Public Input on General Electric's Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area, dated August 7, 2023

August - October 2023

TOWN OF LEE
32 Main Street, Lee, MA 01238
www.lee.ma.us

R. Christopher Brittain,
Town Administrator
cbrittain@town.lee.ma.us

September 28, 2023

Mr. Dean Tagliaferro
EPA New England
10 Lyman Street, Suite 2
Pittsfield, MA 01201

The following is a list of comments from the Town of Lee regarding the Upland Disposal Facility (UDF) Pre-Design Investigation Report.

1. The Town requests that GE/EPA conduct a public meeting/presentation of the UDF Design Plan for residents to better understand the details of the 3,800 plus page document.

2. Locations of support areas for the UDF (stockpiles, de-watering, material transfers) are not shared in the plan. These details are requested as soon as possible to determine if the monitoring described in the plan will be sufficient.

3. Please confirm if the adjacent land is still being actively mined for sand and gravel. If so, please include opportunities for additional monitoring that would account for any changes in ground water as a result of future mining that may take place.

4. The current groundwater level contains a slope (based on test wells) at a greater degree than UDF. Historical data shows annual differences in ground water levels but does not seem to account for possible effects of climate change. The Town would like to see that the plan allows for the flexibility of adding additional monitoring and that the UDF is designed to be at least 15 feet above the highest known ground water level.

5. The document (page 29) states that wells MW-2022 1S and 1D will be replaced but does not specify when. The Town would like to see these wells replaced quickly and add PFAS testing to these samples. In addition, the Town feels there should be a more robust down gradient monitoring system.

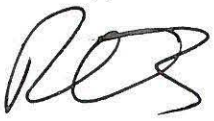
6. The document (page 36) states that final sampling will occur in fall of 2023 and (page 30) states that "wells will remain in service for continued monitoring". The Town would like further details on if and how monitoring will take place after fall of 2023 to capture year-to-year trends.

7. The document shows the use of a "split analysis" of sample media between GE and the EPA. The testing and lab reports between GE and the EPA however do not seem to show comparable results. Furthermore, it is questionable if the GE tests have met the levels outlined in the QAPP. The Town requests that EPA further investigate if QAPP standards are being met and report back to the town with assurance that the tests are consistent and equivalent.

8. The Town asks that the EPA place a greater emphasis on alternative remediation that could potentially impact the size and scale of the toxic UDF being place in Lee.

Thank you for your consideration. Feel free to contact me with any questions or feedback.

Sincerely,



R. Christopher Brittain,
Town Administrator

CC:
His Excellency Joseph Biden, President of the United States
The Honorable Edward Markey, U.S. Senate
The Honorable Elizabeth Warren, U.S. Senate
The Honorable Richard Neal, U.S. House of Representatives
Her Excellency Maura Healey, Governor of Massachusetts
The Honorable Paul Mark, State Senator
The Honorable William "Smitty" Pignatelli, State Representative, 3rd Berkshire
Select Board, Town of Lee

TOWN OF LENOX
6 Walker Street, Lenox, MA 01240
www.townoflenox.com

Christopher J. Ketchen,
Town Manager

October 9, 2023 [VIA EMAIL: tagliaferro.dean@epa.gov]

Mr. Dean Tagliaferro
EPA New England
10 Lyman Street, Suite 2
Pittsfield, MA 01201

RE: Town of Lenox Comments: Final Pre-Design Investigation Summary Report for Upland Disposal Facility

Dear Mr. Tagliaferro:

The purpose of this letter is to convey comments and concerns of the Town of Lenox regarding the remediation of polychlorinated biphenyls (PCBs) in the Housatonic River. Lenox recognizes that, while the remedy selection process is over, the all-important process of implementing the Rest of River permit is just beginning. As such, it requires the full focus of the Town's attention and that of Region 1.

Part of the implementation is a review of the Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area – otherwise known as the UDF. To that end, the Town of Lenox has engaged Weston & Sampson as an independent third party for the purposes of evaluating various aspects of the Rest of River clean-up, beginning with these initial comments regarding the UDF – *see attached memorandum*.

Overall, our commissioned review considers the siting of the UDF as appropriate for its intended purpose. However, Lenox feels that more data, particularly around site hydrogeology and environmental assessment (33 comments), would be appropriate in advance of construction. The remaining comments, while fewer in number, reflect Lenox's concerns in the areas of geotechnical engineering and landfill engineering. In summation, the attached report provides an in-depth discussion and analysis of Lenox's review. Some of the key takeaways include:

- Longer monitoring/data collection period (one additional year) with increased attention to high-precipitation events;
- Additional borings to confirm slope stability findings;

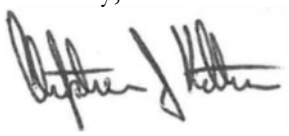
- Verify that baseline environmental sampling analytes cover all chemicals of concern identified in the river sections to be dredged, especially for pre- and poly-fluoroalkyl substances (PFAS);
- Attention to the need for adequate financial assurances to address future issues as they arise. (We recognize that this final point will be addressed later in the permitting of the UDF, but it bears mentioning at the outset).

We understand that the plan as presented lacks some data as well as other details and final determinations. Furthermore, we agree with our partners at the Rest of River Municipal Committee that EPA should require GE to submit an interim UDF design plan accompanied by an appropriate public comment period.

These comments are intended to call EPA's attention to issues important to Lenox. We look forward to seeing progress toward our concerns in these areas.

Thank you in advance for your consideration and we look forward to your favorable response.

Sincerely,



Christopher J. Ketchen, ICMA-CM
Town Manager

cc: The Honorable Edward Markey, U.S. Senate
The Honorable Elizabeth Warren, U.S. Senate
The Honorable Richard Neal, U.S. House of Representatives
Her Excellency Maura Healey, Governor of Massachusetts
The Honorable Paul Mark, State Senator
The Honorable Smitty Pignatelli, State Representative, 3rd Berkshire
Select Board, Town of Lenox
Mr. Channing Gibson, Housatonic Rest of River Municipal Committee

712 Brook Street, Suite 103, Rocky Hill, CT 06067
Tel: 860 513.1473

M E M O R A N D U M

TO:	Christopher Ketchen, Town Manager, Lenox, MA
FROM:	Weston & Sampson
DATE:	October 9, 2023
SUBJECT:	Review of Final Pre-Design Investigation Summary Report for Upland Disposal Facility

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Weston and Sampson Engineers, Inc. (Weston & Sampson) has reviewed the relevant technical documents and reports pertaining to the pre-design investigation and conceptual design of the proposed Upland Disposal Facility (UDF) for the GE-Pittsfield/Housatonic Rest of River Project. In this memorandum we provide our review comments on the site hydrogeology, environmental assessment, geotechnical, and landfill engineering aspects of the Project. The documents which were the primary focus of our review and comment efforts were as follows:

- *Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area*, GE-Pittsfield/Housatonic River Site; Arcadis, August 2023.
- *Upland Disposal Facility Conceptual Design Plan*, GE-Pittsfield/Housatonic River Site; Arcadis, December 2022.

To support this technical review, we also referred to the following documents for supporting information:

- *Pre-Design Investigation Work Plan for Upland Disposal Facility*, Arcadis and AECOM, November 2021.
- USEPA Conditional Approval of General Electric's November 24, 2021, submittal titled Rest of River, Pre-Design Investigation Work Plan for Upland Disposal Facility, GE-Pittsfield/Housatonic River Site, February 25, 2022.
- *DRAFT Comments on Upland Disposal Facility (UDF) Pre-Design Investigation (PDI) Summary Report*, GE-Pittsfield/Housatonic River Site Technical Assistance Services for Communities, September 13, 2023.

The format for this memorandum generally presents a brief bulleted synopsis of relevant information in the reports as a summary of our project understanding followed by our comments, where applicable. The memorandum has three main sections focusing on Site Hydrogeology and Environmental Assessment, Geotechnical Engineering, and Landfill Engineering.

SITE HYDROGEOLOGY AND ENVIRONMENTAL ASSESSMENT

Report Reviewed: Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area

Introduction

- A former sand and gravel quarry; GE acquired April 2021.
- Support area may include sediment dewatering.
- Lee municipal landfill (LML) to south.

2.1 Site Description

- East central portion site has wetland conditions, vernal pool.

2.2.4 Soils

- Loamy fine sand to very coarse gravel.
- Overburden glacial sediments, outwash deposits, fine-medium sand, varying amounts silt and gravel. Stratified and heterogeneous.
- Bedrock Stockbridge Group, carbonate limestone, dolomite, marble.

2.2.5 Groundwater Elevations

- September 2019 – preliminary investigation Geoprobe 5 locations.
- GW Elev 947-949' NGVD 29. Pond stage 947'. Conclude surface-water stage in ponds reflects nearby groundwater levels.
- Nearest USGS groundwater-monitor well 1.2 miles northwest. Conclude not representative of site due to distance and topo variability.
- 12 other USGS wells reported to be on southern edge of Wood Pond; could not locate.
- MADEP files include ***Evaluation Opinion Transmittal Report*** for LML, contains summary of groundwater-elevation data from monitoring wells nearby Schweitzer-Mauduit and LML.
- Report indicates GW in MW-84-1, east side LML, 10/84-12/88 = 955.4-959.91'
- MW-84-2 west side LML 948.85-952.59'. Data indicate east to west flow direction/gradient.

3.3.3 Soil Testing Results

- 22 borings. Glacial outwash deposits, over marble. Two main soil units:
    - Fine sand and silt. Alternating layers silty sand and sandy silt. Medium dense to dense.
    - Mixed sand, gravel, and silt. Heterogeneous silty fine to coarse sand and fine to medium gravel. Layers of gravel and cobbles. Loose to dense.
- Bedrock marble, slight weather zone. Top bedrock 909.5-957.5', sloping down to northwest.

3.3.4 Soil Infiltration Testing Results

- 8 test holes drilled where stormwater basins proposed, June 2023.
- Constant head test method used to measure rate of infiltration, inside 3-inch diameter drill casing.
- Infiltration rates ranged from 0.74-0.98 in/hr, north to south. Very consistent. Two locations 35-78 in/hr; gravel.

3.4 Soil Testing for Environmental Quality

- Soil-quality samples collected from each boring for monitoring wells and piezometers, and six additional borings.

- Samples collected from 0-2 ft bg (feet below grade), the 2-ft-intervals spaced 15 feet apart to 60 ft bg or groundwater level. One sample collected at groundwater interface.
- All samples analyzed for VOCs, SVOCs, pesticides, herbicides, PCBs dioxins/furans and metals.
- Results:
    - No PCBs. Detection limits relatively high but below MCP Method 1 S-1/GW-1 standard of 1 ppm
    - VOCs, SVOCs, pesticides and herbicides at relatively low concentrations
    - Detections of dioxins/furans at low concentrations
    - Metals at background levels
- Results compared to EPA Region 9 Preliminary Remediation Goals (PRGs) and MCP standards to evaluate potential reuse.
    - Arsenic above applicable PRG but below MCP standard
    - Nickel in 2 samples above MCP standard but below PRG

Weston & Sampson Comments:

1. *Sampling network appears representative and includes worst-case sampling locations near grade and at groundwater interface.*
2. *No conclusion offered about reuse. Appears adequate quality for reuse but should be confirmed.*

3.5 Piezometers and Monitoring Well Installations

- 6 piezometers installed for water-level measurements only, constructed with 1-inch diameter PVC well materials, by hollow-stem auger and sonic drill methods.
- 11 groundwater-monitoring wells, including two shallow/deep well clusters, constructed with 2-inch diameter PVC well materials.

3.6.1 GW Elevation Monitoring

- Manual measurements made monthly.
- Pressure transducer/dataloggers (PTDLs) installed in PZs and MWs set to measure and record water levels hourly.
- Monitoring period June 6, 2022, to June 2023.
- Water-level data shows seasonal fluctuation of 2.5 to 9.8 feet.
- Within consolidation area footprint, groundwater elevations ranged from 949-973' April- May 2023; 946-967' November 2022.
- Groundwater-flow direction/gradient east-west, east-northwest, east-southwest.
- Cluster wells measured upward vertical hydraulic gradient (VHG) from bedrock to deeper sediments.
- LML data also shows upward VHG from bedrock to deeper sediments.

Weston & Sampson Comments:

3. *Geologic cross sections indicate thickness of overburden sediments range from 68 to 117 feet (east to west) and 47 to 105 feet (north to south). Depth-to groundwater ranges from 57 to 79 ft bg (east to west) and 21 to 80 ft bg (north to south). Variability east to west principally due to sloping bedrock surface, north to south due to topography.*
4. *Geologic cross sections indicate phreatic water table, with no confining conditions or significant restrictive layers/stratification.*

5. *Consider providing an extended section view from east to west, e.g., from the till boundary to other side of the Housatonic River valley.*
6. *Data suggests the till boundary is nearby to east and affects groundwater levels and gradient.*
7. *Table 1, below, presents a summary of the water-level data relative to seasonal high groundwater levels.*

Table 1: Summary of water-Level Data Referenced for Hydrogeologic Review

ID	Low GW EL	High GW EL	Flux	Max Frimpter GW EL	Diff	High Date	High – Baseliner EL 975'	Max Frimpter – 975'
MW-2022-1S	966.50	973.87	7.37	975.85	1.98	5/23	-1.13	0.85
1D	966.50	973.29	6.79	975.66	2.37	5/23	-1.71	0.66
2	950.00	962.61	12.61	965.20	2.59	3/23	-12.39	-9.8
3	947.00	949.74	2.74	953.53	3.79	6/22	-25.26	-21.47
4S	947.00	950.50	3.50	953.90	3.40	6/22	-24.50	-21.1
4D	947.50	952.31	4.81	954.43	2.12	4/23	-22.69	-20.57
5	951.00	955.90	4.90	959.12	3.22	4/23	-19.10	-15.88
6	947.10	952.00	4.90	954.28	2.28	4/23	-23.00	-20.72
7	949.00	955.63	6.63	957.50	1.87	4/23	-19.37	-17.5
8	949.50	953.94	4.44	958.35	4.41	6/22	-21.06	-16.65
9	948.20	954.41	6.21	956.24	1.83	4/23	-20.59	-18.76
PZ-1	949.30	951.77	2.47	956.44	4.67	4/23	-23.23	-18.56
2	948.80	952.54	3.74	955.73	3.19	6/22	-22.46	-19.27
3	957.80	963.80	6.00	966.61	2.81	6/22	-11.20	-8.39
5	951.40	955.28	3.88	958.45	3.17	4/23	-19.72	-16.55
7	952.20	961.26	9.06	963.09	1.83	4/23	-13.74	-11.91
8	952.10	960.69	8.59	962.52	1.83	4/23	-14.31	-12.48
MW-84-1	953.00	965.32	12.32	967.15	1.83	4/23	-9.68	-7.85
2	948.30	954.46	6.16	957.15	2.69	6/22	-20.54	-17.85
MAX	966.50	973.87	12.61	975.85	4.67		-1.13	0.85
MIN	947.00	949.74	2.47	953.53	1.83		-25.26	-21.47
AVG	951.69	957.86	6.16	960.59	2.73		-17.14	-14.411
POND	947.00	949.60	2.60					

Notes: Yellow highlighted text indicates monthly precipitation amount below normal.
Light blue highlighted text indicated monthly precipitation amount above normal.
Red indicates water level within 15 feet of proposed baseliner elevation.

8. *Appears to be significant Variability of high groundwater levels between wells, which suggests variable hydrogeology relative to sediment composition, vertical permeability, and infiltration rates.*

9. *It appears that the high groundwater level often occurs in months with below normal precipitation (see attached table showing monthly precipitation amounts for 2000 through 2023, normalized mean values and relative wet/dry months for monitoring period). This should be explained.*
10. *The fluctuation of groundwater levels is generally highest along the eastern perimeter, reflecting thinning of aquifer to east and effects of till boundary.*
11. *For PZ-2022-3 located within the UDF footprint, the high groundwater elevation and Max Frimpter elevation is less than 15 feet below the proposed baseliner elevation of 975'.*
12. *Water levels at MW-2022-1S/D well cluster, located east of the UDF, are significantly higher than 975'. Using the gradient from 1S/D to PZ-2022-5, groundwater beneath the eastern edge of the UDF may be higher than 975'.*
13. *The monitoring network appears to be representative of hydrogeologic conditions. May need more monitoring wells along eastern edge of UDF and a longer period of record for comparison to the baseliner elevation.*
14. *Confirm the location of MW-2022-5. It appears to be shown at different locations on figures and cross section. This well is critical to the groundwater configuration beneath the central and western UDF areas.*
15. *The groundwater configuration appears relatively consistent throughout the monitoring period. The steep gradient beneath the east side of the UDF likely reflects the upland till/bedrock boundary. The hydraulic gradient shallows beneath the central and western portions of the UDF, with a centrally located east to west divide; flow north and south toward groundwater discharge areas at the northern pond and MW-2022-6. The divide is principally established by water levels in MW-2022-5, which appear to be several feet higher than would be expected. Water levels at MW-2022-5 and screen/aquifer connection should be confirmed. Redevelop well if needed.*
16. *Table 2 below, shows a water-level fluctuation of 3 to 6 feet beneath areas of the UDF, with the east area within 9 feet of the baseliner elevation, and 6 feet when seasonal high Frimpter elevations are considered.*

Table 2: Summary of Groundwater Elevations from Contour Maps

Month	Groundwater Elevation Taken from Contour Maps				
	East	Central	NW	SW	West
6/22	966	955	951	953	955
7/22	965	953	950	952	953
8/22	963	951	949	950	951
9/22	962	951	949	949	950
10/22	961	950	948	948	950
11/22	960	950	948	948	951
12/22	960	950	948	949	950
1/23	961	951	949	951	951
2/23	962	953	950	953	953
3/23	964	952	950	952	952
4/23	965	954	951	954	954
5/23	966	954	950	954	954
6/23	965	953	949	952	953

Month	Groundwater Elevation Taken from Contour Maps				
	East	Central	NW	SW	West
Max	966	955	951	954	955
Min	960	950	948	948	950
Avg	963	952	949	951	952
Flux max-min	6	5	3	6	5
Max Rel 975	9	20	24	21	20
Frimpter Add	3	3	5	2	3
Frimpter High	969	958	956	956	958
Frimpter High Rel 975	6	17	19	19	17

Notes: Yellow highlighted data indicates highest groundwater level.
Red highlighted data indicates the highest groundwater level is within 15 feet of the proposed baseliner elevation.

3.6.2 Estimate of Seasonally High Groundwater Elevation

Description of Frimpter Method

- Terrain setting valley-flat and terrace; evaluated as terrace, which they consider to be more conservative (yields higher groundwater elevations).
- Geologic environment – stratified drift sand and gravel.
- Frimpter compares two ratios: 1) measured groundwater fluctuation at site and at an observation well (OW); and 2) standard Frimpter range of groundwater fluctuations and the recorded upper limit of the range of groundwater fluctuations at the OW. Seasonal high groundwater elevations for site are estimated based on recorded groundwater elevation fluctuations at OW.
- The OW selected for this evaluation was USGS MA-PTW 51 Pittsfield MA. Similar valley setting. Data 1985-2022. Range of groundwater elevation in OW approximately 5.2 feet, compared to 5.0 at GE site.
- Frimpter calculations show increases in PDI gauging points of 1.8 to 4.7 feet above PDI measured elevations.
- Comparative calculation using OW MA-DWF 44R in Deerfield MA; terrain very flat and stratified drift. Showed similar results to PTW-51.
- Determined PTW-51 data appropriate for use.
- Frimpter also run on 2 LML wells, with longer historical GW record. Highest water level in the LML wells occurred in spring 1984. The maximum Frimpter terrace elevation was 967.15; 1.4 feet higher than measured. Note, the MW-84-1 measurement on June 6, 1984, was determined to be anomalous due to surface-water leakage into well. For MW-84-2, the maximum Frimpter elevation was 957.15, about 0.8 ft lower than measured.

