Half-Life: How an Accident at the Idaho National Laboratory Changed a Family

Years after he was exposed to radiation, a man fights to tell his story

by Jessica Murri

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Ralph Stanton was one of 16 workers exposed in an uncontrolled release of plutonium on Nov. 8, 2011, at the Idaho National Laboratory. The event happened two and a half years ago, but for Stanton, it might as well have been yesterday. Passionate, dogged and obsessed with telling his story, he's the kind of guy who will settle in for phone conversations lasting full afternoons, undertake eight-hour-long road trips to deliver documents and send text messages before dawn.

The anger he carries for the INL cannot be doused by any official document, scientific opinion or reassurance from upper management. Stanton filed a whistleblower complaint against INL in April 2013. Now, more than a year later, mediation between Stanton and the lab will begin at the end of May. If it doesn't work out, Stanton will wait for his chance in court to prove his claims.

While he feels the company that runs INL, Battelle Energy Alliance, should be held accountable in the public eye, the U.S. Department of Energy has a much different opinion. At the end of March 2014, BEA was awarded a contract renewal to run INL through September 2019. The DOE said it extended the contract because of BEA's consistently strong annual performance reviews.

Stanton still insists that his job, family and health have been shattered. INL says: Not by us.

Exposure

The alarm was terrifying. It took the 16 workers at the Zero Power Physics Reactor (ZPPR) a moment to realize what it was. It sounded like a fire alarm, but working for the Idaho National Laboratory at this high-security facility, handling fuel-grade plutonium, the alarm was bad news. Worse than a fire alarm. Contamination had gone airborne.

That Tuesday morning, Nov. 8, 2011, had started simply enough: Stanton, who had worked for INL for almost a decade, was to enter the ZPPR vault--a giant concrete refrigerator with one of the largest stockpiles of plutonium in the world--pull out 33 plutonium plates and repackage them to be sent to another laboratory.

Stanton slid his white lab coat over his broad shoulders and buttoned it down his thick middle. From the vault, he pulled four tightly clamped metal boxes called clamshells, each the size of a kid's lunchbox, and brought them over to his work area, called a "hood." The hood looked more like a salad bar than somewhere to handle radioactive materials, but that's where he unpacked the clamshells, inside each of which rested a plate of fuel-grade plutonium the size of a Hershey's bar, sealed in stainless steel.

For Steve Braase, the morning was hectic. He didn't expect this job until later in the week, but management bumped it up a few days.

As health physicist, it was Braase's job to check all the safety equipment in the room before Stanton could start pulling out the plates. He constantly looked for contamination that could danger his co-workers. Finding all his instruments in order except for one radiation monitor, the ZPPR facility's ventilation system was placed in "Operate Mode."

But Stanton and a dozen other co-workers stopped when they saw a bright yellow label bearing a red haz-mat symbol on one of the clamshells. "ATTENTION: RADIOACTIVE MATERIAL," it read, and beneath, in delicate black handwriting, it said, "Plate wrapped in plastic."

click to enlarge

- U.S. DEPARTMENT OF ENERGY
- THE IDAHO NATIONAL LABORATORY FACILITY WHERE RALPH STANTON AND 15 OTHER WORKERS WERE EXPOSED TO AIRBORNE PLUTONIUM IN NOVEMBER 2011.

According to Stanton, Braase, INL officials and a U.S. Department of Energy investigation following the incident, the shift supervisor called two tiers of management, asking if the team should open the clamshell. Though this task was common, Stanton had never seen a plate wrapped in plastic before. Management gave workers the OK to continue.

Braase was nervous about going forward with the work. He wiped the outside of the clamshell with a piece of paper and fed the swab into a radiation detector, but found no trace of contamination.

Wearing two pairs of gloves and standing behind a plate of lead shielding, Stanton took the clamshell into his hood. Several filters lined the back wall of the hood, but a few months before, Stanton had noticed three of the four exhaust fans weren't working. He didn't like that, and had brought it up to his supervisors, but they hadn't been fixed yet. He didn't push it.

