Poisoned By My Government: How the Military Let Families Drink Contaminated Water for Decades and Didn’t Learn From It

Alana Pipe
CUNY Graduate School of Journalism

Lori Freshwater
CUNY Graduate School of Journalism

How does access to this work benefit you? Let us know!

Follow this and additional works at: https://academicworks.cuny.edu/gj_etds

Part of the Environmental Public Health Commons, and the Occupational Health and Industrial Hygiene Commons

Recommended Citation
https://academicworks.cuny.edu/gj_etds/244

This Dissertation/Thesis is brought to you for free and open access by the Craig Newmark Graduate School of Journalism at CUNY Academic Works. It has been accepted for inclusion in Capstones by an authorized administrator of CUNY Academic Works. For more information, please contact AcademicWorks@cuny.edu.
In the autumn of 1980, a contractor showed up to grade a parking lot. He had no idea he was about to start digging up the radioactive bodies of dead beagles. But the forked bucket on his bulldozer started pulling up more than soil, and it turned out he was digging in a pit of strontium-90 and dog carcasses that had been buried in an ash grey tomb, a hellish nest of dead dogs and waste labeled *Radioactive Poison*. The new parking lot was on the site of the former Naval Research Laboratory Dump and its sister incinerator.

About a half a mile away from the dump, soon to be known as Site 19, my friends and I were living in our neighborhood called Paradise Point. Me and Nessy, Heather and Maria, the rest of our gang. Spending our time putting other girls’ bras into freezers at slumber parties. Playing the Telephone Game. Riding our bikes all over the place. To the golf course to steal a cart, to swim at the pool, to play soccer on Saturdays.

During the same autumn the dead beagles were found, I was sitting in front of a fake backdrop of rusty colored leaves, a slight young girl with spaces in between my teeth and freckles sprayed across my nose and cheeks, to take my school photo.

This entirely unremarkable 5th grade photo, in a plaid shirt and fragile gold necklace, would have likely ended up where most school photos do, in an old album or a drawer or simply inevitably lost to time. But this photo, instead, would become a piece of evidence of sorts, from a crime that was being committed not only on the day the photo was taken - but for decades before and years after.

The place was Camp Lejeune. A United States Marine Corps base wrapped around the New River in Onslow County. An amphibious training base put there to train Marines to be “the world’s best war fighters,” who are able to make surprise landings on the shores of far away countries. And from the 1950s to at least 1987, the drinking water was contaminated with chemicals at levels 240- to 3400-times higher than what is permitted by safety standards.

Camp Lejeune would become a sprawling Superfund site, and also the place where my mom and I drank those chemicals. In the book, *A Trust Betrayed*, about the Camp Lejeune water contamination, the author gave special attention to my mother’s story: “A woman with the ironic name of Mary Freshwater may have had the most ghastly experiences at Camp Lejeune.”
Of course, I share the ironic name, which can often seem more of a curse. Nearly my entire childhood was consumed by tragedy. The chemical contamination can be linked to the deaths of my two baby brothers, Rusty and Charlie, and my mom’s own difficult passing from two types of acute leukemia. My mother also suffered from mental illness, and that was intensified - understandably - by these brutal losses.

Sometimes it seems that behind me, there is nothing but inescapable grief.

My middle school was called Tarawa Terrace II - named for the area where it was located, and a World War II battle. I rode a Marine-green bus everyday instead of a yellow one, on a base that claimed rivers and creeks, swamps, and miles of Atlantic oceanfront during the fervor of the second World War.

Early in the unfolding tragedy, there was a note sent about water testing results. It was sent during the same month my mother wrote the date on the back of my photo. October, 1980.

Army Laboratory Service Chief, William Neal, wrote on the bottom of the lab results: Water is highly contaminated with low molecular weight halogenated hydrocarbons.

It was an early warning about the drinking water on base. But no action was taken that month or the next, and even with warning after warning - including another handwritten note exclaiming Solvents! They waited five years to start shutting down contaminated wells. After that first memo, issued only days before the beagles were found, the poisoned drinking water kept flowing.

It would become clear that this was a part of the worst water contamination case in United States history - and I would be one in a poisoned million. The tragedy, however, is not left in the past. Documents show the Marines and families at Camp Lejeune are still being exposed to toxic chemicals. We’ve also found that women and children at U.S. bases and our overseas bases who could right now be taking a drink of cold water in their kitchen that’s contaminated with deadly toxins. The military’s failures of the past are continuing today.