<u>Weston & Sampson Comments:</u>

17. *The average fluctuation of groundwater levels in all wells, including the LML, was 6.16 feet; and for site wells only 5.80 feet. This conflicts with determination of 5 feet for comparison to OW. The significance of this deviation should be explained/evaluated or corrected.*
18. *Weston & Sampson reviewed stream-gauge and precipitation records to evaluate the climatic conditions for the monitoring period. The stream gauge in the Housatonic River at Lenox dale,*

MA-01197145 (at Site) only has a period of record beginning September 2022. The gauge near Great Barrington, MA-01197500, is the closest downstream station to the parcel with a long period of record. This gauge shows variable flow conditions over the monitoring period but generally representative of historical flow variability, with the possible exception of highest flow period 2021.

19. *During the monitoring period the precipitation total was 63.16 inches, compared to the normalized mean precipitation total for this period of 56.76. so monitoring was conducted during a statistically wet period.*
20. *In 2022, total precipitation was 50.19 inches, compared to the normal annual precipitation amount of 47.57 inches, so relatively wet.*
21. *Since 2000, the highest annual precipitation was 66.53 inches recorded in 2021 prior to the monitoring period. This corresponds to a high stream gauge reading as noted above. The monitoring period was statistically wet, as noted above under #19, but not the wettest period according to recent records. The measured water levels during the monitoring period should reflect relatively high conditions, but not the highest.*

3.7 Groundwater Testing for Environmental Quality

- Samples collected from 11 groundwater-monitoring wells, including shallow/deep cluster wells at MW-1S/D and MW-4S/D.
- Sampling designed to establish baseline chemical conditions for comparative evaluations during UDF operations and post-closure monitoring.
- All samples analyzed for PCBs, VOCs, SVOCs, inorganics, dioxins/furans, pesticides, herbicides and PFAS.
- Three sampling events: spring 2022, fall 2022, and spring 2023.

Results June 23-July 6, 2022:

- No PCBs
- Only few detections of VOCs, SVOCs and herbicides at MW-2022-1S and 1D (east, upgradient)
- Few detections of pesticides in 4 MWs and inorganics in all 11 MWs at low concentrations
- PFAS in 8 of 11 MWs at low concentrations
- Dioxins/Furans in all 11 MWs at low concentrations

Results November 9-December 19, 2022:

- No PCBs
- Only few detections of VOCs, SVOCs and herbicides at MW-2022-1D and MW-2022-2 at low concentrations
- Few detections of pesticides in 8 of 10 MWs and inorganics in all 10 MWs sampled at low concentrations.
- PFAS in 7 of 10 MWs low concentrations
- Dioxins/Furans in all 10 MWs sampled at low concentrations.

Results April 25-May 5, 2023:

- No PCBs
- Only few detections of VOCs, SVOCs and herbicides at MW-2022-2, MW-2022-3 and MW-2022-5 at low concentrations
- Few detections of pesticides in 5 of 11 MWs and inorganics in all 11 MWs sampled at low concentrations.

- PFAS in 7 of 11 MWs low concentrations
- Dioxins/Furans in all 11 MWs sampled at low concentrations.

Results were compared to MCP Method GW-1 (drinking water) and GW-3 (discharge to surface water) groundwater standards.

- Total PFAS at MW-2022-1S, MW-2022-1D and MW-2022-9 for all 3 events above GW-1 standard. Source not determined but apparently hydraulically upgradient.
- Spring 2022 sample from MW-2022-5 contained cyanide above the GW-3 standard.

No current or reasonably foreseeable future use of groundwater as drinking water at parcel, and no active drinking water wells within 500 feet of UDF consolidation area.

Weston & Sampson Comments:

22. *The analyte list appears to be adequate for assessment of background conditions. Confirm that the list includes all analytes used for assessment of remedial dredge samples to confirm the background water-quality results are useful for monitoring of potential releases from UDF.*
23. *Sample results from seasonal events appear to be reasonably consistent, validating use for background conditions.*
24. *Absence of PCBs good for operational and post-closure monitoring.*

3.8 Hydraulic Conductivity Testing

- Slug tests at MW-2022-1S, 2, 5, 7 and 9 to determine hydraulic conductivity (K) of parcel soils. Additional testing at MW-2022-1S and 4D in July 2023 as directed by EPA.
- Relative locations for test wells:
    - MW-2022-1S: east-central parcel boundary, upgradient of UDF
    - MW-2022-2: north-central parcel boundary, outside and side gradient of UDF, north of SW infiltration basin
    - MW-2022-5: west parcel boundary, west and downgradient of UDF
    - MW-2022-7: east-central parcel boundary, upgradient of UDF
    - MW-2022-9: south-central parcel, inside south limit of UDF
    - MW-2022-4D: west-central parcel boundary, outside and downgradient of UDF
- Water-level displacement using solid slug 1.5-inch diameter by 2-feet-long.
- Water-level recovery measured with PTDL.
- Test response with the lesser amount of initial variability used to analyze K.
- Recovery data processed and analyzed with AQTESOLV, following guidance from Butler (2019).
- MW 1S, 7 and 9 partially submerged screens, or screens/upper filter packs that became partially submerged during rising head test.
- Estimated K values ranging from 0.3 to 38 ft/day.

Weston & Sampson Comments:

25. *To understand the significance and distribution of results, the relevance and use of in-situ "K values for parcel soils" should be explained. The report only references it as being required by EPA.*
26. *The results are not relevant to reuse due to depth of saturated soils. They may be useful for development of a groundwater flow model, which is recommended to understand pre- and post UDF conditions.*

27. *K values reflect the heterogeneous nature of glacial deposits.*
28. *No slug tests were conducted within the proposed stormwater basin area for mounding analysis purposes. The closest test was conducted at MW-2022-2; K = 30 ft/d; 224 gpd/ft^2. This K value is characteristic of fine to coarse sand and glacial till (Groundwater and Wells, 1989). K values beneath the proposed stormwater basin would facilitate a mounding analysis for the design use of infiltration, and to assess the effects of infiltration on groundwater elevation and flow in the northern UDF area.*
29. *A mounding analysis should be conducted to confirm groundwater separation from baseliner in northern portion of UDF. Of note, the Frimpter estimate at PZ-1 is about 18.5 feet below the baseliner elevation 975'. Would mounding raise groundwater in this area 3.5 feet?*

3.11 Non-Community and Private Water Supply Wells

- Reviewed surrounding area within 500 feet of the UDF consolidation area to identify possible non-community and private water-supply wells.
- Reviewed aerial imagery to determine locations requiring investigation, conducted field reconnaissance of accessible areas within the area of investigation looking for visible evidence of private wells, and made an inquiry to MassDEP for records concerning wells in the investigation area.
- Review identified no active wells in 500-foot radius.
- Review identified 3 potential wells in vicinity, 2 were outside 500-foot radius and one that served a former residence and is no longer in use.

Weston & Sampson Comments:

30. *Is 500-foot radius adequate for this assessment? This radius should consider well yields and radius of influence, which could be greater than 500 feet if used for more than residential supply.*
31. *Will construction of the UDF include a restriction from development of groundwater supplies within a certain radius of the UDF consolidation area?*

Report Reviewed: Upland Disposal Facility Conceptual Design Plan

2.1 Performance Standards UDF

- Baseliner minimum 15 feet above conservative estimate of seasonally high groundwater elevation; describes method for determining i.e., Frimpter.
- Cap is low permeability layer with hydraulic drainage layer. 1x10^{-7} cm/s with minimum 0.030-inch thickness and chemically compatible with PCBs.
- Description of stormwater management system and groundwater-monitoring plan.

2.3.5 Piezometer and Monitoring Well Installation

- Reference to 6 PZs and 11 MWs, including 2 deep/shallow MW pairs installed within parcel.

2.3.6 Groundwater Elevation Monitoring

- Groundwater monitoring at 6 PZs, 11 MWs on parcel, 2 MWs at LML, 2 surface-water points on artificial ponds on parcel and Housatonic River at Crystal Street Bridge.
- Seasonal high groundwater levels determined from monitoring data and Frimpter Method.

2.5 Perimeter Berm and Baseliner System

- Perimeter berm constructed with site soils excavated from UDF footprint. Designed to provide protection from stormwater run-on outside UDF

- Baseliner consists of upper primary and lower secondary liners. Primary HDPE geomembrane underlain by geosynthetic clay liner. Secondary HDPE and clay liner and 1-ft-thick compacted clay liner.
- Primary leachate collection above primary liner. Secondary leachate collection between primary and secondary liners, function as leak detection system.
- Two UDF cells separated by intercell berm constructed of compacted clay. Cells would be hydraulically separated. Each will have dedicated collection sump. Cells would be constructed together or in phases.

2.8 Surface Water Management

- Stormwater drainage system with open channels, culverts, and infiltration basins. Perimeter ditch would collect runoff and route to an infiltration basin north of UDF.
- Runoff from peripheral areas will be limited and managed by smaller infiltration areas.

3.3.2 Groundwater and Bedrock Offsets

- Revised Permit requires that baseliner must have a minimum separation distance of 15-feet-vertical from seasonal high groundwater.
- 310 CMR 19.110(6) requires baseliner to be a minimum of 4 feet above top of bedrock or maximum high GW table.
- The seasonal high groundwater level used for design must be approved by EPA.

Weston & Sampson Comments:

32. *The bedrock surface was confirmed at 3 borings. The highest bedrock-surface elevation was 957.5', at MW-2022-1. This is approximately 17.5 feet below the baseliner elevation of 975'.*

4.3.1 Drainage Layer Design

- A geocomposite drainage layer will collect/convey non-contact water that infiltrates cover soil layers. This will minimize hydraulic head on the geomembrane and geosynthetic layer, which should reduce the potential for leakage and generation of leachate and improve slope stability.

4.3.2 Collection and Conveyance Piping Design

- Perforated piping in connection with the geocomposite layer will collect and convey infiltrated stormwater to the stormwater management system.

4.4.4 Stormwater Basin Design

- Infiltration basins to be sized to attenuate peak runoff.

5.3 Management of Contact and Non-contact waters

- Non-contact stormwater runoff prior to placement of consolidated material, dewatering discharge, surface and geocomposite runoff.
- Contact/leachate: any water with potential to interact with consolidated material. Drawings show contact leachate routed to Treatment Facility then discharged to River.

Weston & Sampson Comments:

33. *Design drawings and sections show lowest bottom elevation of baseliner at 975'. Drawing of bottom elevation contours compared to seasonal high groundwater elevation contour should be provided.*

GEOTECHNICAL ENGINEERING

Report Reviewed: Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area

Weston & Sampson Comments:

1. MW-2022-4S/D: profile on Figure 7 indicated that this boring extended into rock, but log indicates it terminated in sand.
2. A total of 22 borings for the site seems low. Provide justification that the number of borings adequately assesses site subsurface conditions.
3. Of the 22 borings completed, 5 encountered very loose to loose material. Based on the "upland disposal facility limits of Consolidated material" on Figure 6, these borings are outside the UDF. Please confirm.
4. Of the 22 borings completed, only 9 are located within the "Upland Disposal Facility Limits of Consolidated Material" on Figure 6. Rock cores were retrieved from 3 of the 22 borings, none of which are located within the UDF limits. Recommend additional borings within the UDF limits extending into rock to further define the soil conditions, soil thickness and rock elevation, and rock characteristics in particular degree of fracturing and corresponding permeability.
5. Additional borings may be necessary to assess slope stability depending on the proposed grading.

Report Reviewed: Upland Disposal Facility Conceptual Design Plan

Weston & Sampson Comments:

6. Section 4.2.1 presents the final cover system components. Confirm that veneer stability has been assessed.
7. What will be the condition and degree of saturation of the dredged material at the time it is placed in the UDF cells? If sediment is to be dewatered on site how will this be achieved and how will effluent be managed? Is there sufficient space on site for a sediment dewatering operation?
8. Section 4.2.3 notes that settlement will be evaluated as part of the final design and it will include settlement of the proposed fill. Fill placement and compaction criteria for the dredged/waste materials has not been provided. Confirm that this will be included in the final report along with corresponding geotechnical strength parameters.
9. Section 4.2.4 indicates that slope stability analyses have been performed. However, the report does not provide the soil parameters or cross sections used in the analysis which are critical input in the analysis. Without that information, we cannot comment on the slope stability analysis.
10. Section 4.4.3 discusses culvert design with respect to flow conditions. Will the design also consider structural and geotechnical engineering?
11. Section 5.2 indicates that transport of the dredged or excavated material has not been determined but "trucking or conveyance via slurry within a temporary pipe to the UDF" are under consideration. These methods have very different impacts on the material handling, dewatering, and placement. It is unclear how geotechnical engineering parameters could have been assigned to perform a slope stability analysis without this having been determined.

LANDFILL ENGINEERING

Report Reviewed: Upland Disposal Facility Conceptual Design Plan

Our landfill engineering review of the conceptual design for the UDF primarily focused on the *Upland Disposal Facility Conceptual Design Plan*. The plan provides details on the preliminary design of the facility from the siting phase through construction and post-closure. Design items and data gaps were identified for which further information is required; however, none of these items or data gaps represent

significant concerns about the general siting or design of the UDF from a solid waste/landfill engineering perspective.

Weston & Sampson Comments:

Capacity Calculations

Provide back-up calculations for UDF disposal capacity. Has the volume of the intercell berm and the general fill shown beneath the final cover on Figure 7 of the CDP been considered in the calculations of the maximum capacity?

Decomposition Gases

The disposal facility design does not include a system for managing gases produced from the decomposition of consolidated waste. The presence of a small amount of carbon, sulfur, and other elements in sediments could result in the production of decomposition gases beneath the final cover. This could threaten the integrity of the final cover.

Has the possible production of decomposition gases been considered in the design of the UDF?

Baseline to Final Cover Interface

Figure 7 depicts the geosynthetic layers of the baseliner and final cover terminating in separate anchor trenches. Has the approach of welding the geomembranes of the final cover system and primary baseliner been considered?

Shear Interface Testing

Section 4.2.4 discusses modelling of shear slope stability. Geosynthetic shear strength parameters are indicated as potentially the weakest interface shear strength in the UDF. It is noted that the baseliner was modelled as if it were a single layer. Are there intentions to further refine the shear strength modelling to determine if any particular interface within the baseliner or between the baseliners and an adjoining surface are weaker than is currently modelled? Are interface shear strength tests being considered as part of construction quality testing? Also, please see Geotechnical Engineering comment #8 above.

Temporary Stormwater Berms

Has the use of temporary stormwater berms within the cells been considered during early facility operations in order to reduce the size of the active cell and thus limit the amount of contact water generated during rain events?

Site Access Road

There does not appear to be an access road from the perimeter to the top of the disposal facility on Figure 4. Will an access road be included in a future design and how might it affect stormwater management and consolidation capacity?

Leachate Dewatering

The movement of leachate through the consolidation material could be rather slow, which could result in a lengthy settlement period. Have means of increasing the rate of leachate movement been considered, such as the use of vertical drainage risers that extend from the primary leachate collection system up through the consolidation material?

PFAS Concerns

There are indications that PFAS may present various concerns throughout the construction of the facility, such as the presence of PFAS in baseline groundwater monitoring. What considerations have been made about the potential presence of PFAS in various site materials, such as collected leachate? Given

the evolving regulatory environment around PFAS, how will potential PFAS concerns be addressed if such compounds are detected during the project?

Financial Assurance Mechanism

It is assumed that a financial assurance will be established for the UDF. Given the high interest of local communities in the amount and type of financial assurance, discussion of this in the next report is recommended.

Monthly Total Precipitation for LENOX DALE, MA

Click column heading to sort ascending, click again to sort descending.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	3.05	2.92	3.69	4.67	5.5	8.53	M	M	5.38	2.61	M	4.63	M
2001	M	3.02	6.42	2.26	2.6	5.77	2.68	2.21	4.91	1.38	1.56	3.24	M
2002	1.62	1.73	3.69	3.74	4.95	4.73	M	3.89	3.74	3.11	5.67	4.38	M
2003	3.43	3.12	3.72	1.76	5.16	3.5	2.24	6.64	6.45	6	4.27	5.75	52.04
2004	2	1.58	3.07	4.28	4.88	2.24	M	M	8.38	2.11	2.96	3.42	M
2005	4.48	2.8	4.42	2.85	1.53	2.81	3.47	M	1.64	15.27	6.23	3.95	M
2006	6.51	1.82	0.59	4.18	5.18	5.93	3.76	M	4.13	4.65	3.66	2.29	M
2007	3.59	2.94	5.63	6.56	2.23	2.16	6.18	M	1.77	5.35	4.03	5.65	M
2008	1.85	9.93	6.57	2.75	3.1	M	9.5	3.48	5.82	4.14	2.24	8.86	M
2009	3.11	2.4	2.5	1.91	4.97	8.17	10.91	6.23	1.08	4.8	2.83	3.69	52.6
2010	3	4.68	5.7	1.36	2.19	4.22	4.35	1.68	1.06	9.73	2.61	4.51	45.09
2011	3.03	4.08	5.02	5.26	M	6.89	2.69	9.48	10.61	4.23	2.3	5.32	M
2012	3.71	1.19	1.55	2.05	6.98	2.86	2.6	2.82	6.06	4.75	0.88	5.2	40.65
2013	2.39	3.21	2.63	2.3	5.95	6.59	2.58	5.6	4.38	1.23	3.65	3.52	44.03
2014	3.18	3.9	2.84	3.1	3.36	9.07	10.32	2.42	1.14	5.4	3.58	6.58	54.89
2015	4.26	2.22	2.18	3.18	1.6	7.69	5.35	4.96	2.49	3.27	2.28	3.78	43.26
2016	1.76	4.93	2.5	3.35	6.36	2.74	2.81	2.88	3.11	4.25	3.34	5.46	44.9
2017	3.26	2.87	3.55	3.49	5.65	3.48	4.34	4.13	3.7	5.06	1.13	2.8	43.46
2018	5.05	4.94	4.67	3.78	1.83	4.05	4.6	8.83	7.45	4.67	7.66	4.26	61.79
2019	5.44	2.95	M	M	4.53	M	M	2.49	3.04	7.87	4.7	6.84	52.22
2020	1.65	3.29	3.7	4.4	2.91	3.51	3.56	3.93	0.68	3.82	2.62	4.61	M
2021	2.53	2.26	2.2	5.53	6.63	5.32	15.97	4.52	7.27	7.32	2.92	4.06	66.53
2022	1.99	4.33	3.24	5.84	3.12	2.92	5.03	2.32	7.87	5.29	2.95	5.29	50.19
2023	5.4	2.05	4.7	2.99	2.6	4.72	9.03	M	M	M	M	M	M
Mean	3.32	3.3	3.69	3.55	4.08	4.9	5.6	4.36	4.44	5.06	3.37	4.7	50.13
Max	6.51 2006	9.93 2008	6.57 2008	6.56 2007	6.98 2012	9.07 2014	15.97 2021	9.48 2011	10.61 2011	15.27 2005	7.66 2018	8.86 2008	66.53 2021
Min	1.62 2002	1.19 2012	0.59 2006	1.36 2010	1.53 2005	2.16 2007	2.24 2003	1.68 2010	0.68 2020	1.23 2013	0.88 2012	2.29 2006	40.65 2012

Normal	3.25	3.31	3.75	3.93	4.17	4.52	4.67	3.88	3.95	4.47	3.84	3.83	47.57

													Total	Normal	Diff
2022						2.92	5.03	2.32	7.87	5.29	2.95	5.29	31.67	29.16	2.51
2023	5.4	2.05	4.7	2.99	2.6	4.72	9.03						31.49	27.6	3.89
													63.16	56.76	

To EPA from Citizens for PCB Removal commenting about *Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area*

October 9, 2023

Allowing a document that is 3894 pages in length having such a short time for public comment without an extension is unconscionable. Extensions have been the norm for submittals for the GE-Pittsfield/Housatonic Site. Much of the statements here may not be directly about this specific submittal, but relate to the Upland Disposal Facility (UDF) Area.

