



HOUSATONIC REST OF RIVER MUNICIPAL COMMITTEE

February 7, 2023

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

Re: Comments on the *Monitoring, and Maintenance Plan for Columbia Mill Dam*

Dear Mr. Tagliaferro:

The Housatonic Rest of River Municipal Committee (the Committee) respectfully submits the following comments on the *Monitoring, and Maintenance Plan for Columbia Mill Dam* (hereafter referred to as the M&M Plan). The purpose of the M&M Plan is to describe the M&M program for Columbia Mill Dam. One objective of such a program should be to minimize releases of polychlorinated biphenyls (PCBs) in the sediments and surface water of the Columbia Mill impoundment behind the Dam that could be prevented by appropriate inspection, monitoring and maintenance activities for the Dam.

The M&M Plan adheres to the general requirements set forth in the Final Revised SOW and the Revised Final Permit, and provides a description of general, routine dam operations and maintenance efforts. However, the M&M Plan should include greater detail on how contaminated sediments will be monitored and disposed of and should address the potential impacts that could result from climate change. The Committee's comments on the *Monitoring, and Maintenance Plan for Columbia Mill Dam* are enclosed as Attachment A.

Sincerely,
The Housatonic Rest of River Municipal Committee

Enclosure: Attachment A - Housatonic Rest of River Municipal Committee Comments on the Monitoring, and Maintenance Plan for Columbia Mill Dam

Enclosure: Attachment B - Technical Assistance Services for Communities Comments Monitoring, and Maintenance Plan for Columbia Mill Dam, January 9, 2023

ATTACHMENT A
HOUSATONIC REST OF RIVER MUNICIPAL COMMITTEE
Comments on the *Monitoring, and Maintenance Plan for Columbia Mill Dam*
GE/Housatonic River - Rest of River

The *Monitoring, and Maintenance Plan for Columbia Mill Dam* (hereafter referred to as the M&M Plan) describes the inspection, monitoring and maintenance activities that GE will undertake at the Dam during the interim period before the Dam's removal. The Dam is required to be removed by GE as part of the Housatonic ROR remedial action. The removal date for the Dam is unknown at this time, but may occur in about 10 years. The M&M Plan describes the monitoring and maintenance activities that GE will conduct at the Dam in an effort to prevent the Dam from failing before it is removed under the Revised EPA Permit. Failure of the Dam could release sediments in the Columbia Mill impoundment that contain polychlorinated biphenyls (PCBs).

The M&M Plan adheres to the general requirements in the Final Revised SOW and the Revised Final Permit and provides a description of general, routine dam operations and maintenance efforts. However, the OM&M Plan should include greater detail on how contaminated sediments will be monitored and disposed of and should address the potential impacts that could result from climate change.

In addition, the Committee offers the following comments:

1. The purpose of the M&M Plan is to describe the monitoring and maintenance activities that GE will conduct in an effort to prevent the Dam from failing before it is removed under the Revised EPA Permit. Failure of the Dam could release sediments in the Columbia Mill impoundment that contain PCBs. GE is required to remove the Dam as part of the ROR remedial action. It is unknown when the Dam will be removed, but it is anticipated to occur in about 10 years. The M&M Plan does not currently include requirements and monitoring for future Dam removal activities. Dam removal monitoring methods are described in ROR Applicable or Relevant and Appropriate Requirements (ARARs) sources and associated guidance. (See Attachment B - Technical Assistance Services for Communities Comments, January 9, 2023, p 3)

The M&M Plan should be revised to acknowledge and incorporate Dam removal monitoring methods as outlined by ROR ARARs and applicable guidance.

2. In 2009, removal of the Columbia Mill Dam was pursued by the Housatonic Valley Association (HVA) in partnership with the Division of Ecological Restoration (formerly the Riverways Program), American Rivers, and Schweitzer-Mauduit International, Inc. as part of a Natural Resource Damage Fund review. The 2009 HVA document outlined a monitoring strategy that begins approximately four years before Dam removal. (See Attachment B - Technical

Assistance Services for Communities Comments, January 9, 2023, pp 3-4) Given the Dam is to be removed as part of the ROR Remedial Activities and removal may occur within 10 years, there is an overlap in scheduled annual monitoring that could assist with the Dam removal monitoring.

GE and EPA should work with HVA and the Division of Ecological Restoration to coordinate monitoring to ensure a monitoring strategy that achieves annual monitoring requirements and pre-monitoring requirements of Dam removal as well as meeting the Dam removal goal to restore the ecological integrity of the Housatonic River.

