

Public Input on General Electric's September 16, 2022
Operation, Monitoring, Maintenance Plan for Willow
Mill Dam

December 2022

From: [Iott, Traci](#)
To: [R1Housatonic](#)
Cc: [Papp, Carol](#)
Subject: Comments from CTDEEP on Willow Mill Dam OM&M Plan
Date: Tuesday, December 20, 2022 11:25:13 AM

Thank you for the opportunity to review and comment on the Operation, Monitoring and Maintenance Plan for Willow Mill Dam. Proper operation of dams in Massachusetts is important for Connecticut since PCBs are sequestered behinds these dams and can mobilize downstream under certain conditions. Connecticut requests that copies of documents and notifications regarding the dam be provided to CTDEEP. This includes, but is not limited to:

- Advanced notice of draw-down activities
- Copies of Annual Inspection Reports, Updates to the Emergency Action Plan and OM&M plan
- Notification of emergency conditions and responses
- Notification of catastrophic failures of the dam or a material breach of the dam
- Copy of the periodic Engineering Phase 1 Inspection and Evaluation Report
- Copies of documents related to permit compliance or submittals seeking new or revised permits

Notification should be provided to:

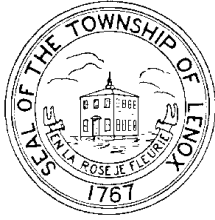
- Traci Iott (traci.iott@ct.gov)
- Carol Papp (Carol.Papp@ct.gov)
- Charles Lee (Charles.Lee@ct.gov)

Please reach out with any questions or for follow-up.

Traci

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HOUSATONIC REST OF RIVER MUNICIPAL COMMITTEE

December 19, 2022

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

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

Dear Mr. Tagliaferro:

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

The OM&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 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. The Committee's comments on the *Operation, Monitoring, and Maintenance Plan for Willow 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 Operation, Monitoring, and Maintenance Plan for Willow Mill Dam

Enclosure: Attachment B - Technical Assistance Services for Communities Comments Operation, Monitoring, and Maintenance Plan for Willow Mill Dam, October 27, 2022

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

The purpose of the *Operation, Monitoring, and Maintenance Plan for Willow Mill Dam* (OM&M Plan) is to describe the OM&M program for Willow Mill Dam. One objective of that program is to minimize releases of polychlorinated biphenyls (PCBs) in the sediments and surface water of the Willow Mill impoundment behind the Dam that could be prevented by appropriate inspection, monitoring and maintenance activities for the Dam.

The OM&M Plan describes procedures which were developed in consideration of the requirements specified in the Revised Final Permit and the Final Revised SOW, as well as the procedures that Onyx Specialty Papers, Inc. (the dam owner/operator) currently follows, which conform to the Massachusetts Dam Safety Regulations set forth in 302 CMR 10.00. The OM&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 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. Given that the Willow Dam impoundment sediments have been identified as media for removal and disposal, the OM&M Plan should include a discussion or a proposed strategy describing procedures for inspections and monitoring to achieve the OM&M goal of “minimizing releases of polychlorinated biphenyls (PCBs)” (pdf page 6). Of particular importance is the understanding of how sediment removal as part of routine maintenance requirements during the planned ROR remedy efforts will be monitored to assure sediments are disposed of properly. It is possible that upstream ROR remedy efforts (such as riverbed sediment and riverbank soil removal) may release contaminated sediments downstream to the Willow Mill impoundment. During this timeframe, the Dam may require sediment removal activities as part of routine maintenance. As a result of these combined events, it is important that the OM&M Plan describe how existing efforts (inspections, sampling and monitoring, headrace canal cleaning) may be adjusted to make sure that routine sediment removal activities do not accidentally dispose of contaminated materials from upstream sources.

The OM&M Plan should be revised to include a discussion of the procedures necessary to inspect and monitor the Dam to ensure contaminated sediments are not released.

2. Section 4.3 of the Plan describes the methods to complete handling, management and disposal of sediments and soils. As stated within this section, “if sediment analytical testing

indicates the presence of PCB concentrations that do not allow unrestricted use, GE, after consultation with the Owner/Operator, will develop and submit to EPA a plan..." This statement warrants two comments as follows:

- Sediment sampling and analysis for PCBs should follow standard practices already in place for ROR studies. The methods for sample collection and analysis should be comparable to routine practices followed by site activities in order to ensure the collection of comparable data. This document should refer to any standard sediment sampling guide that is in place for the ROR.
- This statement indicates that a plan describing how contaminated sediment/soil will be managed and disposed of will be provided to EPA. It seems that enough information regarding contaminated materials disposal for ROR remedy activities exists that the OM&M Plan could be developed prior to detection of contaminated media thereby allowing for more timely management and disposal of these materials.

