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QUESTIONS AND ANSWERS

Public Health Assessment: General Electric Site – Housatonic River
Pittsfield, Lenox, Lee, Stockbridge, Great Barrington, and Sheffield,
Berkshire County, Massachusetts

Public Comment Release
Comment Period Ends: December 31, 2007

Q: Why did the Massachusetts Department of Public Health (MDPH) conduct a Public Health Assessment for the Housatonic River?

A: The MDPH has a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR) to conduct public health assessments at National Priorities List (NPL) or other sites in Massachusetts. When a site is proposed for listing, ATSDR is required by federal law to conduct a public health assessment for the site. On September 25, 1997, as announced in the Federal Register, Volume 26, Number 186, the General Electric (GE) site was proposed by the U.S. Environmental Protection Agency (EPA) for the NPL. The Massachusetts portion of the Housatonic River is one of 10 areas that compose the GE site.

Q: What portions of the Housatonic River were evaluated?

A: The Massachusetts portion of the Housatonic River site starts at the East Branch of the River adjacent to the GE Facility in Pittsfield and continues on the main stem of the Housatonic River to the Connecticut Border in Sheffield. The Housatonic River passes through the towns of Pittsfield, Lenox, Lee, Stockbridge, Great Barrington, and Sheffield. For the purposes of conducting this Public Health Assessment, MDPH divided the Housatonic River into nine reaches based on previous segmentations by the EPA and GE.

Q: What environmental data has been reviewed in this public health assessment?

A: For each of the nine reaches, MDPH reviewed available environmental data including ambient air, soil, sediment, surface water, and biota (e.g. fish and wildlife) for the Housatonic River. Opportunities for exposure to polychlorinated biphenyls (PCBs) and

other contaminants associated with groundwater plumes entering the Housatonic River from the individual GE Facility and data from residential fill properties that abut the Housatonic River sites were also considered.

Q: Where did the environmental data come from?

A: Consultants for both GE (BBL) and EPA (Weston) sampled soil and sediment along the Housatonic River over the past two decades for different purposes. In order to take into account all available information, this public health assessment combined all consultant data as well as data from residential fill properties that abut the Housatonic River and used average concentrations reach-wide for surface soil and sediment in order to come up with exposure estimates.

Q: What exposure pathways were evaluated as part of this public health assessment?

A: Using available environmental data, possible opportunities for exposure through consumption of garden produce, agricultural products, drinking water, fish and waterfowl, contact with surface soil and sediment, and indoor air and dust were considered for the past, present, and future. The main contaminants of concern in the Housatonic River are PCBs and dioxins/furans in fish tissue and waterfowl tissue; PCBs and to a lesser extent dioxins/furans and polycyclic aromatic hydrocarbons (PAHs) are also of concern in soils along the Housatonic River and sediments from the Housatonic River.

Q: What are the health/exposure concerns related to contamination in the Housatonic River?

A: Currently PCBs considerably outweigh the concerns from other contaminants that are present in the various environmental media. Health concerns from opportunities for exposure to PCBs and dioxin/furans through fish and waterfowl consumption from the Housatonic River pose a “Public Health Hazard.” Also, the presence of contaminants, particularly PCBs, in surface soils and surface sediments may have also contributed somewhat to health concerns in some Reaches in the past (i.e., Reaches 3 and 4 prior to remediation) and currently (i.e., the parts of Reach 4 that were not remediated at the time this assessment was completed and Reaches 5 and 6). Thus, MDPH issued recommendations which are outlined in this public health assessment in order to avoid exposures that could result in adverse health effects.

Q: What MDPH recommendations are currently in place?

A: PCBs and/or dioxin/furan contamination in the Housatonic River is and was a “Public Health Hazard” and the MDPH currently has advisories in place which state:

- The general public should not consume any fish, frogs, or turtles from the Housatonic River and fish taken from feeder streams to the Housatonic River should be trimmed of fatty tissue prior to cooking. Fish, frogs and turtles containing PCBs in their

- tissues at levels of health concern can be found in the Housatonic River and its tributaries from the Center Pond Dam in Dalton to the Connecticut border.
- The general public should refrain from eating all mallards and wood ducks from the Housatonic River and its impoundments from Pittsfield south to Rising Pond in Great Barrington. Consuming mallards, wood ducks, and possibly other waterfowl taken from the Housatonic River and surrounding area is a “Public Health Hazard” due to PCB and dioxin/furan contamination.
 - In all areas other than the Housatonic River area, to reduce exposure to PCBs, wild waterfowl should be skinned and all fat removed before cooking. Stuffing should be discarded after cooking. Drippings should not be used for gravy. Waterfowl should be eaten in moderation (e.g., no more than two meals per month).

