

A Weitzberg - March 29, 2017

Introduction

My name is Abe Weitzberg, and I will be coordinating this meeting. I want to thank our hosts at Shomrei Torah for providing us the venue. The purpose of this meeting is to give community members the opportunity to ask questions and receive answers on issues relating to the cleanup of the nearby Santa Susana Field Laboratory (SSFL).

Alec, John, and I are members of the Community Advisory Group, or CAG, and have been citizen stakeholders in the cleanup controversy for far too long. I worked at Santa Susana in the early 60's on space reactors, and have been a practicing nuclear engineer ever since. I returned to the area about 12 years ago and soon found out that most of the information that had been widely disseminated to the public for decades was flat out wrong. I am a technical expert on things nuclear, having spent 9 years at MIT, receiving 3 degrees, and working continuously in the field to the present day. I will spend the next ten minutes giving you an overview of the lab history, contamination, and health effects. John will follow, discussing the site end use and impact of cleanup alternatives, and Alec will close by introducing the impact of cleanup alternatives on surrounding communities.

No matter what you have heard, everybody, including DOE, NASA, and Boeing wants the site cleaned up. The only source of disagreement is the level of cleanup needed to be protective of human health and the environment. I will quickly go through the first set of handouts to highlight what I think are the most important points. You can read faster than I can talk and you can decide what information is important to you.

1. [SSFL CAG Tri-fold Handout APPROVED FINAL 18Aug14](#)

The first handout is a tri-fold that provides information about the CAG and the issues. Details about all of the subjects that we will touch on tonight can be found on the CAG website. Our principal concern is to achieve a protective cleanup that does not do more harm than good. The suggested takeaway tonight is what you can do as community members ...Educate

yourselves; reach your own conclusions; and then communicate your views to your elected officials. The underlying cause of delays and problems with the cleanup has been political interference resulting from antinuclear activism and misinformation. If lies are repeated often enough they become widely believed.

2. [1959 SRE Accident Fact Sheet](#)

The second handout addresses the 1959 SRE accident. Measurements taken at the time showed that no harmful contamination was released from the accident and harmless radioactive gasses, xenon and krypton, that were released, rapidly decayed and dispersed. The reactor was cleaned and refurbished and run successfully for another few years. All remnants of the reactor were removed over twenty years ago, and the accident is not at all relevant to the site cleanup. It was never secret, and was well known within the nuclear community. It was not newsworthy and so was forgotten by the local community.

3. [SSFL Radiological Contamination](#)

The third handout discusses radiological contamination at SSFL. A big deal has been made of radiation because most people do not understand it and it scares them. Every knowledgeable individual and organization familiar with the site understands that most of the remaining contamination is chemical and that radionuclides are only of minor concern. People have been told that EPA did a recent study and found over 600 locations with radionuclide levels above background, up to 1000 times background. What they don't tell you is that only 12 of these locations are above levels considered to be safe for full time residents and only one was 1000 times background. That location was known before the EPA study and was left in place until final cleanup because it was under an asphalt road. Even that site is relatively harmless because if you lay on top of it for two weeks you would get the same dose as a round trip airplane ride to New York. The chart shows the concentrations of 670 samples of Cs-137 in subarea 6, which has the majority of the higher cesium concentrations. Only six are above the residential cleanup level, which in turn is less than 1/3 of the natural potassium-40 background. The big question is why should the

radionuclides that are only slightly above background be remediated if they pose no risk.

4. [Exposure Pathway Schematic](#)

The fourth handout illustrates a concept that many people fail to grasp. Even if there are large amounts of contamination in the vicinity, one must have a specific pathway from the contamination to an individual for there to be health consequences. Pathways include direct contact, air and soil gas inhalation, groundwater, and food ingestion. Additionally, the concentration of the contaminant decreases, the greater the distance between the source and the receptor.

