

## OFFICE OF THE COMMISSIONER

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November 22, 2017

Mr. Scott Pruitt  
Administrator  
US EPA  
1200 Pennsylvania Ave., NW  
Suite 3000  
Washington, DC 20460

Dear Administrator Pruitt:

Re: Hudson River PCBs, GE request for Certificate of Completion

Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Contingency Plan (NCP), and the United States Environmental Protection Agency's (EPA)'s own guidance, EPA must deny General Electric's (GE)'s December 23, 2106 request for a Certification of Completion (COC) of the Remedial Action for the Hudson River PCBs Site. Overwhelming evidence and data demonstrates that the remedy is not protective of human health and the environment. Consequently, EPA cannot certify the PCB remedy for the Upper Hudson River as complete.

Section 122(f) of CERCLA requires that remedies selected by EPA and implemented under their oversight be protective of human health and the environment prior to issuance of a COC and "Covenants not to Sue." As explained in more detail below, EPA itself has acknowledged that this remedy is not currently protective of human health and the environment. Furthermore, recent sediment data collected by the state bolsters EPA's determination that the remedy is not currently protective. Additionally, EPA's proposed protectiveness determination, of "not currently protective, but will be protective" is in direct conflict with the agency's guidance on issuance of five-year reviews of its remedies. EPA's guidance does not allow issuance of a "will be protective" determination at a site where construction (here dredging and backfilling) has been completed. Finally, the NCP requires EPA remedies to comply with all applicable substantive requirements of state law when reconstructing habitat that was negatively affected by a remedy. EPA has failed to ensure that the habitat of New York has been adequately restored in accordance with law. The people of New York deserve better.

A decision by EPA to certify completion of the remedy will have significant consequences, including triggering the Remedial Action Consent Decree's "Covenants Not To Sue." Consequently, GE may be prematurely relieved of liability for any future work, other than monitoring and maintenance, to address the polychlorinated biphenyl (PCB) pollution of the Upper Hudson River sediments. GE would receive this release from cleanup responsibility even though their remedial actions fell short. There remains in the Upper Hudson significantly greater amounts of PCBs than EPA anticipated there would be after dredging, and habitat reconstruction has fallen well short of statutory and regulatory requirements. As described in more detail below, recent sampling by the State suggests that River Section 2 is two to three times more contaminated than EPA estimated it would be at the completion of the dredging remedy, and there are other areas of the Upper Hudson where levels of PCB left behind are well above 50 parts per million (ppm) at the surface, and likely higher levels just below the surface. If these levels of PCB were found on land they would be regulated under the Toxic Control Substance Act, and EPA would require that they be disposed of in a permitted hazardous waste landfill.

Based on these circumstances, there is significant uncertainty as to whether or not the remedy will meet the risk reduction goals set by EPA in the Record of Decision (ROD). Therefore, EPA must not approve GE's request for a COC. Granting GE's request is effectively shifting the burden to finish the cleanup onto New York State taxpayers, which is simply unacceptable. To ensure this does not happen, GE must not be released from liability until the remedy is found to be protective of human health and the environment. This decision should be an easy one for EPA, as EPA has preliminarily determined that the remedy is currently not protective of human health and the environment.

As described in the State's commentary on the recent Five-Year Review Report for the Hudson River site, the current conditions in the river are such that the remedy is not protective of human health or the environment. Much more PCB was found in the river during both project design, and project implementation, and the State has confirmed that more PCB was left behind than was intended when the remedy was selected. Despite persistent calls throughout the remediation from the State, NOAA, and other stakeholders, EPA has never considered adjusting the remedial work to take the increases in known PCB mass into account. EPA has not provided any sound scientific basis for dismissing such consideration. EPA has an obligation to consider the science, and the new data that the State has collected, before making any determination about relieving GE of its liability for the ongoing contamination of the Hudson River.

Fish PCB concentrations in the Upper Hudson River, where GE would no longer be responsible for cleanup, will remain at concentrations that pose human health and ecological risks well above the EPA acceptable risk range and well beyond the goals set forth in the ROD. EPA has admitted this in its own "Five Year Review," stating that the ultimate goals established in the ROD will not be met for at least fifty-five more years.

