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March 16, 2026

The Honorable Tom Tiffany
Chairman
House Committee on Natural Resources
Subcommittee on Federal Lands
Washington, DC 20515

The Honorable Joe Neguse
Ranking Member
House Committee on Natural Resources
Subcommittee on Federal Lands

Re: H.R. 4290 (Rep. Vasquez), "Downwinder Commemoration Act of 2025"

Good Morning Chairman Tiffany, Ranking Member Neguse and Members of the Subcommittee on Federal Lands,

It is an honor and a privilege to provide this testimony on behalf of the many people I represent from New Mexico. Thank you for inviting me to participate.

My name is Tina Cordova. I'm a native New Mexican, a small business owner of 36 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 21 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 my hope and that of the members 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. We request the U.S. Congress to acknowledge the sacrifice and suffering of their fellow Americans and support the installation of a plaque at White Sands National Monument acknowledging the Downwinder communities of New Mexico, 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.

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 14 thousand people, children, women and men 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 lost their lives to cancer and other diseases. Some of these family’s like the Gilliland’s, the Gallegos’, the Walker’s, The Tucker’s, the Hinkle’s, and the Peralta’s have been wiped out by cancer.

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 almost half a million 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. 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. It has been estimated that the bomb at Trinity produced 10,000 times the heat of the sun.

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 massive fallout and

less destruction. The Trinity blast literally had nowhere to go once it impacted the earth and is the reason radioactive material was so widely dispersed across New Mexico 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 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 mothers 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.

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.

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 an atomic bomb. 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 1000 abandoned uranium mine and mill sites across the Navajo Nation and the Laguna and Acoma Pueblos. Thirty two 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, children, women and men 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. 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 45 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, seldom drank alcohol, never used chewing tobacco, had no viruses, yet he developed two distinctly different and rare oral cancers along with prostate cancer. The doctors told us, "This just doesn't happen but we see a lot of this in New Mexico."

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 on December 14, 1944. 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! We 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 we couldn't bear to watch his suffering any longer. 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 have 3 siblings, a sister and two brothers. My sister has had skin cancer. My youngest brother was diagnosed just over a year ago with kidney cancer. His daughter was diagnosed at the age of 23 with thyroid cancer in the middle of her college studies. My mom is being followed for a parotid gland tumor that so far is not malignant. I have just one member of my immediate family a brother that so far has been spared. My dad's oldest sister at the age of 81 was treated for a rare and aggressive breast cancer and my Mom's only sister died of breast cancer at the age of 63. I've lost 3 cousins in the last 2 years to different cancers.

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 likely damaged his reproductive cells altering his DNA. Those genetics were passed on to me. 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. I was diagnosed with thyroid cancer at the age of 39. Now my niece MacKenzie is the 5th generation. We've documented many families like mine that now have four and five generations with cancer.

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, members of 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 unassisted and unacknowledged.

Recently my 21-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 80 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 the funeral of another 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, per capita 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 for that sacrifice even as people continue to suffer and die. 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!

After doing this work for 21 years I know there is a path to healing for the Downwinders of New Mexico whose lives and lands were forever changed by the detonation of the bomb at Trinity. It begins with the placement of a permanent plaque at White Sands National Monument that will stand forever more in recognition of our service and our sacrifice to our great Nation.

Thank you, and I stand for questions.

Enclosures:

Written Family History of the Trinity test provided by Genoveva Purcell

Written Family History of the Trinity test provided by Edna Hinkle

Genoveva Peralta Purcella
8016 Constitution Road
Las Cruces, NM 88007

September 7, 2016

On July 16, 1945 my sisters Elena (Helen), Adelaida (Addie), and Natividad (Tive) came home to the family ranch located 5 miles west of Capitan and one mile north of US 380. After graduating from Capitan High School, they re-located to Albuquerque (as it was spelled then) to go to college and work. That July day, they were helping their mother (who was one month pregnant with me; I was born on March 13, 1946) in the ranch house, when they heard a loud explosion that shook the house, and broke windows. They huddled in fear in a corner with our mother Francesquita (Frances), unaware of what was happening. Mother thought the world was ending!