The OM&M Plan should include a reference to ROR standard sediment sampling and PCB analysis techniques as part of the Dam routine procedures, and a plan for contaminated sediment disposal should be developed in the near future since ROR sediment disposal practices are well understood.

3. The OM&M Plan should describe possible future monitoring and inspection changes that may occur as a result of climate change effects to the Willow Dam. For instance, Section 2.0 of the OM&M Plan summarizes Housatonic River 100-year flood limit records of the high water level as 10 feet above the crest of the Dam, and the water level downstream of the Dam as 0.6 feet above the crest of the Dam (related possibly to the recorded river flow of 12,200 cubic feet per second in January 1949). These flow rates and possible increases in flooding from climate change will likely affect these crest water levels.

The OM&M Plan should incorporate an evaluation of potential climate change impacts given that future monitoring and maintenance needs may vary given the potential impacts of climate change.

4. Section 8.0 of the Plan summarizes Willow Mill Dam compliance with notification requirements of the Revised Final Permit; however, the document does not mention any compliance requirements associated with the sediment removal actions for the impoundment. It is important to reference the Revised Final Permit, the Final Revised SOW, the Performance Standards and Corrective Actions that are applicable to the Willow Mill impoundment. These future activities will likely affect the Dam's routine OM&M efforts and should be acknowledged.

The OM&M Plan should include a summary of the Willow Mill impoundment remedy (Reach 7E) requirements as described in the Revised Final Permit.

5. The OM&M Plan acknowledges the state-required procedures for inspections that are essential to confirm important physical dam attributes, to identify condition and highlight problems, and to provide a basis for planning and implementing maintenance and repairs of a dam. However, the OM&M Plan does not call out or refer to standard Massachusetts Department of Environmental Protection (MassDEP) Office of Dam Safety documentation requirements as follows:
 - Dam Safety Inspection Template: This is an editable document that must be used to prepare inspection reports, following field inspections to ensure compliance with the current template version. Failure to use the current template version will result in a non-compliant inspection report that may be returned to the dam owner and engineer.
 - Inspection Checklist: This checklist, also an editable document, may be used in the field as a data collection guide to record inspection data and findings.

The OM&M Plan should be amended to include the standard state inspection documents required as part of routine dam monitoring and inspection activities.

6. The 2007 MassDEP document *Dam Removal and the Wetland Regulations* summarizes the necessary permitting requirements associated with dam maintenance and dam removal activities. The guidance document endeavors to promote consistent approvals of sediment management methods among the review authorities including local conservation commissions, MassDEP and the U.S. Army Corps of Engineers. As a general rule, the 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 OM&M Plan does not reference the need to comply with the MassDEP or Army Corps requirements.

The OM&M Plan should clearly reference whether the sediment removal actions routinely addressed as part of dam maintenance adhere to state and/or Army Corps permitting and recordkeeping requirements.



Technical Assistance Services *for* Communities Comments on Rest of River Operation, Monitoring, and Maintenance Plan for Willow Mill Dam October 27, 2022

Contract No.: 68HERH21A0018

Call Order Number: 68HERH22F0082 (14.0.0 OSRTI – Regional & Headquarters
TASC/CI Support)

Technical Direction: R1 2.6.14 GE Pittsfield

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

Introduction

This document provides TASC’s comments on the GE-Pittsfield/Housatonic River – Operation, Monitoring, and Maintenance (OM&M) Plan for Willow Mill Dam. 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.

The OM&M Plan was submitted 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 and Section 4.5.3 of GE’s Final Revised Rest of River Statement of Work (Final Revised SOW) for the Rest of River (ROR) portion of the GE-Pittsfield/Housatonic River site. The procedures described in the Plan were developed in consideration of the requirements specified in the Revised Final Permit and the Final Revised SOW, as well as the procedures that Onyx Specialty Papers, Inc. (Onyx, the Dam’s owner/operator) currently follows, which conform to the Massachusetts Dam Safety Regulations set forth in 302 CMR 10.00.

