

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

Martin Suuberg Commissioner

Colonel James Suhr Commander 104th Fighter Wing Barnes Air National Guard Base 175 Falcon Drive Westfield, MA 01085-1385

December 11, 2017

Re:

Westfield 1-0020093

Barnes Air National Guard Base Review of Draft FY 16 Phase 1 Regional Site Inspections of Perfluorinated Compounds Report

Dear Colonel Suhr:

Thank you for your submittal of the *Draft FY 16-Phase 1 Regional Site Inspections of Perfluorinated Compounds Report* (Phase 1) for the Barnes Air National Guard Base (Barnes ANGB) – Massachusetts Air National Guard. The Massachusetts Department of Environmental Protection (MassDEP) received the report on November 20, 2017. The Phase I report was prepared and submitted on your behalf by Amec Foster Wheeler Environment and Infrastructure, Inc.

The object of the Site Investigation/Phase 1 was to determine the presence/absence of perflourinated compounds (PFCs) in soil and groundwater at each of the eight potential release locations (PRLs) at and within the Base boundary to develop appropriate path(s) forward toward either closure or further assessment and remediation.

The Phase 1 was conducted in accordance with the Final Work Plan FY 16 Phase 1 Regional Site Inspections for Perflourinated Compounds received by the Department on April 25, 2017. MassDEP has reviewed the Site Investigation/Phase 1 report and has the following comments:

1. The Phase 1 compared specific PFCs; perfluorooctanoic acid (PFOA), perfluorooctanesulfonate (PFOS), and perfluorobutane sulfonic acid (PFBS) soil and groundwater data to applicable U.S. Environmental Protection Agency (EPA) Regional Screening Levels, Air Force Guidance for Soils and Sediments, and the EPAs Drinking Water Health Advisory for PFOA and PFOS. Additional assessment activities were

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

recommended based on this evaluation. It should be noted that, MassDEP is currently developing reportable concentrations (RCs) and human health standards for PFCs. When these RCs and standards are finalized, the findings of the Phase 1, subsequent Comprehensive Response Action reports and response actions must be re-evaluated, as necessary to be in compliance with the Massachusetts Contingency Plan (MCP- 310 CMR 40.0000) regulatory standards.

- 2. Given the historical nature of the release of storm water potentially containing PFCs to the storm water drainage basin and the documented presence of PFCs in soil and groundwater samples collected at depth on Base, the assessment activities conducted at the seventh PRL (Storm Water Drainage Basin) were not of sufficient scope to eliminate this PRL as a potential PFC source area. Additional assessment of this area should be conducted and the results incorporated into the Final Phase 1 report and/or future site assessment reports.
- 3. The report indicated the assessment of the former Fire Training Area and Fire Department Equipment Testing Area was incomplete and further off site soil and groundwater assessment was recommended. These assessment activities should be conducted in accordance with the MCP and the results incorporated into the Final Phase 1 report and/or future site assessment reports.
- 4. Assessment activities conducted by the City of Westfield at the former Fire Training area (PRL-1) were not mentioned or evaluated in the draft Phase 1. An evaluation of this assessment should be conducted and incorporated into the Final Phase 1 report and/or future site assessment reports.
- 5. A detailed evaluation of current and historical impacts of PFCs to the City's public water supply wells should be incorporated into the Final Phase 1 report.
- 6. The Phase 1 did not mention or evaluate the Immediate Response Actions being conducted by MassDEP to evaluate potential human health exposures to residents through the ingestion of PFC impacted drinking water from private drinking water wells. An evaluation of these IRAs should be incorporated into Final Phase 1 report.
- 7. Based on the distribution of the PFC impacted private wells surrounding the Base, current and historical storm water discharges from the Base were a likely PFC transport mechanism. Additional evaluation of the historical storm water discharge locations requires further evaluation.

Based on the results of this Phase 1 evaluation as well as assessment completed by the City of Westfield and MassDEP, it is MassDEP's determination that there is now sufficient evidence documented that has confirmed the release of PFCs to soil and groundwater at the PRLs identified within the Barnes ANGB and that these compounds have migrated off-base. Elevated concentrations of PFCs detected in samples collected from temporary wells installed at the southern boundary of the Base further supports this conclusion. This information along with the off-base assessment of private wells indicates that the Barnes ANGB and its historical use of

aqueous film forming foam during firefighting training is the likely source of PFC contamination in groundwater. It is MassDEP's expectation that Barnes ANG, as the Potentially Responsible Party, will now take over all of the response actions associated with the assessment and mitigation of PFCs in the private wells located hydrogeologically downgradient from the Base, including the monitoring and maintenance of the point of entry treatment systems installed in residences with PFC contamination above the EPA Health Advisory, and the continued assessment and remediation of the PFC contamination both on and off- the base property in accordance with the MCP.

Please contact us as soon as possible to discuss the transition of the private well response actions and future response actions. You can contact me at 413-755-2295 or Cynthia Pawloski at 413-755-2247. Please reference Release Tracking Number 1-20093 in any future correspondence to the Department regarding the site.

Sincerely,

Eva V. Tor

Deputy Regional Director Bureau of Waste Site Cleanup

ecc: Westfield Mayor Brian P. Sullivan

Westfield City Councilor- Mary Ann Babinski Westfield Board of Health – Attn: Joseph Rouse

Westfield DPW- Public Water Supply- Attn: David Billips

Westfield City Councilor- Mary Ann Babinski

MassDEP/WERO- Attn: Brain Harrington and Deirdre Doherty

Barnes Aquifer Protection Advisory Committee – Attn: Patty Gambarini Massachusetts Department of Public Health-Attn: Dr. Marc Nascarella

Barnes ANG

Colonel Peter Green John Richardson