

Housatonic Environmental Action League, Inc.

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COMMENTS PRESENTED JANUARY 13, 2004 TO THE (GE)/HOUSATONIC RIVER SITE, REST OF RIVER ECOLOGICAL RISK ASSESSMENT PEER REVIEW PANEL MEETING, CRANWELL RESORT, LENOX, MA

Good afternoon. My name is Judy Herkimer and I am a founding member and current director of HEAL. The Housatonic Environmental Action League, Inc. (HEAL) is a 501(c)(3) non-profit, broad-based grassroots environmental advocacy coalition that includes individuals and organizations from the tri-state area who are dedicated to the protection of the Housatonic River and its watershed. Our non-partisan all-volunteer organization has been actively involved with the Environmental Protection Agency's (EPA) Housatonic River Project as it relates to General Electric's (GE) polychlorinated biphenyl (PCB) contamination of the river system. In 1996, a group of citizens were concerned that the Connecticut region of the PCB-contaminated river was not being adequately addressed. To our surprise, our research uncovered that the longstanding "river protection" group in CT had, for years, been accepting tens of thousands of dollars from GE. With the help of Tim Gray from the Housatonic River Initiative (HRI), HEAL was formed and we continue to be a vocal proponent for removal and destruction of GE's PCBs from the entire Housatonic River watershed.

We fully support and endorse Dr. Peter deFur's comments and thank him for his expert advice and guidance to multiple stakeholders during this process. HEAL appreciates the opportunity afforded our organization to have provided Dr. deFur with input throughout this process. As the sole site recipient of EPA's Technical Assistance Grant (TAG), HRI, under the invaluable leadership of Executive Director Tim Gray, has again demonstrated their expertise in the contracting Dr. deFur for his review of both the Human Health Risk Assessment (HHRA) and the Ecological Risk Assessment (EcoRA). The Consent Decree's Appendix J is certainly suspect in terms of its legal integrity. We are dismayed that SRA International, Inc. has participated in its enforcement by preventing HEAL and HRI from donating 50% of our time allotments to Dr. deFur.

Although it is clearly evident that considerable work went into EPA's EcoRA under the coordination of Susan Svirsky and her team, we believe it has some serious deficits that we request you consider during your deliberations.

Healthy Populations vs Impaired Individuals

Much of the data in the EcoRA indicates viable reproducing populations of multiple species in the Primary Study Area (PSA) and into CT. EPA's findings of reproducing populations has resulted in risk designations that are not truly representational of the impacted individuals within a group. The current EPA risk assessment protocol that relies solely on evidence of reproducing populations as an indicator of the "health" of a species

is inadequate and, we believe, incorrect in the presence of PCBs and other Contaminates of Concern (COCs) dumped into the Housatonic River watershed by General Electric. In CT, we have found this to be most dramatically demonstrated in the fish populations. Multiple HEAL members and other CT stakeholders continue to observe fish with gross external abnormalities in various species (e.g. body lesions, gill sores and anatomical anomalies). Toxins that do not overtly lead to the immediate demise of a contaminated organism and allows continued, yet impaired, reproduction, do not fit within the EPA's ecological risk assessment framework. Additional attention in the data to individuals within a population is indicated.

Mink and Otter

IF THE PISCIVOROUS MINK AND OTTER POPULATIONS ARE EXPERIENCING SEVERE HEALTH EFFECTS AND CONSIDERED AT HIGH RISK IN A SYSTEM, HOW CAN FISH IN THAT SAME SYSTEM BE CONSIDERED AT LITTLE TO NO OR LOW RISK??

Cultural Practices and Archeological Resources

HEAL strongly requests that a cultural and archeological resources assessment be completed and incorporated into the EcoRA. We could find no reference in either the EcoRA or HHRA pertaining to those who are no longer being able to practice their traditional food practices. There are no provisions for injury and risk related to those whose religious practices have been impacted as a result of the contaminated watershed. First Nation's people do not separate themselves from the river or anything that is found in the system. As an example, rocks are taken from the river, put into a fire until they glow and then brought into a closed "sweat" lodge that is filled with people where water is poured on them to create copious amounts of steam. If PCBs are present on/in those rocks, what happens to the toxin in the presence of extreme heating and subsequent dousing with river water?

