

VIII. Protection of Radiation Victims

A. Empty Promises

The DOE promises to run its nuclear weapons production facilities safely. They promise that new projects planned for INL will not affect the health and safety of the general public and facility workers will be protected.

The truth of the matter is that the federal government established the Atomic Energy Act which exempts them from any liability due to injuries sustained by their nuclear weapons production and testing. The Price-Anderson Amendments Act of 1988 was signed into law to continue indemnification to DOE contractors. This legislation goes on to limit contractors working for DOE from liability even if injuries are caused by gross negligence or failure to follow safety regulations. The law "... subjects DOE contractors to potential civil penalties for violations of DOE rules, regulations, and compliance orders relating to nuclear safety requirements. Reduction of up to 50% of a base civil penalty may be given when a DOE contractor promptly identifies a violation and reports it to DOE. Additionally, the Enforcement Policy gives DOE discretion to not issue a Notice of Violation in certain cases." [Operating Experience] An example of how this system failed is when DOE tried to discipline Rocky Flats contractor Rockwell International for violations. Rockwell received a light slap on the wrist amounting to their bonus for the year because they could prove that DOE as the employer knew about the violations for decades.

Witness the 10th U.S. Circuit Court of Appeals decision to overturn US District Judge Bruce Jenkins' finding in 1984 that the government negligently failed to warn or educate downwind residents of radiation hazards from tests conducted by the Atomic Energy Commission at the Nevada Test Site from 1951 to 1962. Jenkins' earlier ruling came after a trial of 24 "bellwether" claims which represented nearly 1,200 plaintiffs suing the government for some 500 deaths and injuries. The U.S. Supreme Court subsequently refused to hear an appeal on the 10th Circuit Court decision because the Atomic Energy Act provides government-contractor exemption from liability. Congress has steadfastly refused to repeal the Atomic Energy Act; however, they recently awarded some limited compensation to Nevada Test Site Downwinders.

There was no question that the government was negligent in conducting the tests and that it gave false and misleading information at the trials. The legal bottom line is that Congress created laws that specifically exempt the government and any contractors who work for the government from liability.

Radiation victims from INL can find no compensation for their injuries. [Cawley] Not only can they not sue the government or the contractors for whom they worked, but Idaho law does not recognize long term radiation injuries. Typically, it takes 10-20 years for radiation related injuries to surface after exposure. Again, the legal bottom line exempts even the state Workman Compensation Commission from covering long term radiation injuries.

Sweetheart contracts between AEC/DOE and the state Workmen Compensation Commissions provided for: "Hiring of the state's claims administrator in the Tri-Cities [Hanford] was subject to approval by the Atomic Energy Commission (now DOE). That language is still in the current contract. From the beginning of the contract until today, state officials agreed to accept censored and deleted files on workers radiation injuries. The (Labor and Industries) Department will accept the Contractor's description of any accident, even though full details may not be given. This procedure is necessary in order to ensure against the possibility of disclosure of secret information." [Spokesman(e)]

"In 1984, the Ninth Circuit Court of Appeals in San Francisco ruled the workers could sue because the Nevada contract with DOE nullified the integrity of the state's industrial insurance system." [Ibid] The New York Times states, "The DOE has routinely awarded millions of dollars in performance bonuses over the last decade to contractors that run nuclear weapons factories racked by safety, health, and environmental deficiencies according to Government Accounting Office records." [Schneider] INL contractors were awarded \$7.3 million in bonuses for 1993, \$14.36 million in 1995. [AP(d),1/4/96]

Promises made by the Department of Energy must consequently be viewed as hollow promises. Individuals or communities have no legal standing in court. Safety would by definition have a low priority because there is no accountability.