He opened the clamshell to reveal the plutonium plate wrapped in several layers of plastic and duct tape. It had sat in the vault like that for more than 30 years. Braase again swabbed for contamination and, again, found none.

Stanton sawed through the first layer with a box cutter. He turned over the plate and cut off the next. He flipped it over three or four times, getting closer to the stainless steel that separated him from the plutonium.

Braase said he heard fellow nuclear facility operator Brian Simmons, who has refused to comment to the press pending mediation in a court case, say, "I seen something fall out." As the workers gathered around, Braase heard him say it again. "Yeah, I seen something fall out. We've got powder."

Stanton said this is where he "puckered." He looked at Simmons, thinking, "Man, I hope that's not what we think it is, or we're hosed."

Stanton feared the contamination was alpha radiation. While alpha radiation isn't strong enough to penetrate someone's skin or clothes, it can be extremely poisonous if inhaled.

Braase grabbed a sample of the powder and threw a wet towel over it to keep it from going airborne. He reached for a handheld alpha radiation detector. Normally, the detector has to be a quarter inch away from the subject to pick up radiation. As far as three inches from the swab, the needle bounced into the red.

"Stop the work," Braase said. Based on the distance from the sample and the reading on his monitor, he knew his colleagues were being dosed with far more radiation than they could safely--or legally--be exposed to.

"We've got to get Ralphie out of there," he said.

But Braase couldn't let Stanton out of the hood until he was checked for contamination. Running a detector over his Stanton's body, Braase was shocked to find alpha radiation on his shoulder.

"No, Ralph, you can't come out," Braase said. What he thought was, "Oh shit."

At that moment an air monitor--installed 15 feet away and upstream of the ventilation--started screaming. That was the workers' cue to evacuate immediately. The contamination was airborne.

Everyone but Braase and Stanton rushed out of the room. Stanton stripped off his gauntlets and gloves and Braase sealed his hands inside a plastic bag.

By 11:15 a.m., less than 10 minutes after Stanton cut through the plastic wrapping on the plate, the ZPPR workroom was empty. Sixteen employees waited in a control room for decontamination.

Figure 2-6. Clamshell Number 45 M

click to enlarge

- U.S. DEPARTMENT OF ENERGY
- THE CONTAINER OF PLUTONIUM THAT RALPH STANTON OPENED, ONLY TO DISCOVER THAT IT HAD OXIDIZED INTO A POWDER WHICH THEN CONTAMINATED THE FACILITY.

Thirty-two miles away, Jodi Stanton was waiting, too. An employee at INL's buried waste facility, Jodi was on her lunch break, waiting for her husband's call. Married for 23 years, he called her every lunch hour and they'd talk on the phone for 40 minutes or so, about plans for the weekend or what the kids were doing. Family stuff. But on Nov. 8, 2011, he didn't call. She thought it was weird, but figured her husband was busy and went back to work.

The hours dragged on as Stanton watched his co-workers get checked for contamination. The alpha detector moved at half an inch per second, a hair's width from their bodies.

The decontamination team found contamination in Braase's hair and all over his face. He remembered feeling like Pigpen from Peanuts, surrounded by a cloud he couldn't see. Every movement he made stirred the particles more.

A few hours later, Stanton, Braase, Simmons and another worker with the highest levels of contamination were led to a room lined with beds. Beside each bed was an IV drip, containing a chemical solution meant to absorb heavy metals in their bloodstream and prevent radiation poisoning.

To Stanton, it was "surreal," like a science fiction novel. Braase was scared.

At 4:30 p.m., Jodi finished her work out in the field and headed to her work trailer. A phone call came in from a number she didn't recognize, but she knew it was her husband. He told her he'd been involved in an accident, but he couldn't say anything more. He told her he would talk to her when he could, that he was on his way to be checked by medical staff.

Right after she hung up, she got another call from a friend.

"It was on the news, it was just on the news," her friend told her. "There's been a radiation accident at work and Ralph was involved. It was in his facility."

Jodi felt stunned. Then she got angry. Something happened to her husband and nobody had called to tell her--even four hours after the incident and even though she worked for the same company.

