TOWN OF LEE, BOARD OF HEALTH
ADJUDICATORY HEARING
November 19, 2022

GE-Pittsfield/Housatonic River Site/Rest of River Portion
Petition to Town of Lee Board of Health by HRI.
EPA's Counsel Responses to LBOH's Letters Dated September 28, (Exhibit-6), October 31 (Exhibit-7), and November 3 (Exibit-8) 2022

EPA's COUNSEL RESPONSES FOLLOW WITH LABEL
EPA's RESPONSES NOVEMBER 8, 2022

EXHIBIT-9

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
New England Region
Five Post Office Square – Suite 100
Boston, Massachusetts 02109-3912

Via Electronic Mail: ccrbonifaz@gmail.com

November 8, 2022

Cristóbal Bonifaz, Esq.
Attorney for the Town of Lee Board of Health
Law Office of Cristóbal Bonifaz
180 Maple Street
Conway, Massachusetts 01341

Re: GE-Pittsfield/Housatonic River Site/Rest of River
Notice of Adjudicatory Hearing of the Town of Lee Board of Health

Dear Attorney Bonifaz:

EPA has received the Notice of Adjudicatory Hearing ("Notice") issued by the Town of Lee Board of Health ("BOH") regarding an adjudicatory hearing that the BOH will hold on November 19 to determine whether the Upland Disposal Facility ("UDF") to be constructed in the Town of Lee to facilitate the cleanup of the Housatonic River presents a health impact to Lee residents. I have also received your letter to me dated October 31, 2022 (the "Letter") primarily regarding transportation of material to the UDF, and your follow-up letter dated November 3. This letter responds to the Notice and your two letters to me.

As the Notice points out, EPA has previously referred the BOH to the Administrative Record that EPA established for the Revised Final Cleanup Permit that the Region made final in 2022 (the "Permit"). In my October 5 letter to you, I identified specific portions of the Administrative Record that are relevant to the protectiveness of the UDF. This letter clarifies and responds to certain misunderstandings contained in the Notice and in your Letter. Please forward this letter and the letter I previously sent you on October 5 to the BOH and add both letters to the Record that the BOH is creating for its decision. For ease of reference, I have attached my letter of October 5.

1. The Conclusions of the De Simone Report

As stated in our letter of October 5, EPA addressed the De Simone Report in one of our 2021 filings to EPA's Environmental Appeals Board. The relevant portion of EPA's filing is copied below, and the two pages from our filing are attached for your reference.

> [T]he primary finding [of the DeSimone Report] confirms what is already known and documented in the [Administrative Record]: there are permeable soils underlying the UDF location. EPA agrees that such soils are permeable and, based upon monitoring well elevation data, that the localized groundwater flows towards the River. EPA, however, has accounted for these facts and has determined that the UDF will be protective of human health and the environment. The report neither addresses nor rebuts these findings. At most, the Report expresses a mere difference of opinion. Dr. DeSimone does not address the low-level concentrations of the PCBs designated for the UDF; the chemical nature of PCBs that does not make them prone to migration in groundwater; or, based upon monitoring well data, the upwelling of groundwater near the UDF that would prevent any contamination from reaching the bedrock. (Footnotes and citations omitted.)

2. Health Impact from Truck Traffic for Sediment Disposal

The discussion of the trucking of PCBs to the UDF contained in the Notice and Letter is incorrect. First, based upon the cleanup criteria contained in the Permit and Housatonic River sampling data, it is estimated that approximately one million cubic yards of contaminated material will be disposed of at the UDF. Further, 100,000 cubic yards of the most highly contaminated material will be disposed of off-site. The total mass of PCBs estimated to be removed from the River is 50,500 pounds of PCBs, or 25.25 tons. See Table 2 of EPA's 2020 *Determination on Remand*. Because a minimum of 100,000 cubic yards of the most highly contaminated material will be sent off-site for disposal, the actual mass of PCBs to be disposed of in the UDF is estimated to be less than 25.25 tons.