The author interviewed Michael Cawley who worked at INL between 1955 and 1974 as a machinist. Mr. Cawley was diagnosed as having extensive pulmonary and pleural fibrotic disease that is an incurable and life threatening lung disease. Court documents support his allegation that he was exposed to radiation many times over

the course of his eighteen years of employment at INL. This included unprotected exposure to beryllium. Dr. William R. Berry and Dr. Grady at the Boulder, Colorado Medical Center both substantiate Mr. Cawley's contention that his lung disease was caused by radiation exposure while working at INL. [Cawley, 1988] "In 1966 Cawley was exposed to a significant amount of radioactive material. Having passed through a storage area, he was informed by a health physicist that the area was contaminated. He was instructed to remove his clothing and take a shower. The health physicists discovered that Cawley had radioactive particles lodged in his nose, which the health physicist attempted to remove through the use of a small brush." [Cawley© @2] Cawley's notice of injury and claim for benefits was filed with the Idaho Industrial Commission [Workman's Compensation] June 29, 1979. The State Commission would not even give Cawley a hearing on the merits until 1990 when the Idaho Supreme Court ordered the State to respond and pay Cawley \$983.23 for legal costs. [Ibid] The benefits the State tried to deny Cawley totaled \$207,900.56. [Cawley(d)] Cawley's legal documents list the following exposures: 1) Fast Neutron beam exposed from the Materials Test Reactor Neutron Chopper in 1956; 2) Plugged pneumatic radioactive material (W.A.P.D. B.4 sample) transfer tube requiring MTR evacuation; 3) MTR July 1966 storage area exposure; 4) SL-I reactor explosion January 1961; 5) J.A.-10 Fuel element loading at the ETR canal. [Cawley(e)]

The author interviewed Richard Hansen who lives near Rupert, Idaho (Minidoka county) southwest of INL, in an area characterized as "Cancer Ridge" by the local residents and media. [AP(I), 2/18/89] Rupert residents are the first domestic users of the Snake River Aquifer down-gradient of INL. Hansen says that within the 36- square mile area around his home, there are 60 cancers. These diseases range from thyroid, pancreas, colon, leukemia, and female reproductive cancers. Hansen, a staff researcher in archaeology with the University of California at Los Angeles and a Rupert farmer, is asking for scientific studies to determine whether the cancer rate is excessive. Hot-spot phenomenon is discussed Allan Benson's book "Hanford Radioactive Fallout". [Benson, p.28 & 36] In 1997, State health studies of cancer rates in Minidoka county found that there are elevated levels of seven types of cancers when the county incident rates (observed) were compared with the state as a whole (expected). This comparison likely understates the problem because the Idaho counties in the north have high cancer rates likely due to Hanford radioactivity. Also see Section V.A Independent health studies.

Cancers in Minidoka County

Cancer Site/Type	Observed	Expected
Parotid/Salivary	4	3.6
Stomach	37	22.09
Rectosigmoid/Rectum	48	43.82
Bone	4	2.79
Ovary	30	29.2
Brain/CNS	28	21.47
Liver	6	3.82

[IDH&W(d)]

As previously stated, Physicians for Social Responsibility's *Dead Reckoning* report, cites INL exposure records acknowledging 154 workers received greater than 5 rem/yr., and 562 received 4 rem to just under 5 rem between 1951 and 1989. This figure includes only prime contractors and does not include subcontractors, construction workers, security guards, or military personnel. [Dead Reckoning@41]

An example of non-monitored subcontract workers is Kenneth Grover who worked as a night security guard at INL between 1956 and 1959. The author interviewed Grover's daughter who clearly remembers that her father was irradiated during an accident at the site. As a result of his exposure and induced radiation sickness, he was forced to take a three month medical leave from work. Kenneth Grover died a few years later after suffering from cancer and heart disease. The Grover's lived in Montevue, Idaho, just east of the site. Three of Grover's children have thyroid dysfunction problems and one daughter has periodic hair loss, both are symptoms of radiation exposure. A partial listing of 100+ INL accidents and intentional radioactive releases between 1952 and 1995 is provided in attached Appendix.

