

December 09, 2021
The Honorable Jerrold Nadler
Chairman
House Committee on the Judiciary
Washington, DC 20515

Dear Mr. Chairman Nadler:

I am writing to request that your committee consider the issue of the radiation exposure of residents of New Mexico from activities of the Manhattan Engineering District (MED) and the Atomic Energy Commission (AEC) dating back more than three quarters of a century.

On Oct. 15, 1990, Congress passed the Radiation Exposure Compensation Act (RECA). RECA is scheduled to sunset in 2022. In order to properly address the radiation exposure of New Mexico residents from all exposures from the MED and AEC activities, and to consider adding residents of New Mexico to RECA, your committee should consider amending RECA to extend the sunset provision. The justification for this urgently needed action is based on consideration of the incomplete and faulty studies that have been performed to date which are described below.

RECA did not include New Mexico in the "downwinders" category based on studies by the National Cancer Institute on fallout (NCI, 1997). That report did not consider the Trinity Test nor any other MED and AEC releases of radioactive material in New Mexico. In 2005, at the request of Congress, the National Academies reported on whether additional claimants should be added to RECA (NAP, 2005). In that report to Congress, nearly 50 prominent scientists, including National Research Council (NRC) committee members, NRC staff and reviewers were involved with the three year long development of that report. They asserted that no additional claimants should be considered for addition to RECA based on that NCI report of 1997, noting on page 124 that the highest exposed individual in Utah received 210 milligray (mGy) to their thyroid organ throughout the entire atmospheric testing era. That thyroid dose is equivalent to a whole body dose of 8.4 millisieverts (mSv). An exposure that low to the highest exposed individual would result in few excess cancers to the entire population. When Congress has periodically asked the Congressional Research Service if other categories of claimants should be added to RECA, their report (e.g. CRS, 2019) references the NAP study to advise that no added categories are needed.

That information, relying on the 1997 NCI report, is incorrect. In 1979, in testimony for both the Senate and House, DOE offered data that showed Utah had external exposures alone just from the tests in 1953 (including the "Harry" shot) that were a factor of more than 10 times higher as can be seen on page 298 of the testimony in Figure 2 (HELLR, 1979). That 1979 table did not include the internal exposures asserted by NCI in 1997, and the NRC report did not include the data from the 1979 testimony.

The Los Alamos Document Retrieval and Assessment Project by CDC, published in 2010, summarized all available information dealing with offsite impacts of the Los Alamos National Laboratory. Chapter 10 deals with Trinity, and reports that releases from Trinity alone were estimated by MED scientific staff to have caused exposures that exceeded 1,000 mSv from external radiation alone, more than 100 times larger than the assumed exposures that Congress has been provided by advisory groups. That exposure along with internal dose from fallout approaches the highest exposure asserted for survivors of the bombings of Hiroshima and Nagasaki.

The following table compares the partial external dose alone from short lived radioactivity to Trinity downwinders with the complete internal and external dose received over 30 years by offsite civilian populations

from other noteworthy events. The data from Hiroshima and Nagasaki is taken from the Japanese Radiation Effects Research Foundation (RERF). The Trinity data is taken from a report in 2008 by NCI provided to Senator Bingaman. The International Atomic Energy Agency (IAEA) and World Health Organization (WHO) data is summarized for Chernobyl and Fukushima. Thousands of downwinders from Trinity received as much dose from fallout as survivors in Japan did from the nuclear weapons. Unlike data for all other categories listed, this table does not include internal dose from Trinity or any other MED releases and, as such, is not a complete assessment of the numbers of New Mexicans that were impacted by MED and AEC releases nor their exposures to those releases. The lowest dose range (0 to 50 mSv) has many individuals whose partial external exposure exceeded that of residents of Utah.