The 2020 remedy involves an estimated 47,000 truck trips of excavated material to the UDF. The cleanup is estimated to take 13 years, so there will be approximately 3,800 truck trips per year over the estimated 13-year cleanup duration. The 2016 all off-site disposal remedy that does not use the UDF (alternative TD 1) would have involved 81,700 trips, nearly 35,000 more truck trips than the 2020 remedy. (For the 2016 remedy, truck trips would have been required to either a rail staging area, if rail were feasible, or directly to off-site facilities.) When considering the significant additional sediment to be removed from the River for the 2020 remedy (see footnote 5 of Table 13a described below), the use of the UDF will eliminate nearly 50,000 truck trips from the roads of Lee and Lenox due to its use of hydraulic pumping, if feasible, of excavated material directly to the UDF location. Based upon experience at other sites, EPA

believes such pumping to be feasible. (Note that the above numbers of truck trips do not count truck trips for importing clean material for capping, backfilling, or for the construction of the UDF. They also do not account for return trips to the River after disposal at the UDF or trips taken by trucks to the River for disposal off-site.) The number of truck trips described above are based upon estimates as described in Tables 13a, 13b, and 13c of EPA's 2020 *Determination on Remand and Supplemental Comparative Analysis*. These tables are enclosed for your ease of reference.

Finally, with respect to the safety of PCB-material transport, the sediment will be drained of water prior to loading into trucks, and EPA expects that GE will use sealed trucks and tarps to minimize the potential for releases of liquids or air emissions, as it has done in other areas of the Site. This process was used successfully for the numerous response actions in Pittsfield, including at Silver Lake and the first two miles of the River, where the PCB concentrations in soil and sediment were much greater.

The Permit requires many actions by GE to address community impacts during remediation activities in submittals required under the Permit including the Quality-of-Life Compliance Plan and the Off-Site and On-Site Transportation Plan that will detail safety precautions for trucking. See the 2022 Permit, Section II.H.

For further details, see Section II.C. of EPA's 2020 *Response to Comments*.

3. Potential Leaking of the Double Liner System

The UDF will be designed according to the same engineering standards as those at permitted, long-term, hazardous waste landfills that accept waste with much higher PCB contamination levels. In addition to an impermeable top cover that cuts off rainwater infiltration, at the bottom of the landfill, to prevent leaks, the UDF will have an upper impervious liner with a leachate collection pipe above the upper liner, a backup liner located below the upper liner, with another leachate collection system between the liners that can detect leaks from the upper liner. As stated in the 2020 *Response to Comments*, "[w]hen two geomembrane liners are used in conjunction with a drainage layer designed to limit liquid head (water pressure) on the liner system, studies have demonstrated that the liner efficiency can be 99.9% or better. Assessment and Recommendations for Improving the Performance of Waste Containment Systems, EPA/600/R-02/099, 2002." 2020 *Response to Comments*, page 18. As further stated in the 2020 *Response to* Comments, "[t]he composite liner system is recognized as a best available liner technology to contain waste materials and has been shown to have a service life of 400-800 years. Technical Memo, URS, 2008; White Paper #6, GRI Institute, 2005 (updated 2011)." *Id.* These cover and liner systems have been used for many decades at landfills across the nation. *Id.*

Under the Permit, GE is required to operate, inspect, maintain, and, if necessary, repair the UDF. The Permit requires that GE install a groundwater monitoring network abutting and around the UDF. As described in EPA's 2020 *Response to Comments*, EPA believes that a leak from the UDF is extremely unlikely to occur. But, if the leachate collection or

the groundwater monitoring systems did identify a leak, GE is required to take corrective actions.

The Notice also cites an EPA guidance for the proposition that the liner system will eventually leak. 53 Federal Register 33345 (August 30, 1988). This guidance, however, does not recommend against properly designed and monitored landfills with a low-permeable cover, double bottom liner, and leachate collection, such as the proposed UDF. The guidance actually recommends double bottom liners and groundwater monitoring longer than 30 years, which is what the Permit requires.

For further details, see pages 18 and 19 of EPA's 2020 *Response to Comments*.