Clair Burket moved his wife and four old daughter Mary to Idaho Falls in 1958 to work on the Aircraft Nuclear Propulsion Project (ANP) at INL's Test Area North. General Electric was the operating contractor for

both the ANP as well as the SL-1 Reactor accident cleanup at the Auxiliary Reactor Area. When the SL-1 blew up in 1961, Burket along with other ANP workers were called down to the SL-1 site to extract the three dead bodies and cleanup the contamination. Clair Burket died several years later of a massive brain hemorrhage at the age of 33 and his family believes his premature death was the result of exposure to radiation at the site. Mary attributes her thyroid problems to exposure as an infant to iodine-131 releases from the site. Mary's attempts through Freedom of Information Act requests to access her father's dosimetry records have thus far been denied on the grounds that DOE claims not to have any of Burket's exposure records. Even though the National Institute for Occupational Safety and Health is doing an INL worker mortality study, the agency is uncooperative in assisting in Mary's quest for her father's records.

The author interviewed Jean Dennis, the widow of James Dennis, who was a member of the SL-1 involuntary Army demolition crew brought in by General Electric under contract with AEC to dismantle the reactor after it blew up in January 1991. The 38 eight by ten photographs taken by the AEC and submitted as evidence in Dennis' litigation against General Electric, shows Dennis right beside the damaged reactor core placing the explosive charges on the support beams that held up the 80 ton concrete and lead operating room floor above the reactor vessel. The photos also show the two huge clouds of debris that went into the air when the two separate charges went off, covering Dennis, his partner Arthur Limeruk, and spreading the residual contaminants over a large area. Dennis died of a rare blood cancer called Waldenstrom's micro globulin anemia (blood & bone marrow cancer), which his medical documents confirm, was caused by exposure to 50 rem/hr for nine hours and ten minutes at the SL-1 site. [Dennis ,p.10] Dennis' documents further challenge the government's acknowledged exposure of whole body - 2135 mrem, and skin - 3845 mrem [Dennis citing AEC/SL-1,CAB] as grossly understated. Dennis claimed he received internal exposure because of the contamination in his nose. GE's health physics technicians however made no attempt to swab out his nose to remove the contamination or provide chelates to flush out the contaminants. Dr. Charles Miller M.C., hematologist / oncologist, chief of Medical Services at Letterman Army Medical Center and Dennis' internal physician, supports the allegation that Dennis' cancer was caused by exposure to radiation. [Dennis ,p.17] The government refused to grant Dennis any compensation for his radiation exposure injuries that caused his early death. The US Justice Department defended General Electric John Horan, an INL health physics technician, was an expert witness brought in by the Atomic Energy Commission to refute Dennis' claims to radiation induced injuries. Horan was also in charge of the Health Physics Department at the site and in charge of worker monitoring of the SL-1 cleanup workers. See Section I Accident History.

Time ran out for self-described INL Downwinder Chuck Walker who died at the age of 44 from chronic myelogenous leukemia - the rarest form of all leukemia. Walker's testimony to the State Oversight Committee and recorded by Idaho State Journal reporter Mary Duan stated that:

"As a young boy in Jefferson county near the border of the INL he remembers an explosion in the late 1950's that lit up the night sky from his home in Dubois. He remembers smoke pouring from stacks at the then Atomic Energy Commission site, and government workers running frantically at a monitoring station a mile away from his family's farm."..."I've spent hours and hours going over my health history with doctors from the University of Utah and the Fred Hutchinson Cancer Institute," he said. "They say that I must have gotten a good-sized dose of radiation at one time or another. The first time they identified this kind of cancer was after Hiroshima and Nagasaki."..."I don't understand why the department is not looking at Jefferson County. It's closer to the site than any other", Walker told the committee. "If the doctors are right in telling me that the only place, I could have gotten this from is the site, what will the oversight committee do to make sure they don't get away with this again." [Id St Journal(b)]

Between 1989 and 1992, over \$39 million of taxpayer money has been spent defending DOE Hanford contractors against radiation victims. A class-action suit has been filed by thousands of Hanford's Downwinders against DOE's contractors for health and environmental damage. Documents gained through the Freedom of Information Act by the Seattle Times revealed that DOE is paying all the contractor's legal expenses - \$15 million for 1992 alone.

