UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1 – NEW ENGLAND

Via Electronic Mail

November 18, 2020

Albert Pratt, P.E.
Water Supply Operations Manager - City of Portsmouth, New Hampshire
680 Peverly Hill Road,
Portsmouth NH 03801

Brian Goetz
Deputy Director of Public Works - City of Portsmouth, New Hampshire
680 Peverly Hill Road,
Portsmouth NH 03801

RE: Dover Municipal Landfill Superfund Site – Southern Plume Remedial Action Optimization, 30 Percent Remedial Design

Dear Mr. Pratt and Mr. Goetz:

Thank you very much for your comments on the 30% Remedial Design Report for the Southern Plume Remedial Action Optimization, submitted via letter to me on October 7, 2020. This letter conveys EPA's response to those comments.

EPA appreciates the City of Portsmouth's continued efforts in protecting the quality of the Bellamy Reservoir's water and its interest and contributions towards the cleanup of the Dover Municipal Landfill Superfund Site. As you may know, EPA is in the process of evaluating the 30% Remedial Design Report submitted by GeoInsight, the environmental consultant retained by the Site's responsible party, the Dover Group. EPA is conducting this evaluation with the assistance of its contractor, Hydrogeologic Inc. (HGL) and in consultation with the New Hampshire Department of Environmental Services (NHDES).

The following are transcripts of your comments (*in italics*) on the 30% Remedial Design Report followed by EPA's response.

Extraction Wells. *The Southern Plume Remedial Design (SPRD) that was submitted to the EPA on September 8, 2020 in the 30% complete stage proposes the addition of five new extraction wells. Given the complex hydrogeology at this site, we ask that the number and placement of these wells be carefully evaluated and if their adequacy with respect to the capture of contaminated groundwater is questionable, that the proposed capture scheme is enhanced to ensure its effective performance. The thorough extraction of contaminated groundwater from the Southern Plume is critical to the protection of the water quality in*

the Bellamy Reservoir. We understand the proposed method for "stabilizing the migration of the Southern Plume source area" through groundwater extraction is the most straight forward and feasible option for a short-term response, and because of this we are pleased to see this method is moving forward toward implementation next year.

EPA agrees that the number and placement of extraction wells and their thorough extraction of contaminated groundwater is critical to protect the Bellamy Reservoir's water quality. To that effect EPA and its contractor will carefully evaluate the construction details of all new extraction wells to be installed, including the location of their screening intervals and the adequacy of their capture zones in conjunction with the capture zone of other existing extraction wells. Also, the adequacy of the existing network of monitoring wells will be evaluated.

Sampling of Tributaries*. Section 7.2 identifies the frequency of surface water sampling as quarterly for two years, then annually thereafter at three surface water tributary stations. Since these surface water drainages are clearly direct inputs to the Bellamy Reservoir, we believe these samples should continue at a quarterly frequency for at least five years or until levels remain below detection for at least one year. It appears that these samples are only for the analysis of 1,4-dioxane. Given the recent passing of drinking water compliance limits in New Hampshire for four PFAS compounds, we recommend that these PFAS compounds should also be included with this sampling.*

EPA will consider your recommendation to extend the time frame of the quarterly monitoring of the surface water locations. The sampling effort as laid out in the 30% Design Report only contemplates the analysis of 1,4-dioxane. EPA will request to the Dover Group that these locations also be tested for the four PFAS compounds with recently promulgated NHDES drinking water standards.

Sampling at the Portsmouth Water Treatment Plant*. To clearly and directly document whether the landfill may be impacting the quality of the water supply source water, we also request that samples of the source water be collected at the Portsmouth Water Treatment Plant in Madbury for the analysis of 1,4dioxane and PFAS. These samples should be collected at the same time and frequency that they are being tested in the surface water tributaries.*

EPA agrees that samples of the source water for the Portsmouth Water Treatment Plant in Madbury are needed to clearly and directly document whether the Site is impacting the quality of the water supply. However, given the location of the intake for the Portsmouth Water Treatment Plant at the opposite end of the reservoir, and the possibility of numerous other sources contributing to PFAS levels in that location, EPA understands that regular samples at this intake location would not necessarily be representative of the Site's impact to the water supply. Surface water samples from the Reservoir directly at the outfall of the tributaries being tested, would instead offer the most direct and clear representation of the Site's effect on the Reservoir.

EPA will request the Dover Group to collect this type of samples at the same time and frequency as the surface water samples being collected in the tributaries and to test them for 1,4-dioxane and the four PFAS compounds with NHDES drinking water standards.

Immediate Reporting. *We also ask that any detections of PFAS compounds in the tributaries or the source water at the treatment plant be reported to the City of Portsmouth immediately.*

EPA will request the Dover Group to immediately report to the City of Portsmouth, NHDES and EPA any detections of PFAS compounds in the surface water samples at the tributaries or the source water at the treatment plant. EPA will request that this information be sent via e-mail to both of you at the City of Portsmouth, unless you specify a different contact/method of delivery.

Long-Term Remediation Alternatives. *Finally, we encourage further investigations into long-term remediation alternatives that could provide additional protection of the Bellamy water quality from groundwater and surface water contributions from this site.*

EPA will carefully evaluate the results of the implementation of this optimization to the Southern Plume Remedial Action to determine if additional measures are needed to protect the quality of the Bellamy Reservoir. In addition, every five years EPA will conduct a statutory review (Five Year Review) of the overall Site remedy to determine whether it is still protective of human health and the environment. The Five Year Review will identify any issues affecting current and future protectiveness and will provide recommendations to address those issues if warranted.

Please contact me via e-mail at millan-ramos.gerardo@epa.gov or via telephone at 61 918-137 with any questions.

Sincerely,

GERARDO MILLAN-RAMOS

Digitally signed by GERARDO MILLAN-RAMOS
Date: 2020.11.18 14:36:46 -05'00'

Gerardo Millán-Ramos, Remedial Project Manager
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Electronic cc:

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