## Appendix B – Response to Public Comments

Listed below are comments received from the public regarding the report *Assessment of Cancer Incidence in Weymouth, Abington, Hingham, and Rockland, Massachusetts 1982-1998,* released for public comment on February 14, 2002. The 30-day public comment period for this report ended on March 14, 2002. Where appropriate, comments of a similar nature have been listed together and a single response is provided. Comments are provided exactly as stated in written correspondence to MDPH.

In addition to comments submitted regarding the cancer incidence report, comments were received regarding the Weymouth Health Needs Assessment survey being conducted by the John Snow Institute (JSI) with funding support from the Town of Weymouth. Although MDPH involvement with the latter study is limited to providing technical epidemiologic support, these comments are summarized in Section II below.

### I. Comments Regarding MDPH Cancer Incidence Analysis:

***COMMENT #1:*** *"While I am admittedly no expert at this, I fail to understand the logic behind the compilation of data on a town-by-town basis, and its further fragmentation into census tracts. (I can see how this may be effective in gathering information initially, but once gathered, I believe the town lines should be ignored)[sic]."*

***COMMENT #2:*** *"…[sic] I would ask that when you study health issues in the area further, that once your data is obtained, you include in your assessment of this data a simple map which plots the incidences of the various illnesses studied by geographic location; something like sticking colored pins on the map for each different type of illness, where each is found. As a visually-oriented person I can understand this sort of presentation a lot more easily than I can tables of data. It might be a very simple idea, but it might be one worth using. To me it would say a lot more than data fragmented by town, further fragmented and analyzed to death by microscopic examination of census tracts."*

***COMMENT #3:*** *"…[sic] I half expected that privacy was the reason we haven't seen the sort of maps I described. I don't suppose there is any chance people would be willing to sign some sort of release of such information?"*

***COMMENT #4:*** *"Look at the elevated incidence of lung cancer in Rockland and Weymouth. Look at where they've mainly occurred. They occurred [sic] along the flight path of planes that used the north/south runway at the base. Standing in the middle of a room looking at a map of this I see a pattern. When I zoom in to the microscopic level within the various census tracts I lose the big picture, and suddenly nothing seems to be going on. I may be oversimplifying this; I may be missing something. This is simply how it looks to my untrained eye."*

**RESPONSE:** Cancer incidence rates were calculated for all four towns and census tracts within the towns to evaluate whether more or less cancer occurred than would be expected based on the state-wide cancer experience. In order to evaluate the incidence of a disease like cancer at a

smaller geographic level than the town, rates of disease are calculated to determine whether the incidence in the area of concern might be higher or lower than expected based on population size. To calculate cancer rates for smaller geographic areas it is necessary to obtain accurate age-group and gender specific population data. This is because different diseases occur with different frequency (either higher or lower) among different age groups and by gender. The census tract is the smallest geographic area for which accurate counts of population by age-group and gender necessary for calculating cancer incidence rates are available.

Our evaluation not only included a quantitative analysis, but also a qualitative analysis of cancer incidence in the four towns surrounding the South Weymouth Naval Air Station (SWNAS) over a seventeen year period. In addition to calculating cancer incidence rates, a key portion of our analysis included an evaluation of the geographic pattern of all people diagnosed with cancer at the neighborhood level regardless of whether cancer rates were statistically significantly elevated in a particular town or census tract. By plotting the address reported for each person diagnosed with cancer on a map we were able to evaluate the patterns of individuals diagnosed with each cancer type at both the large-scale and smaller neighborhood level without the influence of town and census tract boundaries. However, due to the confidential nature of the information contained within the Massachusetts Cancer Registry (MCR) data files, we are unable to provide the maps showing the individual locations of people diagnosed with cancer to the public. State confidentiality laws prohibit MDPH staff from releasing MCR data in any way that would identify a person with cancer (including contacting them directly to sign a release of their information).

The combination of calculating cancer rates by town and census tract together with an evaluation of the geographic patterns of cancer at a smaller geographic level provided us with a comprehensive picture of the pattern of cancer in the four towns surrounding the SWNAS. Specifically, as stated in our report and presented at the February 2002 public meeting, when we looked at the pattern of cancer and flight paths at the base in the most recent time period (i.e., 1995-1998) we observed that census tracts close to the base had elevations of lung cancer. However, since census tracts cover a wide area, when we looked more closely at the flight paths within the census tracts together with the specific locations of people diagnosed with lung cancer at the neighborhood level, particularly non-smokers, we did not see a clear pattern of cancer diagnoses suggesting a relationship specific to the pattern of former flight paths at the base.