Judith Jurji, President of the Hanford Downwinders Coalition says that, "what we have here is taxpayer money going to fight its own people, which is the ultimate slap in the face." Contractors being defended by DOE are Du Pont, UNC Nuclear Industries, Atlantic Richfield Hanford Co., General Electric, Rockwell, and

Westinghouse. Jurji believes the trial will bring everything out in the light of day, in a public forum, and the government would have to answer some very tough questions.

Other cases against DOE contractors operating the Nevada Test Site and the Fernald nuclear weapons plant in Ohio have been settled. Fernald residents received \$73 million in compensation for environmental damage. It is unconscionable that the federal government has turned against its own people and sided with its big business contractors. The government simply does not own up to its responsibility to compensate people injured by its nuclear bomb factories. Instead of fighting the people and wasting collectively hundreds of millions on legal defense of the criminals, the responsible thing to do is use the money to help those injured.

"Inadequate oversight at the DOE allowed some of the nations' largest law firms to bill the government excessively, including steep photo copying fees in a Hanford case and expensive dinners in Seattle, investigators say. The lawyers, doing work defending DOE contractors against class-action suits, claimed \$70 million in legal bills for six lawsuits since 1990, the DOE estimates. About \$29 million of that was spent in a case involving the Hanford nuclear reservation in Richland, Wash., including \$175,000 in copying fees at 20 to 25 cents a page. Investigators for the General Accounting Office told Congress on July 13, 1994 that DOE officials often did not receive copies of the bills and rarely reviewed the legal costs. 'This was the standard way for the DOE - turning an operation over to a contractor and just paying the bill.' Victor S. Rezendes of the GAO told the House Energy and Commerce subcommittee on oversight and investigation. 'The agency does not know the full costs associated with defending its contractors in litigation, does not have criteria setting forth what costs are allowable for legal services and does not have procedures requiring detailed contractor and DOE review of billed costs', he said."

[AP(m)]

The Congressional Office of Technology Assessment (OTA) released a report in April 1993 that cites that DOE is unprepared to protect tens of thousands of workers who would soon embark on a 30-year cleanup of the DOE complex. OTA's 80-page report said that protection of workers in environmental restoration projects of any kind was often inadequate, but that the DOE, because of the way it is organized, might do worse than private polluters in cleanup. DOE and its contractors continue to operate under an organizational structure that presents serious obstacles to progress in safeguarding worker health and safety, the report said. [Times ©]

Between July 1961 and January 1966, 3,210 whole body counts of workers at INL's TRA, ICPP, SPERT, TAN, and CFA. Forty-six of these counts showed activity greater than 0.1 uCi (uCi = micro-curie or 10⁻⁶). Six of the more significant exposures are listed in the following table. [PTR-789 @5]

Case	Nuclides observed	Activity (uCi)	Remarks
A	I-131	0.20	Medical Experiment (count taken at termination)
B	Zr-95 Nb-95	0.10	Contamination on external surface of body
C	Hg-197	0.29	8.75 mrem to kidney, 7.3 mrem to gastrointestinal tract
D	Co-60	0.10	Radioactive contamination on external surfaces of body
E	Mn-54	0.15	Radioactive contamination on external surfaces of body
F	Co-60	1.50	93 mrem to lungs, 94 mrem to gastrointestinal tract, 3 mrem to whole body

Section VIII. B. Stories of Radiation Victims ^{1 2 3}

The Environmental Defense Institute (EDI) has over several decades collected interviews and news stories ⁴ about individuals who have been affected by radiation exposure at or near the Department of Energy's Idaho National Laboratory (INL) previously called the Idaho National Engineering and Environmental Laboratory (INEEL) located northwest of Idaho Falls, Idaho, the Hanford nuclear reservation in eastern Washington State, and the fallout from over a thousand nuclear weapon detonations at the Nevada Test Site (NTS). ⁵ EDI hopes that sharing this small sampling of stories of men and woman harmed by radiation exposure will help put a face on the thousands of INL workers and Nevada Test Site "downwinders," ⁶

