



*B.E.A.T. Working to protect the environment of Berkshire County*

## **Public hearing March 23, 2005**

### **GE National Pollution Discharge Elimination System Draft Permit**

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 monitoring is exceeding EPA PCB water quality standards. In addition, there are several discharge pipes that also go into the East Branch of the Housatonic River that are not being monitored. All these pipes are or could be releasing toxic materials from a RCRA site into the Housatonic River. All of these discharges are upstream of the river remediation area. All ready PCBs are being detected in the sediments of the remediated portion of the river. The river is being recontaminated and if these discharges are not eliminated the remediation will be in jeopardy.

#### **1) 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 permit. I believe this is because EPA did not require enough sampling in the previous permit to be able to characterize the amounts of PCBs being discharged.

#### **2) Flow monitoring**

This permit should require continuous flow monitoring of all pipes. This can be done mechanically and is not an undue burden. It is essential to being able to calculate how much PCB is getting into the river.

#### **3) Contaminant monitoring protocols**

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 through out 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 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 and monitoring can be scaled back to capture the most likely load times for each pipe.

#### **4) Additional pipes to be monitored.**

There are several other pipes that I know of that GE should be monitoring.

1. 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.
2. 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. I believe, 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 I 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.
3. 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!
4. 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.

##### **5) Preferential pathways.**

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 waterbody. 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”.

**6) Accounting of current and historical pipes.**

GE should account for and map all pipes under their property. GE should provide current and historical maps of pipes and account for all of them. In particular - the “perforated sub drain lines” that ran throughout the site shown on a map located in Pittsfield Engineering and hand labeled “GE DRAINS MAINS MAIN PLANT” and titled “PLANT DRAINAGE SYSTEM” in the lower right corner.

**7) Determining the condition and connections of all pipes.**

GE should videotape all pipes that run through the site that have an outfall into one of the waterbodies 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.

**8) 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.

**9) Ditches**

Any ditches from the site should be considered as outflows from the facility.

**10) Sheetflow & Infiltration**

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 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.

**11) Total PCBs entering the river.**

GE should determine the amount of PCBs 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 source (NP). This entire site is contaminated and thus could be considered in and of itself a point source.

**12) 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.

**13) What are the by products of the GE plastics operations and are they being tested for?**

**14) GE should monitor the wells at Pittsfield Generating Co.**

All these wells should be monitored monthly. Data should include “flow” (the quantity of water used) as well as PCB and other contaminant levels.

**15) All monitoring data must be made public.**

This eliminates the possibility of monitoring several times in one day and only submitting the one that shows the least contamination.

**16) Reservoir off Benedict Road**

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.

**17) Injection wells under Unkamet Brook area**

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.

**18) Permit expiration and the Consent Decree**

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 site puts human health and the environment at risk. This entire permit should be a reopener to the Consent Decree so that all the contamination entering the Housatonic River above the current remediation area is dealt with NOW, not eight years from now.

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