

In Pursuit of Justice for All Those Who Were Damaged



Date: March 22, 2021

To: The Committee on the Judiciary
Subcommittee on the Constitution, Civil Rights, and Civil Liberties
U.S. House of Representatives

From: Tina Cordova
Co-Founder
Tularosa Basin Downwinders Consortium (TBDC)

Re: Hearing Scheduled for March 24, 2021
2:00 PM EST

Examining the Need to Expand Eligibility Under the Radiation Exposure
Compensation Act

Written Testimony along with Attachments



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March 22, 2021

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

The Honorable Steve Cohen
Chair
Subcommittee on the Constitution, Civil Rights, and Civil Liberties

The Honorable Mike Johnson
Ranking Member
Subcommittee on the Constitution, Civil Rights, and Civil Liberties

Re: Examining the Need to Expand Eligibility Under the Radiation Exposure Compensation Act

Good Afternoon Chairman Nadler, Chair Cohen, Ranking Member Johnson and Members of the Subcommittee on the Constitution, Civil Rights, and Civil Liberties,

It is an honor and a privilege to provide this testimony on behalf of the many people I represent. Thank you for inviting me to participate. I want to acknowledge that I also feel very honored to be a part of this distinguished panel to offer testimony on behalf of all the Downwinders of New Mexico.

My name is Tina Cordova. I'm a native New Mexican, a small business owner of 31 years, a Downwinder and a cancer survivor. I'm also a community organizer and the Co-Founder of the Tularosa Basin Downwinders Consortium (TBDC) that has been working for 16 years to bring attention to the negative health effects suffered by the people of New Mexico as a result of their

overexposure to radiation from the first atomic bomb test that took place at the Trinity Site in south central New Mexico, on July 16, 1945.

The test of the “Gadget”, as it was referred to, was the culmination of the top-secret Manhattan Project. And while most people know some of the History of the Project and the Test most people know nothing of the ensuing destruction of human health and the environment that took place subsequent to the test.

It is the hope of the TBDC that through this written testimony we submit and via the oral testimony I will deliver in the committee hearing, that each of you will become more informed of the toll the test took on the American Citizens that lived in close proximity to the test site. Our ultimate goal is for the U.S. Congress to acknowledge the sacrifice and suffering of their fellow Americans and extend health care coverage and compensation to the people of New Mexico, through Amendments to the Radiation Exposure Compensation Act (RECA), while noting that New Mexico has played a pivotal role in this country’s national security as home to the Manhattan Project, two national laboratories, Los Alamos and Sandia, and many other large government installations, such as Cannon, Holloman, and Kirtland Air Force Bases, and White Sands Missile Range. **Please be aware that the current RECA bill will sunset in 2022 and the need to Amend the bill is eminent.**

On July 16, 1945, the first nuclear device was detonated as mentioned earlier in the Tularosa Basin of New Mexico at the Trinity site. The government has always characterized the area as remote and uninhabited, but we know from the US census data that there were an estimated 40 thousand people, men, women and children living in a 50-mile radius to the test site. We’ve identified ranching families that lived as close as 12 miles to the test site. A few of these people are alive today to tell the stories of how one by one their loved ones have lost their lives to cancer and other diseases.

It was written by Ferenc Morton Szasz in his book “*The Day the Sun Rose Twice*” that five days after the Trinity test, Stafford Warren wrote a letter to General Groves, warning that the Tularosa Basin also referred to as the Jornada del Muerto region of New Mexico was too populated for further use in nuclear explosion tests. He urged that any future tests be located in an area with a radius of at least 150 miles with out inhabitants. If you draw a 150 mile radius around the Trinity site it encompasses Albuquerque to the North and El Paso to the South. This meant that hundreds of thousands of people were likely overexposed to radiation as a result of the Trinity test.

The atomic bomb at Trinity had some unique qualities that produced significant fallout. It was the first nuclear device to ever be tested. Because the scientists working on the project had to make certain the test was a success, the bomb was packed with 13 pounds of weapons grade plutonium. Only three pounds fissioned. The remaining ten pounds of unfissioned plutonium was joined with the soil, the sand, and the animal and plant life in the area and incinerated. The mushroom cloud rose over seven miles beyond the atmosphere, penetrating the stratosphere. Plutonium the most toxic substance known to humankind has a half-life of 24,000 years meaning it will remain radioactive for 240,000 years. You only have to ingest, absorb or inhale one particle of plutonium and it remains in the body throughout life giving off radiation and damaging cells, tissue and organs. A green glass-like substance called Trinitite was produced at

the site when the sand in the soil melted from the heat of the blast and was joined with the plutonium. The only place in the world you'll find Trinitite is in the desert of New Mexico.