5. [Health Study FactSheet 20141101](#)

The fifth handout addresses health effects which are the greatest concern among nearby communities and which have been the subject of much of the disinformation over the past decades. It is a fact sheet summarizing health studies of SSFL workers and communities surrounding SSFL. I documented the results of about a dozen studies performed primarily by regional county cancer registries and academic institutions. Contrary to what you may have heard or read about cancer clusters in neighboring communities not one study concludes that there were any consistent statistically significant elevated cancer rates in the area. In fact the most recent and most comprehensive study was performed by Dr. Thomas Mack of the USC Keck School of Medicine and the LA County Cancer Registry. He concluded that observed variations in cancer rates were within those to be expected from normal statistics and it is impossible to conclude that there were or were not any excess cancers that could be attributed to proximity to SSFL.

Activists refer to studies by Morgenstern and Cohen and claim that they say otherwise. Actually, Morgenstern himself documents the uncertainties in his studies and states that there is no connection to SSFL based on his results. He states that the slightly elevated results he did see might be related to the extensive use of perchlorates in SSFL rocket testing. However, perchlorate is a major component of solid rockets and SSFL tested liquid-fueled

rockets. Morgenstern's worker study also has significant uncertainties and a later more comprehensive study by Boeing showed that the only observed correlation was with smoking. Those workers that smoked had increased cancer rates while those who did not smoke showed no excess cancers. Morgenstern did not consider the smoking variable.

Although some claim that Cohen's study was about risk, it actually was a pathway study that was biased to show possible locations where contaminants might be found in surrounding communities. There was no evidence that such contamination was ever found or that there were elevated health effects that might correlate with such contamination.

6. [Breysee Public Health Education 20151216](#)

To help resolve the apparent contradictions in the various health studies, I attempted to set up a panel discussion among the various authors. All but Cohen and Morgenstern were willing to participate. I then petitioned the Agency for Toxic Substances and Disease Registry (ATSDR) of the U.S. Centers for Disease Control and Prevention to revisit the SSFL issue and educate the community about the risks from SSFL contamination. The activists and their political supporters put on a full court press and prevented ATSDR from helping the rest of us. However, as shown in the sixth handout, Dr. Breysee, the director of ATSDR, did confirm that the Cohen and Morgenstern evaluations were funded by ATSDR, but the associated reports and evaluations were neither reviewed nor approved by ATSDR. This is contrary to the claims of the activists. As a matter of fact, these reports were directed by the activists, who to this day misstate their conclusions and relevance.

7. [Cancer Study1999and2006publichealth –redacted](#)

8. [Cont'd](#)

The seventh and eighth handouts are very important because they show the real health effects of SSFL contamination on the communities immediately adjacent to the lab. They address two studies of cancers in the census tract that includes Bell Canyon, which is the nearest center of population to the south. Bell Creek receives about two thirds of the surface

water runoff from the lab. The studies concluded that Bell Canyon residents were not at higher risk of being diagnosed with cancer when compared with the rest of the population in the Tri-counties Region and, from 1988 through 2004, the neighborhood did not show any unusual pattern and actually decreased by 7.5 percent.

9. [Response Letter - The Honorable Matthew M. Dababneh - December 22, 2016](#)

The ninth handout is a letter from Barbara Lee, the Director of DTSC, to Assemblymember Matt Dababneh. It states that the Brandeis-Bardin Campus of AJU is safe for use by students, faculty and visitors, and that there was no migration of radiological contamination north from SSFL to Brandeis-Bardin.

You have conclusive evidence of no offsite health effects from SSFL to the immediate north and south. The further away you go, any possible effects would be even less. There have been consistent statements of no offsite health effects made by the EPA, DTSC, and ATSDR, yet claims of such health effects are still made by activists and their political supporters and repeated in the media. I expect that all of us have friends and family members who have been diagnosed with cancer and nobody can deny the tragic effects of these illnesses on those affected. However, fully twenty-five percent of all deaths in the US are from cancer, no matter where one might live. Claims of illness cannot be used as the basis for any cleanup decisions regarding SSFL.

Everything I have told you is factual and well documented. When we get into the Q&A period, I would be happy to answer any questions that you may have.