March 25, 2005

United States Environmental Protection Agency  
Office of Ecosystem Protection  
One Congress Street, Suite 1100  
Boston, MA 02114-2023  
Attention: Brian Pitt  

RE: GE National Pollution Discharge Elimination System Draft Permit  

Public notice number: MA-012-05  
Permit Number: MA0003891 General Electric Company, Pittsfield Facility  

Dear Mr. Pitt:

The Environmental Protection Agency (EPA) settlement/consent decree set the stage for the cleanup of two miles of the Housatonic River. Decisions were made without any affected citizens allowed into the negotiations. EPA made promises at public meetings that they would protect the citizens interests. In motions to intervene in the consent decree, arguments were made that the EPA did not sufficiently address the pathways of migration of polychlorinated biphenyls (PCBs) from the General Electric Company (GE) facility, making recontamination of the river a likely possibility. EPA dismissed the citizens’ claims and told the community that reopeners in the consent decree could be utilized and enforcement actions could be taken if new information became available. These would protect the public and the river from more PCB releases.

The data presented in the National Pollution Discharge Elimination System (NPDES) Draft Permit shows that EPA knew that these releases were taking place, did not act on them and let these PCBs continue to leak into the river. The EPA negotiated that a large part of the cleanup would be paid by the public but failed to keep their promises to the community. In 2001 at the monthly Citizen Coordinating Committee (CCC) meeting, EPA was asked directly if they have storm water data. The EPA responded that no such data exists.

In 2001 a call came in from Al Bertelli, Housatonic River Initiative (HRI) vice president and Lakewood river steward, that an oil slick could be seen on the river during a torrential rainstorm. By the time HRI organized the sampling event, the oil slick was no longer visible. HRI then sampled the
storm drain during the storm event and a certified lab in Connecticut confirmed the existence of 18 ppb PCB in the water. EPA immediately dismissed the idea that the stormwater was contaminated and blamed it on an uncovered pile of contaminated soil washing into the river. Data in the Draft Permit indicates that EPA was wrong and indeed PCBs are flowing into the river during storm events.

The GE NPDES Draft Permit is insufficient to protect the East Branch of the Housatonic River from being recontaminated with PCBs. According to GE’s own data, every outfall that they have been testing is exceeding EPA’s PCB water quality criteria. GE and EPA are not even monitoring several discharge pipes that also go into the East Branch of the Housatonic River.

These are releases of toxic materials from a hybrid RCRA/Superfund site (EPA’s words) governed by the consent decree. Test results from 2001-2003 show PCB levels of more than 900 times the chronic water quality criterion level and 200,000 times the human health water quality criterion levels being released into the Housatonic River. All of these discharges are upriver of the river remediation. PCBs are being detected in the sediments of the remediated portion of the river. The remediation of the river is in jeopardy.

EPA needs enough data to be able to set numerical limits. Even though PCB standards are being exceeded, EPA included few numerical limits in the new Draft Permit. The EPA claims that the Housatonic is one of the most sampled rivers in the country. EPA did not require enough sampling in the previous permit to be able to characterize the amounts of PCBs being discharged. They also have not done enough sampling to characterize the PCB load from the GE facility. This should have been done as part of the CERCLA enforcement action. Why is the EPA reducing the frequency of sampling instead of increasing it?

Anti backsliding should be enforced especially with the amount of contamination and complexity of the GE facility. This permit should require an immediate assessment of these storm drains and require that remedies to stop the migration of PCBs from the site be implemented as soon as possible.

The monitoring for PCBs of the pipes with continuous flows should be daily. The monitoring for PCBs of the pipes that only carry water during storm events should be four times per hour on storm events starting at first flow and continuing until there is no more flow. For pipes that only carry water during storm events, the flow and the PCB levels will change throughout the event. The water may start with no PCBs, increase steadily up to a given point, then decrease. Or, it may have a strong blip in the graph if there is an area that
has lots of PCBs that flushes through at a given time. The only way to know is to sample frequently during a rain event. Taking one grab sample can be grossly misleading. Once a number of storms have been monitored for each pipe, the events can be characterized to figure out when the pollutant load comes through each pipe. The data should be compiled and PCB loading should be stated in weekly, monthly and yearly loading. Projections of future PCB loadings should be analyzed to present estimates of further PCB contamination of the remediated river.

GE should determine the amount of PCs entering the receiving waters from all the sources combined per year. This should include data from Yard Drains (YD), Overland Flow (OF) and Non-Point sources (NP). This entire site is contaminated and thus could be considered in and of itself a point source. The data from outfall 005 alone shows that we can measure yearly loads of PCBs in pounds instead of parts per billion. When all discharges from storm drains are added together the numbers surely indicate a compromised cleanup.