Summary

The September 2022 OM&M Plan for Willow Mill Dam has ten sections:

- 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 purpose of the OM&M Plan for the Willow Mill Dam (MA00262, also known as Hurlbut Dam, and referred to as the Dam) is to describe the OM&M program for Willow Mill Dam. One objective of that program is to minimize releases of polychlorinated biphenyls (PCBs) in the sediments and surface water of the Willow Mill impoundment behind the Dam that could be prevented by appropriate inspection, monitoring and maintenance activities for the Dam.

The Dam is located on the Housatonic River in South Lee, Massachusetts. The drainage area for the Dam is approximately 243 square miles and encompasses a large portion of western Massachusetts along the New York border. The Dam is classified as an “Intermediate Size” structure based on the classification procedures of the Massachusetts Department of Conservation and Recreation, Office of Dam Safety. Onyx retained Professional Engineers to conduct the 2017 and 2022 Phase 1 Inspection/Evaluation. GE retained a Professional Engineer experienced in dam engineering and safety to prepare the OM&M Plan, conduct annual inspections, and review other dam issues on an as-needed basis.

TASC Comments

Review of the GE-Pittsfield/Housatonic River Site, Rest of River, OM&M Plan for Willow Mill Dam indicates that this document does adhere to the general requirements set forth in the Final Revised SOW (pdf pages 23-24, and 72-74) and the Revised Final Permit (pdf pages 33-36), and provides a description of general, routine Dam operations and maintenance efforts. Section 3 of the Plan describes the proposed inspection/observation program for the Dam. These inspections will include routine periodic inspections, regulatory engineering inspections, inspections after large storm events, and other special inspections. The Willow Mill Dam Emergency Action Plan (Attachment B) will be followed during emergency conditions. Section 8 of the OM&M Plan describes how GE will comply with the Final Revised SOW with respect to the Willow Mill Dam. TASC provides comments below that may be of interest to the community. The comments generally cover the potential need for the OM&M Plan to discuss how contaminated sediments will be monitored and disposed of, whether the Plan should take into account impacts from potential climate change, discussion of the impoundment and whether additional regulations need to be accounted for.

1. Given that the Willow Dam impoundment sediments have been identified as media for removal and disposal, it seems important that this Plan include a discussion or a proposed strategy describing procedures for inspections and monitoring to achieve the OM&M goal of “minimizing releases of polychlorinated biphenyls (PCBs)” (pdf page 6). Of particular importance is the understanding of how sediment removal as part of routine maintenance requirements during the planned ROR remedy efforts will be monitored to assure sediments are disposed of properly. It is possible that upstream ROR remedy efforts (such as riverbed sediment and riverbank soil removal) may release contaminated sediments downstream to the Willow Mill impoundment. During this timeframe, the Dam may require sediment removal activities as part of routine maintenance. As a result of these combined events, it seems important that this document describe how existing OM&M efforts (inspections, sampling and monitoring, headrace canal cleaning) may be adjusted to make sure that routine sediment removal activities do not accidentally dispose of contaminated materials from upstream sources.

The community may want to ask EPA if the OM&M Plan should be revised to include a discussion of the procedures necessary to inspect and monitor the Dam to ensure contaminated sediments are not released.

2. Section 4.3 of the Plan describes the methods to complete handling, management and disposal of sediments and soils. As stated within this section, “if sediment analytical testing indicates the presence of PCB concentrations that do not allow unrestricted use, GE, after consultation with the Owner/Operator, will develop and submit to EPA a plan...” This statement warrants two comments as follows:
 - Sediment sampling and analysis for PCBs should follow standard practices already in place for ROR studies. The methods for sample collection and analysis should be comparable to routine practices followed by site activities in order to ensure the collection of comparable data. This document should refer to any standard sediment sampling guide that is in place for the ROR.

- This statement indicates that a plan describing how contaminated sediment/soil will be managed and disposed of will be provided to EPA. It seems that enough information regarding contaminated materials disposal for ROR remedy activities exists that this plan could be developed prior to detection of contaminated media thereby allowing for more timely management and disposal of these materials.

The community may want to ask EPA if the OM&M Plan should include a reference to ROR standard sediment sampling and PCB analysis techniques as part of the Dam routine procedures, and if a plan for contaminated sediment disposal could be developed in the near future since ROR sediment disposal practices are well understood.