CPR has always and foremost been concerned with the health and safety of our citizens and environment. Placing a toxic dump near residents of Lee and the Housatonic watershed will only lead to a failure of this UDF and endangerment to our environment. We oppose this UDF and the secretive method by which it was agreed to by the EPA, GE and the other communities without public input.

Since the document in question has results for site groundwater elevations and their seasonal variances, site topography and soil composition, CPR will use other reports to show why this location should not be used for any type of landfill but especially one consisting of toxic PCBs.

In EPA's own words:

Excerpts from Response in 2016 by EPA against Woods Pond location for landfill

https://semspub.epa.gov/work/01/593922.pdf

RESPONSE TO COMMENTS ON DRAFT PERMIT MODIFICATION AND STATEMENT OF BASIS FOR EPA'S PROPOSED REMEDIAL ACTION (RA) FOR THE HOUSATONIC RIVER, REST OF RIVER (463 pp, 3.06 MB)

10-1-2016

Pages 249-252

EPA Response 546: **EPA disagrees with GE's assertions, the characterization of EPA's analyses, and the conclusions of GE favoring on-site upland disposal of excavated material.**

It is inconsistent for the Region to conclude that disposition of such material within that waterbody is acceptable, **but that disposition of similar materials in a secure on-site upland disposal facility outside the floodplain in Berkshire County is not.**

Response to Comments Housatonic River "Rest of River" on-site disposal facilities may be less effective at containing waste than an off-site disposal facility because the locations identified in the Revised CMS do not meet TSCA's siting requirements for PCB landfills. See 40 C.F.R. § 761.75(b)(1).

GE's Revised CMS acknowledges that none of the three proposed landfill sites meet TSCA's requirements for soil characteristics including permeability. In addition, *Woods Pond* is located near a drinking water source and is located above a medium yield aquifer. The Revised CMS also notes that none of the three sites meet all of TSCA's requirements for a

landfill site's hydrological characteristics and all three sites are located within close proximity to the Housatonic River.

As explained in EPA's Statement of Basis, "there is the potential for PCB releases to the Housatonic watershed if the landfills are not properly operated, monitored and maintained."

These factors increase the risks of potential future releases to the Housatonic watershed, compounded by the poor suitability of the proposed locations given such factors as soil permeability, proximity to the Housatonic watershed, and/or drinking water sources.

Here, no on-site locations have been identified that would meet the TSCA PCB landfill siting requirements.

Comment 485: **The Commonwealth and the affected communities are seeking EPA's affirmation that off-site disposal will remain a legally binding requirement in the Final Cleanup Plan for Rest of River, as well as a more detailed explanation as to how it will be implemented in a manner that is most protective of our interests and concerns.**

The geology of the site continues to cause concern to experts who have evaluated the proposed UDF location. David J. De Simone, PhD, produced a report in 2020 that can be reviewed here: https://cleanthehousatonic.com/wp-content/uploads/2021/08/6.-David-Desimone-Expert-Report.pdf

A report by Technical Assistance Services for Communities (TASC) Comments on GE-Pittsfield/Housatonic River Site – UDF PDI Summary Report also raises several concerns about the site. The full report can be read here: https://semspub.epa.gov/work/01/677509.pdf

Following are excerpts from the TASC report:

Given the important concerns that the public has regarding design of the UDF, the community may want to ask EPA if GE could provide a presentation at a public meeting describing the UDF final design, and if it would be appropriate for GE to incorporate a response to community comments within the UDF Final Design Plan. The public meeting would allow for an exchange between GE and the community so that GE could understand community questions and concerns and address them in the UDF final design.

The community may want to ask EPA if the absence of understanding the Support Areas location and function represents a significant gap in understanding if the ongoing monitoring is sufficient to capture all future UDF impacts.

The community may want to ask EPA if the requests presented in item #36 of the 2022 conditional approval letter have been met in order to thoroughly understand the presence or absence of confining or restrictive layers in the subsurface.

The community may want to ask EPA if the status of the adjacent quarry could be thoroughly and accurately depicted throughout the document. Potential conflicts to future quarry use or closure (such as the use of pond surface water levels as an indirect measure of groundwater levels) should be acknowledged

The community may want to ask EPA if monitoring for mitigation area considerations is included as part of the continued field efforts to be accomplished until (and perhaps beyond) the production of the Final UDF Design Plan.

The community may want to ask EPA if the dynamic groundwater levels will affect the usable amount of UDF area available that will meet UDF performance standard requirements, and if the design will consider effects of the UDF on groundwater flow pathways (which may in turn, influence the monitoring well field design).

The community may want to ask EPA if installation of the proposed replacement well for wells MW-2022-1S and 1D will occur in the near future to capture a continuum of groundwater quality characterization, and if the soils from installation of the new well could be analyzed for PFAS in addition to the standard suite of soil quality chemical analysis

The community may want to ask EPA if groundwater level monitoring will be collected in fall 2023 and if it will continue during and after the UDF construction to capture year□to-year trends.
The community may want to ask EPA if the bedrock and groundwater levels in the eastern area of the proposed consolidation area will pose concerns for the UDF design.

Since characterization of upgradient/background groundwater quality is an important measure for the future UDF groundwater characterization, should the upgradient monitoring well field be bolstered to include two additional monitoring wells between the MW-2022-1S and 1D replacement well and MW-2022-7, MW-2022-7 and MW-84-1? In addition, it is important to recognize the existing wells (the replacement well for MW□2022-1S and 1D, MW-2022-8 and MW-84-1) need to continue to be used for monitoring.

Given the monitoring results shown to date, it is apparent that the pond associated with MP-1 is a possible groundwater sink. As such, the surface water quality measurements of PCBs may be appropriate to measure UDF effectiveness in the future. Would it be appropriate to continue monitoring this pond and to include surface water (and sediment and porewater, preferably) for PCB content?

Could Figures 9 through 21 be amended to include a modeled footprint of the appropriate area that meets UDF construction performance standards?

The community may want to ask EPA if the discrepancies in the GE and EPA split sample analysis will be addressed prior to UDF monitoring when the UDF is active.
The community may want to ask EPA if the groundwater monitoring can continue to include the suites of analysis listed in Table 7A-1 (particularly in reference to the dioxins and PFAS chemicals).

Following are excerpts from the Berkshire Eagle article by Greg Sukiennik on October 10, 1023 that refers to the TASC report. The article can be read here: https://www.berkshireeagle.com/news/central_berkshires/report-on-lee-pcb-landfill-design-calls-for-more-monitoring-wells-raising-concern-about-groundwater-levels/article_f4ed17ee-5e41-11ee-93fc-0722da9fec0f.html

And is titled ***Report on Lee PCB landfill design calls for more monitoring wells. It also raises concerns about groundwater levels***.

Its geography is important because of two performance standards in the permit the General Electric Co. must adhere to in order to dispose of 1.3million cubic yards of lower-level PCB-contaminated sediments in the landfill. The first one is that the height of the landfill may increase if the groundwater

is at 950 feet above sea level or higher, with the other being that the lowest reach of the landfill must be no less than 15 feet above the highest groundwater elevation.

"The groundwater level has a slope; however, the design of the UDF will not." The UDF needs to be a level feature in order to properly disseminate disposed waste and not create pooled areas of waste collection," the TASC report says. It was produced under contract by Skeo, a Charlottesville, Va.-based consulting firm.

"Given this design requirement, it is important to know the conservative elevation for the bottom of the UDF that will contain the waste within the performance standard requirement of 20 acres at a level of 15 feet above the highest groundwater elevation," the report reads.

Issued last week, the report also asks whether the dynamic nature of the groundwater table below the site will affect how much landfill area will be usable and whether activities on the surface might impact groundwater pathways below. It also suggested more monitoring wells in areas with the highest groundwater levels.

In its comments, TASC called for "more thorough monitoring up gradient within areas unaffected by the UDF and groundwater quality data analysis."

The TASC report noted a pair of wells on the site — MW-2022 1S and 1D —were "found to be of limited use and were replaced." But those wells yielded the highest level of groundwater and are located in the area with highest bedrock levels and also detected PFAS contamination. Furthermore, the wells are located in an area up gradient from where landfill consolidation will take place.

"All of these conditions exemplify the importance of maintaining monitoring wells in this location," the report reads.

Now the EPA is stating that the UDF will have five (5) liners instead of the previously proposed two (2). This is an admission that there is something terribly wrong with the UDF site.

Lastly, CPR wishes to state that a website shows pictures/drawings of what appear to be a final UDF. These pictures/drawings would lead people to believe that the landfill will be relatively small, low and compact. Based upon the previously mentioned reports this will certainly not be the case.

The website is: https://storymaps.arcgis.com/stories/5412345599064c28a863fd54601a171d

Here are the pictures/drawings referenced that are misleading.

Before: View of current conditions looking south towards the Lee Landfill and Willow Hill Road.

After: Constructing the UDF at this location can help the area transition from a denuded landscape to a functional meadow.

Before: View looking northwest towards the quarry pits and Woods Pond.

After: A primary walking route extends from October Mountain campground along the northeast side of the property to the boat launch and foot bridge at Woods Pond. A hiking loop to the top of the UDF could offer a vantage point with scenic views up and down the Housatonic River valley. The cleanup of Woods Pond will enhance recreational boating and fishing. Note that these figures are conceptual and may change based upon final design.

HOUSATONIC REST OF RIVER MUNICIPAL COMMITTEE

October 6, 2023

Dean Tagliaferro, EPA Project Manager
GE-Pittsfield/Housatonic River Site
Boston, MA
Submitted via email to R1Housatonic@epa.gov

Re: Comments on the *Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area*

Dear Mr. Tagliaferro:

The Housatonic Rest of River Municipal Committee (the Committee) respectfully submits the following comments on the *Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area* (hereinafter, the UDF PDI Summary Report). The UDF PDI Summary Report builds on the Interim PDI Data Summary submitted in December 2022 and presents data and information obtained during implementation of the PDI activities through June 2023. Additional PDI activities are ongoing and are planned to be completed in late 2023. The results of those activities will be presented in an addendum to this UDF PDI Summary Report. The UDF Final Design Plan is due 60 days after EPA approval of the Final PDI Summary.

The Housatonic Rest of River Municipal Committee submitted comments on the *Upland Disposal Facility (UDF) Conceptual Design and UDF Pre-Design Investigation (PDI) Interim Data Summary* on February 13, 2023. At that time the Committee requested that Interim UDF Design Plan be developed and an independent and impartial contractor with appropriate expertise be engaged to provide a comprehensive presentation to the public at the 75% design phase (or thereabouts). This would allow an interactive review of the proposed design during a public meeting where the design is presented for discussion prior to being finalized. There are questions of particular importance to the community (such as protectiveness of UDF activities to human health, aesthetics, transportation routes, times of operation etc.) that could benefit the final design. The Committee remains concerned with advancing directly to the UDF Final Design Plan without an interim plan available for review and public comment. GE should be required to prepare and submit an Interim UDF Design Plan available for public comment and should include a responsiveness summary summarizing public questions/concerns provided during the meeting, and how GE addressed those questions/concerns in the final design.

The Committee's comments on the *Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area* are enclosed as Attachment A. In addition, the Committee has contracted to conduct an independent review, which is enclosed as Attachment C.

Sincerely,
The Housatonic Rest of River Municipal Committee

Enclosure: Attachment A - Housatonic Rest of River Municipal Committee Comments on the *Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area*

Enclosure: Attachment B - Technical Assistance Services for Communities Comments, September 26, 2023

Enclosure: Attachment C – TRC Technical Review of *Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area*, September 21, 2023

ATTACHMENT A
HOUSATONIC REST OF RIVER MUNICIPAL COMMITTEE
Comments on the Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area
GE/Housatonic River - Rest of River

The safety of the UDF is of utmost concern to the Housatonic Rest of River Municipal Committee (the Committee) and the community must have the ability to be actively engaged in review of these documents throughout the UDF design process. In addition to the technical review provided by Skeo under the Technical Assistance to Services to Communities (TASC) contract, the Committee has contracted with TRC to conduct an independent review of the *Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area* (hereinafter, the UDF PDI Summary Report). This independent review can be found as Attachment C.

The Committee offers the following comments:

1. The Statement of Work describes the essential elements required for the UDF PDI Summary Report within Section 4.2.2.2 Pre-Design Investigation Summary Report. A component of the required document is an understanding of the UDF Support Areas, which have yet to be identified. The identification of the location and use of the Support Areas is essential to understand if the designed and ongoing monitoring efforts currently included in the UDF PDI Summary Report are complete and would be expected to capture the potential impacts attributable to these areas.

   The absence of understanding the Support Areas location and function represents a significant gap in understanding if the ongoing monitoring is sufficient to capture all future UDF impacts.

2. The 2022 EPA conditional approval letter for the PDI Work Plan identifies outstanding items to be addressed as part of continued UDF monitoring and design efforts. Outstanding items included the need for GE to discuss with EPA if the deep borings advanced to at least 910 feet indicate the presence of any potential confining or restrictive layers and if there is a need for additional deep borings to better understand the geological setting beneath the UDF. As per information provided in the UDF PDI Summary Report, on pdf page 25, the restrictive or confining layer of underlying marble bedrock occurs at depths ranging from 909.5 feet at MW-2022-3 to about 957.5 feet at MW-2022-1. However, the conceptual location of the bedrock layer is shown to be at elevations greater than 957.5 feet (refer to Figure 7, pdf page 301). In addition, the document does not describe whether the other encountered subsurface geologic layers (silt, clay – shown in Figures 7 and 8, pdf pages 301 and 302) would be expected to be restrictive or confining layers.

   It is important to thoroughly understand the presence or absence of confining or restrictive layers in the subsurface. GE should provide additional detail and consistency with regard to clarifying the presence of any potential confining or restrictive layers.

3. Based on the limited geotechnical data provided, it cannot be confirmed that a demonstration has been made that the design will provide long-term stability and protectiveness of the environment and human health. We do recognize that the reports are part of a pre-design investigation and that detailed

geotechnical analyses (slope stability, settlement, etc.) are forthcoming and will be provided as the design progresses.

Detailed geotechnical analyses should be provided as part of an interim conceptual design plan and made available for review before proceeding to final design.

4. Section 3.5 of the UDF PDI Summary Report documents the installation of six piezometers and eleven monitoring wells to support the proposed water level monitoring and groundwater sampling.

   A shallow and deeper monitoring well arrangement at the MW 2022-1 location is recommended rather than replacing MW 2022-1 with a single monitoring well, as proposed in the document. This would allow for ongoing monitoring of groundwater elevations and the resultant vertical component of groundwater flow. Additional short-term (baseline) and long-term monitoring wells may also be needed depending on the plans for and location(s) of the UDF Support Area(s), which have not been provided yet, including any locations for the performance of sediment management or dewatering on the Property.

5. The statements at the end of Section 3.6.2 regarding the proposed design separation of the UDF baseliner system and the estimated seasonally high groundwater elevations within the UDF Consolidation Area seem premature given the limited information on the proposed design elevations presented in the UDF Conceptual Design Plan.

   EPA should require GE to provide adequate elevation details for the baseliner system in an Interim UDF Design Report to verify compliance with this important Performance Standard.

6. The UDF PDI Summary Report indicates that the adjacent property retains active mining operations. The document states "westerly ponds (contained within the Eurovia property) remain in active use as part of the gravel pit operation ongoing…" (pdf page 20) and "greenish color of the pond water, which reflects the suspended silts and clays consistent with the use of the pond for settling as part of that operation" (footnote five, pdf page 21). It is not clear if GE intends to manage the overlapping ponds (fill in certain ponds for the construction of the consolidation area) or if GE will work cooperatively with the landowner to maintain the ponds for gravel operations.

   The status of the adjacent quarry could be accurately and consistently depicted throughout the document (whether it is currently in use or not). Potential conflicts to future quarry use or closure (such as the use of pond surface water levels as an indirect measure of groundwater levels) should be acknowledged and discussed to ensure that future potential changes in the mining operation do not affect the validity of the UDF groundwater monitoring network.

7. The measured groundwater elevations and the modeled groundwater elevations using the Frimpter Method yield levels routinely greater than the permit performance standard threshold of 950 feet above mean sea level. This is allowable as per the permit standards that state "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 UDF to have a maximum capacity of 1.3 million cubic yards" (pdf pages 59 – 60 of the Revised Final Permit). The difference between the seasonally high groundwater elevation and 950 feet (referred to

as difference values) varies by monitoring well/piezometer location. Estimated difference values occur from a minimum of 3.9 feet above mean sea level (MW-2022-4S) to a maximum of 27.85 feet above mean sea level (MW-2022-1S). These results reveal a very dynamic groundwater system, which highlight several questions and concerns as follows:

- It is important to know the conservative elevation for the bottom of the UDF that will contain the waste within the performance standard requirement of 20 acres at a level of 15 feet above the highest groundwater elevation. It is also important to understand how this conservative elevation will affect the maximum elevation (defined as 1,099 feet to be adjusted based on the estimated elevated groundwater level – described in the permit on pdf pages 59-60, 5.a.(2)(b)) that will be required to accommodate this design.

- The highest groundwater levels occur in the northeast area of the GE parcel, which is considered upgradient and would capture background or groundwater conditions unaffected by UDF influences. Creation of a landfill feature may cause the groundwater flow pathway (from the northeast to the southwest) to diverge, thereby creating new/affected groundwater pathways. It is important to be sure that the planned monitoring well field will capture these potentially new groundwater pathways.

GE should be required to determine whether the dynamic groundwater levels will affect the usable amount of UDF area available that will meet UDF performance standard requirements, and if the groundwater monitoring design network will be able to identify effects of the UDF on groundwater flow pathways (which may in turn, influence the monitoring well field design).