Sampling of the outfalls within 30 minutes of the storm event is totally inadequate and cannot possibly provide an accurate assessment of PCB loading during the entire storm event at the 256-acre facility. Storm events can be quick or take several days. At times of low groundwater level, it may take considerably longer than 30 minutes for groundwater to rise to a level where it is discharged through the stormwater system. PCB’s at various depths, soil types, cracks in the bedrock, and storm flow and velocity all contribute to changing PCB loading. This monitoring should take place immediately and even in the absence of a new permit.

GE should account for and provide fully engineering drawings and maps of all pipes under their property. GE should provide current and historical maps of pipes. In particular, the "perforated sub drain lines" that ran throughout the site shown on a map located in Pittsfield Engineering and hand-labeled "GE Drain Mains Main Plant-Plant Drainage System" in the lower right corner.

Many of the existing pipes travel through areas of extreme contamination such as underground plumes, highly contaminated soils, and Hill 78…the highly toxic PCB landfill. Underground pipes, even those that are no longer used and have been capped, can act as “preferential pathways” for contaminants to find their way to a water body. Water will flow more easily along the pipe and therefore the pipes act as preferential pathways for the water. Pipes should be tested at their outfalls, but not just the water coming out of the pipe, but also any water that may have followed the pipe as a preferential pathway.
Accounting for what GE has done with underground structures on their site, GE should give a complete description of how all abandoned pipes, floor drains, liquid waste storage areas, underground storage tanks, tunnels, etc. were demolished, filled, removed, or left in place.

GE should videotape all pipes that run through the site that have an outfall into one of the water bodies to show the condition of the pipe and that there are no unknown connections on the site. This includes city stormwater pipes where they run through GE property. Any ditches from the site should be considered as outflows from the facility.

Inflow and infiltration (I&I) requirements have been included in recent NPDES permits. This permit does not require that I&I be assessed and reduced to meet current goals. This permit should address this and require a timely workplan to eliminate I&I.

It is usually a good idea to promote sheetflow and infiltration, but in this case they may also carry PCB and other contaminant loading from the facility into the river. GE needs to be able to measure the contaminants carried by the sheet flow and infiltration at the locations where they know it is getting into the river. If GE wants to disconnect a pipe and instead use sheet flow or infiltration, they should first have to prove that this will result in less contaminants being carried into the river.

Limits for stormdrains and yard drains should be implemented for Total Suspended Solids (TSS) as data indicates large quantities are entering the river. It is well known that PCBs will attach to soil particles and could be transported with the TSS into the river.

There are several other pipes that GE should be monitoring. GE should monitor the pipe that has its outfall into the ditch next to Bobby Hudpucker’s Restaurant both for flow and for contaminants. This pipe runs through GE’s property and had several connections from the GE plant. It also carried storm water runoff from the GE site. It also carries water from an area that at least one worker claims was used to dump GE waste water off Benedict Road. The potential for this pipe to carry PCB contamination is very high. The only way to know what is getting into the river is to monitor at the outfall. This pipe should be monitored continuously for flow and four times per hour during storm event flows to determine the amount of contamination. If this pipe flows continuously it should be monitored daily IN ADDITION to the monitoring during a storm event.
According to the Source Characterization Study, surface water and sediment contamination in the swales from Hill 78 are discharging into the river, as is groundwater contamination from Hill 78 area. Again, this should be quantified and stopped. This swale leads into a 42" pipe that has its outfall just north of East Street opposite Commercial Street both for flow and for contaminants. The outflow from this pipe then flows into a pipe under East Street, under part of Commercial Street and empties into the East Branch of the Housatonic River. From the research we have done, it appears GE put in this pipe. In that this pipe also carries the storm water runoff from Hill 78's swale, the potential for this pipe to carry PCB contamination is very high. The only way to know what is getting into the river is to monitor at the outfall. This pipe should be monitored continuously for flow and four times per hour during storm event flows to determine the amount of contamination.

According to the Source Characterization Study, page 1-6, Unkamet Brook bisects the old GE landfill and flows directly to the Housatonic River. Also, according to that Study, Table 5-1, groundwater contamination and contaminated sediment in Unkamet Brook are flowing into the river above the remediated section of the river. When Unkamet Brook leaves the GE site, it flows under Merrill Road through a pipe. This pipe should be monitored for both flow and contaminants. This would show what is getting off the GE site through this pipe, and presumably getting into the East Branch of the Housatonic River. This should be done immediately even though the whole Unkamet Brook area is being studied. We know there are PCBs there. We need to know how much is getting into the river now!