Dad (Demecio) was outside in the corral tending to the cows. When the explosion happened the sky turned dark and the ground shook! After the initial shock, he immediately ran inside to see if everyone was safe. He entered the house, dusting himself off as walked inside. He was covered in a white powder from the explosion. He found that his family was safe, but very frightened. He walked outside to check on his cows and all of his red cows were covered in a white powder, as was the entire ground! The white "snow" was everywhere. It entered every crevice of the entire landscape. It entered every crevice of my family's home and future.

My father Demecio, suffered with cancer for three years. He had skin cancer and his skin was literally cracking open. He had cancer in his eyes and his stomach. He developed Hodgkin's disease now called Hodgkin's Lymphoma (a cancer of the lymphatic system), and he was in and out of the hospital in Albuquerque. My father passed away due to complications of Hodgkin's Lymphoma on April 18, 1962. By this time, I was a young teenage sophomore in high school. The death and suffering my father endured was devastating for me. He was my idol.

Of my ten siblings raised on the ranch (some of them born on the ranch), seven of them have endured the disease of cancer and four of my siblings have been lost to various types of cancer. My sister Adelaida Peralta (only 33 years of age), endured cancer then died on January 28, 1958 of complications due to metastasized cancer. She left behind her two young children to be raised by my mother, Francesquita Silva Peralta. My mother was not without her own cancer diagnosis.

I am currently the only surviving family member of my nuclear family and I have also had my war with cancer. Due to advances in modern medicine, I am hoping every day for a cure! Many of my family members, including my sons and their families still live on this land. I pray that my daughter, two sons and their children, can live cancer-free lives.

One by one as the years have passed, I have been witness to all my adult siblings and some of their children being diagnosed with one form of cancer or another. Those who have succumbed to the disease left behind families and their own struggles with cancer legacies.

In honor of my immediate family, I will list each member who has been afflicted with and/or lost to various cancers.

- Adelaida Peralta Martinez, my sister, passed away in 1958. She was 33 years of age. The death was a direct result of cancer.
- Demecio Peralta, my father, passed away in 1962. He was 43 years of age. He had Hodgkin's Lymphoma. The death was a direct result of cancer.
- Dorotea Peralta Chavez, my sister, passed away in 2004. She was 69 years of age. The death was a direct result of cancer.
- Juan Peralta, my brother, passed away in 2004. He was 75 years of age. The death was a direct result of cancer.
- Mike Peralta, my brother, passed away in 2001. He was 58 years of age. The death was a direct result of cancer.
 - Francesquita Silva Peralta, my mother, was 63 years of age when she was diagnosed with cancer. She was cancer-free after treatment and passed away at age 92.
 - Natividad Peralta Heberling, my oldest sister, was diagnosed with more than one form cancer in 1999 at age 79. She was cancer-free after treatment and passed away at age 94.
 - Elena Peralta Quintana, my sister, was diagnosed with cancer in 1972 at age 50 and again in 1980 age 58. She was cancer-free after treatment and passed away at age 92.
 - I, Genoveva Peralta Purcella, am the sole surviving member of my nuclear family. At the age of 30, as the mother of three young children, I was diagnosed with breast cancer. I have been cancer-free for over 40 years!

I feel the same way that I assume everyone who was exposed to the fallout from the Trinity site nuclear bomb testing feels, which is that the United States government and the U.S. military did us an injustice! If we had been made aware in advance of the Trinity site nuclear bomb testing, and had been educated on any repercussions related to the fallout and the radiation exposure, my family would likely have been spared the undue suffering and loss that resulted from this government testing. We wouldn't have eaten the meat of the cows; we wouldn't have ingested the water from our wells. We had a large garden on which we subsisted, and we ate all of those vegetables that were exposed to radiation! My dad's favorite horse died shortly after my dad died. The horse's fur changed color, grew long and he lost so much weight that he simply disintegrated. It is disheartening and despicable, that my family and their surrounding neighbors were not located, and told via letter, radio, or any form of notice, that we should vacate the area or stay indoors, or seek shelter underground. Anything would have been better than nothing we received.

As executor of the estate of my family ranch in which my two sons and their families currently reside, I am submitting these testimonials for both my father Demecio Peralta, and my mother, Francesquita Silva Peralta, and myself, Genoveva Peralta Purcella.