EDI considers all these people victims of America's nuclear legacy - regardless of whether the source was from current operations or fallout from previous INL, Hanford, NTS operations, or the exposure happened while they were employed by Department of Energy contractors. At this time it is not possible for the public to differentiate between INL, Hanford, and nuclear weapons fallout from the Nevada Test Site. The National Cancer Institute conducted a 1997 study that found that four of the five counties in the US that received the most radioactive iodine-131 from the Nevada Test Site (NTS) nuclear bomb fallout were in Idaho. ⁷ In this report, a special emphasis has been placed on Idahoans since their suffering is least reported. ⁸

In 1990, the Radiation Exposure Compensation Act (RECA) was passed to provide monetary compensation of people, including atomic veterans who contracted cancer and a number of other specified diseases as a direct result of their exposure to atmospheric nuclear testing undertaken by the United States during the Cold War. States included Arizona, Utah, and Nevada. The 1990 act provided the following remunerations:

- * \$50,000 to individuals residing or working "downwind" of the Nevada Test Site
- * \$75,000 for workers participating in atmospheric nuclear weapons tests
- * \$100,000 for uranium miners, millers, and ore transporters ⁹

Revisions to the act were passed in 2000 and in 2002. However, subsequent attempts to amend the act to include the downwind states of Colorado, Idaho, Montana, and New Mexico have been not been brought to a

¹ Tami Thatcher, Idaho National Laboratory, Hanford, and Nevada Test Site Radiation Exposure Radiation Victim Stories Revision 28, Edited by Chuck Broschious And Tami Thatcher Updated December 2014
<http://environmental-defense-institute.org/publications/RadCBC.pdf>

² Tami Thatcher The Truth about the SL-1 Accident — Understanding the Reactor Excursion and Safety Problems at SL-1. remembered later by the spouse of the second *victim* about his concern that the reactor might blow up. Obscured History of Sticking Control. www.environmental-defense-institute.org/

³ Tami Thatcher, Radiological and Chemical Exposures at the Idaho National Laboratory that Workers May Not Have Known About — How health is harmed by uranium, plutonium and other radiological and chemical exposures and possible nutritional support strategies Environmental Defense Institute Special Report By Tami Thatcher, April 2017
[Radiological and Chemical Exposures at the Idaho National Laboratory That Workers May Not Have Known About - How Health is Harmed by Uranium, Plutonium and Other Radionuclides and Chemicals and Possible Nutritional Support Strategies, by Tami Thatcher, April 2017](http://www.environmental-defense-institute.org/publications/Radiological%20and%20Chemical%20Exposures%20at%20the%20Idaho%20National%20Laboratory%20That%20Workers%20May%20Not%20Have%20Known%20About%20-%20How%20Health%20is%20Harmed%20by%20Uranium,%20Plutonium%20and%20Other%20Radionuclides%20and%20Chemicals%20and%20Possible%20Nutritional%20Support%20Strategies,%20by%20Tami%20Thatcher,%20April%202017) www.environmental-defense-institute.org/publications

⁴ J. Preston Truman, Jeremy Maxand, and Dr. Peter Rickards sent many of the news stories to EDI that are contained in this report.

⁵ "DOE Facts, Declassification of Unannounced Nuclear Tests at the Nevada Test Site, Summary List of Previously Unannounced Tests," DOE Office of Public Affairs, Sam Grissle that states, "There were 925 [announced] nuclear tests at the Nevada Test Site in addition to 204 unannounced tests." The total number of tests would number 1,129.

⁶ Tami Thatcher, Radiation Workers at the Idaho National Laboratory and Around the DOE Complex Need to Understand Blood Count Changes That Can Indicate a Significant Radiation Exposure, By Tami Thatcher, July 14, 2018
<http://environmental-defense-institute.org/publications/RadCBC.pdf>

⁷ Specific radiation fallout deposition can sometimes be evaluated with sampling and chemical/radiological analysis to "differentiate" between different fallout depositions.