Then, she fell apart.

"I've got to go," she told her boss. She fled to the medical facility where Ralph was, but couldn't get in to see him. They told her, "Just go home. It'll be a long night."

She had an hour's drive ahead of her to get home. She called her mom, but her mom couldn't understand her because of the crying. Once at home, Jodi had to try to explain to her 14-year-old daughter what happened, without even knowing herself.

She sat on their couch facing the door and she waited, staring at the door.

Just after midnight, Ralph walked in. Jodi met him at the door.

"You're good?" she asked.

"I'm OK," Ralph replied.

"No, I mean, you're good? They cleared you to come home. They said you're good to come home?" Jodi said.

"Yes," he said.

Jodi grabbed her husband, held him around his shoulders and cried, kissed his face, kissed his ears and helped him in. Stanton peeled off the surgical greens the INL sent him home in and spent the night sicker than he's ever been in his life. So sick, he thought he was going to die.

Where the Stories Diverge

The account of what happened in the ZPPR facility on Nov. 8, 2011, is mirrored by INL officials, the Department of Energy's investigation and the memories of Braase and Stanton. But they diverge from the point when Stanton opened the door to his own little beige home. He brought something with him from the lab that day--he claims it was radiation. INL is doubtful of that. Regardless, it upended his family's life.

Stanton spent the whole night after the exposure in and out of bed, violently sick. He and a few other co-workers who were also exposed went to the INL site doctor the next day, complaining about vomiting and diarrhea.

"The doctor told us we had influenza," Stanton recalled, bitterness creeping into his voice. "We said, 'That's bullshit.' The minute he told us that, that's when all the trust went away."

Sharon Dossett, the health and environmental safety director at the INL, pointed out that radiation-blocking therapy (called chelation) can also cause flu-like symptoms. She said there's no way that Stanton tracked any radiation into his home, or that he inhaled enough into his lungs to be poisoned.

"We have no evidence that there was any release of contamination from this event, ever," Dossett told *Boise Weekly*. "We cleared everybody the night of the event. They did not go home contaminated."

Stanton doesn't believe that now any more than he believed it then. He had all the proof he needed from the other nuclear facility operator exposed alongside him: Brian Simmons.

By April 2012, five months after the exposure, Stanton said Simmons was still vomiting two or three times a week. Stanton remembers times when he and Simmons would be driving down the highway and in mid-conversation, Simmons would tell him to pull over.

"He'd run into the sagebrush, just puking," Stanton said.

The INL doctors changed his diagnosis from influenza to post traumatic stress disorder. Stanton didn't buy it and started calling around for another doctor with radiological experience who could help his friend. He landed on Marco Kaltofen, president of Boston Chemical Data Corporation, which specializes in environmental investigations from petroleum, chemical and radiological releases.

Though he's tracked radioactivity from the Fukushima Daiichi nuclear disaster and most recently the Waste Isolation Pilot Plant in New Mexico, Kaltofen isn't a medical doctor, so he told Stanton he couldn't help his friend.

"But just out of curiosity, what happened?" Kaltofen asked Stanton during their first phone call. Stanton told him about the incident, about the failed stainless steel cladding around the plutonium, about the "hellacious uptakes" of the radioactive particles.

"Well, Ralph," Kaltofen said. "Good luck to you. But you don't have to worry about your family because they showered you. That would have taken all the alpha off of you."

Stanton stopped.

"They didn't shower us," he told Kaltofen.

"Let me get this straight," Kaltofen said. "You're handling plutonium K.G.s [kilograms] in a hood, they don't have you in respiratory gear, you had a breach, and you had a 5.5 million D.P.M. [disintegrations per minute] smear and a huge D.A.C. [derived air concentration] reading 15 feet away from you, and they didn't shower you?"

"No."

"No," Dossett confirmed to *BW*.

"What we typically do on a personnel contamination in decon is we survey people. Then, if we can easily remove the contamination, we don't shower them," she said.

Dossett said contamination was removed that night by taking off the workers' clothes, using tape and wiping them down with wet wipes.