When I started researching Lejeune, I became curious about my friends from School - the kids who spent 5th and 6th grade with me, learning archery during P.E. and performing It’s Music! in chorus. I wanted to know if they, too, had been touched by loss that could be connected to our water. I also just wanted to know they had been there, with me.

The school building was torn down. But it also seemed absent from the collective memory. I was told the school had been located where I knew it wasn’t. That it was always an elementary school
- but it was not. It became some sort of ghost only I had seen. So I wanted to find as many of us as I could to make sure our stories aren’t buried along with all that poison.

Heather lived around the corner from my house in the married Officer’s quarters on base. Her family drove a yellow Peugeot, which at the time I thought was the most exotic car ever made. I found Heather’s facebook page when I began searching and I wrote and asked if she remembered me. A few days later, I heard back.

“Yes, of course I remember u!” she wrote in her message.

And then, “Are u writing a story about Camp LeJeune?” a question that somehow felt like both relief and sadness at the same time. “I had breast cancer when I was 33 and believe the water there to be a contributing factor.” Then she asked if I was healthy, and said that she hoped I was.

In the years since learning about the water and dealing with many people who are sick, I have not become desensitized to this sentence. My friend Heather, blonde hair, cut in a pixie, who rode in an exotic French car, had gotten breast cancer when we were 33 years old.

For some reason my mind flashed to my own 33rd year.

One thing about Marine culture is always being squared away, and that meant a pressed and starched uniform and a lot of shoe polishing. One of the dry cleaners Marines frequented for their uniforms was ABC Cleaners. It was a small red and white building just across the highway from the base, and word traveled fast that they had the lowest prices. But the business produced more than money. It produced waste. Tons of waste from the solvent used to dry-clean the uniforms. Two to three 55-gallon drums of the solvent a month. About three gallons a day, of muck.

This dry cleaning business is across the street from the entrance to my school. The owner, Victor Melts, used the toxic muck to fill potholes in his parking lot and he threw the rest into the drains.

In other areas on the base, waste was generated and discarded into empty lots, forests, potholes, roads, waterways, and makeshift dumps. That toxic waste was then taken by the Carolina rains and summer thunderstorms down, down, down, toward sea-level, down into water wells, and into the barracks, into houses, trailers, offices, and schools, and into the bodies of thousands of United States Marines and their families, into our cells, into our bones.

The Agency for Toxic Substances and Disease Registry, part of the CDC, has been conducting studies on the water we drank at Camp Lejeune. Some of the chemicals we were exposed to are identified with long and complicated words, but are reduced to the benign evil of an acronym.
The Toxic Substances Agency issued a position on our water, saying, “past exposures from the 1950s through February 1985 to trichloroethylene (TCE), tetrachloroethylene (PCE), vinyl chloride, and other contaminants in the drinking water at the Camp Lejeune likely increased the risk of cancers.” For those of us who were poisoned this science is about our lives, and our deaths.

But in addition to those chemicals, we would eventually learn we had also been exposed to the deadly carcinogen benzene. Benzene is a clear and colorless, and highly flammable with a gasoline-like odor. When you put gas in your car, that smell - is benzene. It is an important petroleum byproduct, and it is also used in industrial solvents.

In the universe of environmental contamination language can be complex, murky, often confusing. However when it comes to benzene, the language is like the chemical itself, perfectly clear.

Benzene is a carcinogen. Benzene is a well-established cause of cancer in humans. Benzene causes acute myeloid leukemia. Chronic exposure to benzene can reduce the production of both red and white blood cells from bone marrow in humans.

The EPA has established a Maximum Contaminant Level Goal of 0 parts per billion for benzene in public drinking water systems. One of the wells at Camp Lejeune during the time I lived there measured 380 parts per billion. My mother died from two types of acute leukemia. Her genetic testing pointed toward benzene.

The American Petroleum Institute concluded in 1948 that the only absolutely safe concentration for benzene is zero, and then the petrochemical industry launched a decade-long effort using science to create doubt. “Experts say the petrochemical industry has bankrolled more research — at greater cost — than anyone but Big Tobacco, which coined the phrase “manufacturing doubt.”