3. The intent of continued Columbia Mill Dam M&M efforts is to maintain the integrity of the Dam (to retain contaminated sediments) until the Dam is removed as part of the ROR Remedial Action. The inspections will focus on evaluation of features that are integral to Dam integrity. Looking beyond Dam removal, there has been interest in the area for public reuse (See Attachment B - Technical Assistance Services for Communities Comments, January 9, 2023, p 4)

GE should coordinate with Lee community representatives to identify Dam or Mill features with community reuse value. These features could be inspected as part of the annual monitoring.

4. GE recently released the Willow Mill Dam OM&M Plan, one objective of the Willow Mill Dam OM&M program is to “minimize releases of PCBs in the sediments and surface water” that could be prevented by appropriate inspection, monitoring and maintenance activities for the Willow Mill Dam. The purpose of the Columbia Mill Dam is to retain PCB sediments, but this document does not acknowledge the need to control releases in surface water and sediment.

The M&M Plan should be amended to, at a minimum, describe compliance with notification requirements of the Revised EPA Permit, schedules and responsibilities (where appropriate); and to include a goal to control PCB-contaminated surface water and sediments.

5. The M&M Plan does not include a review of the most recent 2017 inspection or address Dam condition issues observed and recorded in previous inspections. Because this recent information is not included, the M&M Plan has information gaps. The M&M Plan was prepared without review of dam information available from Massachusetts Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS) and relies heavily on information from a February 28, 2008 Phase II Inspection/Evaluation Report on the Dam prepared by Tighe & Bond and observations made during a visual inspection performed by GZA on August 17, 2022. The M&M Plan states that the only current function of the Dam is to impound PCB-contaminated sediments. However, online records of the U.S. Army Corps of Engineer’s inventory of Dams identify the Dam’s primary purpose as water supply. This indicates that the Dam may have (or historically had) a potable water supply intake.

The M&M Plan should be revised to include more recent inspections and reports, and to acknowledge potential (or historical) potable supply use of the Dam.

6. The M&M Plan does not identify whether sediment removal is necessary for Dam maintenance. Typically, sediment removal is a standard requirement to maintain storage capacity of the water retention pool and functional features of a Dam.

The M&M Plan should be revised to describe whether sediment removal is part of Dam maintenance procedures, and if these sediment removal actions adhere to state and/or U.S. Army Corps of Engineers permitting requirements. If so, the revised M&M Plan should include compliance with permit requirements and record-keeping activities.



Technical Assistance Services *for* Communities GE-Pittsfield/Housatonic River Site Comments on Monitoring and Maintenance Plan for Columbia Mill Dam January 9, 2023

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**Technical Assistance Services for Communities (TASC)
Comments on GE-Pittsfield/Housatonic River Site –
Monitoring and Maintenance Plan for Columbia Mill Dam,
November 2022**

Introduction

This document provides TASC comments on the GE-Pittsfield/Housatonic River Site – Monitoring and Maintenance Plan for Columbia Mill Dam (the M&M Plan). This document is for the Berkshire Regional Planning Commission (BRPC) and municipalities 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.

GZA Geoenvironmental, Inc. prepared the M&M Plan on behalf of GE in accordance with 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 and the Final Revised Rest of River Statement of Work (Final Revised SOW) submitted by GE and approved by EPA in September 2021. The M&M Plan describes the inspection, monitoring and maintenance activities that GE will undertake at the Dam during the interim period before the Dam’s removal. The Dam is required to be removed by GE as part of the Housatonic ROR remedial action. The removal date for the Dam is unknown at this time, but may occur in about 10 years. The M&M Plan describes the monitoring and maintenance activities that GE will conduct at the Dam in an effort to prevent the Dam from failing before it is removed under the Revised EPA Permit. Failure of the Dam could release sediments in the Columbia Mill impoundment that contain polychlorinated biphenyls (PCBs).

Summary

The November Monitoring and Maintenance Plan for Columbia Mill Dam has seven sections and four attachments:

- Introduction and Background.
- Inspections.
- Maintenance and Repairs.
- Emergency Response.
- Record-Keeping and Reporting.
- Schedule.
- References.
- Attachment A – Condition Descriptions and Dam Terminology.
- Attachment B – August 2022 Visual Inspection Report (October 31, 2022).
- Attachment C – Quarterly Observation Checklist.
- Attachment D – Annual Inspection/Evaluation Checklist.

The Columbia Mill Dam M&M Plan provides a summary of Dam history and construction. It summarizes inspections that GE will conduct at the Dam, which include routine quarterly and annual inspections, inspections after large storm events and other special inspections. At least once every five years the Columbia Mill impoundment will be drawn down, if feasible, to expose the downstream face of the primary spillway and the boulder-lined downstream splash area at the toe of the Dam. The M&M Plan describes maintenance and repairs that include both initial repair activities and routine annual maintenance. The Plan includes information about emergency response, record-keeping and the schedule. The references section includes two 2008 references.