The DOE report said another reason why contaminated workers weren't showered was "an insufficient supply of hot water" at the facility.

Out of the 16 workers, two did go to another facility to shower, including Braase, who thinks that his shower prevented him from getting sick that night.

Back on the phone with Stanton, Kaltofen said, "Look, what I want you to do is send me some dust samples from inside your house."

"There's no contamination in my house," Stanton told him. "My wife is a very tidy housekeeper. She's kind of a clean super-freak."

Not only that, but the Stantons had their carpets cleaned after the holidays.

"Plus, my daughter and my wife did the spring cleaning. There's no contamination in my house," Stanton said.

"Ralph, with the levels of contamination you were in, just humor me," Kaltofen said.

Stanton stuck strips of duct tape to his walls and ripped them off. He did the same on the shelves, cupboards and elsewhere around the house. He mailed them off to Massachusetts and Kaltofen's call came a week later.

Kaltofen told him the samples tested positive for plutonium-239 and americium-241. He asked for more samples, so Stanton sent him his vacuum bag--the third since he came home the night of the exposure. It tested positive. Braase sent in his pillowcase as well. Positive.

Dossett, meanwhile, is not positive those results can be trusted.

She said INL has reached out to Kaltofen repeatedly, asking questions about his methods and the credibility of his lab to test for plutonium, but her questions have gone unanswered. Stanton said it's because his Massachusetts scientist won't release anything until there's a trial in the whistleblower complaint he filed a year ago.

John Grossenbacher--director of INL, president of BEA and a retired U.S. Navy vice admiral--told *BW* that INL offered to have an independent

lab come check Stanton's home for contamination. He said he offered radiation-detecting body scans for his family six times, but Stanton declined.

"We know what kind of radiation exposures will result in physical impacts on a person's health, and none of these exposures came anywhere near that," Grossenbacher said in an interview. "I don't know what else we can do. We're very serious about it ... everything we know and understand is that these people are not hurt. And [they] certainly didn't track any contamination home. If they feel that they did, then we want to do everything we can to resolve it. If they won't cooperate, it puts us in a difficult position."

'So I Bought Me a Respirator'

When Ralph told Jodi about the contamination Kaltofen found in their house, she bawled for hours.

"Here, the last six months we've spent laying on the floor, reading books, taking naps, having my 14-year-old daughter vacuum and dust every weekend. Just living life as normal," Jodi said. "This home is my refuge. This is a place where my family can come and be together and feel peace and comfort and now that's gone. These people have taken over my home. Every time you think it can't get any worse, it gets worse."

Jodi, a small, delicate woman with curly red hair and bright green eyes, struggled to cope with her new, "tainted" life. She started carrying a pink .22 pistol in her purse and went from taking a daily multivitamin and the occasional ibuprofen, to a daily schedule of 23 medications: blood pressure medication, anti-depression medication, anti-anxiety pills, a cocktail of migraine medications, sleeping pills, B-12 injections, vitamin-D pills, calcium, potassium and magnesium supplements. Her hands are ice cold all the time.

"So I went and I bought me a respirator, and put it on, and started cleaning," she said.

- JESSICA MURRI
- JODI STANTON BECOMES EMOTIONAL WHILE TALKING ABOUT HER FAMILY'S STRUGGLES IN THE AFTERMATH OF HER HUSBAND'S EXPOSURE TO PLUTONIUM IN 2011.

She scrubbed walls and shelves and floors and baseboards. She cleaned everywhere she could think of. She had just purchased a $800 vacuum in the past year, but when Ralph told her about Kaltofen's test results she bought another one just like it.

At the store, the clerk reminded her of the 12-month warranty on her first vacuum.

"I gotta have another vacuum," she said, feeling a surge of guilt. Only a few weeks earlier, she had taken in her vacuum for one of its two free services. The worker pulled off the bottom and, "whoof, dust went everywhere," she said. Now, Jodi knew that dust could have been radioactive.

"So I've got another vacuum now," she said. "But we sent some samples off again and yeah, we still have it. So now both vacuums are contaminated. But I can't just keep going through vacuums."