The Gadget was also the only bomb ever detonated on a platform, a mere 100 feet off the ground. The scientists working on the Project realized the bomb at Trinity produced mass fallout and less destruction. To produce massive destruction and far less fallout, the bombs dropped by airplanes on Hiroshima and Nagasaki were detonated at a height of 1,600 to 1,800 feet. The Trinity blast literally had nowhere to go once it impacted the earth and is the reason radioactive material was so widely dispersed across the Tularosa Basin in every direction.

According to written and oral firsthand accounts from people, an ash fell from the sky for days. This radioactive fallout settled on everything. On the soil, in the water, in the air, on the plants, and on the skin of every living thing, both human and animal. It was a public health and an environmental disaster of grand proportions. July is one of the months historically referred to as the "monsoon season" in New Mexico because it is when we receive most of our annual scant rainfall. It is also when we have massive thunder, lightning, rain and wind storms. The test was delayed the morning of July 16th to allow a substantial storm to subside. Once the storm broke the bomb was detonated and later in the day another significant storm battered the desert and brought down the largest particles of the radioactive fallout.

To fully understand how the fallout negatively impacted human health, it is important to understand what life was like in rural New Mexico in 1945. People lived very organic lifestyles. They had no running water and used cisterns, holding ponds, or ditches to collect water for drinking, cooking, bathing, cleaning and doing laundry. They depended on the earth, the soil, the water to produce all the food they ate. They had gardens and orchards and raised cows, pigs, chickens, sheep, goats, and the like for food. They hunted wild game when it was necessary. One man told me, "We didn't have much, but we had all we needed, and it was all destroyed after the bomb."

Growing up in Tularosa, I thought I lived in Utopia. During the summer months my brothers, my sister, my cousins and all the other children we knew spent our days playing in the acequias (irrigation ditches), eating fresh fruit and nuts from the trees in the orchards and drinking fresh milk from the local dairy. We had no way of knowing we were poisoning ourselves. Our parents had no clue either. No one warned us before or after the test. In July our Moms would have been canning as many fresh fruits and vegetables as they could for the upcoming winter and that fateful July would have been no different. We were not wealthy by any means but we were blessed to have everything we needed to take care of ourselves and each other and we lived beautiful, full lives.

The historical false narrative that General Groves who ran the Manhattan Project, the physicists, the meteorologists and the physicians assigned to the Project had no idea what exposure to radiation meant is disingenuous at best. It is also patently false that they didn't know the people living in the many small communities surrounding the Trinity Test site would be harmed and to what extent. A book published by James Nolan in 2020, entitled, "*Atomic Doctors: Conscience and Complicity at the Dawn of the Nuclear Age*," speaks to exactly how much they knew and how much was kept from public knowledge in an effort to maintain secrecy. The U.S. Government chose secrecy over the wellbeing of American Citizens and it cost those citizens their lives, their futures and their economic security. Most of the people affected were Hispanos,

indigenous people of color including those living on the Mescalero Apache Reservation which lies about 40 miles east of the test site.

General Groves eventually gave into pressure from the meteorologists and the physicians working to prepare for the test and developed an evacuation plan for a small number of people. He believed that any large-scale evacuation would have brought attention to the top-secret test. He gave no consideration to people like Barbara Kent from El Paso, Texas, who was 13 at the time and attending a dance camp in the mountains east of the Trinity test site in the small town of Ruidoso, New Mexico. Barbara and the 10 or so other girls in camp were shaken out of bed before dawn the morning of the blast. Eventually they settled back into bed and later in the day put their swim suits on and made their way to the creek. While playing in the water that day, they experienced what Barbara describes as snow falling in July except it wasn't cold like snow normally is, it was warm. They caught the snow (ash) on their tongues and rubbed it all over their faces and bodies. The girls grew up to be women who all died of cancer at a young age except Barbara, but she was not spared. Barbara has had numerous cancers, miscarriages and her daughters have had cancer as well. She tells of how a swath of her hair along her face turned gray that day never to be restored to its original color. If only General Groves had chosen to evacuate those towns. Innocent children like Barbara would have been spared. (See the attached photo of Barbara with her friends at the dance camp in Ruidoso).

Dr. Louis Hempelmann, the physician who served as the Manhattan Project Medical Director, stated afterwards, and I quote:

“A few people were probably overexposed, but they couldn't prove it and we couldn't prove it so we just assumed we got away with it.”

