



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 1 – NEW ENGLAND  
5 POST OFFICE SQUARE – SUITE 100  
BOSTON, MASSACHUSETTS 02109-3912**

**BY ELECTRONIC MAIL**

April 13, 2018

Mr. Peter Britz, Environmental Planner  
City of Portsmouth Planning Department  
1 Junkins Avenue  
Portsmouth, NH 03801

RE: Coakley Landfill Superfund Site  
March 8, 2018, Berrys Brook Fish Tissue Sampling

Dear Mr. Britz:

The United States Environmental Protection Agency (USEPA) is in receipt of the proposal for the sampling and analysis of fish from Berrys Brook submitted on March 8, 2018 (the "Proposal"), by Michael Deyling, on your behalf. The Proposal was submitted in response to USEPA's letter and attached draft quality assurance project plan (QAPP) dated February 22, 2018, directing the Coakley Landfill Group (CLG) to develop a program for sampling tissue from fish in Berrys Brook, downstream of the Coakley Landfill Superfund Site (the "Site"), and analyzing for per- and polyfluoroalkyl substances (PFAS).

As stated in USEPA's letter, the overall goal of the fish tissue sampling and analysis shall be to collect composite samples of two species of warm water fish and stocked brown trout of a size that would potentially be caught and consumed and to analyze these composite samples for the six PFAS compounds that are currently analyzed by CLG for surface water, including PFOA, PFOS, PFBS, PFHpA, PFHxS and PFNA. The results for PFOA, PFOS and PFBS can then be compared against site-specific risk-based screening levels (SLs) to evaluate whether further risk evaluation is appropriate.

As directed in USEPA's letter, the CLG has outlined a scope and schedule for developing and implementing a fish tissue sampling and analysis program, and has proposed a number of modifications from the program detailed in USEPA's letter. After consulting with the New Hampshire Department of Environmental Services (NHDES) and New Hampshire Fish & Game Department (NH F&G), USEPA provides the following comments that the CLG shall incorporate in to a workplan to be submitted to the agencies:

1. USEPA and NHDES understand that the NH F&G will be stocking Berrys Brook with brown trout in April as a "catch and release" program for anglers. In the past, anglers

had been allowed a “put and take” program for brown trout in Berrys Brook. The workplan shall provide a description of the NH F&G stocking program for Berrys Brook including a schedule for both the spring and fall stocking programs. This information shall be used by CLG to optimize it’s sampling efforts for brown trout.

2. The Proposal states that “the survival rate for stocked Brown Trout is low, so the highest probability of catching Brown Trout would be shortly after stocking occurs.” The workplan shall provide more detailed information regarding the fishery in general (e.g., number of fish typically stocked, number of fish estimated to be caught by anglers, duration that fish remain in the Brook following stocking, etc.) and, in particular, the assertion that brown trout survivability is low, and expand on how this could impact the fish tissue sampling program.
3. USEPA and NHDES understand that catching brown trout for sampling and analysis may be difficult during July and August given the survival rate and migration patterns of the stocked fish. However, every effort should be made to collect brown trout samples at the same time as collecting samples of the warm water species. The schedule included in the workplan shall specify that the CLG will attempt to catch brown trout during the late spring and fall seasons, when the likelihood of their presence in Berrys Brook is greater.
4. The Proposal states that “a catch and release program would limit consumption of brown trout and subsequent exposure risks.” Although this may be true for this stocking season, there is no reason to assume at this time that the put and take program will not be reinstated for brown trout in Berrys Brook, and therefore reintroduce a potential exposure pathway. USEPA and NHDES do not concur with the CLG using this as a reason for focusing on sampling warmwater species other than brown trout. All efforts shall be made (including gill netting and multi-day sampling efforts) to catch enough brown trout for sampling and analysis as specified in the USEPA’s February 22, 2018 letter and draft QAPP.
5. USEPA and NHDES do not agree that “active fishing does not occur on Berrys Brook.” This assertion appears to be based solely on anecdotal observations and should not be used as a basis to assume fish consumption rates.
6. In addition to the proposal to collect fish samples from Berrys Brook at the Sagamore and Lang Road crossings, CLG shall also attempt to collect samples of warmwater, native species from Berrys Brook at the Lafayette Road crossing. Based on observations, this crossing may be the first accessible point downstream of the landfill where samples could be collected.
7. The Proposal specifies one day of fishing at the Sagamore and Lang Roads, and in the estuary portion of Berrys Brook. The workplan shall specify that fishing efforts will continue until enough fish are caught and processed to allow for representative sampling and analysis in accordance with the methods specified in the QAPP. The work plan shall