The Stantons are frustrated, too, because they feel they're paying a mortgage on a house that's pretty much worthless now. Idaho state law says homeowners must disclose the presence of hazardous materials to buyers, so the Stantons ask, "Who would ever want to live in that?"

The effects of the exposure have reached their teenage daughter, Marissa, as well. Their older boy lives in Arizona with his wife, so he's not directly impacted. But as her parents became more

engulfed in their situation, Marissa dropped out of high school and got in trouble a few times for drinking.

"Nobody deserves to live through the stress and the nightmare of what she's been through," Jodi said. "This one got lost along the way."

Ralph also regrets the way the two and a half years since his exposure have hurt Marissa.

"We weren't there," he said. "We weren't focused like good parents should be."

Since then, Marissa earned her diploma online. She's 16 now and her hair fades wildly from bleach blonde to dark brown. She longboards and hangs out with her friends on Friday nights, eating pizza and seeing movies like any other teenager.

But she doesn't talk about her home life.

"None of my friends have gone through something like this. No one can relate," Marissa said. "I just want all of it to go away. Going through all this, my parents have been so stressed all the time. I haven't seen them happy since it happened. I want everything to go back, and that's never going to happen. It's never going to be the same."

An Investigation, An Obsession

Life's definitely never going to be the same for Stanton, who says that a culture of unsafe working conditions doomed him to this nightmare, in which he returns again and again to the belief that some form of cancer will crop up and kill him in the next 10 years.

In some ways, a Department of Energy investigation mirrors his safety concerns.

Driving through the high desert of Eastern Idaho, it's easy to feel like there are secret powers hidden in the scrubby, rock-studded expanse. And you'd be right. Spread over 890 square miles is the Idaho National Laboratory--an amorphous entity encompassing dozens of facilities and 4,000 employees, many drawn from nearby Idaho Falls.

Though administered by the U.S. Department of Energy, INL has since 2005 been run by contractor Battelle Energy Alliance. Among its hundreds of projects and roles, INL specializes in nuclear material storage and research, with common customers like the National Nuclear Security Administration and NASA, as well as TerraPower--a company owned by Bill Gates.

Back in 1992, the Zero Power Physics Reactor--where the exposure happened--was taken out of operation. It sat abandoned for the next 13 years until BEA moved in and reopened the site. Containing metric tons of fuel- and weapons-grade plutonium, scientists from all over the world came to run tests at ZPPR. And they had no major problems in the facility until that November day in 2011 when plutonium oxide spilled out of Stanton's hands. Two days after the exposure, the DOE

launched an investigation into the incident, with findings that left Stanton feeling bitter and betrayed.

"The board concluded that this accident was preventable and that, over time, a number of opportunities had been missed that could have prevented the accident," the investigative report stated in its opening summary.

The report, which resulted in $412,000 in fines for BEA, scolded the company for "not recogniz[ing] the hazards associated with the possibility of releasing plutonium material."

Grossenbacher agreed.

"Frankly, I don't think we paid enough respect to that uncertainty and the hazard," he told *BW*. "It's at all levels. It's at the managerial level and I certainly accept responsibility, and it's at the worker level, too."

The report found much of the equipment wasn't working during the exposure, from missing alarms to cracks in the ventilation system to faulty decontamination techniques.

Phil Breidenbach, who manages nuclear operations at the lab, told *BW* that "anytime you have a complex facility, there's going to be times when the equipment isn't working, and we can normally compensate for that and safely continue."

But during the exposure, he added, the stars aligned in such a way that too much equipment was out of service and couldn't safely compensate.

"That was a mistake," Breidenbach said.

Grossenbacher said part of their error at the lab was, "saying it bluntly, complacency. We had done this operation many, many times. ... We were set up for failure and we didn't recognize it."

The report found the continuous air monitor--the alarm that signalled workers to evacuate--wasn't good enough. There used to be an alarm in the hood that would have detected the alpha radiation immediately, rather than leaving the workers exposed to airborne plutonium for almost five minutes, but it was taken out before the incident due to cost. BEA concluded that the continuous air monitor, installed 15 feet from the hood where the plutonium plates were handled, would be enough. The DOE report disagreed.