Part of the history of Trinity is that there was a time following the detonation when people were allowed to freely go in and out of the site without obstruction. Children were taken there on field trips, ate their lunches there, and then packed their pockets with the radioactive Trinitite I mentioned before. They stored shards of Trinitite in cigar boxes under their beds along with other childhood treasures. People picnicked at the site and some ranchers have told me they hunted wild game there all the time.

New Mexicans were the first people in the world to be overexposed to radiation as a result of a nuclear test. New Mexico has a vast beautiful landscape full of natural resources but it was long ago declared a “sacrifice zone”. And the People of New Mexico, were reduced to collateral damage that resulted from the extraction of uranium, the research, and development and testing of the first atomic bomb and the unfettered disposal of nuclear waste. There are over 500 abandoned uranium mines across the Navajo Nation and the Laguna and Acoma Pueblos. Thirty million tons of uranium was extracted out of those mines. The abandoned mines have piles of tailings around them which are rich in toxic substances. When it rains or snows and the moisture washes over the tailings it leaches out these toxic substances that are now part of the environment forever. Those living in the area are also Downwinders. These people, men, women and children live every day of their lives exposed to radiation that will over time rob them of their lives and their futures.

As for the Downwinders of the Trinity test, few knew what had taken place when the bomb was detonated. It produced more heat and light than the sun and was more powerful than the bomb at

Nagasaki. The blast took place before dawn and most people alive at the time have told me they thought it was the end of the world. So many have said they were alone with their Mothers because their Fathers were serving in the Pacific. Just after the detonation their Mothers gathered them up and made them pray the rosary until the time they felt settled. Imagine not knowing what you had just experienced but knowing it was bigger than anything you could imagine. (Please see the attached written family history of Genoveva Purcell and the family history/affidavit of Edna K. Hinkle as just two of the many recorded histories to better understand existence as a Downwinder).

While it was not the end of the world, it was the beginning of the end for so many people, people like my own Father who was a four-year-old child living in Tularosa. The little village is about 40 miles south of the Trinity site, the way the crows fly. Like his neighbors, he and his family lived a simple but full life in rural New Mexico. As a result of his overexposure, he paid the ultimate price for simply being a child raised in a downwind community.

My Father, Anastacio Cordova, died after suffering for more than eight years with three different cancers for which he had no risk factors. He didn't smoke, drink, use chewing tobacco, or have any viruses, yet he developed two distinctly different and rare oral cancers along with prostate cancer – which are compensable under RECA. The doctors told us, "This just doesn't happen. We just don't see this."

My Father was a strong man in mind and body. He grew up that way always living in the shadow of his own Father who was killed in Germany during WWII in December, 1944, the year prior to the fateful year of the Trinity test. My Grandfather is buried in Belgium a place my Father never got to visit. We were planning that trip when my Father was diagnosed with his first cancer. He had to have part of his tongue removed at the base of his throat. He had a feeding tube for over 18 months because he couldn't swallow. My Father who had the most amazing voice couldn't sing any more or whistle which is what he did as he went about his days. He lost a significant amount of weight but not his will to live.

My Father did finally recover from this first cancer and he secured a job driving a school bus for disabled children. I knew when he took the job it was about him healing himself, and he did. It didn't last long. Soon he had prostate cancer which truly was a walk in the park compared to the traumatic treatment for oral cancer. Then one day he told me he had a sore on the front part of his tongue. I couldn't believe it. After all he had been through! After all we had all been through! We all hoped and prayed it wasn't cancer but in the end it was. It wasn't a metastasis either. It came on eight years after his first oral cancer and when examined under a microscope the two cancers were different.

My Father fought the good fight, but he knew what was in store. He did all he could to survive but the exceedingly high levels of chemotherapy took away any strength he had left. He again relied on a feeding tube for nourishment and when he finally gave into the idea of dying, he weighed all of 125 pounds. I will never forget the day he told me he was ready to die. He couldn't speak anymore but he mouthed the words. In many ways it was a relief because I couldn't bear to watch his suffering any longer. I had pledged that as long as he wanted to fight, I would be there for him day in and day out. I knew his days were short then because he had been living on his own will for so long. I was with my Dad when he took his last breath. It forever changed me. I am not the same person, and I weep as I write about it.

