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The Commonwealth of Massachusetts

Executive Office of Health and Human Services
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Milham Brook Area/Glen Street Neighborhood Marlborough, Massachusetts Ouestions & Answers

1. Where is the Milham Brook Area/Glen Street Neighborhood site?

The Milham Brook Area/Glen Street Neighborhood site in Marlborough, includes 82 acres and is bordered to the north by Route 20, to the east and south by Glen Street, and to the west by Ames Street. Milham Brook, a tributary of the Milham Reservoir, and one of the drinking water sources for Marlborough, runs through the site. Available information indicates that until approximately 1966, a portion of the property was used as an apple orchard. A map of the site is attached as an appendix.

- 2. Why was a Public Health Assessment conducted for the Glen Street Neighborhood? The Glen Street area residents petitioned the Agency for Toxic Substances and Disease Registry (ATSDR) to do a Public Health Assessment (PHA) for this site. They expressed concerns regarding cancer in neighborhood residents and known use of pesticides in the former orchard.
- 3. What is a PHA? How is a site evaluated for existing or potential hazards? A PHA is a report that determines if a site is likely to pose an existing or potential hazard to an exposed or potentially exposed population. Health assessors review all available environmental contamination data on and off site for soil, surface water, groundwater and air.
- 4. What are the contaminants of concern associated with the Milham Brook Area/Glen Street Neighborhood site?

The main contaminants of concern at the site are arsenic and pesticide compounds (DDT, DDE, and dieldrin). Lead arsenate was used as a pesticide at the site; however, available data did not include analysis of lead. MDPH/CEH recommends further assessment of this site, including analysis of lead in soil.

5. Does the site currently pose public health concerns?

The main contaminants of concern at this site did not exceed health-based guidance provided by ATSDR. In addition, the site is covered with vegetation. According to ATSDR criteria, the site currently poses "No Apparent Public Health Hazard." However, there are important data gaps that need to be addressed and have been included among MDPH/CEH's recommendations (see Question 13). Although vegetation lessens direct contact with soil, part of the site is not enclosed by a fence and is accessible.

6. Does the site pose potential future public health concerns?

Because of present data gaps and incomplete site characterization, the site poses a future "Indeterminate Public Health Hazard." Public health concerns in the future relate primarily to potential development of the site. Currently, this site is zoned for business, light industrial and industrial development. As a result, this site would not be expected to be developed for residential use.

7. Did the site pose health concerns to the public in the past?

During past application of pesticides, workers, trespassers and possibly neighborhood residents may have had opportunities for exposure to harmful levels of pesticide. However, such exposures are difficult to quantify.

8. Have cancer incidence data for Marlborough been evaluated in relation to this site?

The MDPH (CEH/Community Assessment Program) has completed an investigation of cancer incidence for Marlborough, in relation to concerns associated with the Milham Brook site. This document is being released as a companion report and provides leukemia, lung and liver cancer incidence for the city of Marlborough and for the six census tracts that make up the city.

9. Do children have a greater health risk associated with environmental contamination/exposure to the site?

In general, children are at a greater risk than adults from certain kinds of exposure to hazardous substances. They are more likely to be exposed because they play outdoors and often bring food into contaminated areas. Because of their smaller stature, they are also more likely to breathe and ingest dust and soil, and also breathe heavy vapors close to the ground. This may result in higher doses of contaminant exposure. While estimated opportunities for exposure for children at the Milham Brook Area/Glen Street Neighborhood are not expected to be of health concern, it is nevertheless prudent to remind children not to trespass on this site.

10. Is Milham Brook affected by the site?

Two surface water samples from Milham Brook were analyzed for organochlorine pesticides and arsenic, and no contaminants were detected. No surface sediment samples were available. If development activities are done improperly, this could cause runoff resulting in higher levels of these compounds in Milham Brook in the future.

11. Are private drinking wells in this area affected by chemicals from this site?

Opportunities for exposure to the chemicals in groundwater related to this site are unlikely to occur because groundwater beneath the site is most likely flowing away from homes toward Milham Brook, which flows into Milham Reservoir. According to the Marlborough Board of Health, public drinking water serves all streets in this area. None of the residences in the neighborhood adjacent to the site have private wells used for drinking water.

12. Are there concerns about future health impacts to the Milham Reservoir or the public drinking water supply?

Groundwater releases from the site, as well as off-site, into Milham Brook, into the Milham Reservoir are unlikely, but cannot be completely ruled out. Potential opportunities for exposure could exist for residents of Marlborough if there are significant releases to Milham Brook. Massachusetts Department of Environmental Protection requires public water suppliers to test the drinking water for various contaminants. The most recent results available, for 2004, did not indicate contamination from VOCs or arsenic. Test results for the public drinking water supply can be obtained from the Marlborough Department of Public Works.

13. What further environmental testing/action does MDPH recommend at the Milham Brook Area /Glen Street Neighborhood site?

- Additional site characterization for pesticides and metals, including arsenic and lead; surface and groundwater sampling, including characterization of ground water flow to the brook should be done, particularly if the site is developed in the future.
- MDPH/CEH recommends measures to prevent access to a drop-off near the culvert at Glen and Ripley Streets. Currently, there is no fence or guardrail.

14. How has the public been involved in the Public Health Assessment process?

MDPH/CEH initiated a public comment period for the PHA at a public meeting in June 2000. MDPH/CEH and ATSDR received and responded to over 70 comments/questions following this meeting and release of this draft PHA. Appendix A of the final PHA, which is available on the MDPH/CEH website (below), provides a response to each question/comment.

15. Who shall I contact if I have public health concerns related to the Milham Brook Area/Glen Street Neighborhood?

For additional questions, contact the Center for Environmental Health, Environmental Toxicology Program, at (617) 624-5757 or the Center's website for more information at http://www.mass.gov/dph/ceh.

Appendix: the Milham Brook Area/Glen Street Neighborhood site