To add to that, the report dinged BEA for not fully training employees in the event of an uncontrolled airborne contamination. From 2010-2011, only one radiological drill was performed at the ZPPR facility.

"Medical and radiological staff stated that none of the drills that were performed would have prepared them to recognize and respond to the human aspects (emotional trauma) of such a radiological event," the report said.

Urine and fecal samples of the most contaminated workers were sent to another lab, but weren't "properly handled ... due to a verbal miscommunication," so the samples were thrown out. Those samples would have shown the highest doses of plutonium and americium.

Despite all this, Grossenbacher said part of the day-to-day operations include constantly weighing safety risks--and, in the wake of the DOE investigation, he added that BEA took 80 corrective actions after the exposure, leaving the ZPPR facility out of commission for nine months. He's confident that INL is a safer place to work than ever.

"An extreme example is when NASA has to make the decision to launch or not," Grossenbacher said. "It's never a perfect decision, they weigh all the considerations and they make the best judgment that they can. And for whatever reason, if their judgment goes wrong, the results are unacceptable. ... We make these kind of decisions frequently, and we get it right the overwhelming majority of the time. Our goal is always, no matter what happens, even given that people make mistakes and machines break, that in the end, nobody gets hurt."

Stanton certainly felt that he had been hurt.

As the DOE launched its investigation, another investigation of sorts began at his dining room table. He filled filing boxes with documents, memoranda and internal emails. He was on the phone constantly--with other workers involved in the exposure incident, with friends in other facilities, with retired INL employees, with past whistleblowers. Stanton became consumed with piecing together the events the led up to his exposure and the ways BEA could have prevented it.

In his search, Stanton discovered one letter in particular that devastated him. It was written by an independent safety review committee chairman named Ted Lewis.

"I feel there is a potential for finding failed [stainless steel] cladding on the ZPPR Plutonium-239 plates that are now in storage in the ZPPR vault in 'sealed containers,' (clamshells)," the letter read. "My concern is I think the potential for discovering the failed [stainless steel] cladding plates in the Hood is greater than the facility and senior management realizes."

The letter spelled out the exposure that happened to Stanton, and it had been presented to Breidenbach and Grossenbacher in 2009, and once more a mere five months before the accident.

"Ted [the author of the letter] actually came into my office," Breidenbach told *BW*. "It was kind of an informal meeting where Ted was talking to me about several things. It was one issue in a 15-minute meeting. In hindsight, clearly that was a missed opportunity to prevent this event from happening. It was one of several missed opportunities that would have prevented it."

Grossenbacher said he was also in that meeting. He said that Stanton's interpretation is taking it too far.

"This letter, when it's looked at outside the context of what goes on here every day, creates the image that someone ran in here and said, 'No, stop, danger, danger, danger.'" Grossenbacher said. "That's not the case."

The two recalled the meeting as cordial and "soft-spoken."

Despite the faulty safety measures, Breidenbach said one simple action could have prevented the exposure: Stanton and others could have stopped the work once they found the plastic-wrapped plate.

"I'm not a rocket scientist or a Ph.D.," Grossenbacher added, "but if I'm a rad-con tech and I think, 'Well, what happens to this stuff after 30 years of being wrapped in plastic, anybody know?' And if the answer is no, I would say, 'You know what, let's stop.'"

Stanton underscores that his supervisors told him to proceed; what's more, he takes BEA to task for never warning workers about the potentially faulty stainless steel cladding. He figured addressing the issue would have cost millions of dollars and put the facility out of commission for some time, stopping the large bonuses he claims management was getting from these "milestone jobs"--jobs where bonuses are given for meeting tight deadlines.

Reading that letter, Stanton "just went crazy," he said.

"You've got problems with the work room's ventilation," he added, "three out of four exhaust fans aren't working, the upstream alpha alarm is 15 feet away, the other alpha alarm was removed from the hood. So the only thing you have to protect you is the cladding around the plutonium. That's the only safety component left to protect the worker. Now you know that three years prior, they find out they have an issue with the cladding. So what do you have left to protect the worker? Nothing."