8. The document states that wells MW-2022 1S and 1D were found to be of limited use and will be replaced. However, these wells yielded the highest levels of groundwater and co-occur within an area with the highest bedrock levels. In addition, PFAS results for groundwater samples were detected at levels greater than the Method 1 groundwater standards used to determine potential environmental effects resulting from contaminated groundwater discharging to surface water. Furthermore, the area where these wells occur is upgradient of the consolidated area of the UDF; therefore, the water quality provides a measure of pre-UDF disturbance. All of these conditions exemplify the importance of maintaining monitoring wells in this location. If GE plans to install a replacement well or wells, this effort should be accomplished in the very near future to continue to capture upgradient groundwater quality conditions. In addition, if GE plans to install a new well to replace MW-2022 1S and 1D, it is recommended that the soils be characterized (similar to the monitoring wells soils analysis performed during the PDI) to include PFAS analysis to assist with the delineation of possible PFAS contamination.

   The replacement well for wells MW-2022-1S and 1D should be installed in the near future to capture a continuum of groundwater quality characterization. Soils from installation of the new well should be tested for PFAS in addition to the standard suite of soil quality chemical analysis.

9. The UDF PDI Summary Report captures one year of groundwater elevation monitoring including one month of temporal overlap (June). Comparison of the measured groundwater levels between June 2022 and June 2023 show a decrease in groundwater levels for all wells measured. The results highlight the importance of continued monitoring to capture additional, seasonal/annual trends in the groundwater level data. The report, states that the final groundwater sampling event to test for environmental

quality is scheduled for fall 2023. It is unclear if groundwater level monitoring will continue. While the amount of information captured to date represents a robust dataset from which to draw conclusions regarding trends, this divergence of data in one year demonstrates the need to continue monitoring. The report indicates that additional field activities are ongoing but does not mention if these include continued groundwater level monitoring. In addition, text provided on pdf page 30 states "the monitoring wells may remain in service for continued monitoring" indicating that it is unknown how future monitoring will be accomplished.

GE should clarify whether groundwater level monitoring will be collected in fall 2023 and if it will continue during and after the UDF construction to capture year-to-year trends.

10. Figures 7 and 8 depict the geological cross section profiles for transects A – A' and B – B' that traverse the GE parcel. Results shown in Figure 7 depict a bedrock marble layer with a surface elevation of about 960 feet to 965 feet above mean sea level. The groundwater levels within this area also range in the highest measured levels across the GE parcel and are likely in relation to this geological feature. The bedrock feature and elevated groundwater levels may pose issues for the design of the UDF in regard to being able to achieve the UDF performance standards.

    GE and EPA should clarify whether bedrock and groundwater levels in the eastern area of the proposed consolidation area will pose concerns for the UDF design.

11. Figures 9 through 21, on pdf pages 303 through 315, depict measured groundwater elevations by sampling effort (June 2022 through June 2023). Several observations were noted for these figures as follows:

    - The boundary of the consolidation area (bold dashed line) needs to be added as a feature to the legend.
    - The figures show that the upgradient or the highest groundwater levels occur to the north/northeast. It is important to continue to characterize upgradient/background groundwater quality through the duration of UDF use and post-closure. There appears to be spatial gaps in this upgradient area that may benefit from additional monitoring wells. Specifically, this includes two areas: 1) there are no monitoring wells between MW-2022-1S/1D and MW-2022-7, and 2) between MW-2022-7 and MW-84-1. There are two piezometers (PZ-2022-8 and PZ-2022-7) in this area; however, as stated in the document, on pdf page 30, "prior to UDF construction, the piezometers will be abandoned in place." In addition, the Support Areas may be placed in this area and should be monitored closely as there is the potential for spills of contaminated materials. *Additional monitoring wells in these two areas should be considered.*
    - It is also important to recognize that wells MW-2022-1S and 1D, PZ-2022-8, PZ-2022-7 and MW-84-1 are valuable for future upgradient monitoring of the consolidation area and the potential support areas that have yet to be defined. The document, on pdf page 30, states that MW-2022-1S and 1D are to be replaced. Well MW-84-1 is associated with the Lee Landfill; therefore it is unknown if GE has access to or intends to use this well in the future. *The continued use of these wells for monitoring should be acknowledged.*
    - The pond that overlaps the GE parcel and the adjacent quarry area (located between MW-2022-3 and MW-2022-4 and is sampled for surface water levels at site MP-1, shown in Figure 6 pdf page

300) demonstrates to be a groundwater sink (an area where groundwater is moving toward) as shown in the repeated groundwater contours for each map. This indicates that this pond may be a useful surface water quality monitoring feature for PCB analysis in the future after the UDF is in use. *The use of the pond's surface water for future PCB monitoring should be considered.*

- The figures were developed with the use of modeling to infer groundwater level contours. It seems that this same method could shade or outline the area within each map that meets UDF construction performance standards in order to visualize the amount of area available for UDF construction. *The revision of these figures to incorporate a modeled UDF consolidation area footprint based on performance standard compliance should be considered*.

Based on these findings, EPA should require additional deeper monitoring wells to establish well couplets at the MW 2022-3 location and the MW 2022-6 location. A downgradient well couplet is already present at the MW 2022-4 location. This would provide a more robust downgradient monitoring well network that could account for the occasional, slight downward vertical gradient exhibited by the manual monitoring data.

10. Table 7A-1, on pdf pages 189 to 196, provides a summary of the groundwater environmental quality testing results. The analytical testing is robust and includes suites of chemicals of interest to the community including dioxins and PFAS. Dioxins are detected in the surface soil fraction of soils gathered during the PDI (Table 4A, pdf pages 53-167). These concentrations are likely typical of industrial soils. Dioxins were generally not detected in groundwater; however, continued monitoring of groundwater for these chemical constituents would help understand if these chemicals are migrating from the soil to the groundwater. Continued monitoring of these same suites of chemicals (dioxins and PFAS) is extremely valuable to the community and would assist in understanding soil-to-groundwater relationships in the UDF area.

    The groundwater monitoring should continue to include the suites of analysis listed in Table 7A-1 (particularly in reference to the dioxins and PFAS chemicals).

11. The Committee previously commented on the discrepancies noted between chemical analysis results shown in the comparative GE and EPA Quality Testing Split Results. The purpose of collecting split samples is to verify the accuracy and precision of sample collection and analysis. To date the results provided within GE documents have summarized these results in general narrative terms. The use of split analysis of sampled media will be of particular value and importance when the UDF becomes active. The issues shown in the incomparability between the split sample analysis should be acknowledged and addressed prior to UDF monitoring when waste materials management procedures are in place.

    The discrepancies in the GE and EPA split sample analysis must be addressed prior to UDF monitoring when the UDF is active.

12. The UDF PDI Summary Report states that to the extent that mitigation for the loss of resource areas is required, mitigation options will be addressed in the UDF Final Design Plan, along with any additional data collection necessary for such mitigation. Possible mitigation areas should be identified during this period of ongoing monitoring since the information would capture seasonal considerations that

influence important mitigation area features such as stormwater pathways, species occurrence and migration patterns and other possible habitat characteristics (vegetation diversity and density).

GE should proactively incorporate mitigation planning and incorporate seasonal monitoring for future mitigation area considerations as part of the continued field efforts to be accomplished until (and perhaps beyond) the production of the Final UDF Design Plan.

Attachment B

Technical Assistance Services *for* Communities
GE-Pittsfield/Housatonic River Site
Comments on Upland Disposal Facility (UDF) Pre-Design Investigation (PDI) Summary Report
September 26, 2023

Contract No.: 68HERH21A0018
Call Order Number: 68HERH22F0082 (14.0.0 OSRTI – Regional & Headquarters TASC/CI Support)
Technical Direction: R1 2.9.14 GE Pittsfield

Technical Assistance Services for Communities (TASC)
Comments on GE-Pittsfield/Housatonic River Site – UDF PDI Summary Report, August 2023

Introduction

This document provides TASC comments on the GE-Pittsfield/Housatonic River, Rest of River – Upland Disposal Facility (UDF) Final Pre-Design Investigation (PDI) Summary Report for UDF Area (UDF PDI Summary Report). This document is for the Berkshire Regional Planning Commission (BRPC), the Town of Lee, the City of Pittsfield and other entities to use as they develop comments to share with the U.S. Environmental Protection Agency (EPA). TASC does not make comments directly to EPA on behalf of communities. This document is funded by EPA's TASC program. The contents do not necessarily reflect the policies, actions or positions of EPA.

Pursuant to the Revised Resource Conservation and Recovery Act (RCRA) Permit Modification (Revised Final Permit) issued by EPA to the General Electric Company (GE) on December 16, 2020, for the Rest of River (ROR) portion of the GE-Pittsfield/Housatonic River site, GE is required to conduct a remedial action for the ROR. The selected ROR remedial action includes a provision for GE to construct and utilize a UDF at the former Lane site for the disposal of certain sediments and soils removed as part of the remedial action.[1] The PDI Work Plan for the UDF was submitted to EPA on November 24, 2021, in accordance with the Final Revised Statement of Work (SOW). It included descriptions of desktop, field and laboratory-based activities necessary to acquire information for design of the UDF. Additional requirements for the PDI were in EPA's February 25, 2022, conditional approval letter for the PDI Work Plan. More requirements for the Final PDI Summary were in EPA's April 18, 2023, conditional approval letter for the Interim PDI Data Summary. This document, the UDF PDI Summary Report, builds

[1] The former Lane site is a 75-acre property that was formerly part of an active sand and gravel quarry. GE acquired the property from The Lane Construction Corporation in April 2021.

on the Interim PDI Data Summary and presents data and information obtained during implementation of the PDI activities through June 2023. Additional PDI activities are ongoing and are planned to be completed in late 2023. The results of those activities will be presented in an addendum to this UDF PDI Summary Report. The UDF Final Design Plan is due 60 days after EPA approval of the Final PDI Summary.

Summary

The August 2023 UDF PDI Summary Report has five sections:

- Introduction.
- Site Background and Historical Site Data Summary.
- Pre-Design Investigation and Data Summary and Evaluation.
- Schedule and Addendum.
- References.

The purpose of the UDF PDI Summary Report is to describe the investigations conducted through June 2023 and the acquired data that will support engineering evaluations and detailed planning and design of the UDF. In general, the PDI activities and investigations included an assessment of the habitat at the parcel; a survey of existing site features, subsurface conditions, groundwater and soils; weather monitoring; and a cultural resource assessment and intensive archaeological survey of selected areas within the GE parcel.

The UDF Support Area will be defined in the UDF Final Design Plan. The final PDI groundwater sampling event to test for environmental quality is scheduled for fall 2023. The results of the groundwater sampling will be included in the addendum to the UDF PDI Summary Report.

TASC Comments

TASC reviewed the UDF PDI Summary Report to determine if it meets the requirements set forth in the SOW, the Revised Final Permit and EPA's 2022 conditional approval letter for the PDI Work Plan. In addition, TASC revisited previously provided comments generated from the review of:

1. GE-Pittsfield/Housatonic River Site Pre-Design Investigation Work Plan for Upland Disposal Facility (December 2021).
2. GE-Pittsfield/Housatonic River Site – UDF Conceptual Design Plan (December 2022).
3. GE-Pittsfield/Housatonic River Site – UDF Pre-Design Investigation Interim Data Summary (December 2022).

TASC's review of the UDF PDI Summary Report focused on the application of UDF design performance standards as described in the SOW and the Final Revised Permit. The performance standards are dependent on measured and modeled groundwater elevations. These levels are critical to the design and capacity of the UDF to keep the contained polychlorinated biphenyl (PCB)-contaminated waste from coming in contact with groundwater. Enough groundwater

information has been obtained to understand an annual trend in groundwater levels and to begin the design of the UDF.

TASC identified comments associated with the monitoring design (the need for more thorough monitoring upgradient within areas unaffected by the UDF) and groundwater quality data analysis. Specific TASC comments are:

1. The next document deliverables following this UDF PDI Summary Report will include an addendum to the Final PDI Summary (to include the fall 2023 groundwater monitoring results) and the UDF Final Design Plan. The Final PDI Summary addendum will incorporate data gathered in fall 2023 and any adjustments accommodating comments and review of the previous deliverables. The UDF Final Design Plan will present the final engineering design of the UDF. TASC previously commented (TASC review of the UDF Conceptual Design Plan and UDF PDI Interim Data Summary, December 2022) that community members may want to ask GE to provide a comprehensive presentation of the final proposed design to the public. Community members may also want to request that GE provide a response to comments in the UDF Final Design Plan for the community to track and understand how their previous concerns were addressed or why they were not addressed. An interactive public meeting will benefit the community and GE by providing a forum to actively discuss UDF design aspects of particular concern. Since significant, outstanding UDF components are unknown (e.g., placement of Support Area features and possible monitoring components to capture Support Area features), it seems particularly important to discuss and describe the UDF footprint in its entirety to the community. Topics of concern and interest may include, but are not limited to, Support Area design and monitoring, air monitoring and per- and polyfluoroalkyl substances (PFAS) in groundwater.

   Given the important concerns that the public has regarding design of the UDF, the community may want to ask EPA if GE could provide a presentation at a public meeting describing the UDF final design, and if it would be appropriate for GE to incorporate a response to community comments within the UDF Final Design Plan. The public meeting would allow for an exchange between GE and the community so that GE could understand community questions and concerns and address them in the UDF final design.

2. The SOW, on pdf page 47, describes the essential elements required for the UDF PDI Summary Report within Section 4.2.2.2 Pre-Design Investigation Summary Report. A component of the required document is an understanding of the UDF Support Areas, which have yet to be identified. The identification of the location and use of the Support Areas is essential to understand if the designed and ongoing monitoring efforts currently included in the UDF PDI Summary Report are complete and would be expected to capture the potential impacts attributable to these areas.

   The community may want to ask EPA if the absence of understanding the Support Areas location and function represents a significant gap in understanding if the ongoing monitoring is sufficient to capture all future UDF impacts.

3. The 2022 EPA conditional approval letter for the PDI Work Plan identifies outstanding items to be addressed as part of continued UDF monitoring and design efforts. Item #36, on pdf page 7 of the letter, describes the need for GE to discuss with EPA if the deep borings advanced to at least 910 feet indicate the presence of any potential confining or restrictive layers and if there is a need for additional deep borings to better understand the geological setting beneath the UDF. As per information provided in the UDF PDI Summary Report, on pdf page 25, the restrictive or confining layer of underlying marble bedrock occurs at depths ranging from 909.5 feet at MW-2022-3 to about 957.5 feet at MW-2022-1. However, the conceptual location of the bedrock layer is shown to be at elevations greater than 957.5 feet (refer to Figure 7, pdf page 301). In addition, the document does not describe whether the other encountered subsurface geologic layers (silt, clay – shown in Figures 7 and 8, pdf pages 301 and 302) would be expected to be restrictive or confining layers.

   The community may want to ask EPA if the requests presented in item #36 of the 2022 conditional approval letter have been met in order to thoroughly understand the presence or absence of confining or restrictive layers in the subsurface. Moving forward, the community may want to ask EPA to ask GE to provide additional detail in terms of how items in EPA's conditional approval letter have been addressed and to add more detail about the geology.

4. TASC has raised several questions related to the status of the adjacent gravel quarry (Northeast Paving, a division of Eurovia Atlantic Coast, LLC). The UDF PDI Summary Report indicates that the adjacent property retains active mining operations. The document states "westerly ponds (contained within the Eurovia property) remain in active use as part of the gravel pit operation ongoing…" (pdf page 20) and "greenish color of the pond water, which reflects the suspended silts and clays consistent with the use of the pond for settling as part of that operation" (footnote five, pdf page 21). It is not clear if GE intends to manage the overlapping ponds (fill in certain ponds for the construction of the consolidation area) or if GE will work cooperatively with the landowner to maintain the ponds for gravel operations.

   The community may want to ask EPA if the status of the adjacent quarry could be thoroughly and accurately depicted throughout the document (whether it is currently in use or not). Potential conflicts to future quarry use or closure (such as the use of pond surface water levels as an indirect measure of groundwater levels) should be acknowledged and discussed to ensure that future potential changes in the mining operation do not affect the validity of the UDF groundwater monitoring network.

5. TASC discussed the need for mitigation area identification and incorporation into UDF design plans during review of the UDF Conceptual Design Plan during previous document reviews. This document indicates that continued monitoring up until the production of the final design is planned and states (pdf page 21, footnote six), "As indicated in the habitat assessment report in Appendix C, the impacts on the identified resource areas from the construction and operation of the UDF and UDF support facilities

will be evaluated further and, to the extent that mitigation for the loss of resource areas is required, mitigation option will be addressed in the UDF Final Design Plan, along with any additional data collection necessary for such mitigation." Once again, TASC suggests the need to identify possible mitigation areas during this period of ongoing monitoring since the information would capture seasonal considerations that influence important mitigation area features such as stormwater pathways, species occurrence and migration patterns and other possible habitat characteristics (vegetation diversity and density).

The community may want to ask EPA if seasonal monitoring for future mitigation area considerations is included as part of the continued field efforts to be accomplished until (and perhaps beyond) the production of the Final UDF Design Plan. In addition, the community may want to ask the EPA if it is appropriate for GE to proactively incorporate mitigation planning as part of the forthcoming UDF Design Plan.

6. The measured groundwater elevations (Table 6A, pdf page 182) and the modeled groundwater elevations using the Frimpter Method (Table 6B, pdf page 183) yield levels routinely greater than the permit performance standard threshold of 950 feet above mean sea level. This is allowable as per the permit standards that state "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 UDF to have a maximum capacity of 1.3 million cubic yards" (pdf pages 59 – 60 of the Revised Final Permit). The difference between the seasonally high groundwater elevation and 950 feet (referred to as difference values) varies by monitoring well/piezometer location. Estimated difference values (example calculated value for MW-2022-1S from Table 6B (pdf page 183) of 975.85 – 950 = 25.85 ft) occur from a minimum of 3.9 feet above mean sea level (MW-2022-4S) to a maximum of 27.85 feet above mean sea level (MW-2022-1S) (Table 6B). These results reveal a very dynamic groundwater system, which highlight several questions and concerns as follows:

   - It is important to know the conservative elevation for the bottom of the UDF that will contain the waste within the performance standard requirement of 20 acres at a level of 15 feet above the highest groundwater elevation. It is also important to understand how this conservative elevation will affect the maximum elevation (defined as 1,099 feet to be adjusted based on the estimated elevated groundwater level – described in the permit on pdf pages 59-60, 5.a.(2)(b)) that will be required to accommodate this design.

   - The highest groundwater levels occur in the northeast area of the GE parcel, which is considered upgradient and would capture background or groundwater conditions unaffected by UDF influences. Creation of a landfill feature may cause the groundwater flow pathway (from the northeast to the southwest) to diverge, thereby creating new/affected groundwater pathways. It is important to be sure that the planned monitoring well field will capture these potentially new groundwater pathways.

The community may want to ask EPA if the dynamic groundwater levels will affect the usable amount of UDF area available that will meet UDF performance standard requirements, and if the groundwater monitoring design network will be able to identify effects of the UDF on groundwater flow pathways (which may in turn, influence the monitoring well field design).