Public Comment Period

This study and the HHRA took researchers/scientists over five years to complete. It is unreasonable to expect that non-expert lay stakeholders can read and provide written comments on these documents in only a few weeks' window. This is an ongoing issue that EPA needs to address in its public participation plans and take into consideration during its negotiations with multi-national corporate polluters and their cadre of lawyers.

CT Waterfowl

There have been no duck sampling in CT despite the duck tissue in MA found to have the highest levels of PCBs ever seen. When EPA released their duck data, MA added waterfowl species to their consumption advisories. We found press articles from Maryland and Delaware whose public health officials voiced concern about the migratory species being consumed in their respective states. CT officials have done everything to ignore this issue. HEAL has been told repeatedly by the agencies (including EPA) that

the contaminated duck are "MA ducks" and that the CT Department of Environmental Protection (DEP) and CT Department of Public Health (DPH) have no plans to add waterfowl to consumption advisories. When we inquired if any waterfowl have been tested, we were told they have been unable to catch any specimens. HEAL requests additional waterfowl sampling in CT to determine risk and potentially adding species to consumption advisories.

Amphibians

Unlike MA, frog and turtle are not included in the CT consumption advisories. **A CT DEP EMPLOYEE WAS VIDEOTAPED ON TWO OCCASIONS AT PUBLIC MEETINGS STATING THAT BOTH HE PERSONALLY KNEW OF NO ONE IN HIS MANY DECADES WITH THE AGENCY, AND THAT DEP'S FIELD SURVEYS INDICATED THAT NO ONE ATE FROG OR TURTLE FROM THE RIVER.**

HEAL is aware of numerous populations that consume amphibians (including snake) from the Housatonic River. We continue to request further sampling of at least frog and turtle in CT to determine risk and potentially adding species to advisories.

PCB Risk Thresholds

Researchers (including Drs. Deborah Rice and Susan Schantz) have clearly demonstrated reproducible adverse effects to living tissue when exposed to PCBs in levels as low as parts per trillion. We believe it is past due that the reduction of acceptable threshold/response levels be instituted. There needs to be some form of consideration to assign higher values of risk in the presence of uncertainties, averaging, "toxic soups" with multiple contaminants, lack of data and incomplete data.

Volatilization

Inadequate attention has been granted to the volatilization of PCBs throughout the river system in light of compelling emerging research that indicates this as a definite pathway of exposure to both nearby and remote organisms.

CT Data Integrity

A major portion of the data for CT Rest of River reaches is historic and generated by GE. We do not trust GE's data and do not believe the RP's data should be allowed in the absence of parallel sampling by EPA. A glaring example of GE's data is found in the Stewart Report that states PCB levels in sediments ranged from less than 1 to 210 ppm and appeared to be confined to the upper 12 inches of the sediment. It went on to estimate that a total of 39,000 pounds of PCBs remained in the river system. Sediment and well samples have been found to be >600,000 ppm and former GE statisticians have estimated 1,500,000 pounds of PCBs were dumped into the river and communities. Lack of data or inadequate data does not result in lack of risk.

Floodplain? What Floodplain?

For years HEAL has called for additional baseline testing of the floodplain in CT and additional deep core sampling behind the CT dams to determine the full extent of PCB contamination and to clearly define any hot spots in the system. **WE HAVE VIDEOTAPE FROM MULTIPLE PUBLIC MEETINGS OF THE SAME CT DEP STAFFER MENTIONED ABOVE STATING THAT THERE IS NO FLOODPLAIN IN THE CT SECTION OF THE HOUSATONIC RIVER.**

Additional Studies, Additional Species

No human, agricultural or wildlife adipose sampling, thyroid function studies, other endocrine system testing, ovo/embryological testing, genetic testing, immunological testing, in-depth reproductive studies, behavioral testing, lactating mammalian analysis, parenting and coupling studies were completed in this system that is heavily contaminated with PCBs, a known endocrine disruptor. Please consider recommending further testing that includes longitudinal studies (hopefully without interrupting the forward movement of a Rest of River corrective measures report) in order to ascertain the more subtle and discrete effects that are statistically significant.

