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February 13, 2013

Brenda Weis, Director
New Bedford Health Department
1213 Purchase Street
New Bedford, MA 02740

Subject: Release of *Health Consultation: Evaluation of Serum PCB Levels and Cancer Incidence Data, Parker Street Waste Site Neighborhood*, February 2013

Dear Ms Weis:

The Massachusetts Department of Public Health, Bureau of Environmental Health (MDPH/BEH) has finalized its report titled *Health Consultation: Evaluation of Serum PCB Levels and Cancer Incidence Data, Parker Street Waste Site Neighborhood* (February 2013). A copy of the report is enclosed. This letter provides a summary of the major findings of the report; a copy of this letter will be sent to all interested individuals and organizations. The full report will be available to the public on the MDPH website at www.mass.gov/dph/environmental_health; within the *Environmental Health Investigations* link, click on New Bedford. A hard copy of the full report will be provided upon request.

As you may be aware, this report was first released in September 2011 as a draft report for Public Comment. The health consultation was conducted in response to concerns raised by neighbors that live in close proximity to the Parker Street Waste Site (PSWS) and school staff at New Bedford High and Keith Middle Schools regarding the presence of environmental contaminants, particularly polychlorinated biphenyls (PCBs), and whether or not exposure to such contaminants may have impacted health. Following the report's release, interested parties were given six weeks to submit comments on the document to the Massachusetts Department of Public Health, Bureau of Environmental Health (MDPH/BEH). MDPH/BEH received approximately 36 pages of detailed comments. MDPH/BEH prepared the final report which includes revisions, as warranted, based on the comments received. A detailed Response to Comments is provided as Appendix D in the final report.

While the enclosed final report was updated in response to the public comments received, the major findings did not change from the public comment draft findings. We have made many

editorial changes and additions to the report to improve its clarity and provide more information and a fuller explanation of both the methods and reported findings.

Serum PCB testing showed that the majority of participants who currently live or previously lived within the five CTs, as well as three non-resident participants that reported spending a significant amount of time at the PSWS, had serum PCB levels within the typical variation seen in the U.S. population. These data do not indicate unusual exposure opportunities to PCBs (i.e., participants fell within the 95th percentile). According to the U.S. Centers for Disease Control and Prevention (CDC), the 95th percentile of National Health and Nutrition Examination Survey (NHANES) data is helpful for determining whether levels observed in public health investigations are unusual. Three of the 45 participants have serum PCB results above this typical range. However, there was no consistent pattern of increasing serum PCB levels with increasing years of residence in the neighborhood around the PSWS, suggesting that location of residence was not a primary predictor of serum PCB levels. Consistent with national patterns, serum concentrations of PCBs in participants generally increased with age but were within typical concentrations for the U.S. population for each age group evaluated. Finally, the PCB congener patterns for each age group evaluated are consistent with what is typically seen in the U.S. population, suggestive of dietary sources.

The Parker Street Waste Site is located in CT 6510.02, extending into CT 6515 on its southerly boundary. For both of these census tracts, the incidence of liver cancer, the type of cancer with the strongest association with exposure to PCBs, occurred at approximately the same rate as the state as a whole, with a difference of one between the number of observed and expected diagnoses for the 25-year time period examined. For both census tracts, the incidence of the majority of cancer types was about as expected and no consistent trends were seen in the incidence of any particular type of cancer over the 25-year span. Therefore, for the two census tracts in closest proximity to the Parker Street Waste Site, the incidence rates of those types of cancer possibly associated with exposure to PCBs appear to be approximately as expected based on comparisons to the cancer experience of Massachusetts as a whole. It is important to point out that a review of cancer incidence data, as was conducted in this report, applies to the population at large. This type of analysis cannot be used to determine the cause of cancer in an individual. It is used as a screening-level evaluation to assess whether further study is warranted.

For the other three census tracts surrounding the Parker Street Waste Site, the incidence of the majority of cancer types evaluated was approximately as expected for each of the five time periods evaluated. No unusual or consistent trends emerged in the three census tracts.

When cancer incidence rates for the City of New Bedford as a whole were examined, some elevations were noted, particularly in lung cancer in males. Lung cancer incidence in males was elevated in males primarily between 1997 and 2006. Based on smoking history information reported to the Massachusetts Cancer Registry, it appears that smoking played some role in the incidence of this cancer in New Bedford males.

The final report now includes an Executive Summary, as requested in the public comments, a glossary of technical terms, and several new figures and graphs to more clearly present some of the findings.

We have an extensive distribution list that we compiled at the time of the release of the public comment draft report and, as mentioned earlier, will distribute this letter to those interested individuals and organizations on our list (including all those who provided public comments as well as those who participated in the serum PCB testing). If you have any questions about this letter or the full report with its response to comments, please contact us at (617) 624-5757.

Sincerely,

Suzanne K. Condon, Associate Commissioner
Director, Bureau of Environmental Health

Cc: Representative Antonio Cabral
Senator Mark C. Montigny
Mayor Jon Mitchell
CLEAN
Tarah Somers, Agency for Toxic Substances and Disease Registry
Jim Murphy, US Environmental Protection Agency
Molly Cote, Massachusetts Department of Environmental Protection
Other Interested Individuals and Organizations
Martha J. Steele, Deputy Director, BEH
Jan Sullivan, Director, Community Assessment Program

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