According to the Source Characterization Study, outfall water and sediment contamination from Silver Lake as well as groundwater contamination is flowing into the river. The Silver Lake outfall goes through a pipe under East Street. This pipe should be monitored both for flow and for contaminants. Again, this would show what is getting into the East Branch of the Housatonic River above the remediation area. This is absolutely necessary given the proposed remediation of Silver Lake. It is inexcusable that this outflow has not been monitored for either flow or contaminants. When asked at a public meeting, the claim was that they could not monitor the flow from Silver Lake because of the design of the outfall. That is absurd. Monitoring the pipe will make it easy.

pH levels should have limits set. Monitoring data showed pH levels in some of the outfalls are excessive in both directions. This should not be allowed.

What are the by products of the GE plastics operations and what are they being
tested for?

GE should monitor the wells at Pittsfield Generating Co. All of these wells should be monitored monthly. Data should include "flow" (the quantity of water used) as well as PCB and other contaminant levels.

All monitoring data must be made public. This eliminates the possibility of monitoring several times in one day and only submitting the one(s) that shows the least contamination.

According to a former GE worker, contaminated water was pumped to a reservoir off Benedict Road. Obviously this waterbody should be tested, but also water from that area runs through pipes that cross the current GE property. This water should be tested NOW by GE, but when the city stormwater is separated from the GE site, this water must still be tested to determine where the PCBs actually come from.

Injection wells were used to disposed of contaminated liquids possibly hundreds of feet below ground in the Unkamet Brook area. There should be deep monitoring wells to test for contaminants in this area.

GE's previous NPDES permit expired in February 1997. The fact that this permit has lapsed for eight years so far, when this is a RCRA/Superfund hybrid site puts human health and the environment at risk. It is clear that this permit cannot address all of the issues associated with releases of PCBs from the General Electric Facility. EPA has stated that this permit only tries to assess and control releases from the GE stormwater system. This permit fails to meet this goal.

Releases of PCBs from sheetflow, city drains, and contaminated business properties are not addressed. EPA has not addressed these issues even though they have committed huge amounts of taxpayer money to clean the river to a performance standard of 1ppm PCB.

The data suggests that soon the recontamination will exceed these levels. EPA needs to address these issue in a holistic fashion to insure all PCB sources are cutoff to the river. Citizen groups previously argued that the entire facility, contaminated businesses and oxbows need to be cut off from interacting with the river. A slurry ditch was suggested to insure all migrating groundwater and plumes were effectively cutoff from the river. EPA dismissed this and instead did nothing to address this.
EPA has issued its draft National Pollution Discharge Elimination System Draft Permit eight years after the previous permit expired. During this time, testing shows that GE has still been discharging PCBs into the receiving waters in amounts that sometimes exceed chronic water quality criterion by over 900 times and human health water quality criterion by 200,000 times. The renewed permit for this site must strive to fulfill the intent of the NPDES program to achieve, "the restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters". The prevention of further releases of PCBs and other pollutants to the Housatonic River, Unkamet Brook and Silver Lake certainly fits this mandate.

Additional treatment capacity must be required immediately not just for the outfalls currently covered in this draft permit, but also to treat the water from Unkamet Brook and Silver Lake. The outfalls of both these water bodies are known to have PCBs, but they are neither being monitored nor treated. These outfalls should be monitored while new treatment facilities are immediately built.

As it is now confirmed that PCBs are migrating off of the facility, EPA needs to take immediate action to reverse this situation. The NPDES permit alone cannot address this problem. While millions continue to be spent on cleaning the downriver portion, EPA has failed to address this severe problem. Reopeners to the consent decree or enforcement action due to new information seem to be empty promises to the community. Without strong action, the river will again be compromised and this consent decree and the EPA enforcement actions will go down in history as a waste of taxpayer money and inability of the EPA to meet the mandates of the Clean Water Act.

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Attachments:
1. Boston Globe article; March 3, 2005
   Recontamination feared for river getting cleanup
   by Beth Daley

2. Declaration of Independence from PCBs
   http://www.pcbcongress.net/

3. GE Drain Mains Main Plant–Plant Drainage System Map (perforated subdrain
   line);
   ? March 1, 1985

4. Comments of Inter–Industry Analytical Group and WET Coalition on 2004
   Draft Report to Congress on the Costs and Benefits of Federal Regulation
   69 Fed. Reg. 7987
   (February 20, 2004); May 20, 2004

5. Water Quality Criterion Chart; March 25, 2005; compiled by BEAT