Also, HEAL is concerned that multiple species have been neglected in consideration and testing including bear (CT's population is burgeoning with 17 cubs born last season), bobcat, coyote, fox (red and gray), owl, fisher, eel (no longer found in the river), moose (infrequent visitor but predicted to return), domestic animals, goat, Cooper's hawk, Goshawk, kestrel (2003 decline), migratory warblers and inadequate/incomplete bald eagle studies.

Precautionary Principle

"When an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof." (Excerpted from the Wingspread Consensus Statement on the Precautionary Principle, 1998.)

HEAL fully supports and endorses the Precautionary Principle and urges the EcoRA PR panel to incorporate it into their discussions and findings.

Natural Attenuation Myth

The fiction continues that areas left untouched will improve naturally. PCBs do not degrade naturally and will persist for centuries. Dispersal by air will harm people in northern latitudes (Alaska, northern Canada, Scandinavia, etc.) where PCBs hit the cold air, settle out and concentrate in local fish and meat. This is not "recovery" but merely a shifting of health risks to other regions. **GE'S MANTRA THAT THE RIVER IS AND WILL CONTINUE TO CLEAN ITSELF DESERVES NO CREDENCE.**

PCB Congress and *The Declaration of Independence From PCBs*

HEAL along with the Housatonic River Initiative, Inc. organized the first PCB Congress that took place in March, 2003 at Fairfield University in CT. The Declaration of Independence from PCBs was written, ratified and signed by numerous individuals and organizations throughout the world who are dealing with PCB-contaminated sites. We encourage the EcoRA PR panel and EPA to read and incorporated the Declaration into their recommendations and considerations.

Laboratory Investigation

A recent newspaper article indicates that an environmental laboratory at the University of Connecticut is under investigation by the CT Attorney General's office related to fraudulent research and data. The CT Department of Environmental Protection has historically used this lab. Until such time as it can be determined that the integrity of the results for all Housatonic River specimens processed in this lab can be verified, all CT DEP data should not be considered viable. The following is a response received to HEAL's inquiry regarding this important issue:

"There are several labs under the UConn Environmental Research Institute (ERI). The lab that was the primary subject of the recent investigation was the Organics Laboratory, specifically the Volatile Organic Compounds (VOCs) section. PCBs are not classified as VOCs and therefore no PCB samples were processed by this lab. Both the UConn Ad Hoc Investigative Committee for Alleged Scientific Misconduct at ERI and the CT Attorney General's Office have recently issued final and interim reports, respectively, on the investigation. The UConn report found that misconduct had occurred in the VOC lab and made a number of recommendations including: that a thorough audit be performed of all data generated by the Organics Laboratory - Volatile Organic Compounds section for the period in question; and that an independent preliminary examination of data generated by other ERI divisions be conducted.

The UConn ERI lab that works with semi-volatile organic compounds has processed a limited number of PCB fish tissue "split samples", mostly for quality assurance purposes, as recently as 2000. The other half of the "split samples" were processed by the primary researchers which were the CT Department of Public Health lab and/or The Academy of Natural Sciences of Philadelphia. At this time, CT DEP believes the data produced to be acceptable, especially since we are able to compare it with "split samples" analyzed by other facilities."