The government also appears to have attempted to shroud the truth about benzene. In 2010 the Associated Press found that a contractor “dramatically underreported” the level of benzene found in Lejeune’s tap water. The benzene was reported to be 38 ppb and then was omitted entirely when the Marine Corps was getting ready for a federal health review.

“The Marine Corps had been warned nearly a decade earlier about the dangerously high levels of benzene, which was traced to massive leaks from fuel tanks at the base on the North Carolina coast, according to recently disclosed studies,” the AP reported.
Kyla Bennett, an former Environmental Protection Agency employee turned attorney, told CBS News that it was difficult to conclude there were some sort of innocent mistakes. "It is weird that it went from 380 to 38 and then it disappeared entirely," she told CBS, "It does support the contention that they did do it deliberately."

The chemical stew found at Lejeune is made of volatile organic compounds. This has been called methyl ethyl death. They are volatile because they are not stable. They are able to vaporize, to enter soil and air as gas. To enter steam, with ultimate stealth.

Some years ago I became a member of the Community Assistance Panel or CAP, a group mandated by congress to represent the Lejeune community working with both the scientists at the CDC and the bureaucrats at the Veterans Administration. Doing this work, I’ve learned about the military’s cover-up of the water contamination, and how the culture that says, “Stay Marine,” ensures problems are entombed in secrecy.

People knew for many years that our water was poisoned but they let us keep drinking it. Once the contamination was known they were slow to take responsibility for it. To this day the Marine Corps still hasn’t apologized or formally notified all the victims.

But whether you believe science or not, it is still true. And science has found that exposure to these chemicals increases the risks for cancers, birth defects, and other health-related problems.

Nessy is someone I have thought about a lot over the years. She and I looked like we could be sisters and I remember feeling lost without her. Her dad was Bud Moos, a pilot and someone I remember as being a kind man. He died a little over a decade ago, lung cancer, from Agent Orange. I was sad to read that news. He and Nessy’s mom always made me feel safe and welcome in their home. They lived on the same street as Heather, and if I cut through some woods I could be there in minutes.

I wanted to find Nessy, and to see her face. When I did find her, I was surprised how little that face had changed. I started talking to her and discovered memory was her superpower. She gave me names of more classmates, but also resisted my attempts to connect anywhere beside Instagram messaging. I settled for that, but it was a limited way to communicate. I was anxious to talk to her with more than soundbites, and when that happened it was worth waiting for. She reminded me how much we loved Bridge to Terabithia.

Nessy also remembered the two of us saying Bloody Mary, Bloody Mary, Bloody Mary into the dark mirror during our fifth grade sleepovers. And how in the oppressively humid August of 1981, she was spending the night at my house after something happened that was like a real-life horror movie - in a house less than a mile away from us. It had everything. A triple-murder, a
near-decapitation, and two of the victims were kids near our age. Tyler, 14, and Connie, 12, who was killed wearing little pom-pom socks like the ones we wore all the time. Nessy and I were terrified, and trying to sleep in the den on the floor, wrapped up in a deep red blanket with the TV on the news so we could find out as much as we could about the murderer - scared we would be next.

Soon our conversation turned from memories to our children and politics. It was if all those years apart dissolved and I had my friend again.

I found more classmates, too. One is a real estate agent in San Diego, one is an attorney in San Antonio, and one is still in North Carolina studying to be a health teacher. I’ve found around 17 of them. From what I remember, that has to be most of our small class.

I already knew one of my friend’s father had become a big deal because I saw him on the news talking about the Iraq War. Maria Zinni and I were real goofballs - and I also had fond memories of her dad. General Zinni went on to become the head of U.S. Central Command - and a powerful player in geopolitical politics.

After a long wait, Maria finally messaged me back on Facebook. “Of course I remember you, my first ‘best friend’,” she wrote. We vowed to spend time catching up.

But I also found out more of classmates had fathers that held high rank back then, and who also went on to big careers in the military. My classmate Robby’s dad, Carlton Fulford, is a retired United States Marine Corps four-star General who served as Deputy Commander in Chief for United States European Command.

And my classmate himself became a full bird Colonel - and an image of his dad.