Event & Population		mSv						
Subjects	Total	0-50	50-100	100-200	200-500	500-1,000	1,000-2,000	>2,000
Japanese Survivors	86,572	30,387	6	6,304	6,332	3,963	1,972	737
Trinity Downwinders	376,958	372,024	1,070	2,856	789		200	19
Trinity workers	700	most	few					
Chernobyl Evacuees	116,000	most	few					
Fukushima	81,000	81,000						

The table above only includes Trinity Downwinders to short-lived fallout alone, and does not include the internal exposure from inhalation and ingestion from Trinity as well as other sources that exposed downwinders in New Mexico due to releases from:

1. The 100 Ton Test at the Trinity site
2. Radioactive Lanthanum (RaLa) releases from operations at the Los Alamos site
3. Plutonium releases from Los Alamos
4. Exposures from weapons tests at the Nevada Test Site (NTS)
5. Exposures to New Mexico residents who worked in uranium mines until 1971 (previously included as a category in RECA)
6. Releases over the years from other accidents and operations at the Los Alamos site and elsewhere in New Mexico.

The 2020 NCI report of last fall incorrectly asserts that the Trinity nuclear test of 1945 resulted in a much lower dose from fallout to the surrounding population than experienced by the Japanese survivors who were exposed to the weapons in Japan. (NCI, 2020). There are many issues with that 2020 report that resulted in that erroneous conclusion.

Following the Trinity Nuclear Test, Oppenheimer and Groves asserted that conditions for the test should never be repeated, and that a test site at least ten times farther from civilian populations was needed, along with a much taller (300 feet versus 100 feet) tower to limit fallout exposure to civilians. These criteria were used at the Nevada Test Site, the primary source of exposure to Utah. The MED had two primary concerns in the days following Trinity, secrecy and liability. The need for secrecy was primarily to avoid alerting Japan about the new weapon to ensure the maximum impact to hasten the end of the war. The overwhelming need to keep the atom bomb secret from Japan evaporated 16 days later with the bombing of Hiroshima. This left as their only primary concern to avoid incurring liability.

In order to avoid liability, a false narrative was created that Trinity was a "test conducted on unoccupied government lands". This frequently repeated statement, ignores the impact to uninvolved civilians an hour after

the test who were on land not controlled by the US, and who, unlike downwind civilians near Chernobyl and Fukushima, were not evacuated despite knowledge by MED that the criteria for evacuation (that had been pre-planned) had been exceeded. If one stated that made the same statement that Chernobyl was a "test conducted on unoccupied government lands", it would be correct, as Chernobyl was undergoing a test at the time of the accident, but unbelievable.

Trinity was a successful test, but was also the first and perhaps the worst nuclear accident in history. Scientists were unprepared for the scale and extent of the offsite releases. As reported in Barton Hacker's book "The Dragons Tail", (a history written with support of DOE), the overwhelming concerns for avoiding liability resulted in all radiation release data from Trinity, including the logbooks from radiation protection personnel, were retained in Oppenheimer's office and classified to prevent their inadvertent release. With few exceptions, those documents, logbooks, reports and analyses have never been released by DOE. The CDC's LAHDRA effort did not uncover them as well. However, in December, 2020, after release of the 2020 NCI study, LANL discovered a small collection (~1 box) of documents dealing with Trinity releases that apparently were used by Hacker in writing his book. I was told that LANL is working to release that limited information.

Downwind residents in New Mexico have not been provided an accurate accounting for their exposures from MED and AEC operations, and have not been well served by science. The false narrative created by the MED and maintained by the AEC to avoid creating liability for the government was so successful that no residents of New Mexico were aware of their exposures and none elected to participate in the class action lawsuit that resulted in the creation of the RECA itself.

To be fair, stakeholders and Congress should have access to all information, and both should have access to impartial experts. RECA should be amended to include all impacted individuals from New Mexico who have been denied information about their exposures and denied equal treatment as provided to residents of Utah.

Sincerely,



Dr. Joseph J. Shonka
Health Physicist

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Dr. Joseph Shonka is a Health Physicist who worked on the CDC's Los Alamos Historical Document Retrieval and Assessment Project (LAHDRA) from 2000 to 2010. He also worked on dose reconstructions for other MED sites conducted by CDC.

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