



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

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October 11, 2016

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

RE: Westfield -1-0020093
Barnes Air National Guard Base
IRP Site 1- Fire Training Area
IRP Site 6- North and South- Old Fire Training
Areas
**Notice of Responsibility/
Request for Immediate Response Action/
Interim Deadline**

Notice of Responsibility
M.G.L. c. 21E and 310 CMR 40.0000

Dear Colonel Keefe:

The Massachusetts Department of Environmental Protection (MassDEP), Bureau of Waste Site Cleanup is tasked with ensuring the cleanup of oil and hazardous material releases pursuant to the Massachusetts Oil and Hazardous Material Release Prevention and Response Act (M.G.L Chapter 21E). This law is implemented through regulations known as the Massachusetts Contingency Plan (the MCP- 310 CMR 40.0000). Both M.G.L. c. 21E and the MCP require the performance of response actions to provide for the protection of harm to health, safety, public welfare and the environment which may result from releases and/or threats of releases of oil and/or hazardous material (OHM) at disposal sites.

MassDEP has reason to believe that there has been a release to the environment which has resulted in designating the Barnes Air National Guard Base (Barnes ANG Base) as a disposal site as defined by the MCP. Specifically, perfluoroalkyl substances (PFAS), including perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and other related compounds that are contained in aqueous film-forming foam (AFFF) may have been released to the soil and groundwater at Barnes ANG Base (the Site) and thereby impacted the groundwater resource which supplies the City of Westfield Public Water Supply Wells located downgradient of the Base. Specifically, Wells #7 and #8 located a half mile south of Site 6: the Old Fire Training Area and Wells #1 and #2 which are 1.5 to 2 miles south of the Base have been impacted. According to the City of Westfield Water Department, Well #7 and Well #2 were removed from

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service due to exceedances of the EPA Health Advisory level for PFAS. MassDEP has assigned Release Tracking Number (RTN) 1-0020093 to this release/Site.

Further, MassDEP has reason to believe that you (as used in this letter, "you" refers to the Barnes ANG Base - Massachusetts Air National Guard) are a potentially responsible party (PRP) with liability under Section 5a of M.G.L. c. 21E for response action costs. This liability is "strict", meaning that it is not based on fault, but solely on your status as owner, operator, generator, transporter, disposer or other person specified in said Section 5a. This liability is also "joint and several", meaning that you are liable for all response costs incurred at a disposal site even if there are other liable parties. The purpose of this notice is to inform you of your legal responsibilities under State law for assessing and/or remediating the release at the Site. For purposes of this Notice of Responsibility (NOR), the terms and phrases used herein shall have the meaning ascribed to such terms and phrases by the MCP unless the context clearly indicates otherwise.

BACKGROUND INFORMATION

In May 2012, the United States Environmental Protection Agency (EPA) published the final rule "Revisions to the Unregulated Contaminant Monitoring Rule (UCMR3) for Public Water Systems" indicating that thirty chemical constituents, that have not historically been considered as drinking water contaminants, would be analyzed in samples collected from wells serving large public water systems and a representative number of public water systems serving less than 10,000 people from 2013 to 2015.

The contaminants to be analyzed included, among other compounds, PFAS, including PFOS and PFOA. Collectively, PFAS are considered "emerging contaminants" which are contaminants that were previously unregulated by any state or the federal government but due to increasing concerns about their widespread use, reports of their presence in public water supplies, and a growing body of information that the toxicity, mobility and bioaccumulation potential of these compounds have the potential to pose adverse effects to human health and the environment, the EPA included PFAS in their UCMR3 sampling program.

In May 2016, the EPA promulgated a Health Advisory (HA) for PFAS of 0.07 micrograms per liter (ug/L) for PFOS and PFOA combined. The EPA "Fact Sheet, PFOS and PFOA Drinking Water Health Advisories" states that if both PFOS and PFOA are detected, the combined concentrations should be compared to the 0.07 ug/L lifetime HA. The EPA HA is based on the best available peer-reviewed studies of the effects of PFOA and PFOS on laboratory animals (rats and mice), and was also informed by epidemiological studies of human populations that have been exposed to PFAS. These studies indicate that exposure to PFOA and PFOS above certain concentrations may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes).

PFAS have been widely used in industrial and consumer applications, including stain-and water-resistant coatings for fabrics and carpets, oil-resistant coating for paper products approved for food contact, mining and oil well surfactants, floor polishes, insecticide formulations and aqueous film-forming foam (AFFF).

