



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



C. HEIDI GREETHER  
DIRECTOR

December 14, 2017

Mr. Benjamin Marrs, PG, REM  
AFCEC/CIBE  
BRAC Program Management Division  
Air Force Civil Engineer Center (AFCEC)  
3515 South General McMullin Avenue, Bldg. 1  
San Antonio, Texas 78226  
Cubicle 4-313

Dear Mr. Marrs:

**SUBJECT:** Notice of Invocation of Dispute Resolution Concerning the Former Wurtsmith United States Air Force Base (WAFB) and Response to Impacts to Drinking Water from Per- and Polyfluoroalkyl Substances (PFAS); Site ID No. 35000058

This communication from the Michigan Department of Environmental Quality (MDEQ) is made pursuant to the terms of the Defense and State Memorandum of Agreement (DSMOA) entered by the State of Michigan and the United States Department of Defense to refer and elevate a disagreement regarding the level and scope of actions being undertaken by the United States Air Force (USAF) to address PFAS on and emanating from the WAFB in Iosco County, Michigan.

The MDEQ is aware that significant work has been undertaken at the WAFB to address past releases of trichloroethylene, and further that the USAF has been engaged in sampling and surveying the base and limited off-site locations for the presence of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS)<sup>1</sup>.

The investigation work by the USAF related to PFAS in recent years under the Installation Restoration Program was summarized in the Installation-Specific Work Plan provided to the MDEQ in late 2016. In February 2016, the MDEQ requested in writing that the USAF "prevent further off base movement of PFC<sup>2</sup> impacted groundwater so as to protect residents who are using the aquifer for drinking water purposes."<sup>3</sup> In that request, the MDEQ demanded that the USAF (1) regularly monitor existing residential and Type I community wells for PFAS contamination; (2) fully characterize the PFAS plumes in areas upgradient of the impacted residential and Type I community wells; (3) implement a sentinel monitoring well system to assure that higher level PFAS

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<sup>1</sup> PFOA and PFOS are both types of PFAS; the term perfluorinated chemicals (PFCs) was also used more commonly in the past to describe then-known chemicals in the "family" of PFAS.

<sup>2</sup> PFC was previously used by the scientific community as the abbreviation for perfluorinated chemicals, which has been replaced by PFAS.

<sup>3</sup> February 29, 2016, letter from Remediation and Redevelopment Division Director.

contamination is not moving toward the portion of the aquifer that is used as a drinking water source; (4) evaluate the existing groundwater extraction systems as an interim remedial action to control the PFAS plume migration toward the impacted residential and Type I community wells; (5) present a plan to the MDEQ providing for final remedial actions; and (6) provide an alternate drinking water source to affected well users.

The USAF response in March 2016 noted that a pump and treat system aimed at intercepting the PFAS contaminated groundwater was in operation since April 2015, and committed to delineating the extent of contamination in the groundwater. Unfortunately, based on the results of sampling additional offsite residential wells by the State of Michigan, the PFAS plume is not fully delineated. Further, the pump and treat system is not intercepting or containing the PFAS contaminated groundwater, nor is the system effectively preventing expansion of the plume. The ongoing impacts of the PFAS contamination outside the boundary of the WAFB are evidenced in the continuing effect of fish consumption advisories and the public health advisory issued in 2016, officially cautioning certain residents not to consume water from their wells. While alternate water supplies have been provided to affected residents, most of those alternate water supplies are interim in nature, and the best way to prevent PFAS exposure at this site is to connect affected residents to the public water supply. Of the hundreds of alternate water supplies provided by the State of Michigan and the District Health Department #2, the USAF has provided municipal water to only one residence.

These conditions indicate that more effort and more work needs to be focused on addressing the environmental and human health risks posed by the PFAS plume emanating from the WAFB. However, on October 11, 2017, the USAF submitted its revised Phase I Expanded Site Evaluation Work Plan [PFOA and PFOS Release Response], and indicated that the USAF is proposing to change its sampling approach and is "no longer collecting samples at private properties, i.e. along the Van Etten Lake and Van Etten Creek."

This change to reduce or eliminate sampling of residential wells that are threatened or compromised by the plume from the WAFB is not agreed upon by the MDEQ staff and is unacceptable to the State of Michigan. Any reduction of the scope of sampling is contrary to the MDEQ's demand that the USAF take steps to gather all necessary data to delineate the plume and protect residents who use the aquifer for drinking water.

Additionally, conditions observed in areas surrounding the WAFB that are known or suspected to be impacted by plumes originating from the WAFB indicate that additional sampling is needed to evaluate compliance with Michigan's statewide criteria for groundwater-surface water interface (GSI) locations as set forth in Part 201.<sup>4</sup> The USAF must move more aggressively and more quickly to define and remove the ongoing threat to public health and the environment, starting with the USAF action to provide a long-term potable water supply to affected well users, and followed by

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<sup>4</sup> Part 201, Environmental Response, of the Natural Resources and Environmental Response Act, 1994 PA 451, as amended; see in particular MCL 324.20120e(1)(a).

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response actions to remediate impacted ecosystems, including surface waters, groundwater, fish, birds, and mammals.

For these reasons, the MDEQ is invoking dispute resolution as set forth in Section IV of the DSMOA. In accordance with the terms of the DSMOA, Section IV.A.1, the MDEQ requests a response detailing the USAF proposed approach to resolving this dispute in ten (10) days from the date of this letter. If the MDEQ and the USAF are unable to resolve this dispute within that time, the MDEQ expects to continue to elevate these issues through the dispute process, but reserves all rights the State of Michigan has to secure compliance with applicable law through all means available to the State of Michigan.

Please contact Mr. Robert Delaney, Superfund Section, Remediation and Redevelopment Division at 517-284-5085; delaneyr@michigan.gov; or MDEQ, P.O. Box 30426, Lansing, Michigan 48909-7926, if you wish to arrange a call or meeting to discuss any or all of this communication. The MDEQ hopes that the USAF will satisfy its obligations in cooperation with the State of Michigan and we look forward to receiving your response.

Sincerely,



Kathleen Shirey  
Acting Division Director  
Remediation and Redevelopment Division  
517-420-2503

cc: Ms. Carol Isaacs, Governor's Office  
Ms. Polly Synk, Michigan Department of Attorney General  
Ms. Katie Barron, Michigan Department of Attorney General  
Ms. C. Heidi Grether, Director, MDEQ  
Mr. Michael McClellan, Environment Deputy Director, MDEQ  
Ms. Susan Leeming, External Relations Deputy Director, MDEQ  
Ms. Mel Brown, Communications Director, MDEQ  
Mr. Nate Zimmer, MDEQ  
Ms. Amy Peterson, MDEQ  
Mr. Mike Jury, MDEQ  
Mr. David Kline, MDEQ  
Mr. Robert Delaney, MDEQ  
Ms. Lisa Agosta, MDEQ