4. Whether Potential Leaks from the Liner could Present a Health Risk

As stated above, given the design and monitoring of the UDF, EPA believes that a leak from the liners is extremely unlikely. If, for some reason, a leak occurs, however, the leak would be detected by the leachate collection system and the groundwater monitoring wells abutting and surrounding the UDF. Given the slow migration rate of PCBs in groundwater and the tendency of PCBs to sorb (attach) onto soil, these systems would detect elevated contaminant levels in groundwater years before a release to the Housatonic River would occur. 2020 *Response to Comments*, Pages 21 and 22.

Regarding the concerns that the UDF may adversely affect Lee's drinking water supplies, it is important to note that the UDF location is over one mile from the Town of Lee's public water supplies, and the groundwater at the UDF is approximately 150 feet lower in elevation and flows away from the Town's water supplies. 2020 *Response to Comments*, Page 20. Furthermore, the surface drainage from the UDF is generally away from the water supplies and towards the River, and the water supplies are at a much higher elevation than the proposed UDF. *Id.* at 21. Thus, in sum, groundwater and surface water near the UDF flows towards the River and away from the Town of Lee's water reservoirs.

Accordingly, the UDF is protective of human health and the environmental, and unexpected leaks from the liner system are extremely unlikely to present a risk to human health.

For further details, see Pages 20 through 22 of EPA's 2020 Response to Comments.

5. Power of EPA to Preempt Regulations of the Board of Health

EPA addressed this issue at length in its prior letter of October 5, and nothing in the Notice changes EPA's analysis that the BOH regulations do not preempt an on-going federal cleanup. Note that we did not state in our letter that the *Arthur D. Little* case only applied to the United States Department of Defense. Rather, the facts in that case have no bearing on whether the BOH can override an ongoing federal cleanup.

6. Your Follow-up Letter of November 3

We received your letter of November 3 that you describe as a follow-up to your letter of October 31. Regarding the November 3 letter, please note that Permit Section II.B.5, titled Upland Disposal Facility ("UDF"), limits the horizontal and vertical dimensions of the UDF. These limitations are contained in Permit Section II.B.5 (2)(a), (b), and (d). The Permit provisions have a direct bearing on size and height of the UDF and are copied immediately below.

> (2) The Upland Disposal Facility shall meet the following design Performance Standards:
>
> (a) The Upland Disposal Facility shall have a maximum design capacity of 1.3 million cubic yards.
>
> (b) The landfill consolidation area shall have a maximum footprint of 20 acres and a maximum elevation of 1,099 feet above mean sea level. If the seasonally high groundwater elevation is determined to be higher than 950 feet above mean sea level, the maximum elevation of the landfill consolidation area may be increased by the number of feet that is the difference between the seasonally high groundwater elevation and 950 feet above mean sea level in order for the Upland Disposal Facility to have a maximum capacity of 1.3 million cubic yards.
>
> (c) [Omitted for lack of relevancy to this issue.]
>
> (d) The bottom liner of the landfill will be installed a minimum of 15 feet above a conservative estimate of the seasonally high groundwater elevation. The seasonally high groundwater elevation will be projected using site-specific groundwater elevation data collected in the location of the Upland Disposal Facility, modified by an appropriate technical method that takes into account historic groundwater level fluctuations at similarly-sited off-site long-term monitoring wells in Massachusetts. The estimation of a seasonally high groundwater elevation will be performed pursuant to a methodology reviewed and approved by EPA. The estimate of seasonally high groundwater elevation shall then be used to support the design of the landfill relative to achieving the required minimum separation distance from the bottom of the liner system to the seasonally high groundwater elevation.

For your information, the current ground elevation of the UDF disposal area ranges from elevation 950 (at the open water areas) to 1048 above mean sea level. (See Figure 11 of EPA's Response to Comments for current elevations at the UDF disposal area.) Thus, if the seasonally high groundwater elevation is determined to be 950 feet above mean sea level, then based upon the Permit limitations cited above (including the UDF's height

limitation of 1,099 above mean sea level), the maximum height of the UDF will be approximately 50 feet higher than the highest current elevation of the UDF area.

As stated previously, please refer to the Permit and its Administrative Record for more details regarding the UDF. Reference to these materials can avoid misunderstandings about the UDF and on-site disposal.