Another classmate’s father, Col William Swarens, worked to digitize the records of the Marine Corps as a civilian worker after retiring in 1988. He was known as “The record keeper of the Corps,” and was the subject of a glowing story in Leatherneck Magazine as he retired. “When I think of Swarens I think of that classic statement ‘Stay Marine’, in a time where the Marine Corps runs a huge recruitment and retention, that’s exactly what Swarens has done for over 50 years,” said Maj. Gen. Craig Q. Timberlake.

He was also involved with something called the Worldwide Locator, “which has been used in a variety of ways including contacting Marines who may have been affected by the Marine Corps Base Camp Lejeune, N.C., water contamination issue.”
My classmate’s dad, helping to contact Marines about the water his son and I drank in our middle school.

When the Water Becomes Vapor

A friend of mine describes the humid days in North Carolina as feeling like you are in a dog’s mouth. It can be brutal. Take a shower and walk outside and you need another shower. It’s a kind of heaviness that drains you. The only thing that to do is drink lots of water and search for shade. Our school had an open plan, no enclosed hallways or air-conditioning, so teachers marched us to the old metal water fountains after recess. Heather reminded me of "black flag days" which meant too hot for recess.

In the cafeteria we lined up for strange-tasting meat patties on plastic trays still warm and damp from the wash cycle. I can still smell all that dirty steam coming from the industrial dishwashers. We were breathing it, the toxic vapors, but the cafeteria ladies serving us were right there in a fog of it all day long, wearing their paper caps - for our health and safety.

Vapor intrusion is a relatively new science that will be critical in the coming years as we deal with the alarming amount of chemicals in use each day. It is the process of chemicals migrating from contaminated soil and groundwater plumes underground into the air of indoor structures. In 2002 the EPA issued its first guidance on vapor intrusion. In 2003, the Bush Administration killed it. Obama then made it a priority - and the EPA released its final Vapor Intrusion Technical Guide in 2015.

Mike Magner, a long-time journalist who wrote A Trust Betrayed, said he thinks vapor intrusion is “the next big firestorm for the Pentagon, not just at Camp Lejeune but at military bases and former bases around the country.” Magner told me there is plenty of evidence that the air is or has been toxic inside some of Lejeune’s buildings, and that there are test results being covered up which he thinks will eventually come out.

We have obtained more than 22,000 documents from an ongoing vapor intrusion study about Camp Lejeune buildings. There are documented ongoing exposure risks because of the groundwater plumes and utility lines still located under these buildings. This summer a report to the CDC said a recent test produced the "highest recorded on-base indoor air TCE detection due to vapor intrusion," since EPA guidance.

This measurement exceeds both state and federal screening levels, which can cause health issues for those exposed, especially women who are in the first trimester of pregnancy. This building, HP-57, now a barracks, was not even studied during the first two phases of the USMC’s vapor intrusion studies. It was only after someone pointed out the proximity to
contamination that it was added into phase three and even then the risk for this building was downplayed, by saying, "lines of evidence suggest that the vapor intrusion pathway is not currently significant at Building HP-57."

After several years of Marines living in this building we now know the vapor intrusion pathway was significant enough to prompt the USMC to notify the residents that they had been exposed to TCE. The question remains, how many years too late was that notification?

After my school was torn down in 2013, the government built houses on the land where it had been. I visited the site on a base tour for the CAP - and the powerpoint presentation the government gave us located my school in the wrong place. I kept the printout as a souvenir. But the houses there now - and the current schools relocated very close by - have been the things most consuming me for years. I have asked and asked to try and make sure families, children, were not still being poisoned. The last time I asked about these houses, I receive a response from the DoD who said the homes have not “been assessed for vapor intrusion nor do they have vapor barriers beneath the foundation,” and that a study is currently underway to assess the conditions near the sites with residual contamination in the groundwater or soil.

The projected completion date for the study was December 2017. I asked the CDC for an update and there is no new projected date.

The Lessons Not Learned

Vapor intrusion is only one of the contamination problems on American military bases. I’ve learned the same type of governmental negligence that happened at Lejeune is happening right now on bases overseas. In 2013 the Navy’s own Inspector General released a study that is a blistering indictment of the practices and lack of protective measures undertaken at our overseas bases.