The DOE's report referenced Lewis' letter several times, each time stating that, "its significance was not recognized and no action was taken."

"BEA continued operation of the ZPPR Facility with known safety basis deficiencies and without adequately analyzing the hazard to the worker," the report said.

"But you manage the risk," Grossenbacher countered. "There's always the implication that because of cost and schedule, we're going to compromise safety and the answer to that is no, never. Now we do consider cost and schedule when we balance those controls, or we'd never get any work done."

The work Braase performed as health physicist has left him struggling with guilt, even years after the exposure.

"It stressed me out so bad to think I was the head health physicist," Braase said. "I took a lot of the blame on myself for letting it happen. I took it really, really hard."

A recent doctor's visit pegged Braase's blood pressure at 151 over 95. Skinny and nervous, the middle-aged man was put on two different medications to treat depression. He lives with his mom now, taking care of her with the same sense of seriousness he had on the day of the exposure--the same seriousness he carries in every aspect of his life, from clinging to his job to managing his budget. Repeatedly adjusting his bifocals and the silver chain around his neck, he said he never feels like going fishing anymore.

"They let him take the blame," Stanton said of Braase, "when they're the ones who knew those plates were bad."

Fallout

Through his digging, Ralph started to change in ways that scared Jodi. A few days after the exposure, she got home from work and jumped in the shower as Stanton stepped out. He stayed in the bathroom, getting dressed and talking to Jodi about his recent discoveries.

In mid-sentence he stopped talking.

Jodi figured her husband walked into the bedroom and would come back. She waited and didn't hear anything more.

"Ralph?" she yelled over the running water.

"What?" he responded.

"Where'd you go? Did you walk into the bedroom?" she asked.

"Jodi, I haven't left. I'm right here," Ralph replied.

"Ralph, you were just talking to me You were in mid-sentence," Jodi remembered saying.

And he said, "I was talking to you?"

Jodi knew things were not good. Ralph continuously had trouble holding onto his thoughts and found it difficult to concentrate. Through hours of interviews with BW he peppered conversations with the question, "Where was I?"

Stanton's obsession only continued to grow as he started reaching out even further, calling Washington, D.C., calling the FBI, looking for anyone who would listen. Jodi started to miss him.

"Up to that point," she said, "I was the middle of [his] whole universe. It was him and me and the kids. And when [the exposure] happened, it all changed. It's like none of that even existed. ... He said, 'You have no idea what I'm going through. I can't talk to you. You weren't there when the alarm went off.' So here he is with his thing and here I am with the three kids and trying to keep myself

focused at work and keep the house going and the finances. I am trying to be the mother and the father and help with homework and pay the bills. Life as we knew it and normality is gone.

"And to know that they knew [about the failed cladding]," Jodi added in tears. "To know that they could have prevented this infuriates me."

- JESSICA MURRI
- RALPH STANTON, SURROUNDED BY DAUGHTER MARISSA (LEFT) AND WIFE JODI (RIGHT), HAS SPENT THE PAST TWO AND A HALF YEARS FIGHTING THE IDAHO NATIONAL LABORATORY FRROM HIS FAMILY'S KITCHEN TABLE.

The Stantons' anger eventually spilled over into the pages of the Idaho Fall *Post Register*. On a Sunday in mid-August 2013, a large, above-the-fold photograph showed Ralph and Jodi sitting on their couch--Ralph's eyes downcast and Jodi's head in her hands. The headline: "Living in Fear." Below the photo, a quote from Jodi in large font: "It makes me so angry that they have turned my world upside down and they won't take responsibility. As long as the milestones are met, as long as their bonuses are met, human life (doesn't matter) out there."

Exactly a week later, Grossenbacher wrote a guest editorial in the same paper.

"We must ... address seriously inaccurate statements that call public safety into question and threaten to undermine this community's trust in BEA and how it operates INL," he wrote. "All employees involved in the November 2011 exposure were checked for external contamination before being cleared to go home. No affected employees left the site with detectable contamination on their skin or clothes."