7. Conclusion and Summary

We appreciate the Board's concerns. It is important to reiterate, however, that the actual, ongoing threat to human health and the environment lies with the currently uncontrolled PCB contamination present in the River sediment and floodplain soil. Over 285,000 cubic yards of uncontrolled contaminated sediment is in Woods Pond and an additional 60,000 cubic yards is present in other River impoundments located downstream of Woods Pond in the Town of Lee. See Attachment 6 to the May 2014 *Comparative Analysis*. By safely removing, transporting, and disposing of contaminated material in the secure UDF and at off-site facilities, the remediation of the river and floodplain will result in decreased risks to the health of Lee residents.

In evaluating the UDF, we urge the BOH to review the Administrative Record for the 2022 Permit, especially EPA's *Response to Comments* dated December 2020, EPA's *Determination on Remand and Supplemental Comparative Analysis* dated July 2020, and EPA's *Statement of Basis for EPA's Proposed 2020 Revisions to the Remedial Action for the Housatonic River "Rest of River"* dated July 2020. These documents are word-searchable so that the BOH can reference particular topics. A review of the Record will hopefully avoid misperceptions and misunderstandings.

We remain committed to coordinating with all of the municipalities during the planning and implementation of the River cleanup. Please let me know if you have any further questions.

Sincerely,

JOHN KILBORN Digitally signed by JOHN KILBORN Date: 2022.11.08 16:37:37 -05'00'

John W. Kilborn
Senior Enforcement Counsel
Office of Regional Counsel
US EPA, Region 1

Attachments:

EPA letter to the BOH dated October 5, 2022
Pages 20 and 21 from EPA's 2021 *Response* filed with the EAB
Tables 13a, 13b, and 13c of EPA's 2020 *Determination on Remand*

Cc: Board of Selectmen, Lee
Board of Selectmen, Stockbridge
Board of Health of Lenox
Board of Health of Stockbridge
Board of Health of Sheffield
Board of Health of Great Barrington
Senator Elizabeth Warren
Senator Edward Markey
Congressman Richard Neal
Senator Adam G. Hinds
Representative Smitty Pignatelli
Administrator Michael S. Regan, EPA
Dean Tagliaferro, EPA
Bryan Olson, EPA
Andrew Silfer, GE
Chris Ferry, Superfund Records Center

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
New England Region
Five Post Office Square -- Suite 100
Boston, Massachusetts 02109-3912

Via Electronic Mail: ccrbonifaz@gmail.com

October 5, 2022

Cristóbal Bonifaz, Esq.
Attorney for the Town of Lee Board of Health
Law Office of Cristóbal Bonifaz
180 Maple Street
Conway, Massachusetts 01341

Re: GE-Pittsfield/Housatonic River Site/Rest of River
Petition to Town of Lee Board of Health by Housatonic River Initiative

Dear Attorney Bonifaz:

Thank you for your letter to me dated September 28, 2022 regarding the decision of the Town of Lee Board of Health ("BOH") to hold an adjudicatory hearing to determine whether the Upland Disposal Facility ("UDF") to be constructed in the Town of Lee to facilitate the cleanup of the Housatonic River presents a health impact to Lee residents. You state that after the hearing the BOH will decide whether or not the UDF presents or does not present a health risk to Lee residents and adjacent communities and "will either ban or allow the construction of the proposed UDF."

Your letter requests that EPA provide information about the safety of the UDF and appear at the forthcoming adjudicatory hearing. Your letter also asserts that the federal Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund") does not preempt a decision of the BOH issued under certain state laws.

A. The Request for Information by the Lee Board of Health.

As for your request that EPA provide information regarding EPA's decision to site the UDF in the Town of Lee, EPA points the BOH to the Administrative Record for EPA's 2020 Permit decision, as discussed below. The risks posed by the currently uncontrolled PCB contamination, the components of the cleanup of the Housatonic River, and the construction of the UDF that will facilitate the River's cleanup are all addressed in a Permit that EPA issued to the General Electric Company in 2020 and made effective in March of this year. The EPA's national Environmental Appeals Board (EAB) affirmed the Permit in all respects in a decision dated February 8, 2022.