Given the above, PFAS are therefore considered a hazardous material pursuant to the MCP, specifically 310 CMR 40.0342(1)(a), and is therefore subject to the requirements of M.G.L. c. 21E and the MCP.

RELEASE /SITE SPECIFIC INFORMATION

In May, 2016, the City of Westfield's Public Water Supply Wells, Well #7 and its neighboring Well #8 were removed from service since the 2013 Well #7 results were over the EPA Health Advisory level. As a precautionary measure, Westfield sampled Wells #1 and #2 for PFOS and PFOA due to their location and the increased use after the closure of Wells #7 and #8. On September 13, 2016, the City of Westfield received notice that preliminary results of PFOS/PFOA samples collected from Well #1 and Well #2 on

June 23, 2016 showed a combined result of 0.054 ug/L and 0.082 ug/L respectively. The City immediately removed Well #2 from service.

Historically, Barnes ANG Base personnel have performed fire training activities at the Base's fire training areas noted as: Installation Restoration Program (IRP) Site 1- Fire Training Area and IRP Site 6 – Former/Old Fire Training Areas -North and South. IRP Site 1 was used by base personnel for fire training from 1950 to 1987. Site 6 consists of two areas; the North area was used for fire training for a period of approximately three years during the 1950s, the South area was used for one summer for fire training exercises in the late 1950s.

STATUTORY LIABILITIES

M.G.L c. 21E and the MCP require the performance of response actions to prevent harm to health, safety, public welfare and the environment which may result from this release and/or threat of release and govern the conduct of such actions.

As a current owner of the property where a release has occurred, you are a Potentially Responsible party (PRP) with liability under M.G.L. c. 21E §5, for response action costs. Section 5 makes the following parties liable under the Commonwealth of Massachusetts: current owners or operators of a site from or at which there is or has been a release or threat of release of oil and/or hazardous material; any person who has owned or operated a site at the time hazardous material was stored or disposed of; any person who arranged for the transport, disposal, storage or treatment of hazardous material to or at a site; any person who transported hazardous material to a transport, storage or treatment site from which there is or has been a release or threat of release of such material; and any person who otherwise caused or is legally responsible for a release or threat of release of oil or hazardous material at a site.

The liability is "strict", meaning that it is not based on fault, but solely on your status as owner, operator, generator, transporter, disposer or other person specified in M.G.L. Ch. 21E §5. This liability is also "joint and several", meaning that you may be liable for all response action costs incurred at a disposal site regardless of the existence of any other liable parties.

The MCP requires PRPs to take necessary response actions at properties where there is, or has been, a release and/or threat of release of oil and/or hazardous material. If you do not take the necessary response actions, or fail to perform them in an appropriate and timely manner, MassDEP is authorized by M.G.L. c. 21E to perform the work. By taking such actions, you can avoid liability for response action costs incurred by MassDEP in performing these response actions and any sanctions that may be imposed for failure to perform response actions under the MCP.

The MCP requires PRPs and any other person undertaking response actions to perform Immediate Response Actions (IRAs) in response to sudden releases, Imminent Hazards (IH) and Conditions of Substantial Release Migration (SRM). Such persons must continue to evaluate the need for IRAs and notify MassDEP immediately if such a need exists.

If you are a PRP and you have reason to believe that your performance of the necessary response actions is beyond your technical, financial or legal ability, you should promptly notify MassDEP in writing of your inability in accordance with M.G.L c. 21E, subsection 5(e), and 310 CMR 40.0172. If you assert or demonstrate in compliance therewith that performing or paying for such response action is beyond your ability, subsection 5(e) provides you with a limited defense to an action by the Commonwealth for recovery of two to three times MassDEP's response action costs and 310 CMR 40.0172 provides you with a limited defense to MassDEP's assessment of civil administrative penalties.

You should be aware that you may have claims against third parties for damages, including claims for contribution or reimbursement for the costs of cleanup. Such claims do not exist indefinitely but are governed by laws that establish the time allowed for bringing litigation. MassDEP encourages you to take action necessary to protect any such claims you may have against third parties.

You must employ or engage a Licensed Site Professional (LSP) to manage, supervise or actually perform the necessary response actions at this site. You may obtain a list of names and addresses of licensed professionals from the Board of Registration of Hazardous Waste Cleanup Professionals by calling (617) 556-1091, or visiting <http://www.state.ma.us/lsp>.

Response actions at the Site will not be deemed to be completed unless and until a level of No Significant Risk as defined at 310 CMR 40.0900 exists or has been achieved in compliance with the MCP. The MCP requires persons undertaking response actions at a disposal site to submit to MassDEP a Permanent Solution Statement prepared by a LSP upon determining that a level of No Significant Risk exists or has been achieved at the Site.