3. GE recently released the GE-Pittsfield/Housatonic River Site, Rest of River, Sustainability and Climate Adaptation Plan, which provides a conceptual understanding of how forthcoming remedy efforts will accommodate potential climate change-related conditions. It seems important that the OM&M Plan also describe possible future monitoring and inspection changes that may occur as a result of climate change effects to the Willow Dam. For instance, Section 2.0 of the OM&M Plan summarizes Housatonic River 100-year flood limit records of the high water level as 10 feet above the crest of the Dam, and the water level downstream of the Dam as 0.6 feet above the crest of the Dam (related possibly to the recorded river flow of 12,200 cubic feet per second in January 1949). These flow rates and possible increases in flooding from climate change will likely affect these crest water levels.

The community may want to ask EPA if the OM&M Plan should incorporate an evaluation of potential climate change impacts given that future monitoring and maintenance needs may vary given the potential impacts of climate change.

4. Section 8.0 of the Plan summarizes Willow Mill Dam compliance with notification requirements of the Revised Final Permit; however, the document does not mention any compliance requirements associated with the sediment removal actions for the impoundment. It seems important to reference the Revised Final Permit, the Final Revised SOW, the Performance Standards and Corrective Actions that are applicable to the Willow Mill impoundment. These future activities will likely affect the Dam's routine OM&M efforts and should be acknowledged.

The community may want to ask EPA if the OM&M Plan should include a summary of the Willow Mill impoundment remedy (Reach 7E) requirements as described in the Revised Final Permit.

5. The OM&M Plan acknowledges the state-required procedures for inspections that are essential to confirm important physical dam attributes, to identify condition and highlight problems, and to provide a basis for planning and implementing maintenance and repairs of a dam. However, the Plan does not call out or refer to standard Massachusetts Department of Environmental Protection (MassDEP) Office of Dam Safety documentation requirements as follows:

- Dam Safety Inspection Template: This is an editable document that must be used to prepare inspection reports, following field inspections to ensure compliance with the current template version. Failure to use the current template version will result in a non-compliant inspection report that may be returned to the dam owner and engineer. (Source: <https://www.mass.gov/doc/phase-1-formal-dam-safety-inspection-report-template-and-instructions/download>), and
- Inspection Checklist: This checklist, also an editable document, may be used in the field as a data collection guide to record inspection data and findings. The completed checklist is to be comprised of the data collected in the field transferred carefully into the excel spreadsheet at this link (source: <https://www.mass.gov/doc/inspection-checklist/download>).

These template resources, which are required elements to the Mass Dam Safety procedures (MassDCR 2022), should be acknowledged and referred to within the Plan’s text and the Section 9 references.

The community may want to ask EPA if the OM&M Plan should be amended to include the standard state inspection documents required as part of routine dam monitoring and inspection activities.

6. MassDEP has summarized the necessary 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. Sampling and disposal requirements are detailed in the 401 Water Quality Certification regulations. Sediment removal and disposal of less than 100 cubic yards does not require the 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 endeavors to promote consistent approvals of sediment management methods among the 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 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 OM&M Plan does not reference the need to comply with the MassDEP or Army Corps requirements.

The community may want to ask EPA if the described sediment removal actions routinely addressed as part of Dam maintenance adhere to state and/or Army Corps permitting

requirements. If so, then the Plan should call out those permit procedures and recordkeeping activities.

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>

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Massachusetts Department of Conservation and Recreation (MassDCR), Office of Dam Safety, Inspection Report Template: <https://www.mass.gov/doc/phase-1-formal-dam-safety-inspection-report-template-and-instructions/download>, and Inspection Checklist:

(<https://www.mass.gov/doc/inspection-checklist/download>). (Accessed October 2022).

Massachusetts Department of Environmental Protection (MassDEP), Bureau of Resource Protection Wetlands/Waterways Program, December 2007. Dam Removal and Wetland Regulations.

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U.S. Army Corps of Engineers, August 2005. Regulatory Guidance Letter: No. 05-04, Guidance on the Discharge of Sediments From or Through a Dam and the Breaching of Dams, for Purposes of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. <https://www.nap.usace.army.mil/Portals/39/docs/regulatory/rgls/rgl05-04.pdf>

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