The Permit is based upon an extensive Administrative Record that provides the rationale for and the data supporting the Permit. The BOH can refer to this Record for information regarding EPA's decision and the safety of the UDF. The Administrative Record for the Permit is available on-line (except for records that are privileged or otherwise controlled) at https://semspub.epa.gov/src/collection/01/AR66478. Of specific relevance are EPA's *Response to Comments* dated December 2020, EPA's *Determination on Remand and Supplemental Comparative Analysis* dated July 2020, and EPA's *Statement of Basis for EPA's Proposed 2020 Revisions to the Remedial Action for the Housatonic River "Rest of River"* dated July 2020. With respect to the safety and effectiveness of the UDF, the Statement of Basis at Page 8, the Permit requirements at Section II.B.5, and the Response to Comments at Section II.A have information on these issues.

The BOH can also refer to documents EPA filed in the appeal of the Permit before the EAB. (In particular, see Section III of EPA's Response to Petition, Document 19, and documents attached to Document 19, in EAB closed docket RCRA 21-01 at www.epa.gov/eab). Note that as it relates to the UDF, Document 19 discusses the difference between the Permit that EPA issued in 2016 and the current Permit. Document 19 can be found here: Region 1's Response to Petition of Housatonic River Initiative and Housatonic Environmental Action League, Document 19

Your letter attaches an undated report of Dr. David J. De Simone, which appears identical to Dr. De Simone's report that HRI submitted as an attachment to its appeal Petition to the EAB filed on March 5, 2021. EPA addressed the report in EPA's Response to Petition (Document 19), starting on Page 20. (Note that the report was not submitted during the comment period for the Permit.)

EPA's December 2020 *Response to Comments* summarized EPA's findings regarding the UDF as follows:

> Unless addressed, the contamination [in the Housatonic River] poses a current and future threat to humans through direct contact and fish consumption and a current and future threat to ecological receptors. In essence, the sediments are being removed from an area where they are currently causing unacceptable risks to humans and the environment, to an area that is designed to prevent environmental and human health impacts. The excavated materials with the highest levels of contamination will be transported to an off-site location for disposal. At the UDF, the lower levels of contaminated soils and sediments will be sequestered in a proven, engineered containment cell with a low-permeability cap and a low-permeability double bottom liner with leachate collection that will be inspected, maintained, and monitored to ensure that it is protective of human health and the environment. Permit, II.B.5, II.C.

Response to Comments, December 2020, Page 11.

B. Request for Testimony at the BOH Hearing.

As for the request that EPA appear and testify at the hearing, EPA respectfully declines that request. The Permit and EPA's cleanup are based upon the Administrative Record, and the relevant information regarding the safety of the UDF is found in the Administrative Record, including in the documents described above.

C. The Authority of the Town of Lee BOH to Ban the UDF.

Your letter states that should the BOH issue an order banning the construction of the UDF that such a ban is not preempted by the federal CERCLA statute. As a general matter, federal law preempts or supersedes state and local laws, regulations, ordinances, and other legal actions when they conflict with the federal law. This so-called conflict preemption occurs "when compliance with both state and federal law is impossible, or when the state law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." *Weaver's Cove Energy, LLC v. Rhode Island Coastal Resources Management Council,* 589 F.3d 458, 472 (1st Cir. 2009) (quoting *Good v. Altria Group, Inc.*, 501 F.3d 29, 47 (1st Cir. 2007)). Conflict preemption is rooted in the Supremacy Clause of the U.S. Constitution (Art VI, Clause 2), which invalidates state laws that "interfere with, or are contrary to the law of [C]ongress, made in pursuance of the [C]onstitution." *Wisconsin Pub. Intervenor v. Mortier,* 501 U.S. 597, 604 (1991) (quoting *Gibbons v. Ogden*, 9 Wheat. 1, 211, 6 L. Ed. 23 (1824)). Note that preemption applies to state and local action, and the constitutionality of local action is analyzed in the same manner as that of state laws. *See id.* at 605.