More importantly, the most recently measured fish PCB concentrations remain elevated such that even if “Monitored Natural Recovery” is able to achieve the reduction rates assumed by EPA, the PCB concentrations will remain well above the targeted PCB concentrations in fish that were set by EPA in the ROD and that provided the basis for selecting the dredging remedy. Simply put, EPA must not certify the remedy as complete until EPA is certain that the remedy will achieve the ROD goals. As of today, conditions are such that the opposite is true because significantly more PCB was left behind than anticipated, and the fish PCB concentrations are currently so high that the anticipated reduction rates will not allow the rapid reduction in human health and ecological risk as required by the ROD.

In 2016, the State urged EPA to develop and implement a robust monitoring plan to establish, at the appropriate spatial and temporal scale, a quantitative understanding of how much PCB remained in Upper Hudson River sediments, and how these remaining contaminated sediments would impact water and fish over time, to determine if the ROD goals for targeted reductions in fish PCB concentrations would be met. EPA thus far has not yet done so for water and fish, and has only approved a limited sampling and analysis program for PCBs in surface sediments, which has not yet been completed.

As EPA knows, in the summer of 2017, DEC completed a sampling program for surface sediments in the Upper Hudson between Fort Edward and Troy at the appropriate spatial scale to quantify the surface sediment PCB concentrations over time on a pool by pool basis – a scale closer to which fish are impacted by the remaining PCB-contaminated sediment. Although analysis of the data is still ongoing by the State, sufficient data are available to support the fact that the surface sediment PCB concentrations as they currently exist in much of the Upper Hudson are higher than anticipated by EPA at the time of remedy selection – as much as 2 to 3 times higher in River Section 2. This preliminary finding supports the State’s position it is a near certainty that the remedy will not succeed in achieving the targeted reductions in fish PCB concentrations set in the ROD. Once the data set has been validated and is complete, DEC will provide the data set to EPA.

Even if EPA were to ignore the data and the legal requirements regarding the protectiveness determination, GE has failed to complete its obligations to reconstruct habitat that it destroyed during implementation of the dredging remedy. Before it can issue a certificate of completion, EPA is obligated by law to ensure that aquatic habitat affected by the remedial program is fully reconstructed to the condition it was prior to implementing the dredging program. In the attached technical document, the State describes how under CERCLA and the NCP, EPA is required to comply with applicable, relevant and appropriate requirements (ARARs) and monitor the effectiveness of the remedy to affirm that it is meeting the goals set by the ROD, and how EPA has failed to meet these requirements.

The State recommends the following course of action for EPA:

- 1) EPA must not certify the remedy as complete at this time, given existing evidence shows that the remedy is not currently protective of human health and the environment. Rather, EPA must withhold such certification until conditions at the site justify a determination that the remedy is protective.
- 2) EPA must not certify the remedy is complete unless and until habitat is reconstructed in compliance with state and federal law.
- 3) EPA must undertake additional studies to understand the performance of the remedy in achieving the targeted reductions in fish PCB concentrations in the Upper Hudson specified in the ROD. The State has previously identified the data which needs to be gathered to evaluate the performance of the remedy, and the spatial and temporal scale upon which the data should be gathered.
- 4) EPA must update the Conceptual Site Model (CSM) to take into account the information gathered at the site since the CSM was developed in the late 1990s. This information includes:
  - the PCB sediment data gathered during design which identified the much larger PCB mass in the sediments of the Upper Hudson;
  - the PCB sediment data gathered during Phase 1 of the remedy which identified further significant PCB mass in sediment missed during design due to sampling bias;
  - the surface water and surface sediment data indicating that PCB redistribution during dredging was minimal;
  - the surface sediment data gathered by the State and GE in 2016 and 2017; and
  - the surface water and fish PCB data indicating that fish PCB concentrations are relatively insensitive to PCB mass transport from upstream, i.e., that local sediments primarily controlled local fish PCB concentrations.
- 5) EPA must reevaluate the degree to which further removal of PCB contaminated sediment in the Upper Hudson may be required to meet the targeted reductions in fish PCB concentrations identified in the ROD. EPA selected the dredging remedy in the ROD based upon the information available in the late 1990s. With an updated CSM informed by the data gathered since the ROD was issued and the growing understanding of remedy performance obtained through the monitoring work recommended by the State, EPA should be able to determine what additional remedial work is necessary to meet the ROD goals for targeted reductions in fish PCB concentrations leading to reductions in human health and ecological risk.

