical results of PFC samples collected along fence line.
- National Guard Bureau fast tracked funds to sample all wells on camp and start investigation of PFCs in summer of 2017.
- Michigan Army National Guard, in consultation with other state and local agencies supports sampling all drinking water wells between the Grayling Army Air Field and the Au Sable River.



Michigan Army National Guard

Construction and Facilities Management Office – Environmental Section

Steps Actioned: 18 May To Date

- District 10 Health Department coordinated with the state contractor, Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec), to collect requests for sampling information and arrange sample collection of residents' drinking water.
- Amec along with District 10 Health Department staff, as of 14 July received 293 requests for analysis and have collected and submitted for analysis 178 samples.
- State agencies have reviewed the analytical results and upon receipt of validation began sending them out to each residence.
- Notified 3 residents' where sample results exceeded USEPA Lifetime Health Advisory Criteria by in person consultation with DMVA, DEQ, and DHD10.
- Continued communication with interested parties in an effort to maintain absolute transparency: In person communication, hotline phone availability, website updated regularly, direct phone communication, updates to the press, and status update mailings.



Residential Well Sampling Status

Legend

PRIORITY ZONE

Inside Priority Zone

FEDERAL/STATE PROPERTY

NO SAMPLING FORM RECEIVED

SAMPLE FORM RECEIVED

Outside Priority Zone

SAMPLE FORM RECEIVED

+ CITY OF GRAYLING MUNICIPAL WELLS

+ DRINKING WATER WELLS ON FILE WITH HEALTH DEPARTMENT

CRAWFORD COUNTY PARCELS

CRAWFORD COUNTY ROADS

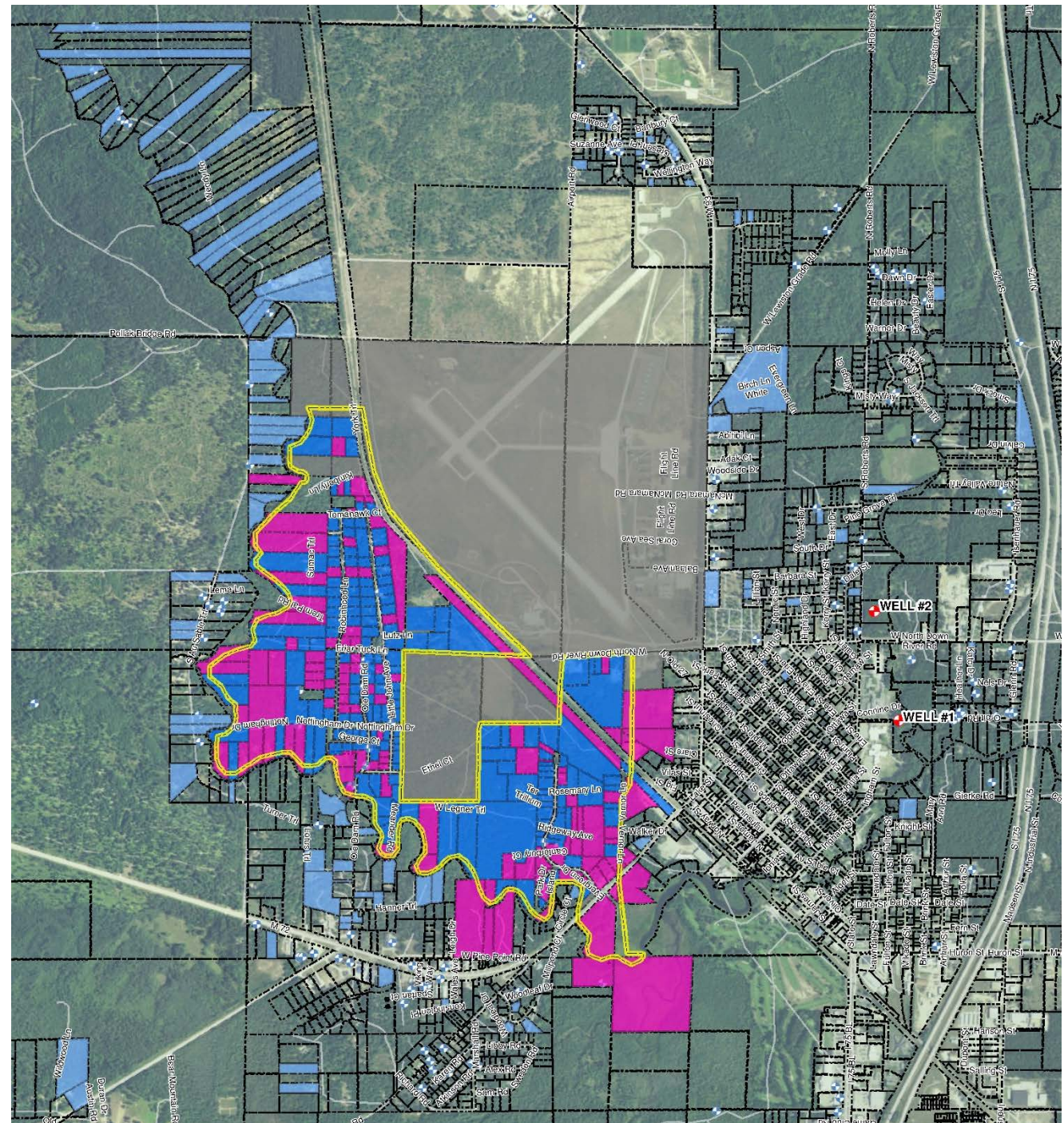
World Imagery

Low Resolution 15m Imagery

High Resolution 60cm Imagery

High Resolution 30cm Imagery

Citations





PFC Sampling Data

Updated July 14, 2017

178	Samples Collected
166	Samples Analyzed
161	Samples with Validated Analysis
3	Sample Results Above the U.S. EPA Health Advisory for total PFOS/PFOA
20	Sample Results detected PFOS/PFOA, but below the U.S. EPA Health Advisory
143	Sample Results that Did Not Detect any PFOS/PFOA

**as of 14 July 2017*



What Happens Next?

- MIARNG will collect additional groundwater data inside of GAAF
- DEQ will collect second round of residential well samples
- DEQ will begin to investigate the extent of contamination outside of GAAF
- District Health Department 10 will begin to distribute filter systems
- NGB will begin Preliminary Site Assessment at GAAF
- Department of Health and Human Services and DHD10 will consult with residents
- Michigan Department of Agriculture and Rural Development will continue to advise on agricultural operations and pet concerns
- Public meeting fall 2017

