

APPENDIX E: RESPONSES TO PUBLIC COMMENTS

The Agency for Toxic Substances and Disease Registry (ATSDR) released the Wurtsmith Air Force Base (WAFB) Public Health Assessment (PHA) on October 4, 2000, for public review and comments. The public comment period ended on November 22, 2000. In this appendix, ATSDR responds to the comments and questions that were submitted during the comment period. For comments that questioned the validity of statements made in the PHA, ATSDR verified or corrected such statements. The list of comments does not include editorial comments concerning such things as word spelling or sentence syntax.

1. **Comment:** One of the sentences included under the "Quality Assurance and Quality Control" section is misleading. The sentence reads: "Based on our evaluation, ATSDR determined that the quality of environmental data available in most site-related documents for WAFB is adequate to make public health decisions." This contradicts other sections of the PHA which clearly indicate that data gaps exist and that these gaps prevent ATSDR from making definitive conclusions about public health hazards.

Response: ATSDR agreed that this statement could be misleading. Thus, ATSDR deleted the sentence.

2. **Comment:** There is no longer an occupant at facility 5098. The building is now being used to store equipment for FT-02's new remedial system. The United States Air Force (USAF) plans to sample AF25, the well that services Building 5098.

Response: ATSDR contacted a WAFB site representative to confirm the occupancy status of Building 5098 and to determine when well AF25 will be sampled. ATSDR learned that the building is indeed vacant and that AF25 will be sampled in spring 2001; ATSDR modified the "Evaluation of Environmental Contamination and Potential Exposure Pathways" to reflect this new information. In addition, ATSDR deleted its recommendation that samples be collected from the well at AF25 since USAF is already planning to do this. A sentence was added to the "Public Health Action Plan," describing the sampling event that is planned at well AF25.

3. **Comment:** ATSDR needs to expand upon its recommendation to collect fish samples from Au Sable River and Van Etten Lake. It is difficult to see what public health issue(s) are being addressed with this recommendation. Obviously, ATSDR must feel that there is a community concern about contaminated fish and that collecting samples will address the concern. However, without a clear statement of compounds to test for and their possible sources, it is unclear if ATSDR is recommending this sampling to address contaminants related to WAFB or general water quality issues. Is there a contaminant that ATSDR predicts will be found in the fish and must be tested for? Could ATSDR state clearly their proposed sampling plan, specific compounds or classes of contaminant, and a general idea of where they think these fish contaminants might come from? Could ATSDR indicate

whether the recommendation for fish tissue sampling will be forwarded to the Michigan Department of Natural Resources (MDNR)?

Response: Community members have expressed concern about eating fish from Van Etten Lake and the Au Sable River, both of which have been impacted by WAFB's contaminants. In this PHA, ATSDR used surface water and sediment data to determine how contaminants might be affecting fish that live in Van Etten Lake and the Au Sable River. Based on available information, ATSDR does not expect that fish residing in the lake or river would pose a health hazard to those who eat them. However, contaminants, specifically arsenic, have been detected that might be emanating from WAFB. And, because there are currently no data on arsenic in fish, ATSDR would prefer to have additional data to verify that the fish are safe to eat. Conclusive assurances can only be obtained by collecting and analyzing tissues directly from fish. ATSDR recommends that WAFB and MDNR coordinate to determine the most effective means of collecting and analyzing fish tissue from these water bodies.

4. **Comment:** Installation of the Northern Landfill Plume remediation system will not be completed until June 1, 2001.

Response: ATSDR modified the PHA to reflect this information.

5. **Comment:** USAF plans to sample the private off-base well that is located at 6092 F-41 County Road.

Response: ATSDR contacted a WAFB site representative to determine whether the sampling event had occurred. ATSDR learned that it had and obtained a copy of the analytical results. The results indicated that no volatile organic compounds were present. ATSDR incorporated this information into Table 5 and the "Evaluation of Environmental Contamination and Potential Exposure Pathways." In addition, ATSDR removed the recommendation that samples be collected from the well at 6092 F-41 County Road.

6. **Comment:** There is little evidence that ATSDR actively gathered information or comments from citizens, community groups, or area health professionals. ATSDR made no effort to publicize the PHA. Very few area residents were aware that a public health assessment was being conducted, thus limiting public input and reducing the credibility of the PHA document."

Response: ATSDR visited WAFB in 1995 and 1998. During both visits, ATSDR did actively gather information and comments from citizens, community groups, and area health professionals. More detail about these interactions has been added to the PHA's "Background" section to describe the interactions that the agency had with the community. (See the subsection entitled "The Agency For Toxic Substances and Disease Registry [ATSDR]'s Involvement.")

In addition, it should be noted that ATSDR followed a set of standard procedures to ensure that local news media were notified of the PHA's availability. First, ATSDR perused a media database to locate the names, addresses, and telephone numbers of media outlets in Oscoda, Michigan. Then, ATSDR faxed a note to local news media alerting them that a draft version of the PHA was being released for public comment. In addition, ATSDR sent copies of the PHA to local repositories, to WAFB representatives, and to regulators and community members that were included on a designated mailing list.

7. **Comment:** The Citizens' Advisory Committee on Wurtsmith AFB Contamination sent ATSDR a petition letter in December 1993 asking the agency to evaluate health effects associated with WAFB. The time lapse between the petition letter and the final PHA is a "negative factor."