⁸ See the National Cancer Institute mapping of Nevada Test Site fallout and the red hot spots in Idaho on this NCI webpage.
http://cancer.gov/cancer_information/doc_img.aspx?viewid=556f5603-23e3-4171-aa5e-77f79d46b27c&docid=ed441687-03f6-4f2e-8eab-4296e8f44606

⁹ <http://environmental-defense-institute.org/radhealth.html>

vote. (See H.R. 1645 113th Congress)

In 2000, another law was passed by congress providing monetary compensation to former Department of Energy workers who get illnesses, such as cancer and qualify for compensation due to their exposure at DOE facilities. The Energy worker compensation act (EEOICPA) law includes this statement: “studies indicate than 98 percent of radiation-induced cancers within the nuclear weapons complex have occurred at dose levels below existing maximum safe thresholds.”¹⁰ Even with a large percentage of claims denied, the law has paid out over 10 billion dollars paid in compensation to date.

Two award winning video documentaries "Idaho's Nuclear Dilemma" and "Voices of Victims" that document many of the above and many more victims, are available from Palouse Clearwater Environmental Institute, Moscow, Idaho, or the Environmental Defense Institute website;
<http://environmental-defense-institute.org> ; edinst@tds.net

Ian Goddard Explains the Linear No-Threshold Model and Looks at Epidemiology Since the 2006 BEIR VII Report

Ian Goddard put together a video explaining the often debated "linear no-threshold" radiation health risk model. Nuclear proponents often argue that at doses below 10 rem there is no harm; they propose that there is a threshold below which radiation causes no harm. Other proponents argue that hormesis theory shows that radiation at low doses has a protective effect. Ian reviews human epidemiology studies that have been published since the National Academy of Sciences published its radiation health study in 2006. The BEIR VII study had concluded that the linear no-threshold model provided the best fit of the available human epidemiology. Ian's look supports that the BEIR VII study represents or underrepresents radiation health risk and that the linear no-threshold model is still appropriate.¹¹

See National Academy of Sciences (2006). BEIR VII. <http://www.nap.edu/read/11340>

Ralph Stanton’s “Nuclear Nightmare”—A “Must Read” for Radiation Workers and Their Families¹²

Tami Thatcher reports: “Ralph Stanton’s life and his family’s life were forever changed by the plutonium inhalation event on November 8, 2011 at the Idaho National Laboratory’s Materials and Fuels Complex (MFC) during examination of fuel plates for the Zero Power Research Reactor (ZPPR). He has written a detailed narrative, titled Our Nuclear Nightmare describing his experience. You can find it on our website. Idaho National Laboratory management directed Stanton to proceed with ZPPR fuel plate inspection, despite unclear warnings on the plates and despite previously warning, 17 times, by the Safety Oversight Chairman for MFC, that plate inspections in the facility were unsafe. 2Ralph describes numerous irregularities that occurred with regard to records pertaining to his dose and how his radiation dose was assessed. This is an important warning to all radiation workers for Department of Energy sites. Radiological dose estimated by Department of Energy contractors are used in determining eligibility of state Worker’s Compensation and for determining eligibility for Energy Employee Occupational Illness Compensation. So, if the contractor underestimates your radiation exposure, you might not be eligible for compensation for illnesses arising from your exposure.

“The assumption that past radiation worker exposures at INL were carefully monitored and recorded is changing as analysts in radiation dose reconstruction for the National Institute for Occupational Safety and Health (NIOSH) 3continue to investigate the ability to reconstruct radiation doses for worker illness compensation claims under the Energy Employee Occupational Illness Compensation Act. 4Recently, their investigations have led to

¹⁰ See 42 USC 7384, [The Act--Energy Employees Occupational Illness Compensation Program Act of 2000 \(EEOICPA\), as Amended.](#))

¹¹ <http://environmental-defense-institute.org/radhealth.html>

¹² Tami Thatcher, Environmental Defense Institute Newsletter June 2019.

statement^{13 14 15} that radiation monitoring may not have been conducted effectively for alpha contamination in the 1960 and 70s—but other decades remain to be investigated.