Grossenbacher stated that "no dose exceeded the safety threshold for radiation workers."

"I truly regret that this family is feeling such distress and has resisted our offers to address their concerns," Grossenbacher wrote. "However, I reject their assertion that BEA hasn't taken responsibility for this incident and doesn't value human life."

Three months after Grossenbacher's letter to the editor, the printed argument continued. This time, the letter came from Jodi, who, using fewer than 300 words, poured out her frustrations in a flood of raw accusations, a rant on how she felt BEA failed at every turn and a demand that the company believe her when she said her house was poisoned.

Because of all the press, Dossett said she went to each of the 16 workers who experienced the 2011 exposure and offered them in-home surveys in December 2013. Four of them took the offer. The surveys--conducted by Tennessee-based Oak Ridge Laboratory, which is funded by DOE and run by UT-Battelle, LLC.--showed nothing abnormal.

Stanton wrote an email to Dossett recommending the company that cleaned his carpets less than a month after the exposure also be surveyed, as well as the houses the carpet cleaners went to next.

"Sharon, it is my expectation that you and I will visit the local business owner and home owners together," Stanton wrote. "We will explain what happened. Should they ask why DOE and BEA sat on this information for so long, I expect that you will answer them truthfully and honestly. Sharon, its time for the truth. The public deserves to know and the employees deserve to know. ITS THE ETHICAL AND TRANSPARENT THING TO DO!!! [sic]"

Dossett didn't reply to his email. Instead, another lab employee emailed Stanton back, letting him know he was on the schedule for the following morning to have his home surveyed by Oak Ridge. He refused.

Stanton's email exchange with Dossett reflected his increasing willingness to speak out to upper management. He filed the whistleblower complaint alleging that BEA created an unsafe work environment and then--he alleges--retaliated against him by forcing him to see a psychologist. He pushed the lab internally to admit contamination doses were higher than reported, and appeared on the front page of the paper. Stanton said his superiors started to chip away at his credibility.

His annual performance reviews used to say things like, in 2010: "Ralph was recognized for his ability to work safely and promote safety among the crew by being awarded the 'You Shine' safety award," and, in 2011: "Ralph takes policies and procedures seriously. ... Ralph has a perfect safety record this year. Ralph keeps the issue of safety on his fellow worker's minds at all times. ... Ralph was commended for his courage to speak up and be heard. One of Ralph's most admirable qualities is he maintains the highest standards of personal integrity."

By 2012, his scores had fallen to 1's and 2's on all marks, from "Safety" and "Teamwork" to "Respect" and "Integrity."

He started being written up for things like having his feet on the desk. He was written up when inappropriate comments were made about upper management and he "took no action to correct the conduct. [Though] it was reported that you did not make the comments," the report stated.

On Dec. 23, 2013, Stanton received a letter from INL with three words across the top: "TERMINATION OF EMPLOYMENT." Grossenbacher told *BW* that he was twice seen sleeping on the job, a claim Stanton bitterly rejects.

But his relationship with INL is far from over. He's waiting for mediations between him and the company by May 2014. If that doesn't go well, he expects his day in court next spring. He's continued his personal investigation with vigor.

Jodi still works out at the INL, but she continues to worry every day about her husband and possible long-term health problems that could crop up from the exposure.

"It hurts me deeply to have to see him go through what he's gone though, physically, mentally, emotionally. If I could do anything to take it back, and change it, or talk it away, I would," Jodi said. "But I can't. All I can do now is try and prevent this from happening to some other family. This will tear a family apart. This will destroy a marriage. All because someone wants a bonus."

The stresses on the Stanton family are obvious. Sitting at their dining room table, 23 family photos hang on the wall behind Ralph, Jodi and Marissa--photos of their older son and his wife, photos of the whole family embracing against a backdrop of autumn leaves. They're typical family portraits. Everyone in them looks happy. But no one is smiling now.

Tags: Features, Ralph Stanton, Idaho National Laboratory, radiation, whistleblower, BW Watchdog