Several federal courts, including the U.S. District Court for the District of Massachusetts, have applied preemption principles to uphold CERCLA cleanups. Specifically, federal courts have held that municipalities lack the authority to impose requirements that conflict with CERCLA cleanups and "pose an obstacle to accomplishment of CERCLA's objectives" to cleanup hazardous substances. *See, e.g.*, *Town of Acton v. W.R. Grace & Co. Conn., Technologies, Inc.*, 2014 WL 7721850, *9 (D. Mass. Sept. 22, 2014). In the *Town of Acton* case, the federal court for the District of Massachusetts held that CERCLA preempted a municipal bylaw that imposed more stringent groundwater cleanup standards because the bylaw would conflict with EPA's selected cleanup and "would displace the judgment rendered by the EPA and deprive it of 'the flexibility needed to address site-specific problems.'" *Town of Acton* at *11; *see also United States v. City & Cnty of Denver,* 100 F.3d 1509, 1512 (10th Cir. 1996) (CERCLA preempts municipal ordinance conflicting with selected clean-up plan).

Other federal courts have held that CERCLA preempts municipal ordinances that ban the management of hazardous waste in a manner that conflicts with a selected CERCLA remedy, similar to a potential ban of the UDF. In *City & County of Denver*, the Tenth Circuit ruled that CERCLA preempted a municipal zoning ordinance that prohibited the maintenance of hazardous waste in industrially zoned areas. 100 F.3d at 1512 ("A zoning ordinance which bars the maintenance of hazardous waste dramatically restricts

the range of options available to the EPA… [and] would prevent a permanent on-site remedy."). In *Fireman's Fund Ins. Co. v. City of Lodi, California*, the Ninth Circuit ruled that CERCLA preempted two different state actions that conflicted with CERCLA's liability and cost-sharing schemes. 302 F.3d 928, 947 (9th Cir. 2002). There's no indication that the First Circuit would differ from its sister circuits' decisions supporting CERCLA's supremacy over any local action impeding an ongoing clean-up.

The decision that you cite, *Arthur D. Little, Inc. v. Commissioner of Health and Hospitals of Cambridge*, 395 Mass 535 (1985), does not support the proposition that the BOH has the authority to ban the UDF, in conflict with the ongoing CERCLA clean-up of the Housatonic River. In fact, the Massachusetts Supreme Court in that case expressly ruled that federal action preempts conflicting state municipal laws, regulations, ordinances, or legal actions. *Arthur D. Little, Inc.*, 395 Mass at 548 ("State law, including municipal regulations, can be preempted by an act of Congress if the State law 'conflicts with federal law'") (quoting other cases)). Furthermore, *Arthur D. Little, Inc.* is irrelevant to the specific question at issue because it was about whether the Constitution's grant of war and defense powers to the Federal government can preempt a state regulation prohibiting the testing, storage, transportation, and disposal of five highly toxic chemical warfare agents. *Id.* at *537. Therefore, that case has no bearing on whether the BOH can override an ongoing CERCLA cleanup.

Banning the installation of the UDF directly conflicts with the CERCLA cleanup plan for the Housatonic River that EPA selected pursuant to the Permit. Accordingly, CERCLA preempts any action by the BOH to impede or stop the ongoing cleanup of the Housatonic River, and the *Arthur D. Little, Inc.* case does not say otherwise.

Please let me know if you have any further questions.

Sincerely,

John W. Kilborn
Senior Enforcement Counsel
Office of Regional Counsel
US EPA, Region 1

Cc: Board of Selectmen, Lee
Board of Selectmen, Stockbridge
Board of Health of Lenox
Board of Health of Stockbridge
Board of Health of Sheffield
Board of Health of Great Barrington
Senator Elizabeth Warren
Senator Edward Markey

Congressman Richard Neal
Senator Adam G. Hinds
Representative Smitty Pignatelli
Administrator Michael S. Regan, EPA
Dean Tagliaferro, EPA
Bryan Olson, EPA
Chris Ferry, Superfund Records Center

PCB remediation waste to remain in place at levels below 25 ppm without *any* excavation or capping. *Id.* 13.

As for being sited above a medium yield aquifer (or a potentially productive aquifer), the Region stated that use of the groundwater is unlikely due to existing groundwater contamination, a statement Petitioners have neither addressed nor rebutted. 2020 RTC at 65.