7. The document, on pdf page 29, states that wells MW-2022 1S and 1D were found to be of limited use and will be replaced. These wells yielded the highest levels of groundwater and co-occur within an area with the highest bedrock levels. In addition, PFAS results for groundwater samples were detected at levels greater than the Method 1 groundwater standards (pdf pages 189-190 for 1D, and 197 – 198 for 1S) used to determine potential environmental effects resulting from contaminated groundwater discharging to surface water (referred to as GW-1 and GW-3 standards, described on pdf page 35 of the document). Furthermore, the area where these wells occur is upgradient of the consolidated area of the UDF; therefore, the water quality provides a measure of pre-UDF disturbance. All of these conditions exemplify the importance of maintaining monitoring wells in this location. If GE plans to install a replacement well or wells, this effort should be accomplished in the very near future to continue to capture upgradient groundwater quality conditions. In addition, if GE plans to install a new well to replace MW-2022 1S and 1D, it is recommended that the soils be characterized (similar to the monitoring wells soils analysis performed during the PDI) to include PFAS analysis to assist with the delineation of possible PFAS contamination.

   The community may want to ask EPA if installation of the proposed replacement well for wells MW-2022-1S and 1D will occur in the near future to capture a continuum of groundwater quality characterization. Since PFAS results for groundwater samples are being investigated by Massachusetts DEP, and these chemicals were detected at levels greater than the Method 1 groundwater standards, it could be important to analyze the soils from installation of the new well for PFAS in addition to the standard suite of soil quality chemical analysis.

8. Table 6A of the UDF PDI Summary Report provides groundwater elevation monitoring results for monitoring wells Lee Landfill wells, piezometers and two surface water features (MP-1, Gravel Pond and MP-2, Housatonic River). The results in the table capture one year of monitoring including one month of temporal overlap (June). Comparison of the measured groundwater levels between June 2022 and June 2023 show a decrease in groundwater levels for all wells measured. The decreases range from 0.04 feet to 10.41 feet. The results highlight the importance of continued monitoring to capture additional, seasonal/annual trends in the groundwater level data. The document, on pdf page 36, states that the final groundwater sampling event to test for environmental quality is scheduled for fall 2023. It is unclear if groundwater level monitoring will continue. While the amount of information captured to date represents a robust dataset from which to draw conclusions regarding trends, this divergence of data in one year demonstrates the need to continue monitoring. The document, on pdf page 11, indicates that additional field activities are ongoing but does not mention if these include continued groundwater

level monitoring. In addition, text provided on pdf page 30 states "the monitoring wells may remain in service for continued monitoring" indicating that it is unknown how future monitoring will be accomplished.

The community may want to ask EPA if groundwater level monitoring will be collected in fall 2023 and if it will continue during and after the UDF construction to capture year-to-year trends.

9. Figures 7 and 8 depict the geological cross section profiles for transects A – A' and B – B' that traverse the GE parcel. Results shown in Figure 7 depict a bedrock marble layer with a surface elevation of about 960 feet to 965 feet above mean sea level. The groundwater levels within this area also range in the highest measured levels across the GE parcel (highest measured groundwater elevations in May 2023 for MW-2022-1S at 973.15 feet above mean sea level and MW-2022-1D at 972.89 feet above mean sea level) and are likely in relation to this geological feature. The bedrock feature and elevated groundwater levels may pose issues for the design of the UDF in regard to being able to achieve the UDF performance standards.

   The community may want to ask EPA if the bedrock and groundwater levels in the eastern area of the proposed consolidation area will pose concerns for the UDF design.

10. Figures 9 through 21, on pdf pages 303 through 315, depict measured groundwater elevations by sampling effort (June 2022 through June 2023). Several observations were noted for these figures as follows:

    - The boundary of the consolidation area (bold dashed line) needs to be added as a feature to the legend.
    - The figures show that the upgradient or the highest groundwater levels occur to the north/northeast. It is important to continue to characterize upgradient/background groundwater quality through the duration of UDF use and post-closure. There appears to be spatial gaps in this upgradient area that may benefit from additional monitoring wells. Specifically, this includes two areas: 1) there are no monitoring wells between MW-2022-1S/1D and MW-2022-7, and 2) between MW-2022-7 and MW-84-1. There are two piezometers (PZ-2022-8 and PZ-2022-7) in this area; however, as stated in the document, on pdf page 30, "prior to UDF construction, the piezometers will be abandoned in place." In addition, the Support Areas may be placed in this area and should be monitored closely as there is the potential for spills of contaminated materials. *Additional monitoring wells in these two areas should be considered.*
    - It is also important to recognize that wells MW-2022-1S and 1D, PZ-2022-8, PZ-2022-7 and MW-84-1 are valuable for future upgradient monitoring of the consolidation area and the potential support areas that have yet to be defined. The document, on pdf page 30, states that MW-2022-1S and 1D are to be replaced. Well MW-84-1 is associated with the Lee Landfill; therefore it is unknown if GE has access to or intends to use this well in the future. *The continued use of these wells for monitoring should be acknowledged.*
    - The pond that overlaps the GE parcel and the adjacent quarry area (located between MW-2022-3 and MW-2022-4 and is sampled for surface water levels at site MP-1,

shown in Figure 6 pdf page 300) demonstrates to be a groundwater sink (an area where groundwater is moving toward) as shown in the repeated groundwater contours for each map. This indicates that this pond may be a useful surface water quality monitoring feature for PCB analysis in the future after the UDF is in use. *The use of the pond's surface water for future PCB monitoring should be considered.*

- The figures were developed with the use of modeling to infer groundwater level contours. It seems that this same method could shade or outline the area within each map that meets UDF construction performance standards in order to visualize the amount of area available for UDF construction. *The revision of these figures to incorporate a modeled UDF consolidation area footprint based on performance standard compliance should be considered.*

The community may want to ask EPA the following questions:

Since characterization of upgradient/background groundwater quality is an important measure for the future UDF groundwater characterization, should the upgradient monitoring well field be bolstered to include two additional monitoring wells between the MW-2022-1S and 1D replacement well and MW-2022-7, MW-2022-7 and MW-84-1? In addition, it is important to recognize the existing wells (the replacement well for MW-2022-1S and 1D, MW-2022-8 and MW-84-1) need to continue to be used for monitoring.

Given the monitoring results shown to date, it is apparent that the pond associated with MP-1 is a possible groundwater sink. As such, the surface water quality measurements of PCBs may be appropriate to measure UDF effectiveness in the future. Would it be appropriate to continue monitoring this pond and to include surface water (and sediment and porewater, preferably) for PCB content?

Could Figures 9 through 21 be amended to include a modeled footprint of the appropriate area that meets UDF construction performance standards?

11. TASC previously commented on the discrepancies noted between chemical analysis results shown in the comparative GE and EPA Quality Testing Split Results. The purpose of collecting split samples is to verify the accuracy and precision of sample collection and analysis. To date the results provided within GE documents have summarized these results in general narrative terms. For instance, in Section 3.3.2, on pdf page 27, which describes soil testing for environmental quality, the document states "the data from EPA's split samples are generally similar to the results from GE's samples" (in reference to results provided in Table 4B). On review of Tables 4B and 7B the following observations are:

    - PCB analysis in soils (Table 4B, pdf pages 168-180) varies significantly between GE and EPA. GE detection limits range from 0.19 milligrams per kilogram (mg/kg) to 0.30 mg/kg, while EPA detection limits are an order of magnitude lower (ranging from 0.035 mg/kg to 0.051 mg/kg). EPA's lower detection limits represent a more stringent analysis method and should be relied on and used for future monitoring by GE.

- The suites of analytes vary between GE and EPA (Tables 4B and 7B). For instance, EPA did not analyze all of the gathered samples for PCBs (entire Aroclor series) or volatile organic chemicals, while GE omitted certain analytes within a given suite. GE and EPA need to more accurately coordinate their split sample analysis suites to be able to compare results consistently.
- PCB analysis in groundwater (Table 7B, pdf pages 288-290) varies significantly between GE and EPA. GE detection limits are all 0.0005 milligrams per liter (mg/L) while EPA's range from 0.00048 mg/L to 0.001 mg/L. It would be more appropriate if the methods EPA and GE relied upon could be more comparable.

The use of split analysis of sampled media will be of particular value and importance when the UDF becomes active. The issues shown in the incomparability between the split sample analysis should be acknowledged and addressed prior to UDF monitoring when waste materials management procedures are in place.

The community may want to ask EPA if the discrepancies in the GE and EPA split sample analysis will be addressed prior to UDF monitoring when the UDF is active, or if the current level of precision is adequate and meets the requirements in the quality assurance project plan for this project.

12. Table 7A-1, on pdf pages 189 to 196, provides a summary of the groundwater environmental quality testing results. The analytical testing is robust and includes suites of chemicals of interest to the community including dioxins and PFAS. Dioxins are detected in the surface soil fraction of soils gathered during the PDI (Table 4A, pdf pages 53-167). These concentrations are likely typical of industrial soils. Dioxins were generally not detected in groundwater; however, continued monitoring of groundwater for these chemical constituents would help understand if these chemicals are migrating from the soil to the groundwater. Continued monitoring of these same suites of chemicals (dioxins and PFAS) is extremely valuable to the community and would assist in understanding soil-to-groundwater relationships in the UDF area.

    The community may want to ask EPA if the groundwater monitoring can continue to include the suites of analysis listed in Table 7A-1 (particularly in reference to the dioxins and PFAS chemicals).

References Cited

Anchor QEA (Anchor QEA, LLC), AECOM and Arcadis. Final Revised Rest of River Statement of Work. Prepared for the General Electric Company. September 2021. https://semspub.epa.gov/src/document/01/659938.pdf

EPA. Conditional Approval of GE's November 24, 2021 Rest of River, Pre-Design Investigation Work Plan for Upland Disposal Facility. February 2022. https://semspub.epa.gov/src/document/01/663452.pdf

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EPA. Revised Final Permit Modification to the 2016 Reissued RCRA Permit and Selection of CERCLA Remedial Action and Operation & Maintenance for Rest of River. December 2020. https://semspub.epa.gov/src/document/01/650440.pdf

GE. Final Pre-Design Investigation Summary Report for Upland Disposal Facility (UDF) Area. GE-Pittsfield/Housatonic River Site. Prepared for the General Electric Company. August 2023. https://semspub.epa.gov/src/document/01/675594.pdf

GE. Interim Pre-Design Investigation Interim Data Summary. GE-Pittsfield/Housatonic River Site. December 2022. https://semspub.epa.gov/src/document/01/671716.pdf

GE. Pre-Design Investigation Work Plan for Upland Disposal Facility. GE-Pittsfield/Housatonic River Site. November 2021. https://semspub.epa.gov/src/document/01/661267.pdf

GE. UDF Conceptual Design Plan. GE-Pittsfield/Housatonic River Site. December 2022. https://semspub.epa.gov/src/document/01/671715.pdf

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Attachment C

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MEMORANDUM

TO:	Melissa Provencher, BRPC	DATE:	September 21, 2023
FROM:	Jeff Hershberger, PG Shawn McGee, PE	TRC PROJECT NO.:	562500.0000
SUBJECT:	Final PDI Report Review		
COPY TO:	Project File		

TRC Environmental Corporation (TRC) provides this technical memorandum to the Berkshire Regional Planning Commission (BRPC) in support of the Housatonic Rest of River Municipal Committee (the Committee) related to the ongoing remedial activities associated with the General Electric (GE)-Pittsfield/Housatonic River Superfund Site (the Site). This memorandum conveys the findings of TRC's review of the following document (the Report).

- *Final Pre-Design Investigation (PDI) Summary Report for Upland Disposal Facility (UDF) Area, GE-Pittsfield/Housatonic River Site (Arcadis, August 2023)*

The Final PDI Summary Report for the UDF Area builds upon the Interim PDI Data Summary (Arcadis, December 2022) and documents additional data collection through June 2023. Additional PDI activities and data received after June 2023 will reportedly be documented in an addendum to this Final PDI Summary Report.

The Upland Disposal Facility (UDF) will be used to manage the majority of the PCB-impacted soils and sediments that will be removed as part of the performance of the Rest of River (ROR) Remedial Action. The UDF will be located on the former Lane Parcel in Lee, Massachusetts (the Property). The actual UDF area, termed the Consolidation Area in Site reports, will occupy up to 20 acres. Surrounding land on the Property will be used to support the construction and operation of the UDF. Details on the nature and location of the UDF Support area(s) has not yet been provided by General Electric (GE).

The requirements for the implementation of the ROR Remedial Action are detailed in the Final Revised Rest of River Statement of Work (SOW) and, specifically for the performance of the Pre-Design Investigation, in the PDI Work Plan for the UDF, supplemented by the additional requirements detailed in the USEPA conditional approval letter for the PDI Work Plan (dated February 25, 2023) and the USEPA conditional approval letters for the Interim PDI Data Summary (dated April 18, 2023) and for the UDF Conceptual Design Plan (dated April 18, 2023).

A Conceptual Design Plan for the UDF was submitted in December 2022 and was conditionally approved by the USEPA in April 2023. USEPA approval of the Final PDI Summary Report will trigger the requirement to submit the Final Design Plan for the UDF within 60 days. The Operation, Monitoring, and Maintenance Plan for the UDF will also be submitted at the same time as the Final Design Plan, as required by the Final Revised Rest of River Statement of Work (GE, September 2021).

The following provides TRC comments on the Final PDI Summary Report for the UDF Area.

GEOTECHNICAL TESTING

TRC performed a review of the geotechnical data (boring logs, geologic cross-sections, and laboratory testing results) presented in Arcadis' Final Pre-Design Investigation Report and evaluated if this information is adequate to demonstrate long-term stability and protectiveness of the environment and human health of

the proposed Upland Disposal Facility. In summary, based on the limited geotechnical data provided in the report as part of the pre-design phase of the project, TRC was not able to confirm that enough information is available to be used in slope stability and settlement analyses to demonstrate long-term stability of a proposed design of the UDF.

TRC's observations are as follows:

1. A total of 22 borings were completed and are positioned within and outside of the anticipated UDF Consolidation Area - 16 of the 22 borings were utilized for soil quality testing purposes and 6 of the 22 borings were utilized for the installation of temporary piezometers within and outside of the UDF footprint. The number and locations of borings appear to be appropriate for the proposed design.

2. Limited geotechnical data was provided in the report. The report included boring logs, laboratory testing results of index properties (e.g., grain size, moisture content, Atterberg limits, organic content, and specific gravity), and a generalized geologic soil profile. However, there were no shear strength or consolidation laboratory testing reports or estimated values that would be used in subsequent analyses that would be necessary to conduct global stability and settlement analyses. The report indicated that because cohesive soils were not encountered during the geotechnical investigations, soil samples were not collected for evaluation involving shear strength testing (e.g., triaxial shear test). TRC recognizes the granular nature of the subsurface conditions at the site would make collection of relatively undisturbed samples (via Shelby tubes) difficult in order to perform shear strength and consolidation laboratory testing.

3. The report indicates that the results of the Standard Penetration Testing (SPT), N-values, reported in the previously performed test borings and the soil index properties determined in the previously laboratory testing will be used to estimate soil engineering parameters, such as shear strength and soil elastic modulus, to support the stability and settlement evaluations during the design of the UDF. When Shelby tubes cannot be collected within granular materials, it is common practice in the industry to estimate engineering parameters based on N-values and index laboratory testing. Cone Penetration Test (CPT) borings, dilatometer borings, and prebored pressuremeter testing can be used to collect this data, however, due to the dense nature and presence of gravel, these tests may be difficult to perform in the site geology.

4. The report did not provide shear strength and soil elastic modulus parameters that will be used in the design calculations. It is recommended that a detailed summary, assumptions, and rationale used in estimating the shear strength and soil elastic modulus parameters be provided in the Final UDF Design Report to indicate how the soil parameters were selected and how the existing data (N-values and soil index testing) was used.

In conclusion, based on the limited geotechnical data provided in the above referenced documents, TRC is not able to confirm at this time that a demonstration has been made that the design will provide long-term stability and protectiveness of the environment and human health. We do recognize that the reports are part of a pre-design investigation and that detailed geotechnical analyses (slope stability, settlement, etc.) are forthcoming and will be provided as the design progresses. TRC can perform a detailed review of the additional data and analyses once made available.

SOIL TESTING

The means and methods used to perform the characterization of the subsurface materials within the Property, estimate the depth to the underlying bedrock, assess the infiltration capacity of the soils and estimate the hydraulic conductivity of the materials seem reasonable and appropriate for this effort and to meet the needs for the design of the UDF and supporting facilities (e.g., stormwater infiltration basins).

Extensive soil sampling and laboratory analysis was performed to characterize soil quality on the Property with the stated objective of collecting the necessary data to support assessing the potential to reuse any excavated soils on the Property during the construction of the UDF. These results are discussed in **Section 3.4**. The laboratory analytical results are presented on **Table 4A** (GE samples) and **Table 4B** (USEPA split samples). The laboratory results were compared to the USEPA Region 9 Preliminary Remediation Goals (PRGs) and MassDEP MCP Method 1 S-1/GW-1 soil standards as required by the Conditional Approval of the Interim PDI Report.

Based on a limited review of Table 4A and Table 4B, the primary analytes detected include the following:

- Various dioxins and furans;
- Various volatile organic compounds (VOCs) including acetone, chloroform, PCE, toluene, and xylenes;
- Phthalates
- PAHs
- Sulfide
- Various pesticides/herbicides
- Various inorganics

PCBs were not detected at concentrations above the laboratory reporting limits in any of the soil samples.

Based on the information provided in these tables, the only analytes detected at concentrations exceeding any of the noted regulatory thresholds are arsenic and nickel. The detected concentrations of arsenic exceed the USEPA Region 9 Residential and/or Industrial Soil PRGs but are less than the MassDEP MCP Method 1 S-1/GW-1 standards. Nickel was detected at concentrations above the MassDEP MCP Method 1 S-1/GW-1 standards but less than the listed Region 9 thresholds.

It would be helpful if, in future reports, the detected analytes in the tables were BOLDED, to make it easier to identify the detected constituents. It would also be helpful if a Key was added at the bottom of Table 4A to explain what underlining of detected concentrations means vs shading of the detected concentrations. In addition, the underlining of concentrations is difficult to see in the tables.

Additionally, it would be helpful in future reports if the noted exceedances were summarized within a small table within the text rather than just described in the text.

MONITORING WELLS AND PIEZOMETERS

Section 3.5 of the Report documents the installation of six piezometers and eleven monitoring wells to support the proposed water level monitoring and groundwater sampling.

Would recommend maintaining a shallow and deeper monitoring well arrangement at the MW 2022-1 location rather than replacing with a single monitoring well, as proposed in the document. This

would allow for ongoing monitoring of groundwater elevations and the resultant vertical component of groundwater flow.

Additional short-term (baseline) and long-term monitoring wells may be needed depending on the plans for and location(s) of the UDF Support Area(s), which have not been provided yet, including any locations for the performance of sediment management or dewatering on the Property.