As part of the follow-up work associated with the cancer incidence evaluation, the MDPH/BEHA further investigated lung cancer in neighborhoods and census tracts near the SWNAS to see whether a clearer pattern related to environmental or other risk factors may emerge. These additional analyses included an evaluation of the length of residence for those individuals who have been diagnosed with lung cancer in these areas, particularly non-smokers (MDPH 2002).

***COMMENT #5****: "During about a two-year period, from 1988 to 1990, there were other cases of cancer on Tilden Road in Weymouth [sic]. …[sic] I know there were also more cases of cancer that evolved after this time [*sic]. …[sic] I hope you will still keep in mind the excessive amount of cancer found on one street *in such a short amount of time."*

***COMMENT #6:*** *I'm aware of an incidence of a type of [sic] cancer in one census tract inWeymouth…[sic] on Tilden Road, which was not considered significant in this study, as it was seen as an isolated case. Meanwhile, just down the street, (but across the town line) a former resident [sic] had the same type of cancer [sic] too. The town of Rockland is less than two hundred feet away … [sic] in the other direction, away from Weymouth. Who knows who has it over there? The doctors, sure. MDPH probably does too. But if, as in the one Weymouth case that I know about, the case was ignored for purposes of the study, then what we have is far from an accurate picture.*

**RESPONSE:** As previously explained (see response to Comments 1-4), in addition to calculating cancer incidence rates for the four towns and the census tracts within those four towns, a key portion of our analysis included an evaluation of the geographic pattern of all people diagnosed with cancer at the neighborhood level. By plotting the address reported for every person diagnosed with cancer on a map, we were able to evaluate the patterns of individuals diagnosed with each cancer type at both the large-scale and smaller neighborhood level without the influence of town and census tract boundaries. All eight cancer types were evaluated at the neighborhood level throughout the four towns, regardless of whether cancer rates were statistically significantly elevated in a particular census tract, and no individual diagnosed with cancer was ignored.

When interpreting the results of the analyses, it is important to keep in mind that cancer is a common disease. According to the American Cancer Society statistics, cancer is the second leading cause of death in Massachusetts and the United States. Not only will one out of three people develop cancer in their lifetime, but also this tragedy will affect three out of every four families. For this reason, cancers often appear to occur in "clusters," and it is understandable that someone may perceive that there are an unusually high number of cancer cases in their surrounding neighborhoods or towns. Upon close examination, many of these "clusters" are not unusual increases, as first thought, but are related to such factors as local population density, variations in reporting or chance fluctuations in occurrence. In other instances, the "cluster" in question includes a high concentration of individuals who possess related behaviors or risk factors for cancer.

Understanding that cancer is not one disease, but a group of diseases is also very important. Research has shown that there are more than 100 different types of cancer, each with different causative (or risk) factors. In addition, cancer of a certain tissue type in one organ may have a number of causes. Cancer may also be caused by one or several factors acting over time. For example, tobacco use has been linked to lung and bladder cancers. Other factors related to cancer may include lack of crude fiber in the diet, high fat consumption, alcohol abuse, and reproductive history. Heredity, or family history, is an important factor for several cancers. To a lesser extent, some occupational exposures, such as jobs involving contact with asbestos, have been shown to be carcinogenic (cancer causing). Environmental contamination has also been associated with certain types of cancer.

Tilden Road is located in Weymouth CT 4222. Although we examined the geographic distribution of all individuals diagnosed with cancer at a neighborhood level in all four towns, the patterns of cancer in the area around Tilden Road in Weymouth and nearby streets in

Hingham and Rockland were reexamined throughout the 17 years evaluated to address specific concerns about cancer in this particular area. In general, our review found no atypical pattern of cancer on Tilden Road or in the surrounding neighborhoods. There were a variety of types of cancer diagnosed among individuals in the neighborhood that includes Tilden Road and in neighboring areas outside of Weymouth between 1982-1998, representing the occurrence of different diseases. In addition, no atypical patterns with respect to place of residence or diagnoses over time emerged for any one cancer type that would suggest a cluster or a common factor, including exposure to a specific environmental source.