Petitioners have not rebutted any of these facts, let alone shown clear error. EPA has thoroughly explained why the UDF will be safe, effective, and protective of human health and the environment in its 2020 RTC and the other 2020 permitting documents and has been presented with no quantitative evidence or scientific studies to the contrary. Petitioners advance their arguments regarding the UDF without addressing or even mentioning the SCA or the 2020 Stmt/Basis, where EPA analyzed the suitability of the remedy against the Nine Evaluation Criteria.

In support of their argument, Petitioners attach a report from a geologist, Dr. David J. DeSimone, that was not submitted to EPA during the comment period or otherwise. See Pet. Att. 6. Accordingly, this report is procedurally improper, and EPA has moved to strike the report. Even if it were appropriate for Board review, the primary finding confirms what is already known and documented in the AR: there are permeable soils underlying the UDF location. EPA agrees that such soils are permeable and, based upon monitoring well elevation data, that the localized groundwater flows towards the River.[11] EPA, however, has accounted for these facts and has determined that the UDF will be protective of human health and the

[11] Contradictorily, the Petition states both that groundwater flows towards the River and that it is difficult to predict groundwater flow. Pet. at 15, line 10 vs Pet. fn 69.

environment. SCA II.F; 2020 Stmt/Basis at 28-35; 2020 RTC 11-14. The report neither addresses nor rebuts these findings. At most, the Report expresses a mere difference of opinion.[12] Dr. DeSimone does not address the low-level concentrations of the PCBs designated for the UDF; the chemical nature of PCBs that does not make them prone to migration in groundwater; or, based upon monitoring well data, the upwelling of groundwater near the UDF that would prevent any contamination from reaching the bedrock.[13] 2020 RTC 21 and 22.

Because the Petitioners have failed to confront and rebut EPA's Record, and because they have relied on information outside the Record (which, even if considered by the Board, does not demonstrate clear error), Petitioners' argument that the UDF is not protective must fail.

III.B Petitioners Ignore the New 2020 Supplemental Comparative Analysis that Supports Hybrid Disposal and the Fact that Hybrid Disposal Differs from the Alternatives Evaluated in 2016

Petitioners contend that the Region's disposal decision in the 2020 Permit is a reversal of prior factual findings without new investigation or a change of circumstances. Pet. at 12-14.

To the contrary, the Region's decision is based on a new alternative – Hybrid Disposal – that significantly differs from the all on-site and the all off-site disposal alternatives that were considered for the 2016 Permit. Furthermore, the on-site disposal remedy evaluated in 2016

[12] Although the expert states that the UDF location is a "textbook" example of where not to locate a landfill (page 4), the expert has not cited a single source, regulation, guidance document, or textbook regarding the siting and protectiveness of landfills. (In addition, Attachment 6 contains no information indicating that Dr. DeSimone has any expertise in the siting of landfills for the purposes of remedial cleanups or otherwise.)

[13] In footnote 67 of their Petition, Petitioners cite for the first time an EPA guidance and a scientific paper to support their argument that the EPA has acknowledged that liner systems may fail. These sources, however, do not recommend against properly designed and monitored landfills with a low-permeable cover, double bottom liner, and leachate collection, such as the proposed UDF. They recommend double bottom liners and groundwater monitoring longer than 30 years. EPA's Permit requires double bottom liners and such monitoring after closure. 2020 RTC 19. Petitioners have not explained why these sources were not cited in the public comments.

Table 13a
Estimated Truck Trips Anticipated to Result from Transport of Excavated Materials and Import of Capping/Backfill Materials

	2016 Permit Remedy[1,2]	2016 Permit Remedy w/TD 3 (Woods Pond)[1,2]	Draft Revised 2020 Permit[1,2]
Truck Trips for Excavated Material[3]	81,700[4] (6,100)	81,700[4] (6,100)	47,000[5] (3,800)
Truck Trips for Capping/Backfill Material[6]	68,800[7] (5,100)	68,800[7] (5,100)	52,800[8] (4,200)
Total Truck Trips	**150,500** **(11,200)**	**150,500** **(11,200)**	**99,800** **(8,000)**

Notes:

[1] The numbers in parentheses represents the average annual truck trips.

[2] Numbers rounded to the nearest hundred.