- 6) EPA must recommit GE to the full habitat reconstruction requirements under the ROD and the substantive requirements of New York State law. In the absence of the completion of GE's reconstruction obligations, the COC cannot lawfully be issued. Remobilization of dredging activities will also require GE to refocus its efforts on reconstruction. As outlined in the ROD, a full remedial program is not complete until habitat reconstruction is sufficiently addressed. Ultimate recovery of the Hudson River depends on the completion of this required habitat reconstruction work, which must go hand in hand with the required remedial work.

The State is also very concerned about the lack of progress by EPA on moving forward with the needed Remedial Investigation for the Lower Hudson River, south of the Troy dam (Lower River). EPA should issue the needed Order to GE to perform the work. This lower 150-mile reach of river is part of the NPL site, has PCB concentrations in fish which result in human health and ecological risks well above EPA's acceptable risk range, and the remedial work in the 40 miles of the Upper Hudson is no longer expected to result in significant reductions in fish PCB concentrations in the Lower River, particularly south of Albany. EPA must move forward with this investigation work as soon as possible.

In light of the overwhelming evidence and data that the remedy is not protective of human health and the environment, EPA legally cannot certify the PCB remedy for the Upper Hudson River as complete. EPA must instead move forward with gathering additional data and performing the evaluations necessary to determine how much further sediment removal is necessary to meet the ROD goals, ensure habitat reconstruction is performed properly, and at the same time move forward with the needed investigation work in the Lower Hudson. The State stands ready to work with and support EPA in accomplishing these tasks.

Sincerely,



Commissioner Seggos

Enclosure



## **Failures Regarding Habitat Reconstruction in the Upper Hudson River**

The following state laws and regulations are applicable, relevant and appropriate requirements (ARARs) under CERCLA and NCP, which have been substantially ignored or insufficiently incorporated into the design and execution of habitat reconstruction efforts on the Hudson River:

### ECL Article 15 (Title 5), Protection of Waters, and 6 NYCRR Part 608

Article 15 and Part 608 provide permit requirements for the types of modifications and disturbances to water resources caused by the remedial program. While permits were not required for the remedial program, the ROD requires that remedial actions comply with the substantive requirements of 6 NYCRR Part 608. Adverse effects from the remedial project that do not comply with the substantive requirements of state law include raising the river bottom surface where areas are capped, extensive rip rapping of the shoreline with no habitat amelioration, failure to replace or reconstruct many acres of wetlands consisting of submerged aquatic vegetation near the shoreline in water less than two feet deep, and filling an estimated 0.5-acre area in the vicinity of Special Area 13. EPA has not documented to DEC that the substantive requirements of permits required by these ARARs have been met or to mitigate these adverse effects. To the contrary, it is clear that the substantive requirements of these permits have not been met and as a result the habitat has been significantly impacted.

### ECL Article 24, the Freshwater Wetlands Act, and 6 NYCRR Part 663

Article 24 and Part 663 provide permit requirements for activities that alter or fill freshwater wetlands. While permits were not required for the remedial program, the ROD requires that the remedy comply with substantive requirements of 6 NYCRR 663. These regulations require in-kind replacement or mitigation that provides substantially the same or more benefits than will be lost through the activity. Compensatory mitigation for lost wetland benefits requires that the net loss of benefits be assessed and weighed according to the state regulations. The Department is unaware of any analysis demonstrating that these permit requirements have been met in the several state regulated wetlands affected by dredging.

ECL Articles 15 and 24 and their implementing regulations must be followed to ensure the protection of Hudson River aquatic resources. Substantial loss of regulated wetland area and the benefits these areas provide has resulted from the project even though practical means are available to substantially mitigate these losses. EPA has largely ignored or disregarded the Department's input with respect to meeting standards for these ARARs. Such disregard is counter to the scheme of cooperative federalism enshrined in CERCLA and endangers the success of the remedial program at the site.