The 70-page report prepared for the Secretary of the Navy said, “overseas Navy installations did not meet the same public health standards as Navy installations in the United States.” In response, the Secretary of the Navy released a memorandum to the Chief of Naval Operations: “It is imperative that Navy personnel receive the same quality of drinking water at overseas installations as they do in the United States.”

The Secretary of the Navy did not do what was needed in order to ensure people on base received “the same quality of drinking water” as they do in the United States. “Four years after [the] 2009 imperative, not a single Navy overseas drinking water system meets U.S. compliance standards,” the Inspector General’s report said.
The report focuses on a case study of Sigonella in Sicily, Italy, and highlights problems there which are seen as echoes of Camp Lejeune. Sigonella’s “legacy of drinking water issues” could cause “the same high profile and damaging negative consequences for the Navy that Camp Lejeune continues to have for the Marine Corps,” the report said.

How could the Navy not have learned its lesson from the million people affected and billions of dollars spent after the Camp Lejeune disaster? I wanted to find out from one of the people most responsible for the delays and obfuscation.

One of the people in charge was Bob Alexander, Camp Lejeune environmental engineer. He was quoted in 1985 as saying no one "had been directly exposed" to contaminants, including benzene. By that time the Marines had known about the contaminants for 5 years, documents show.

Now he works for the state of Tennessee writing water permits. I wanted to talk to him, to see if maybe he had regrets. I read his name over and over again when I studied the documents that detailed the contamination. It felt like I was going to speak to a boogeyman, my nerves were completely frayed. These names become almost mythological after you only know them through years of documents and stories. But in my experience looking directly at a boogeyman is the way to rid yourself of the fear - rob away their mystique and make them live in the same world the rest of us do.

Just do it, I told myself. Pacing with the phone.

After polite introductions, my accent no doubt becoming more southern as it does when I talk to people from the South, from home, I asked if he had anything he wanted to say, anything he would have done differently. The science, after all, is conclusive. It is so inclusive that the Veterans Administration has been compelled to grant presumptive disabilities for 15 illnesses for any Marine who served at Camp Lejeune for 30 days during decades of contamination. This is costing the government billions of dollars. But of course, this is only for the Marines. The family members are left out even though the Toxic Substances Agency says children and adults exposed to TCE during 1972–1985 could be at risk for immune system disorders. The agency unequivocally states, “Young children who used water from the Tarawa Terrace [water treatment plant] during 1956–1984 might have higher risks for cancer. The drinking water was contaminated with vinyl chloride, TCE, and PCE.”

Alexander didn’t seem concerned. He felt as though the men in charge at the time did everything right given the circumstances at the time.
“You know at the time that these data were first appearing, my recollection is we weren't even sure what the detection levels were and what could be believable. And so a lot of the actions that that the Marine Corps officers that were running the base at the time made were made just out of an abundance of caution,” Alexander told me on the phone.

“Abundance of caution” and the word “believable” - obfuscatory language he is still using, all these years and all this mountain of science later.

I told him people were saying Camp Lejeune was probably the worst water contamination case in this history of the country. He challenged this immediately. Who is saying that, he asked. I told him many scientists, and that in fact we had gotten presumptive disability for affected Marines that was costing billions of dollars.

“That is not a science based decision. Right?” he asked.

“It is science based actually,” I told him. “The Toxic Substances Agency scientists met with the V.A. and secretary McDonald and went over study after study...,” I was trying to say when he interrupted.

“Yeah right I get those flyers in the mail too,” he said. "But that doesn't make it a likelihood. It's not a proven epidemiological conclusion.” After a few minutes, he asked rhetorically, “Can you imagine the Trump administration doing that?” before a drawn out snicker.

“He would not have done it,” he said.

I told him I thought Trump had been supportive of the Marines in this case. He seemed doubtful. But in fact, because of Senator Burr of North Carolina - Trump did not sink our new regulations and he did what was necessary to enact them.

Alexander then told me, “Yeah I have - I have some professional experience with Toxic Substances Agency over the years - and it hasn't all been positive. They’ll say what they need to say for the agency they are interacting with.”

In the end, he mostly wanted me to know he was not interested anymore. "I'm just not interested," he said repeatedly. "It's water under the bridge."

"No pun intended," I said, wondering if he had any awareness.

"Yep, it's water under the ground."
This feels like an hourglass I cannot turn over. Time is running through my hands and will likely run out before I’m given a sense of redemption or justice when it comes to Alexander.