NECESSARY IMMEDIATE RESPONSE ACTIONS AND INTERIM DEADLINE

The detection of PFAS in the samples collected from the City of Westfield Public Water Supply Wells above the Health Advisory and the subsequent treatment options are being addressed by the Westfield Water Department. However, non-community public wells and private water supply wells are located hydraulically downgradient of the Base. Releases of oil and /or hazardous material (OHM) that impact public and private water supplies are releases that could pose an Imminent Hazard and, pursuant to 310 CMR 40.0311(7), require notification to MassDEP within two hours. As such these releases require that an Immediate Response Action (IRA) be conducted pursuant to 310 CMR 40.0412(1).

Therefore, MassDEP hereby requires that you submit an IRA Plan, prepared in compliance with 310 CMR 40.0424 to evaluate whether PFAS above 0.07 ug/L are present in any public and private water supply wells located downgradient of the Base. The IRA Plan should identify all drinking water sources; public and private water supply wells located downgradient of the Base and provide a plan to sample and analyze the drinking water supply wells for PFAS using EPA Method 537 Revision 1.1. The IRA Plan should also include an evaluation of the measures that the ANG will undertake to prevent, eliminate, and/or abate any hazards associated with the consumption of drinking water impacted by PFAS above the Health Advisory of 0.07 ug/L. Such measures can include, but are not limited to, providing bottled water, installation of a GAC system(s), or connection of private water supply wells to public water. Upon the ANG obtaining positive detections of PFAS above 0.07 ug/L in private wells, immediate notification shall be required to MassDEP. MassDEP will require that bottled water be immediately provided and that a schedule for implementation of additional actions to abate the contaminant at each private well location be submitted within seven (7) days.

In addition, the IRA Plan should include the history of the ANG's use of aqueous film-forming foam at the Base and a soil and groundwater assessment plan, specific to the fire training areas on the Base to evaluate the need to perform response actions at the Base to prevent, eliminate, or minimize harm to health, safety, public welfare of the environment.

MassDEP hereby requires that you submit the IRA Plan within 30 days of receipt of this letter.

INTERIM DEADLINE

The date established above constitutes an Interim Deadline established pursuant to 310 CMR 40.022 and 40.0167. Failure to comply with an Interim Deadline may result in enforcement actions by the MassDEP, including, but not limited to, the issuance of a Notice of Noncompliance, an Administrative Penalty, and /or Enforcement Orders, or, referral to the Massachusetts Attorney General's Office.

ADDITIONAL RESPONSE ACTIONS

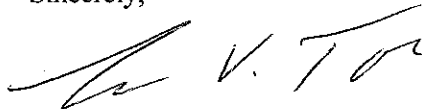
Additional submittals are necessary with regard to this notification, including, but not limited to, the filing of a written IRA Plan, IRA Completion Statement and/or a Permanent Solution Statement (PSS). Specific approval is required from the Department for the implementation of all IRAs and Release Abatement Measures (RAMs). RAMs may not be conducted until a RAM Plan is submitted pursuant to 310 CMR 40.0443. Assessment activities, the construction of a fence and/or the posting of signs are actions that are exempt from this approval requirement.

The MCP requires persons undertaking response actions to perform IRAs in response to sudden releases, Imminent Hazards, and Conditions of SRM. In accordance with 310 CMR 40.0426, an IH Evaluation shall be performed as part of an IRA within 14 days of obtaining knowledge of such a condition and shall be submitted to the Department within 60 days.

This site shall not be deemed to have had all the necessary and required response actions taken unless and until all substantial hazards presented by the release and/or threat of release have been eliminated and a level of No Significant Risk exists or has been achieved in compliance with M.G.L. c 21E and the MCP.

If you have any additional questions relative to this Notice, please contact Cynthia Pawloski at the letterhead address or by calling (413) 755-2247. All future communication regarding this release must reference the following Release Tracking Number: 1-0020093.

Sincerely,



Eva V. Tor
Deputy Regional Director
Bureau of Waste Site Cleanup

Certified Mail #: 7015 1660 0000 9069 4015

Return Receipt

e-cc:

Westfield Municipal Officer
Westfield Water Department
Westfield Fire Department
Barnes ANG/Attn: John Richardson
Deirdre Doherty – MassDEP/DWP
Catherine Wanat – MassDEP/DWP
BWSC File: 1-0020093

Attachments to Addressee only:

Summary of Liability under M.G.L. c. 21E