[3] These truck trips represent truck trips for hauling excavated material from the staging areas to the disposal facility(ies) (or, for rail transport, the rail loading facility) using 20-ton capacity trucks.

[4] These numbers were provided in Table 18 of EPA's Comparative Analysis of Remedial Alternatives. For off-site disposal via trucking, all of these trips consist of off-site truck trips to the designated off-site disposal facility(ies) over public roads. For off-site disposal via rail, these represent truck trips to the rail loading facility.

[5] These numbers were based, for comparison purposes, on the numbers in the prior column with modifications to account for: (1) the revised removal volumes for the Draft Revised 2020 Permit (which increase truck trips by 11,800); and (2) the assumption that all sediments removed from Reaches 5C and Woods Pond will be pumped directly to the Upland Disposal Facility rather than being transported via truck (which reduce truck trips by 46,500). Of the 47,000 total truck trips, 8,300 truck trips consist of off-site truck trips for transport of 100,000 cubic yards of material to the designated off-site disposal facility(ies), and the remainder (38,700) consist of on-site truck trips to the upland disposal facility.

[6] These truck trips represent truck trips for local hauling of capping/backfill material using 16-ton capacity trucks.

[7] These numbers of truck trips for importation of capping/backfill material were provided in Table 18 of EPA's above-referenced Comparative Analysis. In addition, for off-site disposal by rail, there would be approximately 1,200 off-site truck trips to import material to construct the rail loading facility, as provided in Table 4 of GE's October 27, 2014 Comments on EPA's Draft RCRA Permit Modification and Statement of Basis (see Table 13b).

[8] These numbers of truck trips for importation of capping/backfill material were based on the numbers in the prior column with modifications to account for the revised capping/backfill volumes for the Draft Revised 2020 Permit. In addition, there would be approximately 3,100 off-site truck trips for the importation of materials for construction of the Upland Disposal Facility, based on the off-site truck trips for TD 3 (Woods Pond Site) presented in Table 4 of GE's October 27, 2014 Comments on EPA's Draft RCRA Permit Modification and Statement of Basis (see Table 13b).

EPA: U.S. Environmental Protection Agency

GE: General Electric Company

TD: Treatment/Disposition

Table 13b
Estimated Truck Trips Anticipated to Result from Construction of Transportation or Disposal Facility

		2016 Permit Remedy[1]	2016 Permit Remedy w/ TD 3 (WP)	Draft Revised 2020 Permit[1]
TD 1 / TD 1RR: Off-Site Disposal	Transport via Truck	0	--	--
	Transport via Rail	1,200[2]	--	--
TD 3: On-Site Disposal at Woods Pond Site	Transport via Truck	--	2,400[3]	--
TD 6: Combination of Disposal in UDF and Off-Site Disposal	Transport via Truck	--	--	3,100[4]

Notes:
[1] Numbers rounded to the nearest hundred.
[2] These truck trips represent truck trips to import material to construct the rail loading facility, as provided in Table 4 of GE's October 27, 2014 Comments on EPA's Draft RCRA Permit Modification and Statement of Basis.
[3] These truck trips represent truck trips for importation of materials for construction of the on-site disposal facility at the Woods Pond Site, as provided in Table 4 of GE's October 27, 2014 Comments on EPA's Draft RCRA Permit Modification and Statement of Basis.
[4] These truck trips represent truck trips for the importation of materials for construction of the UDF by extrapolation from the off-site truck trips for TD 3 (Woods Pond Site) presented in Table 4 of GE's October 27, 2014 Comments on EPA's Draft RCRA Permit Modification and Statement of Basis.
EPA: U.S. Environmental Protection Agency
GE: General Electric Company
RCRA: Resource Conservation and Recovery Act
TD: Treatment/Disposition
UDF: Upland Disposal Facility
WP: Wood Ponds Location

Table 13c
Estimated Total Truck Trips

	2016 Permit Remedy w/ TD 1	2016 Permit Remedy w/ TD 1RR	2016 Permit Remedy w/ TD 3 (Woods Pond)	Draft Revised 2020 Permit
Total Number of Truck Trips	150,500	151,700	152,900	102,900

Notes:
TD: Treatment/Disposition