GEOLOGIC CROSS SECTIONS

Based on the findings of the drilling and testing programs completed on the Property and as required by the Conditional Approval of the Interim PDI Report, GE constructed two geologic cross sections through the Property and the proposed UDF Consolidation Area (**Figure 7 and Figure 8**). These cross sections are very useful for visualizing the geologic setting of the proposed UDF, the relationship between the unconsolidated deposits and the underlying marble bedrock and the range of groundwater elevations recorded for each well or well couplet.

These geologic cross sections can be used to present the groundwater elevations in relation to UDF features in the Final UDF Design Report, as required by the UDF Conceptual Design Plan conditional approval.

There is no discussion in the report regarding if any of the stratigraphic layers identified within the Property would represent restrictive or confining layers as required by the USEPA Conditional Approval of the PDI Work Plan.

GROUNDWATER ELEVATION MONITORING

As required by the SOW and UDF Work Plan, extensive water level monitoring was performed using both manual measurements and electronic data loggers within and surrounding the UDF Consolidation Area as documented in **Section 3.6**.

The manual water level measurements are provided on **Table 6A** and hydrographs of the water level data collected by the electronic data loggers are provided in **Appendix I**.

Combined hydrographs for the well couplets (MW 2022-1S/1D and MW 2022-4S/4D) were not provided as noted in Section 3.6.1 (Description of Monitoring). These combined hydrographs will be important when evaluating the vertical component of groundwater flow over time and the adequacy of the long-term monitoring well network.

Would also be helpful to add precipitation data to the hydrographs to assist in visualizing the effect of both precipitation events and dry periods on the measured water levels and water level elevation trends.

It would also be helpful if the monthly manual measurements were added to the hydrographs as control points to verify that the data logger monitoring results are accurate and no data logger drift occurred over the 13 months of monitoring.

The manual water level measurements support that the vertical component of groundwater flow is predominantly horizontal to slightly upward, other than the May 2023 manual measurements at the MW 2022-1 well couplet. The May 2023 measurements at the MW 2022-1S/1D couplet support a slightly downward groundwater flow component upgradient side of the Consolidation Area. The nature of the

vertical component of groundwater flow (predominantly upward) are consistent with the location of the proposed UDF proximal to a significant hydrogeologic discharge area, the Housatonic River.

Figures 9 thru 21 present groundwater elevation contour maps created using the manual water level measurements summarized on **Table 6A**. Groundwater levels were collected in the Site monitoring wells and piezometers, an existing pond to the northwest of the Consolidation Area (denoted as PZ Pond on these figures) and two off-Site wells (MW 84-1 and MW 84-2), located at the Lee Municipal Landfill. These thirteen contour maps present similar groundwater flow patterns under both lower and higher groundwater elevation conditions. All of the maps present groundwater flow downgradient of the UDF Consolidation Area towards the northwest (MW 2022-3 and PZ Pond area), to the west (MW 2022-5 area) and to the southwest (MW 2022-6 area).

Based on these findings, TRC recommends that USEPA consider requiring additional deeper monitoring wells to establish well couplets at the MW 2022-3 location and the MW 2022-6 location. A downgradient well couplet is already present at the MW 2022-4 location. This would provide a more robust downgradient monitoring well network that could account for the occasional, slight downward vertical gradient exhibited by the manual monitoring data.

Estimation of Seasonally High Groundwater Elevation

The Revised Permit requires that the bottom liner of the UDF be located at least 15 feet above the estimated seasonally high groundwater level within the Consolidation Area. To support the design of the UDF, the Frimpter Method was used to estimate the seasonally high groundwater levels within the Consolidation Area using the Frimpter Method, the Site groundwater elevation data, and available data from nearby USGS monitoring wells located in relatively similar hydrogeologic settings.

Section 3.6.2 presents the approach and discusses the results of the estimation of seasonally high groundwater elevations on the Site. The revised RCRA permit requires that the design of the UDF maintain a minimum 15-foot separation between the estimated seasonally high groundwater elevations and the bottom of the UDF and also states that if the estimates of seasonally high groundwater elevations are higher than 950 feet AMSL, the landfill design can incorporate a maximum surface elevation greater than 1,099 feet AMSL.

The estimates of seasonally high groundwater elevations were completed using Site-specific groundwater elevations and depths to groundwater collected both manually and using electronic data loggers and the Frimpter Method as documented in the following USGS report.

- USGS, 1980, Probable High Ground-Water Levels in Massachusetts, Water Resources Investigations 80-1205, Open-File Report 80-1205.

The method also requires the use of available depth to groundwater data and certain well-specific parameters for USGS long-term observation wells located as near as possible and in similar hydrogeologic settings to the Site monitoring wells. GE utilized the following USGS observation wells in their analysis.

- MA-PTW 51 (Pittsfield, Massachusetts)
- MA-DWF 44R (Deerfield, Massachusetts)

The selected USGS wells, in particular the Pittsfield MA well, appear appropriate for this evaluation. The reported well characteristics for these two wells are summarized in the following table.

USGS Well	Setting	OW_r (feet)	OW_{max} (feet)
MA-PTW 51	Valley Flat; Stratified Drift	12.12	12.3
MA-DFW 44R	Valley Flat; Stratified Drift	4.68	1.56

NOTES:
OW_r – upper limit of annual range of water level
OW_{max} – depth to recorded maximum water level

The results of this analysis are summarized on **Table 6B** and **Table 6C**. The projected seasonally high groundwater elevations for the monitoring wells and piezometers within the Consolidation Area range from 955.73 feet AMSL (PZ 2022-2) to 966.61 feet AMSL (PZ 2022-3). All of the estimated seasonally high groundwater elevations calculated for Site piezometers and monitoring wells exceed the 950 feet AMSL noted in the Settlement Agreement and the revised RCRA Permit.

It would have been helpful if the required parameters (OWr and OWmax) for the USGS wells were provided in the Final PDI Summary Report along with an example calculation demonstrating the approach and equation used for the calculations.

Also, the Station Name for the Deerfield, Massachusetts USGS well is listed incorrectly in the report.

TRC performed calculations of the predicted seasonally high groundwater elevation for the months of June 2022, January 2023 and May 2023 using the data provided on Table 6C and available information for the USGS Deerfield, Massachusetts well. These calculations are only approximate values as the Report did not note that date of the Transducer Measured GW Elevation reported on Table 6C such that the corresponding depth to groundwater at the USGS well could only be approximated. The method requires the use of depth to water values for both wells collected on the same date. Additionally, GE did note how they selected the value for Sr from Figure 11 (Valley Flat) and Figure 12 (Terrace). The calculated seasonally high groundwater elevations calculated by TRC were all slightly less than the values calculated by GE.

Would be helpful to know the actual date of the Transducer Measured GW Elevation for each month on Table 6C so that it can be matched with the appropriate depth to water value for the USGS well on the same date.

Would be very helpful to understand how GE selected the applicable S_r values from Figure 11 (Valley Flat) and Figure 12 (Terrace) to support their calculations. Different levels of %Confidence can be used to select these values from the report figures and this information is not provided in the report.

The statements at the end of Section 3.6.2 regarding the proposed design separation of the UDF baseliner system and the estimated seasonally high groundwater elevations within the UDF Consolidation Area seem premature given the limited information on the proposed design elevations presented in the UDF Conceptual Design Plan. Adequate elevation details for the baseliner system need to be provided in the Final UDF Design Report to verify compliance with this important Performance Standard.

GROUNDWATER QUALITY

The findings of the assessment of groundwater quality are documented in **Section 3.7** of the Report. Three groundwater sampling events (June/July 2022, November/December 2022 and May/June 2023) were completed at all of the monitoring wells, with the exception of MW 2022-1S. MW 2022-1S was only sampled twice. The stated objective of the groundwater sampling is to establish baseline conditions in the

groundwater prior to the construction and operation of the UDF and performance of activities within the UDF support areas.

The laboratory results for the analysis of the groundwater samples are provided on **Tables 7A-1** through **7A-11**. As required by the Conditional Approval of the Interim PDI Report, the analytical results were compared to the MassDEP MCP Method 1 GW-1 and GW-3 standards.

Based on a limited review of the information provided on these tables, the detected analytes in the groundwater samples generally included the following:

- Various dioxins and furans
- Various VOCs including chloroform, CFC-12, 1,1-DCA, 1,2-DCB, 1,4-DCB, 1,2,4-TCB and chloroethane
- Phthalates
- PAHs
- Various pesticides/herbicides
- Various inorganics

PCBs were not detected at concentrations above the laboratory reporting limits in any of the groundwater samples.

According to the tables, the only analytes detected at concentrations exceeding either the MassDEP Method 1 GW-1 or GW-3 standards are WHO Dioxin TEQ (MW 2022-9), cyanide (MW 2022-5) and Total PFAS (MW 2022-1S, MW 2022-1D and MW 2022-9).

If additional baseline groundwater sampling is performed on the Property, these analytes should continue to be included. And consideration should be given to requiring these analytes for the Performance Monitoring once UDF activities commence on the Property.

Additionally, it would be helpful if in future reports the noted exceedances were summarized within a small table within the text rather than described in the text.

EXISTING POTABLE SUPPLY WELLS

In **Section 3.11,** as required by the Conditional Approval of the Interim PDI Report, GE states that three potential nearby wells were identified in the Project area and that only one of these wells is located within 500 feet of the UDF Consolidation Area. The approximate location of this well is shown on **Figure 25**. GE also notes that this well is reportedly no longer in use. GE also notes that the sources of their information for this evaluation included the following:

- Review of aerial imagery
- Field reconnaissance
- Discussions with MassDEP

Did GE perform any research in the Town of Lee municipal offices relative to potential potable wells in the Project Area? This is not noted in the report.

Has this well been properly abandoned? Would probably be prudent to consider requiring its abandonment so that it is not used for potable uses in the future.

REFERENCES

Anchor QEA, LLC. 2021. Final Revised Rest of River Statement of Work. GE-Pittsfield/Housatonic River Site. September 2021.

Arcadis. 2022. Interim Pre-Design Investigation Data Summary Report for Upland Disposal Facility Area. GE-Pittsfield/Housatonic River Site. December 2022.

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USEPA. 2023. Conditional Approval for General Electric's December 6, 2022, submittal titled *Pre-Design Investigation Data Summary Report for Upland Disposal Facility Area*. GE-Pittsfield/Housatonic River Site. April 18, 2023.

USEPA. 2023. Conditional Approval of General Electric's December 6, 2022, submittal titled *Upland Disposal Facility Conceptual Design Plan*. GE-Pittsfield/Housatonic River Site. April 18, 2023.

USGS, 1980, Probable High Ground-Water Levels in Massachusetts, Water Resources Investigations 80-1205, Open-File Report 80-1205.

BERKSHIRE ENVIRONMENTAL ACTION TEAM
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Protecting the environment for wildlife in support of the natural world that sustains us all.

October 9, 2023

Mr. Christopher Smith
EPA Project Manager
U.S. Environmental Protection Agency
New England Region
Five Post Office Square, Suite 100
Boston, MA 02109

Via email: R1Housatonic@epa.gov

Re: GE-Pittsfield/Housatonic River Site
Rest of River (GECD850) – Upland Disposal Facility
Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area

Dear Christopher Smith,

Please accept the following comments from the Berkshire Environmental Action Team, Inc. (BEAT). BEAT's mission is to protect the environment for wildlife in support of the natural world that sustains us all.

BEAT strongly supports the call for the General Electric Company (GE) to provide a presentation on its plans for the Upland Disposal Facility (UDF), UDF Support Areas, and potential hydraulic pipeline from the river to the dewatering area. It is important in the design of the UDF to know how contaminated sediment will be moved from the river and floodplain to the dewatering and other support areas, and finally to the UDF. We need GE to be talking with the community to answer questions directly!

Siting of the UDF Support Areas, hydraulic pipeline, and dewatering areas should avoid the forested area east of the powerlines.

BEAT is very concerned about the contamination coming from the existing landfills. If the UDF and UDF Support Areas are to be built above contaminated groundwater, EPA should ensure this existing contamination can not reach the river. In Pittsfield, a system to intercept contaminated groundwater was installed to then pump and treating it.

We would like to have a better understanding of how EPA will ensure that the bottom elevation of the UDF will be at least 15 feet above the top elevation of the sloped and fluctuating groundwater level. We request that groundwater continue to be monitored both for elevation and contamination around the UDF in perpetuity for the full suite of analysis listed in Table 7A-1 including dioxins and PFAS).

We are concerned that the on-going gravel quarry or measures taken to close the quarry could pose a threat to the integrity of the UDF.

Thank you for considering our comments.

Sincerely,

Jane Winn, Executive Director

Housatonic Environmental Action League, Inc.

Raising Awareness – Sharing Knowledge – Bridging Advocates

Post Office Box 21, Cornwall Bridge, CT 06754-0021

October 10, 2023

Dean Tagliaferro, PE
Attorney John Kilborn
United States Environmental Protection Agency, Region 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Sent via electronic mail to: tagliaferro.dean@epa.gov; kilborn.john@epa.gov

RE: FINAL PRE-DESIGN INVESTIGATION SUMMARY REPORT FOR UPLAND DISPOSAL FACILITY AREA; REQUEST FOR EXTENSION OF INFORMAL PUBLIC COMMENT PERIOD

Dear EPA GE-Pittsfield/Housatonic River Superfund Megasite Team:

The Housatonic Environmental Action League, Inc., respectfully submits the below informal comments on the massive 3,894 page, 221MB Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area.

We are respectfully requesting the Environmental Protection Agency extend the deadline for the informal public comment period to Friday, January 5, 2024… an approximate 60+/- business day extension. As you are aware, HEAL has been assisting the Housatonic River Initiative in their contracting with a new TAG Technical Advisor; that process is taking a tremendous amount of time. We would appreciate allowing the new contracted Technical Advisor to review the document and comment as they desire. Only a 60 day original comment period for such a document at this Superfund Megasite Rest of River action is grossly inadequate, and severely restricts the ability of citizen stakeholders to review, understand, and formulate effective comments to a federal agency entrusted to protect them. The EPA Megasite Team has

stopped effectively communicating with all stakeholders, stopped providing meaningful guidance, truly listening, or considering stakeholder input. The most recent Citizens Coordinating Council meeting was the single most unproductive and unpleasant meeting since the inception of the CCC. There was inadequate facilitation, the hybrid technology was poorly managed, the various agency representatives who should be in the room sitting at the table and available to answer questions, were instead hiding on the virtual platform. EPA staffers had their noses in their phones or on laptops, blatantly ignoring the citizens who came to participate, learn, and ask questions. The Lee Library is a lovely little library, yet a terrible venue for the CCC. We recommend returning to Lenox Library, or initiating CCC meetings at Lee High School.

As has been the practice since EPA gutted all the hardcopy repositories, HEAL requested a hardcopy of the Final Pre-Design Investigation etc., along with a flash drive. This has been a longstanding practice that was offered by both Dean Tagliaferro and Jim Murphy. Initially, an EPA staffer said providing the document and flash drive would not be a problem. Then sometime after the initial contact, HEAL was contacted again indicating that no document or thumb drive will be provided. EPA has, in large part, stepped away from their responsibility and commitment to supply the Hunt Library in Canaan, CT with Rest of River documents. The GE cover letter to the Final Pre-Design Investigation might indicate a hardcopy was sent to the Hunt Library, however we could not find it at the library, and the librarian stated they have not received anything from EPA for a “long time”. The Hunt Library was gracious enough to open shelf space for the site’s Rest of River documents. The least EPA can do is send them the Rest of River documents they committed to provide.

On September 21, 2023, due to public outrage, the CCC email list received notice of the delivery to ***Lee Town Hall*** of a ***partial*** hardcopy of the Final Pre-Design Investigation, approximately 20 days before the end of the initial deadline for informal comment. Not only are the overburdened and underserved residents of Lee being forced against their wishes to live with a poorly sited, contraindicated 1.3+/- million cubic yard toxic PCB dump. They

are obviously also not considered worthy of hardcopy documents in order to participate in this disturbing EPA process.

Throughout the Housatonic River Watershed...Berkshire County (MA), Dutchess County (NY), and Litchfield County (CT)...have areas with scant, spotty, or unreliable broadband coverage. It is difficult to either open or download a 221MB EPA document from the provided URL, or from the EPA Megasite's website.

Furthermore, there are many elderly, and low income households in Lee, MA that do not even have a computer who are asking for help in learning how to obtain, read, understand, interpret, and submit comments on the documents. These individuals and households are apparently EPA's designated candidates to live in a Sacrifice Zone, however they are not worthy to participate in the process.

From the 2020 Public Hearing, an excerpt from a citizen's testimony living near the river, relating to neighbors having no knowledge of the process, and some with no technology to participate:

"On our street we have 12 young children on our dead-end road alone...So I just want them to know that there are a lot of people that could not be on these meetings and that is why I'd also like to echo some of what my fellow community members have said, that this is really not a good time, unfair and I'd like to push that to[sic] comment period because my street alone had no idea this meeting was happening or didn't have the technology or the knowledge to get on today. And I don't think we're hearing from all of the voices, once again in Lee."

According to the United States Census Bureau's statistics from 2017, Lee's per capita income is $28,781. Lee's percentage of residents living in poverty is 14.9%, which includes 12.5% for White Non-Hispanic residents, 25% for Black residents, 53.8% for Hispanic or Latino residents, 53.8% for Other Race residents. These statistics bear a striking resemblance to similar communities throughout the United States where EPA sites toxic dumps.

This is an ongoing issue, and EPA needs to abide by the public participation plan for this Superfund Megasite, and abide by EPA's Environmental Justice parameters.

"Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.
Fair treatment *means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies."*
https://www.epa.gov/environmentaljustice

As we do not support the toxic PCB dump known with the sanitized name of "UDF", HEAL in no part supports the contents of GE's "Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area"….because it is in no way protective of human health or the environment.

HEAL encourages EPA to view BRPC's TASK consultant SKEO's suggested considerations for additional monitoring wells, and enhanced characterization of ground water, as a forewarning of what is to come if this toxic dump should become a reality.

The decisions made now will either positively impact generations to come, or will come back to bite us and continue to cause widespread harm.
(Attributed to Kelly Niederjohn, Engineer, General Electric Company, Pittsfield, speaking, in part, about the widespread distribution of PCB-contaminated Fuller's earth.)

Respectfully submitted,
Judith Herkimer, Chairwoman of the Board of Directors
Housatonic Environmental Action League, Inc. (HEAL)
healct@snet.net

Brooks, Ashlin

From: [redacted]
Sent: Monday, October 9, 2023 12:19 PM
To: R1Housatonic
Subject: Comments for Lee Mass General Electric Proposed PCB UDF Plans

Caution: This email originated from outside EPA, please exercise additional caution when deciding whether to open attachments or click on provided links.

Here are my comments for the proposed UDF in Lee Mass.

First, to expect the public to have the ability to review nearly a 4K page document in such a short amount of time is both unreasonable and not acceptable. 3894 pages is the actual number for this document.
Not all residents of Lee have access to computers. The cost for Printing this document for review is nearly $500.
Lee residents don't have an extra $500 to print this document for review.

1.) The EPA needs to provide SEVERAL copies of the UDF Plan. The UDF plan should have been and should currently be provided and displayed for review at the public library in Lee along with the public libraries in the 4 other towns involved in the ROR agreement.