## Compliance Failures

The following areas have been identified as particular areas of concern where ARARs have not been met:

### West Griffin Island Area

Most of the West Griffin Island Area is mapped by New York State as a wetland under ECL Article 24 and was dredged under the remedial program. Before dredging, this area supported a nearly continuous, dense cover of emergent and floating wetland vegetation. Approximately 22 acres of state regulated wetlands were dredged in this area. EPA's approved design for this area was not in accordance with ECL Article 24 and 6 NYCRR Part 663 substantive requirements. Dredging and backfilling departed from the approved design in a manner further inconsistent with state law, and the habitat reconstruction plan was not in accordance with state law. The result is a failed wetland that does not provide the wetland benefits lost due to dredging.

### Special Area 13

Approximately one quarter mile of shoreline along Special Area 13 was capped during construction so that roughly one-half acre of river bottom was converted to sterile rock rip rap above the water's surface, thus amounting to filling in an Article 15 6 NYCRR Part 608 navigable water with consequent loss of habitat. No mitigation has been done.

### CU-95 Support Area

The reconstruction plan for the CU-95 support area improperly delineated New York State regulated wetlands, had numerous technical shortcomings, and did not comply with the substantive requirements of 6 NYCRR Part 663. In particular, rather than restoring the site to its pre-existing natural condition, the plan called for a driveway to remain, which is an incompatible activity under the regulations.

### Coveville Cove

Portions of NYS regulated wetland SY-6 were dredged near the mouth of the Coveville Cove. As with the West Griffin Island area, post-dredging depths are not suitable for the reconstruction of wetland vegetation and the wetland benefits lost due to dredging. Moreover, EPA has not provided a mitigation plan that demonstrates reconstruction of NYS regulated wetlands.

Similar deficiencies exist across multiple additional habitat reconstruction sites on the Hudson River. The Department has provided EPA with a detailed report of conditions at each wetland reconstruction area. The report notes shortcomings at many locations, including the failure to establish appropriate elevations for the desired wetlands vegetation, and provided recommendations for improvement. While most of these areas



are small, they cumulatively add up to a substantial degradation of the wetlands resource protected by ECL Article 15 and 6 NYCRR Part 608.

#### Submerged Aquatic Vegetation Reconstruction

EPA has excluded from required reconstruction of submerged aquatic vegetation those areas that were less than two feet deep or more than eight feet deep before dredging throughout the Upper Hudson. This apparent (EPA has not responded to the Department's request for documentation allowing this practice) decision has grave consequences for New York State's aquatic resources as a substantial portion of the pre-existing habitat will be lost. Failure to reconstruct this submerged aquatic vegetation does not meet Article 15 6 NYCRR Part 608 permit standards because it is "unreasonable, uncontrolled or unnecessary damage to the natural resources of the State."

#### Reconstruction Concerns

The Department has provided additional documentation to EPA of habitat reconstruction deficiencies and has requested ameliorative responses in the past. In the vast majority of cases, however, EPA has failed to take action that would put the Hudson River on a trajectory to success. The following broad categories of concern are applicable throughout the Upper Hudson River dredging area:

#### Submerged Aquatic Vegetation Monitoring

The Department has repeatedly expressed concerns to EPA about the appropriateness of the sampling scheme and locations for submerged aquatic vegetation. In spite of multiple requests, EPA has not provided details of the statistical design so that the Department might evaluate its adequacy.

#### Habitat Area Delineation

The Department has requested that EPA determine the actual area of successfully reconstructed submerged aquatic vegetation and riverine fringing wetlands. Knowing the amount of habitat actually reconstructed is critical in determining the extent to which habitats existing before dredging have been replaced. EPA has not responded to these requests.

#### Success Criteria for Habitat Reconstruction

The Department has a long record of pointing out where EPA's criteria for successful habitat reconstruction are inadequate in scope and rigor. In light of EPA's failure to respond productively to these concerns, the State expects to do its own evaluation of success.

## **Conclusion**

The EPA must fulfill its obligations under federal and state law to ensure the reconstruction of habitat destroyed through remedial actions on the Hudson River. EPA must identify needed reconstruction and commit to performing it. A certificate of completion for the remedy cannot be issued unless and until all required habitat reconstruction is successful. The Department is prepared and available to work with EPA on these activities.