***COMMENT #7:*** *"As the recently updated cancer studies document, Weymouth has been found to have had an elevated number of leukemia cases over the period 1987 [sic]-1994. Subsets of this data should be examined. Again; keying on geographical and chronological occurrence in regards to peak military aviation activity, and JP-8 usage. Abington and Rockland leukemia incidence should be reexamined with these same factors examined closely.*

**RESPONSE:** An important component of the cancer incidence investigation was an evaluation of the geographic and chronological patterns of all eight cancer types, including leukemia, in all four towns and their census tracts. As presented in our report and at the February 2002 public meeting, leukemia occurred at approximately the rate expected in the town of Weymouth during the first of the three time periods examined (1982-1986), was statistically significantly elevated during the middle time period evaluated (1987-1994), and occurred slightly less than expected in the most recent time period, 1995-1998. When leukemia rates were evaluated by census tract during the middle time period, more diagnoses of leukemia than expected were observed in some areas throughout the four towns, including Weymouth census tracts 4221 and 4222 located near the SWNAS. Leukemia was statistically significantly elevated in CT 4222 during 1987-1994 (11 individuals were diagnosed with leukemia whereas approximately five would have been expected). Leukemia was also elevated in CT 4221, although this elevation was not statistically significant (seven individuals were diagnosed whereas approximately three would have been expected). Leukemia occurred equal to or below the rates expected in both of these census tracts during the earliest and most recent time periods.

In the town of Abington as a whole, leukemia was slightly elevated in the first of the three time periods (1982-1986), and occurred at approximately the rate expected in the latter two time periods. Leukemia was not particularly elevated among census tracts in Abington, and due to the instability of rates based on small numbers (i.e., less than five), meaningful census tract rates were not able to be calculated for the three smaller time periods. In the town of Rockland, leukemia occurred approximately less than or equal to the rate expected during all three time periods. When leukemia was evaluated by census tract, the rates were mostly equal to or below what would be expected. A slight elevation was observed in Rockland CT 5022 (the southern portion of Rockland not near the SWNAS) during the last of the three time periods evaluated, 1995-1998 (five individuals were diagnosed with leukemia whereas approximately three would have been expected). This elevation was not statistically significant.

In addition to evaluating leukemia rates for specific time periods, as with the other cancer types, the individual locations of people diagnosed with leukemia were examined at the neighborhood level regardless of whether rates were statistically significantly elevated. The pattern of

leukemia in all four towns was examined geographically and over time, with a particular focus on those individuals living near the SWNAS. Additionally, since different subtypes of leukemia tend to occur with different frequency among adults and children and each have unique risk factors associated with their development, the patterns of different leukemia subtypes were also evaluated separately. There were no apparent geographic or chronological distribution patterns observed for leukemia in general or for any of the leukemia subtypes at the neighborhood level in any of the four towns during the 17 years evaluated. Further, there were no apparent concentrations of individual's with leukemia in neighborhoods near the SWNAS that would suggest a relationship to historical flight paths at the base.

The BEHA is aware of concerns about the incidence of leukemia particularly among children and possible exposures to jet fuels such as JP-8 in other areas of the country (i.e., investigations being conducted in Fallon, NV). To address concerns that there might be a peak in the incidence in leukemia near the SWNAS over time, the chronological distribution of all types of leukemia were reexamined by individual year in those census tracts that abut the base, with particular focus on Weymouth CT 4222 where a statistically significant elevation was observed during the middle time period 1987-1994. Between 1982-1998, there were no specific peaks in the incidence of leukemia for individual years or smaller groups of years that would suggest the possibility of a common exposure during an isolated window of time. In addition, we did not see an unusual number of children with leukemia during smaller year groups and there was no preponderance of any one subtype of leukemia in these census tracts either geographically or over time. Although leukemia was statistically elevated in Weymouth CT 4222 during the middle time period 1987-1994, the individual cases were distributed somewhat evenly within the CT and over these years.