2.) There is also currently an absence of a TA through the TAG program provided by the Govt. through the EPA. The comment period should be extended on this FACT alone.

3.) I would like to request that the EPA please allow an extended period of time for public comment to this document. I would like to request an extended period of 60 days.

4.) If this title 40 Chapter I Subchapter R Part 761 Subpart D § 761.75, where followed properly the EPA would NOT allow this UDF to be located in this current area chosen by General Electric.
This areas substrate Has been stated by the EPA to be Permeable in past years on several EPA documents. It is an area the would be deemed to be the WORST possible example to place a Toxic PCB Land Fill on.

5.) All of the technical numbers of the amounts of GE's PBCs are based on estimates. The cleanup and UDF that is proposed here by the EPA and GE will only have the probability of a GUESSED amount of a 20% to 25%, and a majority of it will be to just "MOVE the PCBS" to 1000 feet upland over our aquifer, closer to our reservoir here in Lee.

6.) There are NO innovative treatment Technonologies being used in the proposed UDF for Lee, Ma.>
The EPA has NOT followed through with using innovative treatment technologies to make the GE Site a viable successful cleanup. The EPA has NOT DONE any testing for recent innovative treatment technologies for proper remediation as stated the EPA would.

6a.) As EPA notes, "Thermal desorption has been safely used at many Superfund sites ' ...
https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fclu-in.org%2Fdownload%2Fremed%2Ftdissue.pdf&data=05%7C01%7CR1Housatonic%40epa.gov%7C374ac6070e384a13082708dbc8e3a158%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C638324652221303756%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=zMYASYHWxlGtznCnQYG9JI880vcAI1d7Wv7U3B%2BP12E%3D&reserved=0

7.) EPA's estimate for landfill liners is based on computer modelling and lab tests. No reputable manufacture will guarantee their liners for any significant percentage of the time these landfills will exist.

8.) The Term "If applicable" reappears 23 times through this document on the UDF Proposed Plan. How can a plan be implemented or even reviewed with such irresolution.

9.) There are NO good reasons to allow General Electric to build a toxic PCB dump so close to an aquifer, so close to our community, and too close to nearby schools and nursing homes.

There is an active Cattle Farm EXTREMELY close by.
"Cancer risk and noncancer hazard estimates associated with the commercial and backyard 8 beef scenarios would increase by a factor of 2."
"For backyard beef animals, about 92% of the animals' intake of PCB 29 126 came from grass consumption and 8% from soil consumption."
(HUMAN HEALTH RISK ASSESSMENT GE/HOUSATONIC RIVER SITE REST OF RIVER)

The EPA is FAILING to protect the public health and safety of Berkshire residents.

10.) The stakeholders in this ROR agreement with the UDF Plans for GE's Toxic PCB Dump where NEVER NOTIFIED and NOT ALLOWED to be involved. The EPA NEVER Considered the residents of Lee Massachusetts as stakeholders in the ROR or the Proposed area for the Toxic, General Electric PCB UDF.

11.) The continued practice of the EPA to determine which area in a town or city that is used as a SARIFICE needs to be non-existent.

ALL HUMAN LIFE SHOULD BE OF EQUAL VALUE

HOLD GENERAL ELECTRICE MORALY AND MONITARILY RESPOSABLE

Thank you,
Anne M. Langlais
[redacted]

Brooks, Ashlin

From: Caroline Young [redacted]
Sent: Monday, October 9, 2023 5:22 PM
To: R1Housatonic
Subject: Comments on ROR Proposal

Dear EPA:

Here are my comments for the proposed UDF in Lee Mass.

First, to expect the public to have the ability to review nearly a 4K page document in such a short amount of time is both unreasonable and not acceptable. 3894 pages is the actual number for this document.

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Lee residents don't have an extra $500 to print this document for review.

1.) The EPA needs to provide SEVERAL copies of the UDF Plan. The UDF plan should have been and should currently be provided and displayed for review at the public library in Lee along with the public libraries in the 4 other towns involved in the ROR agreement.

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25%, and a majority of it will be to just "MOVE the PCBS" to 1000 feet upland over our aquifer, closer to our reservoir here in Lee.

6.) There are NO innovative treatment technologies being used in the proposed UDF for Lee, Ma.> The EPA has NOT followed through with using innovative treatment technologies to make the GE Site a viable successful cleanup. The EPA has NOT DONE any testing for recent innovative treatment technologies for proper remediation as stated the EPA would.

6a.) As EPA notes, "Thermal desorption has been safely used at many Super Fund sites ' ... https://clu-in.org/download/remed/tdissue.pdf

7.) EPA's estimate for landfill liners is based on computer modelling and lab tests. No reputable manufacture will guarantee their liners for any significant percentage of the time these landfills will exist.

8.) The Term "If applicable" reappears 23 times through this document on the UDF Proposed Plan. How can a plan be implemented or even reviewed with such irresolution.

9.) There are NO good reasons to allow General Electric to build a toxic PCB dump so close to an aquifer, so close to our community, and too close to nearby schools and nursing homes.

There is an active Cattle Farm EXTREMELY close by.

"Cancer risk and non-cancer hazard estimates associated with the commercial and backyard 8 beef scenarios would increase by a factor of 2."

"For backyard beef animals, about 92% of the animals' intake of PCB29 126 came from grass consumption and 8% from soil consumption."

(HUMAN HEALTH RISK ASSESSMENT GE/HOUSATONIC RIVER SITE REST OF RIVER)

The EPA is FAILING to protect the public health and safety of Berkshire residents.

10.) The stakeholders in this ROR agreement with the UDF Plans for GE's Toxic PCB Dump where NEVER NOTIFIED and NOT ALLOWED to be involved. The EPA NEVER Considered the residents of Lee Massachusetts as stakeholders in the ROR or the Proposed area for the Toxic, General Electric PCB UDF.

11.) The continued practice of the EPA to determine which area in a town or city that is used as a SACRIFICE needs to be non-existent.

ALL HUMAN LIFE SHOULD BE OF EQUAL VALUE

HOLD GENERAL ELECTRIC MORALLY AND MONETARILY RESPONSIBLE

Best regards,

Caroline Meyer Young

[redacted]

[redacted]

Women are Angels
And when someone breaks our wings we simply continue to fly---on a broomstick. We are flexible like that

Brooks, Ashlin

From: DENNIS FIELD [redacted]
Sent: Monday, October 9, 2023 1:48 PM
To: R1Housatonic
Subject: comment on final pre-design investigation summary report for UDF area

To Whom It May Concern:
I am commenting on the photos of the area to be affected by the construction of the UDF. Specifically figure 5 and 6 grassland area with knoll, figure 15 wooded area with WETLAND, figures 16-19 woodland area, figures 25-27 and 31-33 forest area. It is an atrocity to disturb/destroy the natural beauty of this area, especially one with a wetland, to construct a toxic waste dump. Some of these photos indicate sloping land. Water will run towards the UDF.
Shovel test pit logs indicate all of areas A,B,C are composed of:

Textures

1. Sandy loam
2. Coarse sand
3. Sand
4. Loamy sand

Artifacts/Comments
Gravel and/or cobbles

The 2016 permit issued to GE by EPA noted this area was not qualified for a toxic waste dump because of the permeable soil and that ALL material should be shipped out of state to a licensed facility. Your shovel test pit logs indeed confirm this truth. This gravel bed is not suitable to house a toxic waste dump. EPA website states: no liner is permanent
D Kelly

Sent from Mail for Windows

Brooks, Ashlin

From: Diane Shepardson [redacted]
Sent: Sunday, October 8, 2023 6:45 PM
To: R1Housatonic
Subject: The contaminated Dump!

I walk the 4 miles around the Dale over the bridge, past Woods Pond , up Woodland , past Oct Mountain State forest Camping sight , over Willow Hill and then back down a one lane road to Lenox Dale at least 6 days a week!! Shame on GE and the EPA for Thinking it's OK to use this route to transport 100's of truckloads of pcbs daily!! Shame on GE and the EPA to think this will not ruin the October Mountain Campsites which have been there for years! Would you want to camp there with 100's of trucks filled with pcbs going by all day while you're hiking, biking and just trying to relax!! GE and the EPA Shame on you!! Diane Shepardson Sent from my iPhone

Brooks, Ashlin

From: [redacted]
Sent: Thursday, October 5, 2023 11:31 AM
To: R1Housatonic
Subject: GE PCB Clean up

Caution: This email originated from outside EPA, please exercise additional caution when deciding whether to open attachments or click on provided links.

To whom it may concern:
I am a Lee resident and 100% oppose the Housatonic River cleanup as proposed. Have to wonder what transpired to change the agreement made in 2016!
I'm totally against trucking the sediment through our towns!
The Housatonic will never be a family friendly option with this plan! There are alternatives to cleaning up the River but GEand the EPA keep ingnoring even a discussion!
GE and the EPA DO NOT have a well thought out plan. I have been to many meetings and it seems like a lot of avoidance tactics.
At the very least the railroad must be considered for removal.
Lee was thrown under the bus by the other 4 towns. They are just happy not to have a dump in their town. This cleanup as proposed will be devastating to our environment, the health of the county and the irreparable damage it will have for our local economy!
This will destroy the housing market in Lee not to mention the poor people who live close to the proposed dump and will never be able to sell their houses.
Haven't we learned ANYTHING from the irreparable damage GE has done to our community for the last 40 plus years???
Joanne Simpson
[redacted]

Sent from my iPad

Brooks, Ashlin

From: Holly Hardman [redacted]
Sent: Monday, October 9, 2023 9:50 PM
To: R1Housatonic
Subject: Objection to proposed PCB dump in Lee, MA

To:

Dean of EPA Region 1
R1Housatonic@epa.gov

Dear Dean,

I am copying/pasting the letter below. I just learned of today's deadline for submitting requests and opinions for the current discussion about the proposed PCB disposal site in Lee, MA.

The letter below shared with me by Lee resident Anne Langlas. I am a resident of Great Barrington and I am in full agreement with the letter. Because I am on work-related travel in Los Angeles, this copied letter will suffice so that I can make the deadline. I would love to expound further on the letter's statements.

Letter to Dean, EPA Region 1

First, to expect the public to have the ability to review nearly a 4K page document in such a short amount of time is both unreasonable and not acceptable. 3894 pages is the actual number for this document.
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1.) The EPA needs to provide SEVERAL copies of the UDF Plan. The UDF plan should have been and should currently be provided and displayed for review at the public library in Lee along with the public libraries in the 4 other towns involved in the ROR agreement.

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3.) I would like to request that the EPA please allow an extended period of time for public comment to this document. I would like to request an extended period of 60 days.

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5.) All of the technical numbers of the amounts of GE's PBCs are based on estimates. The cleanup and UDF that is proposed here by the EPA and GE will only have the probability of a GUESSED amount of a 20% to
25%, and a majority of it will be to just "MOVE the PCBS" to 1000 feet upland over our aquifer, closer to our reservoir here in Lee.

6.) There are NO innovative treatment Technonologies being used in the proposed UDF for Lee, Ma.> The EPA has NOT followed through with using innovative treatment technologies to make the GE Site a viable successful cleanup. The EPA has NOT DONE any testing for recent innovative treatment technologies for proper remediation as stated the EPA would.

6a.) As EPA notes, "Thermal desorption has been safely used at many Superfund sites ' ... https://clu-in.org/download/remed/tdissue.pdf

7.) EPA's estimate for landfill liners is based on computer modelling and lab tests. No reputable manufacture will guarantee their liners for any significant percentage of the time these landfills will exist.

8.) The Term "If applicable" reappears 23 times through this document on the UDF Proposed Plan. How can a plan be implemented or even reviewed with such irresolution.

9.) There are NO good reasons to allow General Electric to build a toxic PCB dump so close to an aquifer, so close to our community, and too close to nearby schools and nursing homes.

There is an active Cattle Farm EXTREMELY close by.
"Cancer risk and noncancer hazard estimates associated with the commercial and backyard 8 beef scenarios would increase by a factor of 2."
"For backyard beef animals, about 92% of the animals' intake of PCB 29 126 came from grass consumption and 8% from soil consumption."
(HUMAN HEALTH RISK ASSESSMENT GE/HOUSATONIC RIVER SITE REST OF RIVER)

The EPA is FAILING to protect the public health and safety of Berkshire residents.

10.) The stakeholders in this ROR agreement with the UDF Plans for GE's Toxic PCB Dump where NEVER NOTIFIED and NOT ALLOWED to be involved. The EPA NEVER Considered the residents of Lee Massachusetts as stakeholders in the ROR or the Proposed area for the Toxic, General Electric PCB UDF.

11.) The continued practice of the EPA to determine which area in a town or city that is used as a SACRIFICE needs to be non-existent.

My strong opinion: General Electric needs to fulfill the original edict to remove the PCBs from the Housatonic River.. The should be removed to an already registered out of state repository using updated technologies for full removal. There are no safe PCBs. Please act accordingly.

Thank you,

Holly Hardman
--
Holly Hardman
[redacted]

Brooks, Ashlin

From: Janie Nathanson [redacted]
Sent: Friday, October 6, 2023 3:28 PM
To: R1Housatonic
Subject: Housatonic River Cleanup Plan

To Whom it May Concern:
We have been residents of East Street in Lee for the past ten (10) years and before that, yearly visitors to the wonderful Berkshires. As we are well aware of the history behind GE's dumping of PCBs, which eventually wound up polluting the Housatonic, we wish to offer three (3) main concerns about the proposed GE remediation plan:

- Decisions regarding the PCB dump in Lee were made without adequate public notice, informational sessions, or opportunities for discussion and public comment during the pandemic. As residents, we and our neighbors had no input.
- We are very concerned about the design of the UDF. As stated in the TASC report, the groundwater table and bedrock below the surface slopes downward toward the northeast at its northern end but the UDF will not have a slope. Will this stop it from properly disseminating disposed waste? More research must be done in this area. The report also asks if the dynamic nature of the groundwater table below the site will impact groundwater pathways below. We are also concerned about the proximity of the PCB dump to an aquifer.
- How will the passage of 47,500 trucks carrying toxic substances for 13 years impact our beautiful Berkshires, and more importantly, the health of its residents and tourists.

We appreciate your consideration of our concerns.
Sincerely,
Janie and Bob Nathanson
[redacted]

Brooks, Ashlin

From: Laurie Kropkowski [redacted]
Sent: Monday, October 9, 2023 4:56 PM
To: R1Housatonic
Subject: Response to UDF Pre-Design

I must be perfectly clear that I support the removal of PCBs from the Houstonic, but do not at all support the methods that GE and The EPA have cobbled together. We all know that there are much more modern, technical means of removing PCBs and we should be exploring them together.

That said, my direct response to the 3000+ page document is:

1) The parcel purchased from Lane Construction has been home to several endangered species including the bobolink, bald eagle and monarch butterfly, a vernal pool and various other trees, flora and fauna. I am concerned that these species - and others - will cease to be in our area. Also, with the changes in climate, to have acres of hardwoods, pines, and grasses destroyed decreases the benefits they bring to the air and its ambient temperature. Where do we look to regain what GE and the EPA are so callously tossing aside?

2) Support Areas are not defined, nor is it clearly understood what one is. Without a definition of the space(s), we are at a loss to know what impact they have.

3) I wish my daughter in law, who is a PhD candidate in Hydrology at UNC Chapel Hill, were able to take the time to review the numerous data and graphs, tables and addendums concerning the geology and hydrology of the area. I would like to see a synopsis of the hundreds of tables, charts and reports that clearly states what the substrates are and impact on building such a site atop them. I realize that there are plenty of data available, but for the general public to understand it would be better to present it in layman's terms.

4) It seems as though there are several discrepancies between GE and EPA soil testing. Why?

5) How GE is able to not test local people and the environs for PCB contamination and find a better way of disposal and treatment of the sediment is beyond me. I know this is an editorial point, but it infuriates me that we can be condemned to this mess that GE knowingly caused yet we have no recourse.

I'm sorry that I can't provide more details, but know that I am firmly against this plan and will do whatever necessary to prevent it.

Laurie

Laurie Kropkowski
Senior Documentation/Training Consultant
[redacted]

Brooks, Ashlin

From: Monica Ryan [redacted]
Sent: Monday, October 9, 2023 11:53 PM
To: R1Housatonic
Subject: Proposed UDF Lee MA

Dear Sir or Madam,

As a resident of Lee owning a house on Route 20, I am shocked and appalled at the plans for moving the toxic substances from the river to the UDF.

It is obvious that you have not even scoped out the full extent of the mess that this will create.

You have ignored the health hazards of a community where you propose this UDF. You are charged with protecting the environment and the health of the environment and yet you dare to propose a UDF on soil that is so permeable immediately above an aquifer. Have you forgotten what your job is?

Have you seen the recent flooding that's taking place in the Hudson Valley area? How can you possibly think that a UDF would ever be safe with the amount of rain that we regularly receive here?

You still have not determined a proper material for the proposed UDF that would be considered safe. And that is simply because there is no material that is safe.

GE has destroyed so many lives in Berkshire County and now you are giving them a green light to do it in perpetuity. Haven't we suffered enough?

I beg you to reconsider these plans as they spell only disaster for our natural environment and for the health of our citizens. Please listen to the people. Please do not be so quick to prioritize the interests of a corporation over the health and safety of the citizens in this community.

Water is life. If you destroy our aquifer, we cannot repair it. Please do not impose this incredibly stupid plan on us.

Sincerely,
Monica Ryan
[redacted]

Brooks, Ashlin

From: Clare Lahey [redacted]
Sent: Tuesday, October 10, 2023 12:02 AM
To: R1Housatonic
Subject: Public Comment Clare Lahey

Follow Up Flag: Follow up
Flag Status: Flagged

Dear EPA,
Please consider my concerns about the UDF planned for construction near my home in Lee.

1. Structural failure of the UDF would be catastrophic for our neighborhood. GE should prove ASAP that the 50-acre UDF site and the adjoining 25 acres can satisfy their needs, while adhering to stringent performance standards. There seems to be a lot of uncertainties about critical factors that will determine whether the UDF can meet the construction performance standards within the designated 50-acre consolidation area. There are so many constraints at the chosen site, that it appears that this is an impossible dream on GE's part.
2. Ground water flow from the uphill gradient north of the UDF could make a significant difference in the final design. GE has not addressed that aspect of the property. It appears that one or more monitoring wells were removed from this higher elevation. Why?
3. GE probably has enough data at this point to determine if the proposed UDF site will meet the performance standards needed to guarantee a structurally sound UDF. They are probably at a point in their decision tree where they can choose the best-case scenario, taking into consideration not only their bottom line, but also the safety and health of the community. Hopefully, EPA can direct them to accelerate that process, without cutting any corners.
4. The GE report has not shown any analysis of their massive database so far. It's time for them to start showing proof of their assumptions. We trust that EPA is making sure that GE is following the most reliable testing protocols when collecting samples and that their split-samples are comparable to EPA's.
5. GE should provide a final site plan that meets all the performance standards ASAP. This is not something that they should be doing piecemeal. The feasibility of the site has to be proven sooner rather than later.
6. There are too many questions about groundwater elevations, underlying marble and bedrock, groundwater flow, etc., but is any more testing necessary if it can already be shown that the site does not meet the specifications.
7. All of the above concerns are only exacerbated by climate change. GE needs to address the effect of tree cutting on storm water flow, using forecasting programs that include climate change predictions.
8. The possible loss of our ACEC, which received that supposedly highly protective Commonwealth designation only after many years of promotion by local environmentalists, is an environmental travesty. This area of vulnerable habitat will be lost and impossible to mitigate nearby. These vernal pools are the only ones with a mile of the site and are an important migratory location.