Q: Based on this assessment, what are the health concerns related to opportunities for exposure to PCB’s while living or working in the Housatonic River Floodplain?

A: a) In the Past:

The Housatonic River Floodplain is considered a “Public Health Hazard” based on past exposures. People who lived in approximately 22 of the 28 groups of properties that had average PCB surface soil levels above 2 mg/kg (Massachusetts Department of Environmental Protection residential soil standard) were at risk of exposure to PCB contamination in surface soil. People living along the Housatonic River in the Pittsfield area in Reach 4, and those living around Woods Pond in Lenox and Lee in Reach 6 would have had the greatest opportunities for exposure because their soil PCB levels were the highest. Currently, the short-term measures (e.g., warning signs, excavations), and long-term remediation (i.e., soil removals, sediment removals) that have been or will be implemented have reduced or will reduce the opportunities for exposures to PCBs in the surface soils at the residential properties along the Housatonic River in Reach 4. Hence, the properties that have been remediated currently pose “No Apparent Public Health Hazard,” however, those that have not, particularly those in Reach 6, may still pose a “Public Health Hazard.”

b) Currently:

For the properties that are adjacent to areas of the Housatonic River where contamination is still present in sediments, further potential opportunities for exposure to PCBs could occur from contaminated sediments being transported onto yards abutting the Housatonic River. Thus, if long-term remedial measures are not adopted, the short-term measures could become ineffective which would result in increased exposure opportunities in the future. Furthermore, changes in land use (e.g., further development) at the properties could increase exposures even while short-term measures are maintained.

c) In the Future:

Continued releases to the Housatonic River via groundwater from the Unkamet Brook, East Street Area 1, East Street Area 2, and Lyman Street sites could pose a threat to re-contaminate remediated areas if pump and treat stations are not properly maintained. However, with careful EPA oversight of these activities, this would not be expected.

Finally, MDPH supports efforts to ensure that all residential properties in the floodplain with suspected PCB contamination have been identified and tested for PCBs in soil.

Q: Based on this assessment, what are the health concerns related to opportunities for exposure to PCBs while using the Housatonic River and the floodplain for recreation?

A: a) Reach 3 (Between Newell and Lyman Streets)

- In this area remediation is complete and exposure opportunities are unlikely, therefore soil and sediment currently pose “No Apparent Public Health Hazard.”
- Past exposures could have occurred at levels of health concern for people who frequently used the area for recreational purposes, and thus this Reach posed a “Public Health Hazard” in the past.

b) Reach 4 (Between Lyman Street and the confluence of the East Branch with the West Branch)

- In this Reach, opportunities for exposure at levels associated with adverse health effects were unlikely, but possible in areas of maximum concentration.
- Based on information at the time this assessment was conducted, this Reach was undergoing remediation in places, which would reduce opportunities for exposure.
- Reach 4 may have posed a “Public Health Hazard” while remediation was underway and in the past (prior to remediation) posed a “Public Health Hazard” for recreational uses.

c) Reaches 5, 6 (The reaches below the confluence where the floodplain is undeveloped and heavily vegetated)

- These areas may currently pose a “Public Health Hazard” and may have posed a “Public Health Hazard” in the past for recreational uses.
- Opportunities for exposure that might be of health concern are unlikely on average, but possible in areas of maximum contamination.

d) Reaches 7, 8, 9 (Below Woods Pond Dam to Rising Pond Dam and through to the Connecticut Border)

- Currently, these reaches pose “No Apparent Public Health Hazard” for recreational uses other than through the consumption of fish, turtles, frogs, and waterfowl.
- Opportunities for exposure from recreational activities that might lead to health concerns would not be expected.

If Reaches 5 through 9 undergo development, which could increase opportunities for exposure to PCB contamination in subsurface or surface soil, this information would have to be evaluated before public health implications could be determined.

Q: What does “Public Health Hazard” mean?

A: ATSDR has developed criteria for determination of public health hazard categories which are statements about whether people could be harmed by conditions present at a site in

the past, present, or future. The “Public Health Hazard” category is used for sites that pose a public health hazard because of long-term exposures (greater than 1 year) to sufficiently high levels of hazardous substances that could result in harmful health effects.

Q: Is this Public Health Assessment report considered a final document?

A: No. Consistent with ATSDR’s protocol for conducting a public health assessment, this report is being released for a public comment period through December 31, 2007. Depending on the nature of comments received, a final report and responses to public comments are typically released within several months after the closing of the public comment period. Public comments may be submitted to MDPH at the address provided below.

Q: Who should I contact if I have specific concerns about exposure to PCBs and other contaminants associated with the Housatonic River?

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