Sincerely,

Genoveva Peralta Purcella

Richard (Dick) and Genevra Wood Gililand were White Sands Missile Range Ranchers, who were living west of Salinas Peak, twenty seven miles from where the atomic bomb was tested. They had a rainwater cistern that caught the rainwater when it ran off the house, and then the excess rain water ran into a dirt tank. They used out of that dirt tank when the cistern went dry. They used this rainwater for drinking water and to cook with.

The well water across the canyon was too rank to drink. They had no electricity, so that means no pressure pumps or pressure tanks. The well water was pumped out of the ground by the windmill when the wind blew, into an open storage tank. That water sat in the tanks exposed to the radiation.

They had six children: Alice, Sam, Dixie, Lola, Pete, and Jess. Nineteen of Dick and Genevra's immediate family members have been affected by cancer.

Jess and Pete were asleep on the front porch when this bomb went off, and woke them up. They saw the mushroom twenty seven miles away. The government didn't even bother to tell them to get out of the area beforehand. Jess said the government never told them what the mushroom was.

Sam's daughter Cleo had stomach cancer when she was 12. Sam's daughter-in-law Carol Ann died from colon, liver, and lung cancer.

Alice and her husband Clay Smith had spring water that ran into an open metal tank for their drinking water. Alice had breast cancer when she was in her early 80s, her husband Clay died of colon cancer at the age of 66. Her daughter Lucy died from breast cancer at 42. Her son Richard got prostate cancer when he was 56 and died from it when he was 73. Her granddaughter Cheryl died from cancer.

Dixie and her husband Roy Tucker had spring water that ran into an open tank for their drinking water. Roy died from pancreatic cancer. Her son-in-law Tony Beanblossom died from colon cancer

when he was 67. Her daughter-in-law Karen Beanblossom Tucker died of breast cancer.

Lola has had skin cancer. Her husband Hansel Tucker beat colon cancer when he was 52. Both of her sons have been fighting prostate cancer.

Pete had cancer when he died at the age of 79. His wife Wilma was 66 when she died from pancreatic cancer.

Jess had cancer just below his eye. His wife Louise had thyroid cancer at the age of 83. His daughter Edna Kay Hinkle beat breast cancer at 59. She has had twenty one skin cancers and probably hundreds of potential skin cancers cut or burnt off. His daughter Judy beat breast cancer when she was 49.

They all drank out of open tanks, either rainwater or spring water. Open tanks, meaning no tops, no lids on the tanks.

Jess and Louise Gililand, his brother, Pete Gililand, and his wife, Wilma Gililand walked around at the Trinity site after the bomb was detonated. They picked up the melted sand, and took it home, not knowing it was full of radiation. Back in those days they had a fence around the Trinity site, but the gate was open. Their children were clearly affected by it. Wilma was pregnant at the time with Shirley Ann Gililand. Shirley was born without any eyes.

Genevra's brother John Wood lived on the ranch to the south of her. He had a rain water cistern for his drinking water. The closest well was $\frac{1}{4}$ of a mile from the house. He died of Leukemia. His son Howard and his daughter Bonnie both died of cancer.

Genevra's brother Pete Wood's ranch was to the south of John Wood's ranch. Peter had well water, but it pumped into an overhead tank. Pete's son-in-law Harvey Hinkle died from liposarcoma cancer, his son Eldon Hinkle died from esophageal cancer.

Genevra's sister-in-law Annie Wood, who lived on the ranch to the north of Genevra had a spring that ran into a open rock tank. She

died of esophageal cancer. She was closer to the Trinity site than Dick's ranch.

That makes a total of 25 cancer victims in my family.

My oldest daughter, Jackie Freeman says it's not a matter of if you get cancer; it's a matter of when in our family.

Alice Smith's daughter Viola told her Dr. She hadn't been born yet when the bomb went off, so she doesn't have to worry about cancer. He told her the radiation altered our DNA so we are more susceptible to cancer.

Thank you very much for your time and help!

Edna Kay Gililand Hinkle

I live in Tularosa, New Mexico,

But my grandparent's ranch was 27 miles from Trinity Site when the atomic bomb went off.