***COMMENT #8:*** *"In a community based study in Grantsville, Tooele County, [sic] Utah performed in 1996, a private citizens health survey located 201 incidences of cancer in the vicinity of a military installation. This house to house survey by private citizens located these 201 cancer incidences among 650 households, or roughly ½ the town of Grantsville. The State Cancer Registry showed only slightly more total cancers (237), for the entire population of the town. Either the citizen study proximity to the toxic sites play into effect here, or the States data gathering appears greatly flawed. I bring this up as a plea for the State to take every precaution that data reported is gathered in the most viable way possible."*

**RESPONSE:** The Community Assessment Program was able to look at the patterns of cancer in the four communities surrounding the SWNAS by using data collected by the Massachusetts Cancer Registry (MCR), a division within the MDPH Bureau of Health Statistics Research and Evaluation. The MCR is a population-based surveillance system that collects information on all Massachusetts residents diagnosed with cancer, and state law requires that all new cancer diagnoses be reported to the MCR within six months of diagnosis. Estimates of MCR completeness in reporting have increased steadily since the registry was established in 1982. In its early years, the MCR was estimated to include 90-95% of all *reportable* cancer cases in Massachusetts. More recently, efforts to improve case ascertainment by the Cancer Registry have increased completeness to more than 100%, and the MCR is considered by the North American Association of Central Cancer Registries to be 'complete'.

It is difficult to compare results of cancer incidence studies that use cancer registry data with those from door-to-door surveys that collect reports of cancer such as that conducted by private citizens in Tooele County, Utah. Similar to the CAP evaluation of cancer incidence in the four towns surrounding the SWNAS, the study conducted by the Tooele County Health Department and the State of Utah Department of Public Health was based on data obtained from the Utah Cancer Registry (Coombs 2002). Cancer registries typically collect information on all primary (new) cancer diagnoses and do not generally include metastatic cancers that develop as a result of cancer spread from another location within a person's body. Also, individuals are typically reported to cancer registries based on their address at the time they are diagnosed with cancer and would not include people who were diagnosed prior to moving to a particular area. Door-to-door surveys that ask participants to identify all family members who have cancer may include those with metastatic cancers and/or people diagnosed when living elsewhere. This may be a factor in the cancer evaluations conducted in Utah.

***COMMENT #9:*** *"Citing the fact that the State Executive Office of Environmental Affairs has reported that asthma hospitalizations in our towns are among the highest in the state. Rockland, where the foot of the Southern Runway is sited, has the highest level of asthma hospitalizations in a Massachusetts community, bar none.[sic] This [sic] should concern all of us. Increased incidence of lung cancer [sic] reported by your office in all three of our towns (Abington, Rockland, Weymouth), should likewise concern us. As teams of scientists are currently at work proving a connection between JP-8 Jet Fuel and respiratory disease, I am very concerned. …[sic] Once again, the study should be particularly scrutinizing a subset of data collected that addresses proximity (all families that have moved into the study neighborhoods after 1995 should be omitted from study inclusion). Years having the maximum number of sorties (…1994+…?) would seem to be a key subset. The in utero factor should be explored as well."*

**RESPONSE:** *The State of Our Environment* report produced by the Massachusetts Executive Office of Environmental Affairs in April 2000 includes a map showing asthma hospitalization rates for Massachusetts cities and towns for the year 1997 (EOEA 2000). As indicated in this map and elsewhere, asthma hospitalization rates are highest in many urban areas for which hospitalization data are available, including the cities of Boston, New Bedford, Lawrence, and Springfield. According to this same map, the town of Rockland was also in the highest of five asthma hospitalization rate categories during the same year. The towns of Weymouth and Abington were in the second highest category and the town of Hingham was in the second to lowest category.

Nationwide increases in asthma rates represent an important public health issue, and there is much research being conducted to identify and reduce risk factors for this disease. Known risk factors for asthma include exposure to allergens (molds, pollen, dust, pet dander), household products, air pollutants and irritants, smoking and exposure to second-hand smoke, respiratory infections, physical exertion and cold air. However, similar to our cancer incidence investigation, asthma hospitalizations data cannot be used to establish what may have caused a person's asthma diagnosis.

There are several other important considerations to keep in mind when evaluating data on asthma. Unlike cancer data, there is currently no registry for asthma to determine with more

certainty whether asthma rates in specific communities are higher or lower than would be expected for a particular city or town. Without an asthma registry, there is also no way to get an accurate picture of where people with asthma live. In addition, use of hospitalizations data to predict true rates of asthma has been shown to be unreliable for several reasons including that individuals who have control of their asthma are generally not counted because they are not being hospitalized. It is worthwhile to note that the MDPH has recently been awarded federal funds to establish a statewide tracking system for pediatric asthma. This effort is expected to be implemented over the next three years.

Although lung cancer rates increased over the 17 years in both Weymouth and Rockland, particularly in those census tracts near the base, our evaluation did not show a specific geographic pattern of diagnoses that would suggest a clear relationship to the SWNAS. Our investigation of available information on risk factors for individuals diagnosed with lung cancer in the four towns surrounding the SWNAS showed that smoking and in some cases occupation both played an important role in increased lung cancer rates in the four town area.