“While radiation dose reconstruction for Energy Employee compensation does not rely solely on DOE contractor dose estimates for inhalation of radiological materials, it relies on available records, including logbooks and other records documenting contamination levels as well as worker lung count and bioassay information. Without the information, reasonable dose reconstruction impossible—and illness compensation may be denied.

“Since 2011, the Environmental Defense Institute has provided many newsletter articles pertaining to the November 8, 2011 ZPPR plutonium accident, 5lung counts, dose estimation and the Energy Employee Occupational Illness Compensation Program.

After the ZPPR event, workers were not told of their radiation dose for almost 9 months. Ralph Stanton was told his lung counts indicated a very low intake. Yet, Ralph could not return to radiation work for months because of his elevated bioassay (urine and fecal) results because he was excreting elevated levels of radionuclides. Only after returning to radiation work would he later find out that his excretion rates had remained elevated and did not justify his return to radiation work.

Throughout the ordeal, he was being denied radiation dose estimate information from the company. Obtaining his radiation dose estimation documentation required a lengthy Freedom of Information Act request process. And once obtained, he was on his own to interpret the technical information. Instead of medical help that interfaced with dosimetry experts as policy would suggest, there was months of stonewalling and refusing to provide dose information to Ralph or in-house medical folks. An “expert” was hired who was told that their doses were low simply lectured the men contaminated in the ZPPR accident not to be concerned. Then the expert admitted not knowing that the men had positive bioassay results from excreting elevated levels of americium-241 and other radionuclides months after the accident.

Ralph wrote: “My years spent working at the Idaho National Laboratory showed me that there was the way it was supposed to be, and then there was the way it was.”^{16 17}

¹³ Ralph Stanton, *Our Nuclear Nightmare*, 2019 at;

<http://www.environmental-defense-institute.org/publications/OURNUCLEARNIGHTMARE.pdf>

¹⁴ Department of Energy, Office of Health, Safety and Security (HSS), Accident Investigation Report, “Plutonium Contamination in Zero Power Physics Reactor Facility (ZPPR) at the Idaho National Laboratory” accident 11/8/11 at the Materials and Fuels Complex (MFC). <http://energy.gov/hss/downloads/investigation-november-8-2011-plutonium-contamination-zero-power-physics-reactor>.

¹⁵ NIOSH Radiation dose reconstruction for EEOICPA at <http://www.cdc.gov/niosh/ocas/> and

<http://www.cdc.gov/niosh/ocas/ineel.html> 442 USC 7384, The Act--Energy Employees Occupational Illness Compensation Program Act of 2000 (EEOICPA), as Amended and see the website for the Center for Disease Control, National Institute of Occupational Safety and Health, Division of Compensation Analysis and Support at <http://www.cdc.gov/niosh/ocas/> and U.S. Department of Labor, Office of Workers' Compensation Programs, EEOICPA Program Statistics, <http://www.dol.gov/owcp/energy/regs/compliance/weeklstats.htm>

¹⁶ Read his complete story, *Our Nuclear Nightmare*, 2019 at;

<http://www.environmental-defense-institute.org/publications/OURNUCLEARNIGHTMARE.pdf>

¹⁷ Tami Thatcher, Environmental Defense Institute, newsletter articles for the ZPPR accident, search our website newsletters at <http://www.environmental-defense-institute.org/edipubs.html> and see, in particular, these articles: all articles in the October 2013 newsletter; “INL Managers Deny Any Responsibility for ZPPR Accident,” and Boise Weekly Half-Life Article Debate, by Ralph Stanton,” in May 2014; “Three events show that the Idaho National Laboratory still doesn’t know how to monitor airborne alpha contamination,” in May 2016; “Public Integrity reports that widespread bad behavior of Department of Energy contractors goes unpunished, including Idaho National Laboratory contractor Battelle Energy Alliance,” in August 2017, “Understanding your lung count results,” in January 2018, and others.