I wondered if I was too sensitive about what Alexander told me, so I ran his response by Richard Clapp, an epidemiologist who has participated in the Lejeune studies. Alexander’s dismissal of the studies that show the contamination’s effect on people, and the military’s willingness to pay for health problems, is illustrative, Clapp wrote in an email. “He says none of them have provided ‘definitive proof,’ and yet no single study ever does that. They have to be looked at in the context of other studies in other populations, experimental data, mechanistic data, and then put together in an overall evaluation.”

National and international agencies have looked at the combined evidence of the contamination, Clapp said. “Mr. Alexander seems not to know this, or he’s simply looking for a way to deny any cause-effect claim. I would not take his skepticism or his opinion that compensation is not ‘science-based’ as anything more than that - one man's opinion.”

The Damage is Done

When I talked with Heather, the first thing she brought up was my mom. "Bombshell," she said. “When I think of your mother I think of that word - bombshell. She was just so full of life.”

She was that, in so many ways explosive, and it was nice to share a memory of her from this time in our lives.

My mom’s leukemia and her unwillingness to give up the fight, made her illness and death one of terrible suffering. It was difficult, and strange, to see this woman of such beauty and charisma being ravaged by the poison being delivered to hold off the cancer.

She grew up poor on a farm, traumatized from having to break chicken’s necks, and dropped out of high-school mid-way through. But Mary Freshwater knew her powers. And they were a force to be reckoned with when she conjured them up. That was true if you were being seduced or if you were being vilified.

When she stood up in front of the scientists and the Marines at a community meeting to discuss the contamination in the early days, she knew how to throw an emotional punch that would land a knockout. And she did just that.

The oldest USO building sits on New River and it was the place where she waited in the audience as the panel of experts went on about numbers and statistics until time to hear from the people affected by the poisoned water at Camp Lejeune. My mom was there to tell them about
Rusty and Charlie, the two babies she lost. One born with an open spine, the other had no cranium.

Wearing a light pink turtleneck, her hair a mess - which was rare for her - she stepped up to the microphone and placed a small cardboard box on the podium in front of her. In black marker in small letters on the top of the box - the word Baby. This is all my mom had left of Rusty, one of my brothers who lived a month and died on New Year’s Eve.

As she spoke - she opened the baby box and unpacked it, eventually holding up a dingy bottle with the nipple still on it and liquid still inside, and a blue onesie, with a yellow stain which she would explain was her son’s vomit that she had not been able to wash.

“We are not numbers in a study. We are human beings that have had great tragedies,” she said.

After my mom died this same baby box was one of the things I knew I had to find and to keep. She had it with her all the time, even as we moved around like gypsies. It was my family history, but it was also a part of the country’s history now.

After her death my mother’s much younger husband fell apart and fell into the bottle again. One night I got a call that he had not paid the rent and the landlady was putting all my mom’s stuff in the old barn out back. Some cousins had already shown up and taken things. I was living in Rhode Island and had to drive down to rural North Carolina overnight. By the time I could get there the place was a mess.

After a few minutes of walking around the house I was able to find the baby box.

It was sitting with junk, like it was next for the trash. I went into the kitchen to get some water, it was hot already and I was thirsty. On the counter there was another box, but this one stood out because it was new and had no name.

I opened it up, and inside was a clear bag of ash and small fragments of bone. It was what was left of my mama. That was the first time I saw someone’s ashes like that. It was not what I expected, not elegant ash like the kind the Kennedy’s would puff into the air from their boat to watch it settle into the sea. Instead it was undeniably the remnants of a human being and it was heavy with bits of stubborn bone.

I went and got my little brother’s box and sat it on the counter, too. Right next to her.

And then after packing up as much as I could - I took them both home.
The New River is not one of the most beautiful rivers. The banks are scrappy, with wild bushes crouched and waiting to sting legs. It starts and finishes in Onslow County. It is our river, and it seems to say it is majestic until it makes believers out of us all. Sometimes it looks like the banks are falling into the water. Like a claw came along and took root and dirt, rot and leaves. This kind of thing can look spooky. Maybe because we want to wonder - but never actually know what is buried. We don’t want a storm to come along and dig up the things that have been covered, forgotten.