There is some indication that respiratory effects may occur as a result of inhalation of jet fuel vapor, but a stronger association has been demonstrated when jet fuels are aspirated into the lungs following ingestion (ATSDR 2001). It is not possible to determine whether use of fuels at the SWNAS such as JP-8 had an effect on the respiratory health of people living near the base. However, as part of the follow-up analyses associated with the cancer incidence investigation, an evaluation was conducted to evaluate whether individuals living in census tracts surrounding the SWNAS had a greater probability of developing lung cancer relative to the probability of developing lung cancer when living in CTs distant to the base. Results from this analysis indicated that there was no strong geographical factor related to developing lung cancer near the base when compared to other areas of the four towns. In addition, no increased risk was observed for non-smokers diagnosed with lung cancer and living near the base when compared with non-smokers with lung cancer residing in other census tracts in the four towns. Please refer to the follow-up report for a discussion of these results (MDPH 2002).

Finally, the Town of Weymouth has contracted with JSI Research and Training Institute to conduct a Health Needs Assessment and Intervention Program to identify the health needs of the Town of Weymouth and to design programs to improve the health of residents. To help address continuing concerns about health issues other than cancer from residents of Abington and Rockland who live near the SWNAS, the Weymouth Health Needs Assessment was expanded to survey randomly selected households within a half-mile radius of the base. Results from the Health Needs Assessment will be used to better evaluate the prevalence of asthma in those areas surveyed.

**II. Comments Regarding the Weymouth Health Needs Assessment, Being Conducted for the Town of Weymouth by the John Snow Institute (JSI):**

***COMMENT #10:*** *"I also do not agree with the idea of sending out random surveys to people in Weymouth, Abington, and Hingham. I think [sic] the surveys should be sent out to all the residents of the three towns. If it is sent out randomly, it could miss several people who have a lot to say about the study. It could also go to a lot of people who do not care and have nothing to say about the study."*

***COMMENT #11:*** *"I am alarmed at the use of the word "random" I've heard in connection with the intended methodology for obtaining information for this study. I sincerely hope that the complete picture this study is designed to capture will be derived from a house-by-house questionnaire. Anything less than this would be at best a scattershot effort, and would surely miss critical pieces of this puzzle."*

***COMMENT #12:*** *"I would also like to see the study area extended to at least two miles out from the base. I live fairly close to the base property, yet even I would barely meet the criteria to be included in the study if it's limited to half a mile out from the base fence. I have neighbors all the way up the street with serious health concerns. They've wondered for years if they were related to the base."*

***COMMENT #13:*** *"Will you attempt to track people who moved away [sic] down? For the sake of a complete and accurate picture, I believe it's necessary to. (Records, even if the forwarding time has expired, may be obtained from the local post office.) The people living in these neighborhoods may be helpful in supplying you with information as well. Many have lived here all their lives, and know the histories of their neighbors as well as their own."*

***COMMENT #14:*** *"In addition, I believe it's important to capture more than a single frame of this picture.. or even a few frames. What you need to get, I think, is closer to a movie clip…something that spans <u>at least the last fifteen years</u>. For even though the base has been inactive since 1997, the effects of exposure to the chemicals released into the air and water could still be developing. People I know who live here are still coming down with cancer. People I know in other towns, living close to the base, are still being diagnosed with MS… with non-Hodgkin's lymphoma.. with other illnesses that may have an environmental link. To arbitrarily limit the window of time studied to anything less than at least the last fifteen years would leave too many people out of it. And they deserve to be counted. TOGETHER [sic], as well as in separate time spans."*

***COMMENT #15:*** *"I would also suggest you include in your survey a section where people might write their own non-quantifiable comments; where they might address other things that have concerned them but which your study will not cover. A place for anecdotal information, if you will...[sic]"*

***COMMENT #16:*** *"Towards that noble end, I would like to see a non-partisan or private group of environmental health professionals join in this process. I don't believe it's possible to completely remove politics from such a study, but I believe with so many questions surrounding military base closure on a national level, it is of real importance to the credibility of these efforts, that politics as much as possible be removed from the process. I would suggest your office contact the Environmental Health branch of the PEW Commission and employ their assistance with this study, both in establishing the most valid protocol, and subsequent follow-up."*