also specify contingency measures (e.g., CLG will consult with the agencies as field conditions warrant before altering fish collection means and/or duration, etc.) should the sampling efforts be unsuccessful.

8. The CLG shall retain fish smaller than 10 inches in case larger fish are not caught, and to allow for preservation by frozen storage and future analysis should the tissue samples from larger fish be found to contain PFOS, PFOA or PFBS.
9. The CLG shall initiate sampling for warmwater, native species as early as practicable, but no later than June 15, and continue collecting samples until enough tissue has been collected and processed to perform adequate analysis in accordance with the QAPP. The CLG shall initiate sampling for brown trout in the estuary portion of Berrys Brook concurrent with warmwater species sampling and again in mid-September, both prior to and following the fall stocking event, and continue sampling until enough tissue (at least 5 fish) has been collected and processed to perform adequate analysis in accordance with the QAPP.
10. If other fishing techniques (e.g. rod and reel) are not successful in the estuary portion of Berrys Brook, the CLG shall use gill netting, or an alternative netting option, in order to catch brown trout. Prior to initiating any netting methods, the CLG shall consult with NH F&G for specific recommendations on gill netting mesh size, time, location, methods, duration of deployment, etc.
11. In accordance with USEPA's February 22, 2018 letter, the CLG shall collect and analyze for PFAS, a composite sample of the brown trout from the source hatchery that will be stocked in Berrys Brook. This will necessitate the collection of these samples prior to, or at the time of the stocking so that the samples will be representative. In addition, the CLG shall collect surface water samples from Merrymeeting Lake and the holding pond where the stocked trout are raised and analyze those samples for the six PFAS compounds that are currently analyzed by CLG for surface water, including PFOA, PFOS, PFBS PFHpA, PFHxS and PFNA. This analysis shall be conducted in order to evaluate any potential PFAS contamination in brown trout from the hatchery resulting from trout feedstocks or water sources.

Upon receipt of this letter, the CLG shall develop a workplan for conducting a fish tissue sampling and analysis program for Berrys Brook, that incorporates and addresses the comments included in this letter. The CLG shall submit the workplan, along with a QAPP and sampling and analysis plan, for review and approval by USEPA and NHDES within 30 days of receipt of this letter. If any modifications to the draft QAPP developed by USEPA are proposed, the CLG shall highlight those in a cover letter to the workplan and QAPP, along with explanation and justification.

If results from the spring sampling of warmwater, native fish species and brown trout from Berrys Brook are below the SLs for PFOS, PFOA and PFBS, USEPA may consider modifying the requirement for the sampling of brown trout in the fall.

If you have any questions concerning this letter, you can contact me at (617) 918-1882 or [hull.richard@epa.gov](mailto:hull.richard@epa.gov).

Sincerely,

A handwritten signature in black ink that reads "RW Hull". The letters are cursive and fluid, with the first and last names being more prominent than the middle initial.

Richard W. Hull, Remedial Project Manager  
New Hampshire and Rhode Island Superfund Program

CC: Tom Irwin, Conservation Law Foundation New Hampshire  
Don Swanson, Coastal Conservation Association of New Hampshire  
Drew Hoffman, NHDES  
Doug Grout, NH F&G  
Andrew Chapman, NHDES Limnology Center  
RuthAnn Sherman, USEPA  
Richard Sugatt, USEPA  
Courtney Carroll, USEPA