TASC Comments

Review of the M&M Plan indicates that this document adheres to the general requirements in the Final Revised SOW (pdf pages 72-74) and the Revised Final Permit (pdf pages 42-46). TASC comments identify opportunities for the M&M Plan to include monitoring activities such as annual Dam inspections, pre-removal monitoring, and monitoring of area (Dam and/or Mill) features that could be reused and have value to the community. In addition, TASC recently reviewed and commented on the GeoEnvironmental 2022 Willow Mill Dam Operations, Maintenance and Monitoring Plan (Willow Mill Dam OM&M Plan). TASC found that certain issues identified in the Willow Mill Dam OM&M Plan also apply to the Columbia Mill M&M Plan.

Specific TASC comments are:

1. The purpose of the M&M Plan is to describe the monitoring and maintenance activities that GE will conduct in an effort to prevent the Dam from failing before it is removed under the Revised EPA Permit. Failure of the Dam could release sediments in the Columbia Mill impoundment that contain PCBs. GE is required to remove the Dam as part of the ROR remedial action. It is unknown when the Dam will be removed, but it is anticipated to occur in about 10 years. The M&M Plan does not currently include

requirements and monitoring for future Dam removal activities. Dam removal monitoring methods are described in ROR Applicable or Relevant and Appropriate Requirements (ARARs) sources and associated guidance are as follows:

- Massachusetts Wetlands Protection Act (WPA) and Regulations (MGL c. 131, section 40z, 310 CMR 10.00, including 10.53). Dam removal projects can improve the natural capacity of a river to protect the interests of the WPA; that may be (and have been) permitted under 310 CMR 10.53(4). During permitting review of dam removal projects under the Wetlands Regulations, it is recommended that the guidance described in MassDEP, 2007 be followed (refer to References Cited).
- In addition, the Massachusetts Department of Environmental Protection (MassDEP) 2007 guidance recommends habitat monitoring to assess the development of habitat features of particular interest at the project site. The guidance recommends using ‘Barrier Removal Monitoring Standards’ developed by the Gulf of Maine Council for the Marine Environment in conjunction with the Massachusetts Riverways Program (Collins et al., 2007).
- Dam removal monitoring methods specific to Massachusetts and the Housatonic River are also described in Stantec Inc., 2014 and EOEEA, 2007 (refer to References Cited).

The community may want to ask the EPA to consider whether the M&M Plan should acknowledge and incorporate Dam removal monitoring methods as outlined by ROR ARARs and applicable guidance.

2. Removal of the Columbia Mill Dam was pursued by the Housatonic Valley Association (HVA) in partnership with the Riverways Program (Massachusetts Department of Fish and Game), American Rivers, and Schweitzer-Mauduit International, Inc. in 2009 as part of a Natural Resource Damage Fund review. The project partners wished to remove the Dam “to restore ecological integrity to a mainstem reach of the Housatonic River... Dam removal will facilitate fish passage, enhance navigability, improve water quality, protect public safety and provide continuity of habitat for a range of aquatic species” (pdf page 3, HVA, 2009). Given the Dam is to be removed as part of the ROR Remedial Activities, it seems that it could be helpful for GE to make the M&M Plan available for HVA partner review so they can coordinate monitoring that would benefit the Dam removal goal to restore the ecological integrity of the Housatonic River. The 2009 HVA document outlines a monitoring strategy that begins about four years before Dam removal (refer to Section 5. Monitoring/Evaluation and Contingency Plan, provided on pdf page 14 of the 2009 HVA Document). Given Dam removal may occur in about 10 years, there is an overlap in scheduled annual monitoring that could assist with the Dam removal monitoring.

The community may want to ask EPA if the M&M Plan was reviewed by HVA, the Riverways Program, and American Rivers. Their review may help ensure a monitoring

strategy that achieves both annual monitoring requirements and pre-monitoring requirements of Dam removal.

3. The intent of continued Columbia Mill Dam M&M efforts is to maintain the integrity of the Dam (to retain contaminated sediments) until the Dam is removed as part of the ROR Remedial Action. The inspections will focus on evaluation of features that are integral to Dam integrity. Looking beyond Dam removal, there has been interest in the area for public reuse (refer to HVA, 2009, pdf page 10). As stated in the HVA document, “the community of Lee is interested in utilizing the Housatonic River as a major resource attribute to the community. The town Master Plan, and the Open Space and Recreation Plan as well as the Harvard University’s Graduate School of Design and the Downtown Economic Development Plan recommends that the Housatonic River in Lee should be a focus point for the community, and create such projects as a Lee riverwalk, provide additional recreational river access and various visual improvements.” Some physical features of the Mill and Dam may have community reuse value. GE could reach out to the community to determine what these physical features are, if any. Any identified features could be inspected during annual Columbia Mill Dam M&M inspections. This would be a cooperative effort by GE to forwardly address future community reuse values to the area. WPA regulations include a section on Redevelopment of the Riverfront Area (CMR 10.58(5)). Dam removal is a form of river restoration, so it may be considered a mitigation project by the issuing authority under 10.58(5) Redevelopment.