***COMMENT #17:*** *"From my own limited online explorations of base closures, I would suggest this study pay particular attention to those neighborhoods in geographical proximity to runway ends, and waterways."*

***COMMENT #18:*** *"…[sic] I believe it is important to establish protocol that would document the cases of undiagnosed neurological illness, which can manifest itself in a large number of ways. These varied manifestations should be included in this study to chronicle any emerging patterns of illness."*

***COMMENT #19:*** *"[sic] It is known that JP-8 jet fuel was used extensively at SWNAS, but only during the last years of its operation. I believe an important subset of data could be, much like it was in the famous Woburn Massachusetts "Civil Action" case; children in utero, who's mothers may have been chronically exposed to JP-8 Jet Fuel, around the peak years of JP-8 usage. Sorties have been reported by the Navy, to have peaked in 1994 (25,000 sorties). The MDPH should establish with the Navy, what years (through 1995 when the base closed) maximized citizens' [sic] exposures to this fuel product. Again, geographical proximity to runway ends and stream banks should be scrutinized."*

***COMMENT #20:*** *"All diseases of the auto-immune system should be featured in your study."*

***COMMENT #21:*** *"The MDPH should further survey the geographical occurrences of a number of other physical conditions that are currently being linked to environmental causes. These would include ADHD, ADD, Autism, other learning disabilities, birth defects, still birth."*

***COMMENT #22:*** *"I would hope that the MDPH form a citizen's advisory council to assist is establishing study protocol. Politically based studies suffer credibility problems."*

**RESPONSE:** As described at the MDPH public meeting on February 14, 2002, the Weymouth Health Needs Assessment and Intervention Program is not an MDPH activity but a community health study being conducted by the Weymouth Health Department. The Town of Weymouth has contracted with JSI Research and Training Institute, an independent health research and consulting firm, to conduct the study. However, MDPH has provided significant technical assistance to the Town of Weymouth Board of Health. The primary purpose of the Weymouth Health Needs Assessment and Intervention Program is to identify the health needs of the Town of Weymouth and to design programs to improve the health of residents.

Based on continuing concerns about health issues other than cancer from residents of Abington and Rockland who live near the SWNAS, the MDPH asked the Weymouth Health Department to expand the Weymouth Health Needs Assessment to the neighborhoods in Abington, Rockland and Hingham that are located in close proximity to the SWNAS. Therefore, the Weymouth Health Needs Assessment includes distribution of the survey to randomly selected households within a half-mile radius of the SWNAS.

It is important to note the Weymouth Health Needs Assessment was not intended to be a comprehensive health study of all health outcomes of concern and the potential relationship to contamination detected at the SWNAS. Rather, the Weymouth Health Needs Assessment was expanded to provide as assessment of certain health outcomes other than cancer (auto-immune disease, neurological disorders, multiple sclerosis) in neighborhoods near the SWNAS in Weymouth as well as the three other communities of Abington, Rockland and Hingham. Expansion of the Weymouth Health Needs Assessment to areas outside of Weymouth, and the

inclusion of questions to address additional health outcomes of concern in these areas were both attempts to provide the community with some preliminary answers to questions raised in a much quicker timeframe so that it could be determined whether additional study may be necessary. Subsequent to this, the MDPH has also been awarded federal funds to further investigate multiple sclerosis (MS) and Amyotrophic Lateral Sclerosis (ALS) prevalence in proximity to the SWNAS and in Middleborough and Raynham where the state identified hazardous waste sites were of concern.

In specific response to Comment #15, the Weymouth Health Needs Assessment Survey includes a place where participants can write in any additional information or comments that they feel are important and were not specifically addressed by the questionnaire.

**III. References**

ATSDR 2001. Interaction Profile for Arsenic, Hydrazines, Jet Fuels, Strontium, and Trichloroethylene. U.S. Department of Health and Human Services, Atlanta, GA, December 2001.

Coombs 2002. Personal Communication with Jeff Coombs, Director, Tooele County Health Department. October 11, 2002.

EOEA 2000. The State of Our Environment. Executive Office of Environmental Affairs, Commonwealth of Massachusetts. April, 2000.

MDPH 2002. Assessment of Cancer Incidence in Weymouth, Abington, Hingham, and Rockland, Massachusetts 1982-1998: Response to Public Comments and Additional Analyses. Massachusetts Department of Public Health, Bureau of Environmental Health Assessment, Community Assessment Program. November 2002.