9. The possible loss of a Conservation easement that was put in place by some foresighted town planners long ago, who recognized the importance of a natural buffer between the gravel mining operation and October Mountain State Forest, will destroy a Commonwealth designated Scenic Road through a popular recreational area.
10. GE never performed an environmental assessment of the 75-acre site that they purchased from Lane Construction in 2020. If they had any idea of what they were getting, a site so unsuitable in so many ways, they didn't need to worry. They knew that the Consent Decree demanded that every local, state and federal environmental law would be waived so that they could progress without a worry. This is unacceptable and needs to be rectified.
11. There's clearly not enough suitable space for support operations
12. Hydrological pumping has not been proven feasible. No design plans.

Brooks, Ashlin

From: Verena Smith [redacted]
Sent: Monday, October 9, 2023 9:35 PM
To: R1Housatonic
Subject: Comment regarding the UDF in Lee MA

Dear Dean:

I have written this very comment before and am sending it again. This is not a scientific comment, it's a personal one. GE and the EPA are destroying our lives here in Lenox Dale and Lee when other options are available. Treating the PCBs should be the priority. Otherwise sending them to licensed facilities by train should be the alternative. The fact that all this is being done to only clean up about 20% of the PCBs in the Housatonic makes no sense to me. Here is my previous comment which is more relevant than ever:
My name is Verena Smith and my family and I live on Walker Street in Lenox.
We moved here a few years ago after living in different parts of the country and Berkshire County. We feel that we have found our forever home here in Lenox Dale. My son (12) goes to school in Lenox, I work in Lenox and my husband works in Great Barrington. Since we know about the EPA's plan to create the PCB dump in Lee, I am terrified as to what this means for our family. The idea of thousands of truckloads of contaminated materials possibly driving by our front door for years to come is absolutely devastating. To think and worry about airborne PCBs everytime we step outside to walk our dogs, play in our yard or just go about our lives is beyond scary. I am concerned about this exposure to PCBs for my son, who has his whole life ahead of him. I don't want him to get cancer in 15 years when he will think about starting a family. This is a life changing situation for all of us and I BEG you to please consider the people who live here. Treat don't dump!
Thank you for reading my comment.
Verena Smith

Brooks, Ashlin

From: Rachel Bodine [redacted]
Sent: Tuesday, September 26, 2023 12:01 PM
To: R1Housatonic
Subject: Lee PCB storage

Caution: This email originated from outside EPA, please exercise additional caution when deciding whether to open attachments or click on provided links.

Hi,
I'm a resident of Lee, Massachusetts. My name is Rachel Cannon and I live at [redacted] I do not approve of a storage facility in Lee for PCBs. Please register my name on the list of residents who oppose this proposal.
Sincerely,
Rachel Cannon

Brooks, Ashlin

From: Jason Leprevost [redacted]
Sent: Tuesday, October 10, 2023 2:23 PM
To: R1Housatonic
Subject: Your poor excuse of a river clean up plan

This clean up and toxic waste dump in the town of Lee is an injustice to our community. I grew up in Lee and the Housatonic running through my town was a blessing. Although polluted my grandfather a long time fly fisherman saw what the river had to offer and taught me from a young age to flyfish in the Housatonic river. It forever changed the course of my life as I've pursued the sport of fly fishing and it is now my career teaching people to flyfish and respect and care for the rivers they use as a platform to be free, relax, unwind and learn. This project would turn our river into no more than a canal with water, losing all its biodiversity and characteristics. As for the proposed toxic dump site it's a tragedy that they would ever consider removing chemicals only to put them back into the system. If the dump site is in the Housatonic watershed IT WILL leak contaminations maybe not in a year or 10 but it will fail and the river and groundwater will be forever tainted and our future generations will deal with the consequences. This clean up is no more than a way for GE to attempt to clean they're slate. A miserable attempt at that. I attended Plymouth State University and received a degree in environmental sciences and in all my studies this is no consistent with a suitable clean up. We need to hold GE responsible for the complete remediation of all PCB hotspots particularly infront of the dams from Pittsfield to Sheffield MA where sediment with pcb contamination has been built up for years and be shipped of to be disposed of properly.

Sent from my iPhone

Brooks, Ashlin

From: [redacted]
Sent: Tuesday, October 10, 2023 10:28 PM
To: R1Housatonic
Subject: Lee MA

To whom has actually power to make changes.

Here are my comments for the proposed UDF in Lee Mass.

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25%, and a majority of it will be to just "MOVE the PCBS" to 1000 feet upland over our aquifer, closer to our reservoir here in Lee.

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HOLD GENERAL ELECTRICE MORALY AND MONITARILY RESPOSABLE

Thank you
Brandi M.

Sent from my Galaxy

October 10, 2023

Mr. Dean Tagliaferro
EPA new England
10 Lyman Stret, Suite 2
Pittsfield, MA 01201

RE: Upland Disposal Facility Pre-Design Investigation Report & River Remediation Plan.

Dear Dean,

On behalf of my fellow town residents of Lee and other concerned citizens, the following enumerates our unresolved questions about the Upland Disposal Plan and Housatonic Rest of the River Remediation:

1. We request that the EPA and General Electric (GE) conduct a public meeting and presentation of the Upland Disposal Facility (DUMP) Design Plan and answer questions and concerns presented by SKEO, Technical Assistance Services for Communities (TASC), Town of Lee and the public. This will help affected citizens to better understand the details of the approximately 4,000-page ± Upland Disposal Facility Pre-Design Investigation (PDI) Report.

2. Please extend the comment period so additional questions or comments from the public may be submitted after the presentation. While petitioning the public to switch from truck transport to train, several citizens said they do not see the point of commenting because their questions are never answered. So, the community's question to the EPA is: when will their questions be addressed?

3. Under MEPA or NEPA review the entire project impacts must be revealed and reviewed prior to receiving a Permit. Please give the public a description of all the activities associated with the project, so they can be evaluated for their environmental and public health impacts. For example, will Roaring Brook and Woodland Road be widened? What will the impacts be to October Mountain State land, Natural Heritage Endangered Species Program (NHESP) Priority Habitat of Rare Species, BVW (Bordering Vegetated Wetlands), floodplain, and stream crossings? How will these impacts be remediated? Traffic Studies have not been done. The complete project has not been described. Climate Change impacts have not been considered. Geological studies demonstrating unsuitability of the land on which the proposed dump is sited are being ignored, ostensibly to save on costs for GE, as quoted by EPA Environmental Analyst, Brian Olsen in the 2016 GE commissioned Consent Decree Appeal.

4. At a recent CCC meeting, Mr. Tagliaferro stated the Wildlife Habitat Study is a reassessment of the current wildlife, land cover, and conditions where the Dump is proposed. Please outline the changes (if any), which may have occurred between the various studies conducted (e.g., 2002 Woodlot study, other unpublished studies, and the most recent reassessment conducted in 2022).

    - Please request GE to include aerial photographs of the site and adjacent lots. Please include Northeast Paving, a subsidiary of Eurovia which was previously Lane Sand & Gravel, Eversource Right of Way, and LB Corporation parcel purchased in 2017.

Show the details of the surveys, including vegetation cover and types, wetlands, vernal pools, wildlife etc., identified during the different years surveyed.

- Please explain why our local Conservation Commission, and the Commonwealth of Massachusetts have been discouraged from preventing the adjacent landowners from complying with the Wetland Protection Act, and the Clean Water Act.

- Please explain why the adjacent owners were allowed to remove vegetation, soil, and subsoil, and alter protected resources prior to delineation of resources within the Area Critical Environmental Concern (ACEC). One owner was observed placing fill on their site. Asphalt millings are stockpiled near the wetland surveyed along the north property boundary. Has this activity changed the Wildlife Habitat Assessment by affecting the local surface and groundwater pH?

5. Please identify and elaborate on collateral effects of the activities associated with Dump construction and use (ongoing daily dumping of PCB sediments) including vehicular pathways, staging areas, dewatering sites, and other associated activities.

6. How will the PCBs be removed from the riverine system, dewatered, and carried to the dump without collateral impacts to land being traversed? How will PCB dispersal from vehicle top and undercarriage be prevented, volatilization during transport, and release during the process of sediment dewatering?

7. How will easily windblown PCB ladened fine sediments of silts and clays, be prevented from blowing into Lee's surface water supply located just one mile away?

8. How will local children living in neighborhoods along Woodland Rd, Washington Rd, Willow Creek Rd, and other areas, be able to endure 13 to 15 years of wind dispersed PCB-contaminated dust, grow up healthy and strong? One parent noted they could consistently smell Eurovia's Asphalt plant fumes in the air where they live. The dust coming from the proposed dump and roads will be blowing their way too. This parent also informed me that most of the residents in this area have 2 to 3 children. This is a younger community that has poured their life savings into their homes. The value of their homes will decline and if they want their children to stay healthy, they will have no choice but to move. That is an economic expense that will impact their lives forever. This is only a small window of a negative impact from the dump – and for only 20% to 30% of PCBs to be dredged from the river and spread to a new area via the dump. Destruction of PCBs in situ is the only solution. EPA should require Thermal Desorption or investigate other technologies such as bioremediation to destroy the PCB's where they already lay.

9. Many times, monitors observe and report offences of the contractors, but nothing is done to immediately stop the offences. What measures will be taken to immediately stop errant activities, to prevent PCB pollution of ground surface and ground water infiltration throughout the travel routes?

10. The investigation of groundwater levels began in the Fall of 2022 to date. In the year 2021 land was flooded for several months with storm water and ground water upwelling in springs. Several intermittent streams were observed flowing throughout the wetlands surrounding the proposed

dump site. The wetlands were flooded along the common property boundary of LB corporation and GE. The area was completely flooded several hundred feet along Woodland Rd and a couple hundred feet beyond the Vernal Pool indicated on USGS topographical maps. Clare Lahey and I observed wetland flagging along the LB corporation and GE common property line, and in other places throughout the GE property. Flags were also observed south of LB corporation southern property boundary which may have indicated a drainage lane from storm water events. The flags were removed a few days prior to the Lee Conservation Commission on site. Why were the flags removed? Why wasn't the ground water monitoring determined during these times? Even though the Lee Conservation Commission visited the site, they were told by EPA that they could not hold a public hearing and could not require GE to reveal jurisdictional resources to the public in 2021. The public was told to wait until this report was released in August 2023. As a Certified Wetland Specialist, it concerns me that the Rest of the River Committee (ROR) signed the Consent Decree in executive session without the public being aware of the agreement. This is undemocratic and does not allow for diverse and expert revisions of the plan.

11. Why was trucking selected rather than train transport? The train runs parallel to the Housatonic River and each car has the capacity to hold 8 truckloads of sediment. Given the scientific facts of this site being unsuitable for dumping, why did EPA change their mind from the 2016 Consent Decree and acquiesce to permitting a dump?

12. The original source of PCBs starts around the Pittsfield GE Plant. There are extensive PCB plumes in the ground water there. PCBs still leach into the Housatonic River. Until these point and non-point sources are fully remediated, it seems both impractical and irresponsible to consider dredging down river first.

13. A conflict of interest is at issue if GE oversees ground water testing or monitoring. This is demonstrated by the TASC comments made about the split analysis of sample media between GE and EPA.

14. Ultimately, the PCB removal and dump plan should be halted, and a different, more effective, and realistic course of action should be explored. Placing toxic waste on the most permeable soil one can find (sand and gravel), with no confining layer, on top of carbonate bedrock known to have cracks and fissures, over an aquifer that produces 2.2 million gallons of fresh water per day is not remediation, it is just more contamination.

Respectfully Submitted,

Gail Ceresia
Professional Wetlands Scientist (PWS) & Registered Sanitarian (RS)
[redacted]

Brooks, Ashlin

From: Geri O'Brien [redacted]
Sent: Tuesday, October 10, 2023 9:15 PM
To: R1Housatonic
Subject: Proposed UDF in Lee

Dean,

The almost 4000 page document is virtually impossible to review in the short time given to residents. Furthermore, not every resident of Lee owns the means (i.e., a computer) to download and fully read this ROR agreement.

- Therefore it is essential that the public comment period is extended at least two months to allow time for a thorough review by residents. Several copies should be provided to the Lee Library and libraries in the other four towns. This is the only reasonably democratic process for the affected communities to provide input on the agreement.
- The EPA's own research has noted in several documents that the substrate for the proposed dump is permeable, posing a serious environmental risk to people and animals who live nearby or who rely on natural resources in the area, e.g., grassland, soil, water.
- The EPA has made no effort to test or explore known innovative technologies to provide a safe cleanup of the PCBs. They have not honored their agreement to test proper remediation methods.
- The proposed landfill liners have no manufacturer's guarantee that they will not leach PCBs into the surrounding area, endangering the residents of Lee and Lenoxdale
- The EPA has not done due diligence to protect the health of Berkshire residents.
- The EPA never sought or notified the residents of Lee of the UDF Plans for GE's Toxic PCP dump.

GE needs to be held to a higher standard of accountability to the people of Lee and Berkshire Co.
Thank you.

Brooks, Ashlin

From: Maggie Ward [redacted]
Sent: Tuesday, October 10, 2023 9:33 PM
To: R1Housatonic
Subject: HRI

Caution: This email originated from outside EPA, please exercise additional caution when deciding whether to open attachments or click on provided links.

To Dean,
I am writing to request that the public comment period be extended so more people have the ability to review this very long document.

The EPA needs to provide SEVERAL copies of the UDF Plan. The UDF plan should have been and should currently be provided and displayed for review at the public library in Lee along with the public libraries in the 4 other towns involved in the ROR agreement and more meetings to be held to explain it to the public.

This proposed site in Lee for the UDF has deemed by geological experts to be the WORST possible example to place a Toxic PCB Land Fill on. The cleanup and UDF that is proposed here by the EPA and GE will only have the probability of a GUESSED amount of a 20% to 25%, and a majority of it will be to just "MOVE the PCBS" to 1000 feet upland over our aquifer, closer to our reservoir here in Lee. I would like the EPA to reconsider the use of transporting all the PCBs out of Berkshire county to a proper holdings facility by rail.

There are also NO innovative treatment Technonologies being used in the proposed UDF for Lee, Ma. The EPA has NOT followed through with using innovative treatment technologies to make the GE Site a viable successful cleanup. The EPA has NOT DONE any testing for recent innovative treatment technologies for proper remediation as stated the EPA would. I think there should be more time to const these alternatives.

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Thank you,
Maggie Ward
Lee resident

Sent from Yahoo Mail on Android

Brooks, Ashlin

From: Ryan Mayott [redacted]
Sent: Tuesday, October 10, 2023 7:50 PM
To: R1Housatonic
Subject: Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area (pdf) (221 MB

To whom it may concern;

This whole PCB in the town of Lee is a horrible design in both function given that the site isent sustainable, dispite the constant attempt to show that the water barriers will hold, they don't, study after study shows that these barriers don't have nearly the service life they claim nor do they seem to actually serve in function...and this will result in people getting sick with all forms of cancer. This town does not want nor need a PCB dump put on a gravel quarry! The fact that no one has even thought it through seems like a cruel joke. This whole endeavor seems like a misguided way for GE to avoid any sort of real clean up cost...and as the EPA I would hope this organization would do its due diligence to stop this garbage from being put in our town and hold GE accountable for THEIR mess. On top of all that they want to drive THEIR cancer causing mess through our town too, again claiming that covered trucks will be "enough" for keeping debris and contamination at bay, when again we have evidence that contradicts. This whole idea will not only kill any hope of tourism but also physically kill the people of this town, I urge anyone able to actually DO something to help stop this.

Regards
-Ryan Mayott

Brooks, Ashlin

From: Ryan Mayott [redacted]
Sent: Tuesday, October 10, 2023 8:05 PM
To: R1Housatonic
Subject: EMAIL TO Dean

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Thank you

Sent from my Galaxy

Brooks, Ashlin

From: William Fisher [redacted]
Sent: Tuesday, October 10, 2023 7:37 PM
To: R1Housatonic; catherine.coniaris@mass.gov; Little, Shauna; Brooks, Ashlin; Dumville, Kelsey; bchambers@cbi.org
Subject: Housatonic River Remedy Plans

Follow Up Flag: Follow up
Flag Status: Flagged

To All It May Concern:
As long-time visitors and now homeowners in the beautiful Berkshire Mountains of Massachusetts, we have been following, to the best of our abilities, the events and decisions, as well as the protests, related to GE's disposal of PCBs into the Housatonic River over the past several decades and the proposals and plans for clearing the river of these toxins. We believe not only that these plans are inadequate, but that the decision-making process has been marred by inadequate information, behind-the-scenes agreements, and GE's undue influence, among other unfortunate factors.

We have four overarching concerns:

1. It is our understanding that the process planned for dredging and removing the PCBs will only remove one-third of the materials. In addition, while the technical process may minimize disruption of the PCBs, we understand that PCBs emanate into the air, and can be breathed in, as well as contaminate the environment and the aquatic flora and fauna. As is now known, the Hudson River experience and process in removing GE's PCBs appears not to have resulted in lessening the presence of contamination in aquatic wildlife there. It is our understanding that there may be other techniques for removal with better results. These should be investigated thoroughly.

2. Descriptions of the disposal facility in Lee and critiques of it, specifically by the recent TASC Report, indicate that the facility is planned to be located near a significant aquifer and will not be located on a level plane, thus increasing the chances for leakage and contamination of the local water supply. While the engineering of the container may be "state of the art" the risks of leakage and the location pose dangerous threats to the populace both in the short and long-term.

3. Plans for transportation of the PCP materials over the next 13 years involving the use of trucks traveling through the small towns of the Berkshires are misguided and will pose additional risk. We are aware that rail transportation has been suggested as an alternative. While this is potentially a less risky and less impactful (to the community) method of transportation, transportation of any sort to an inadequate storage facility is not in the public interest.

4. The global pandemic affected public input into the process, and involved and interested parties may have taken advantage of this. Increased public participation along the way may have changed the course of events and where things stand now. We urge you and those who can set the wheels in motion to increase public participation in every decision and take additional care in including their wishes into decision-making. We further urge you and those who can influence the process to make all the plans fully known to the public and to reconsider the decisions that have been made thus far, especially in light of the public's wishes.

Thank you for your time. We hope that those involved in this process to remedy an unfortunate public tragedy -- perpetrated by a private company -- will consider all the ramifications of decisions made thus far, reconsider them with

full public input, and take into full account the natural beauty and resources of the area, the local economy, and the quality of life of residents and visitors to the Berkshires, which could be affected for years to come.

Sincerely,
William T. Fisher, Jr., Ed.D., M.S.W., Faculty Emeritus, Springfield College
Lynn T. Gordon, R.N. , M.P.A., Visiting Community Nurse
[redacted]

Dr. William T. Fisher, Jr., Professor Emeritus, Social Work
Springfield College, Springfield, MA
[redacted]