My family's tragic story with cancer doesn't end with my Dad's death. I am currently assisting my Dad's older sister who is 81 years old prepare for breast cancer surgery and follow up treatment for the rare and aggressive breast cancer she has just recently been diagnosed with. It breaks my heart to even think of what lies ahead of her. Cancer and the horrific treatment associated with it are well known to her. Unfortunately, she lost her husband and her brother my Dad within a few months of each other.

There is no doubt my Father was overexposed to high levels of radiation from the Trinity test as a child. My father drank gallons of fresh milk, not glasses. The radiation in the milk likely settled in the glands of his neck irradiating the tissues in the surrounding area. It also damaged the cells in his reproductive organs and altered his DNA. Those genetics were passed on to me, and it may be why I developed thyroid cancer when I was 39.

Or it may be because I was exposed to radiation as a result of the testing that took place at the Nevada Test Site (NTS). Dr. Arjun Makhijani, President of the Institute for Energy and Environmental Research (IEER) brought to our attention that when nuclear bombs were tested above ground at the Nevada test site, monitors were in place in New Mexico that indicated fallout traveled to all parts of New Mexico. The fallout didn't end at the New Mexico border as is sometimes depicted in maps used by the government. <https://www.justice.gov/civil/common/reca> (Scroll down to see the map of the western U.S. depicting areas covered by RECA.)

Dr. Fontaine, a doctor with the New Mexico Cancer Center recently recounted to me that at the clinic she occasionally works at in Gallup, New Mexico, they sometimes see patients who come there for cancer treatment from Arizona. Some of these patients qualify for assistance through RECA. She says the people from Arizona utilizing RECA receive all they need for treatment while the people in New Mexico living just a few short miles across the border are left to fend for themselves.

It is important to note that exposure to radiation is cumulative and while many people in New Mexico received a high dose of radiation from the Trinity test, New Mexicans also continued to receive chronic doses from the fallout produced at the Nevada test site well into the summer of 1962. A compiled sample of this data is included here as an attachment for reference purposes and is chronicled in the book entitled *Under the Cloud: The Decades of Nuclear Testing*, by Richard L. Miller. Either way, through our exposure we continue to pass on the damaged DNA to our children and our children's children from one generation to another never to be the same. I am the fourth generation in my family to have cancer since 1945. We've documented families that now have six consecutive generations with cancer.

As a result, we experience a cycle of poverty associated with the exceedingly high cost of taking care of our health when we get sick. Living in rural New Mexico, we can never get treatment at home because there are no medical facilities in the small towns and villages where we live. Since 1990, the RECA program has resulted in the establishment of medical clinics and screening and treatment facilities in other downwind communities. The proposed amendments (2019-2020) would generate similar results where New Mexicans would be able to receive care.

People tell me stories of how they hold bake sales to buy pain medications or how they have to sell cattle to pay for their chemotherapy. How a wife has to go door to door in her Pueblo community to try to raise money for fuel to get her husband to and from his treatments in Albuquerque. When a family must spend all they have to obtain the medical care they need to survive cancer, they have nothing left to pass on but the damaged genetic legacy. There is no opportunity to develop generational wealth. New Mexico has the highest per capita use of Medicaid to access health care coverage of any State in the union. We know from surveying Downwinders that many of them use Medicaid to cover their catastrophic health care costs. It is their only option when they are too sick to continue to work and be part of any employment based health care program. Imagine the economic burden to families, communities and the State of New Mexico.

It was through the tireless efforts of Department of the Interior Secretary Stewart Udall that RECA was established in 1990. The entire Udall family including former Senator Tom Udall, dedicated themselves to the passage of the original Act. Secretary Udall possessed the moral compass to well understand the damage that was done to human health as our government sought to develop and test nuclear devices.

In a 1992 article published in the *New York Times*, attached to my testimony, Secretary Stewart Udall, stated the following:

“There is nothing comparable in our history to the deceit and the lying that took place as a matter of official Government policy in order to protect this industry. Nothing was going to stop them and they were willing to kill our own people.”

Maybe the most difficult truth for the people of New Mexico to grasp is the fact that we had casualties from the Trinity test and they were our babies. Robert Alvarez and Kathleen M. Tucker authored an article published in the July, 2019; issue of the *Bulletin of Atomic Scientists* entitled *The Most Significant Hazard of the Entire Manhattan Project* that brings attention to the sharp rise in infant mortality recorded after the Trinity test. This spike was seen after there had been a steady multi-year decline in infant mortality. Babies in New Mexico were dying at an alarming rate. When the government was asked about the data the Manhattan Project and its successors again refused to admit they had overexposed the people in New Mexico to high levels of ionizing radiation. When we were losing our babies and it was reported to the government, we remained unaided and were refused assistance. This is unconscionable and an outrage! The Tucker/Alvarez article is included here as an attachment.