The community may want to ask EPA if coordination with Lee community representatives is appropriate to identify Dam or Mill features with community reuse value. These features could be inspected as part of the annual monitoring.

4. GE recently released the Willow Mill Dam OM&M Plan, which contained 10 sections as follows:
 - Introduction and Background.
 - Operations.
 - Inspections.
 - Maintenance and Repairs.
 - Emergency Response.
 - Record-Keeping.
 - Reporting.
 - Compliance with Notification Requirements of Revised EPA Permit.
 - Schedules and Responsibilities.
 - References.

The M&M Plan addresses most of these elements with the following exceptions: Operations, Compliance with Notification Requirements of Revised EPA Permit, and Schedules and Responsibilities (‘Operations’ may not be applicable because the Dam may not serve any function beyond sediment retention). In addition, one objective of the Willow Mill Dam OM&M program is to “minimize releases of PCBs in the sediments

and surface water” that could be prevented by appropriate inspection, monitoring and maintenance activities for the Willow Mill Dam. The purpose of the Columbia Mill Dam is to retain PCB sediments, but this document does not acknowledge the need to control releases in surface water and sediment.

The community may want to ask EPA if the M&M Plan should be amended with sections describing Operations, Compliance with notification requirements of Revised EPA Permit, and Schedules and Responsibilities (where appropriate); and if it should include a goal to control PCB-contaminated surface water and sediments.

5. The M&M Plan does not review the most recent 2017 inspection or address Dam condition issues observed and recorded in previous inspections. Because this recent information is not included, the M&M Plan has information gaps. For instance, the document states: “This M&M Plan was prepared without review of dam information available from Massachusetts Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS) and relies heavily on information from a February 28, 2008 Phase II Inspection/Evaluation Report on the Dam prepared by Tighe & Bond (2008 Phase II Report) and observations made during a visual inspection performed by GZA on August 17, 2022” (pdf page 4). It is GZA’s understanding that the only current function of the Dam is to impound PCB-contaminated sediments (pdf page 5 of the document). However, online records of the U.S. Army Corps of Engineer’s inventory of Dams (US ACOE, 2022) identify the Dam’s primary purpose as water supply. This indicates that the Dam may have (or historically had) a potable water supply intake.

The community may want to ask EPA if the document should be amended to include more recent inspections and reports, and to acknowledge potential potable supply use of the Dam.

6. The M&M Plan does not identify whether sediment removal is necessary for Dam maintenance. Typically, sediment removal is a standard requirement to maintain storage capacity of the water retention pool and functional features of a Dam.

MassDEP summarized the permitting requirements associated with Dam maintenance and Dam removal activities (MassDEP 2007; https://www.mass.gov/doc/dam-removal-and-the-wetlands-regulations/download?_ga=2.251011398.132638430.1666624727-654380224.1626461587). Submission of the 401 Water Quality Certification Dredge Permit Form is required for projects involving sediment removal and disposal of quantities greater than 100 cubic yards. Initial engineering estimates in HVA, 2009 indicate that a relatively small amount of material (4,000 cubic yards of material comprised of both clean and contaminated sediments; pdf page 8) would need to be dredged as part of the Dam removal (estimated for 2008-2009). Sediment removal and disposal of less than 100 cubic yards does not require submittal of a 401 application, provided a Final Order of Conditions has been issued by the local Conservation Commission or MassDEP. In such cases, the proposed work must qualify for a U.S. Army Corps of Engineers Category One Programmatic General Permit. Nevertheless, the

above referenced guidance document promotes consistent approvals of sediment management methods among review authorities. Project proponents must demonstrate (and it is recommended that Conservation Commissions require evidence) that disposal of dredged sediment is managed in accordance with 314 CMR 9.07. As a general rule, the U.S. Army Corps of Engineers has determined that the discharge of substantial quantities of accumulated bottom sediment from or through a dam constitutes a discharge of dredged material (and possibly of fill material) that requires a Section 404 permit. For projects requiring a Section 404 permit, a 401 Water Quality Certification is also required. The M&M Plan does not reference the need to comply with the MassDEP or U.S. Army Corps of Engineers requirements.

The community may want to ask EPA to consider revising the M&M Plan to describe if sediment removal is part of Dam maintenance procedures, and if these sediment removal actions adhere to state and/or U.S. Army Corps of Engineers permitting requirements. If so, the community may want to ask EPA to revise the M&M Plan to include those permit procedures and record-keeping activities.

References Cited

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