Response: ATSDR recognizes that much time has passed since the community submitted its petition letter. When performing PHAs the Agency follows a prescribed and detailed process. For the WAFB PHA, ATSDR evaluated past, current, and future health hazards that might be associated with all 58 of WAFB's areas of concern. In addition, the Agency spent much time tracking down information and data that would shed light on how WAFB's contamination impacted off-site areas. While following a methodical assessment process does take a significant amount of time, using such an approach yields a thorough product. The following paragraph indicates why a significant amount of time was required to complete this PHA.

In December 1993, the Citizen's Advisory Committee on Wurtsmith AFB Contamination, Inc., petitioned ATSDR to perform a PHA. One month later, the site was placed on the proposed National Priorities List. Once on the list, ATSDR was mandated to perform a PHA for the site. Throughout 1994, ATSDR collected data on WAFB and made plans for a site visit. This visit was conducted in June 1995; one of the visit's goals was to collect enough information to rank the site according to its potential for imminent public health hazard. After reviewing available data and collecting information from Air Force personnel and community members, ATSDR concluded that the site posed no current public health issues. Thus, the site was not placed as high on ATSDR's priority list as other sites that required immediate investigation and attention. The agency did acknowledge, however, that there was a need to evaluate past exposures to contaminated environmental media in a detailed PHA. This effort was initiated in earnest in 1998. In July of that year, ATSDR revisited WAFB, collected data, interviewed Air Force personnel, met with community members, and talked with representatives from Camp Nissokone. Since that site visit, ATSDR has reviewed data that have been collected over the last three decades from WAFB and nearby off-site areas. These data were provided by the Air Force and numerous health and environmental agencies. ATSDR invested much time identifying appropriate contacts from each agency and obtaining data. Over the last two years, ATSDR has talked extensively with local agencies to obtain the information that was required for this PHA. ATSDR took care to ensure that the concerns expressed were addressed sufficiently and that the information presented in the document was accurate. Thus, a preliminary draft of the report was released for review to environmental and health organizations prior to its

release to the public. ATSDR received constructive comments on this draft and ATSDR was alerted that new information and data were available. After obtaining these data and revising the preliminary draft, the PHA was released for public comment in October 2000.

8. **Comment:** The PHA would have been more useful if ATSDR had conducted or commissioned independent studies to fully research health effects encountered by those who worked or resided at or near Wurtsmith AFB. Failure to conduct studies of this sort, make many of the PHA's conclusions seem presumptuous.

Response: ATSDR's mandate and primary goals when conducting health assessments include evaluating community concerns, reviewing available health outcome data (e.g., cancer registry data, community-based health study data), and recommending further health study as warranted.

When community members express a concern about a specific health outcome (e.g., cancer), ATSDR's first step is to study the degree of exposure and determine whether the outcomes of interest could be plausibly linked to detected contaminant levels. This involves performing an exposure and health effects evaluation: that is, studying site-specific exposures and determining how detected chemicals might have impacted community members. At Wurtsmith, ATSDR determined that only a limited population (those consuming water from the main water supply wells and one off-base private well before 1980), if any, *might* have been exposed to potentially harmful levels of trichloroethylene (TCE), a possible human carcinogen. It should be noted, however, that harm would only have occurred if the populations were exposed to the water for extended durations of time. ATSDR suspects that it is unlikely that such extended exposures actually occurred. Also, it is imperative to note that there is much controversy in the scientific community regarding TCE's ability to pose adverse health effects in humans. EPA is currently reviewing the scientific literature to determine the chemical's potential to cause cancer in humans. In light of uncertainties regarding TCE carcinogenicity in humans and the transient nature of on-base water use, it is unlikely that exposures were long enough to increase individual cancer risks in those who worked or resided at or near the site.

Nonetheless, ATSDR attempted to identify health outcome studies to further evaluate community concerns regarding cancer rates. Ideally, ATSDR would want to study specific cancers possibly associated with TCE (e.g., leukemia) in only those individuals who were known to be exposed to elevated contaminant levels in their drinking water. Unfortunately, according to representatives from the Michigan Department of Community Health and the District Health Department, no health outcome studies have been performed to evaluate cancer statistics in the community that surrounds WAFB.

When exposures appear to be high AND some elevated disease rates are observed or suspected, ATSDR may recommend additional study (e.g., disease surveillance, health study). However, based on its exposure and health effects evaluation, ATSDR did not feel further study was warranted. Should additional information become available to indicate site-related exposures (e.g., additional monitoring data) and outcomes of concern might be

a problem in the site community, ATSDR will re-evaluate the conclusions and recommendations presented in this PHA.

9. **Comment:** Phrases such as “no sampling data were available” and “no definitive conclusions can be drawn” appear throughout the PHA. Due to the lack of sampling data, it is difficult, if not impossible, to make any definitive conclusions about long-term impacts to the health of affected citizens.

Response: ATSDR acknowledges the commenter’s frustrations regarding data gaps. ATSDR agrees that the lack of extensive environmental sampling makes it impossible for the Agency to make definitive conclusions about the long-term impacts to the health of affected citizens. For this reason, ATSDR has not used definitive language in its conclusions. For example, ATSDR states that “past exposures to groundwater *may have* posed an increased risk of developing adverse health effects” and “past, present, and future exposures to surface water and sediment are *not expected* to pose a public health hazard.” While ATSDR would like to make more definitive statements about the impact of past exposures, it is not possible to do so because data for a wide variety of chemicals were not collected from environmental media on a consistent basis prior to 1984. The aim of this PHA is to provide insight to the community so that community members can put their health concerns in perspective. Obviously, there is no way to go back in time and collect environmental samples to determine the levels that past populations were exposed to. Absent this information, ATSDR uses the best data available, identifies where data gaps exist, and provides perspective on the *likelihood* of exposure to a particular chemical causing harm.