Leaving the PCB-contaminated material in and around the river in MA and CT will not adequately reduce the risk to human health or to the environment. Although preventing further contamination through monitoring (e.g. vast underground toxic plumes, resuspension of buried contaminated sediment) is vitally important, it is woefully inadequate. The wildlife, the river, and the people of the Housatonic River watershed deserve and demand better - we want the Housatonic River returned to its pre-General Electric state. Until the PCBs are removed and destroyed, this site can only be considered a "PCB containment area" and it will continue to be General Electric's personal toxic waste dump. The PCBs will continue to be available for bio-uptake in not only the immediate watershed area, but throughout the globe. General Electric has demonstrated through their PCB-containment project in the first half-mile in Pittsfield that it can be done...and done well. HEAL asks this distinguished Peer Review Panel to undertake your deliberations and reach your findings in a wholistic and global fashion with an

understanding of the array of variables that impact everyone. The limitations of EPA, other agencies and Risk Assessment as a science has been radically affected by multinational corporate polluter lobbying dollars. Universities, laboratories, (pseudo) environmental advocacy groups, special interest groups and politicians have been well paid by those same corporations. Entire unethical state-level governments like the current Connecticut governor corruption scandal have allowed contaminated sites to fester. In every step of this process, we request that you ask yourself if your decisions are:

- protecting the next seven generations
- incorporating the Precautionary Principle
- helping to create a paradigm shift towards a real and tangible healing and remediation of the Housatonic River
- providing General Electric with the clear and objective information needed to make more responsible, ethical and humane corporate decisions
- providing stakeholders with clear conclusions and simple language to assist them with their choices
- providing the indefatigable EPA staffers with the scientific input they need to implement what we consider to be the only solution... the comprehensive removal and treatment of PCBs throughout the entire length of the Housatonic River and its watershed.

Thank you for listening and for the opportunity to comment on EPA's Ecological Risk Assessment.

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RE: Continuation of Comments from January 13th to the Ecological Risk Assessment
Peer Review Panel, Lenox, MA

- Trout stocked in the Connecticut section of the Housatonic River in the area known as the "Trout Management Area" have measurable levels of PCBs after living two weeks in the river system.
- There are four major bridge replacements or new construction either underway or proposed at various points along the Connecticut section of the river. HEAL has contacted the Connecticut Department of Transportation who have expressed a willingness to speak with EPA to discuss the potential for allowing sampling of deep core sediments where the bridge supports will be placed. Stevenson Dam will have an entirely new four-lane bridge built over Lake Zoar and the bridge supports will be placed directly behind the dam where a major portion of PCBs are suspected to be present. HEAL believes this presents an invaluable opportunity for EPA to obtain deep-core samples in a timely and economical fashion.
- During the public comment period of the Consent Decree, Northeast Generating Company wrote a detailed and disturbing letter outlining their concerns for the load of General Electric PCBs found in the accumulated sediments directly behind their multiple dams at the various hydroelectric facilities. The hydroelectric facilities are currently undergoing their fifty-year relicensure review by the Federal Energy Regulatory Commission. FERC can mandate Northeast Generating to dredge behind any or all dams. Better characterization of sediment hot spots behind the dams is necessary.
- A professor from Wesleyan University who has done extensive research on the mercury contamination in the Housatonic River has proposed to float a barge behind Stevenson Dam in order to obtain deep-core sediment samples for his mercury research. He has agreed to split-sample with HEAL or EPA for PCB analysis. HEAL encourages EPA to take advantage of this offer.
- A recent study of Great Lakes' fish shows that the downward trend of PCB-levels in fish tissue has now stalled. HEAL is concerned that the downward trend of PCBs found in Connecticut fish will plateau similar to the Great Lakes' fish. Any level of contaminated fish tissue indicates bioavailability of existing PCBs in the system. Even with this downward trend, fish consumption advisories remain intact and evidence of external anomalies continues.

- HEAL believes there has been inadequate characterization to mollusks (e.g., freshwater clams) in the Connecticut section. We request the Peer Review Panel to recommend testing of mollusks.
- My husband and I reside in an 800-acre wildlife preserve created by my husband's grandfather in 1900. Our review of the historical documents of the preserve combined with interviews of family elders clearly shows a decline in species, such as mink, otter, weasel, raptors (including eagle), martin, fisher, waterfowl, and wading birds. EPA has not utilized invaluable historical resources, such as this preserve's records, the Schaghticoke Indian Tribe, newspaper libraries, community elders and other document repositories.

Thank you for considering these additional comments in your deliberations.

Respectfully submitted,

Judith A. Herkimer, Director