Dr. Joseph J. Shonka, Ph.D., a health physicist and nuclear engineer delivered a lecture entitled *The First Dirty Bomb, Trinity*, at a scientific symposium in Denver in 2019. Dr. Shonka worked extensively on the decade-long Los Alamos Historical Document Retrieval and Assessment (LAHDRA) Project, an investigation of the Centers for Disease Control and Prevention. His work on LAHDRA focused on Trinity and he is considered to be a foremost expert on all things relative to Trinity. His lecture focused on the extensive fallout produced by the Trinity bomb and the subsequent negative consequences to human health. Dr. Shonka is currently exploring further the infant mortality rate. He believes the fallout from the Trinity test produced negative human health effects and that RECA should be amended to include the Downwinders of New Mexico. A letter from Dr. Shonka is attached to this testimony stating his position.

Recently my 16-year-old Grandson Marcus Montoya pointed out to me that radiation is an indiscriminate silent killer. He is concerned about what this means for his health and his future. He is right. Radiation kills the young and the old, it kills men and women, it kills rich and poor and it is bipartisan. It kills both Democrats and Republicans alike. New Mexico Downwinders are hoping and praying that after more than 75 years, members of the U.S. House of Representatives will hear us with open ears, open hearts, and open minds. We ask that you put yourself in our shoes and consider what it's like to walk with us just one day. Imagine what it's like to attend a funeral of a family member, a chemo infusion, or receive the horrible news that the cancer you've been fighting is back. Can you imagine telling your children that you're dying, and all you can wonder is: **Did I pass on my damaged genes to my children and grandchildren?**

No other state in the United States sacrificed more than New Mexico for our national security during World War II. **Along with sacrificing as Downwinders of the Trinity site test, New Mexico also had both the highest military volunteer rate and the highest casualty rate out of all the forty-eight states which were part of the Union during WWII.** And yet New Mexico continues to fight to be acknowledged and compensated for that sacrifice even as people continue to suffer and die as a result of that sacrifice. We are the ultimate patriots and we've given all we have to the fight. We bury our loved ones on a regular basis. We have nothing left to give!

The late, great Congressman John Lewis, a treasured colleague of yours once said:

“When you see something that is not right, not fair, not just, you have to speak up. You have to say something; you have to do something”

We at the TBDC totally agree with Congressman Lewis. We firmly believe there is a moral and ethical imperative to right this wrong. We believe that after carrying this burden for over 75 years we should be granted the same treatment as other Downwinders have received since RECA was first established in 1990, over 31 years ago. After all, RECA recognizes the responsibility of the U.S. Government to apologize and provide health care and monetary compensation to individuals who contracted certain cancers and other serious diseases following their exposure to radiation during atmospheric nuclear weapons test. Downwinders and uranium workers covered by RECA have received more than \$2.4 billion in approved claims. While this is a significant amount of money, and would be meaningful to the people of New Mexico what we covet most is the health care coverage comparable to what is included in the Energy Employees Occupational Illness Compensation Program Act (EEOICPA) afforded by RECA. There is a path to healing for the Downwinders of New Mexico whose lives and lands were taken advantage of and exploited during the Manhattan Project and beyond. It starts with the recognition of our service and our sacrifice to our great Nation and is complete only when we are afforded the exact same care and coverage as other Downwinders. **Not one dime more. Not one dime less.**

You now know the forgotten and untold history of the Manhattan Project and the Trinity test. You now know that American citizens were poisoned in the process. Saying nothing, doing nothing, remaining complacent renders you complicit, with the authority to remedy the situation.

Thank you, and I stand for questions.

Enclosures:

1992 New York Times article entitled *Santa Fe Portrait: A Longtime Pillar of the Government Now Aids Those Hurt by Its Bombs*.

Sample of Data from *Under the Cloud: The Decades of Nuclear Testing*, by Richard L. Miller.

July 2019 *Bulletin of Atomic Scientists* article entitled *The Most Significant Hazard of the Entire Manhattan Project*.

Dr. Joseph J. Shonka, Ph.D., Letter to Chairman Nadler and Members of the Judiciary Committee

Written Family History of the Trinity test provided by Genoveva Purcell

Written Family History of the Trinity test provided by Edna Hinkle

1945 Photo Ruidoso, New Mexico, of Barbara Kent with her friends at dance camp