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Idaho Cancer Rates Continue to Rise at Record Levels

According to the Cancer Data Registry of Idaho there is a steady increase in Idaho cancer rates from the beginning of data collection through 2002 (the latest report issued by the Registry). The 2000 report notes an increase of 359 cancer cases in recent years. "This was one of the largest single-year increases in cancer incidence in the history of the Cancer Data Registry of Idaho. Cancer sites with notable increases from 1999 to 2000 were lung, melanoma (in-situ), oral cavity and pharynx cancer counts increased over 1999 levels. The number of in-situ melanoma cases is 65% higher than for any previous year. The prostate cancer incidence rate is the highest it has been since the spike in prostate cancer rates in 1990-1993 due to prostate-specific antigen screening. However, the increase in rates was limited to Health Districts, 2 [north-central],4, 5 [south-western], and 7 [south-eastern]." [1]

Registry data indicate the high cancer rates continue. "There were approximately the same numbers of cases diagnosed in 2001 as in 2000. However, there were some large differences by cancer site. Cancer sites with notable increases from 2000 to 2001 were Hodgkin's lymphoma, larynx, liver, plasma cell tumors, pancreas, and thyroid. Thyroid cancer incident cases increased 40% over 2000 levels, with increases of 50% or more in Health Districts 1, 3, and 4." [2] Health Districts start numerically at #1 in the north and end with # 7 in the southeast of Idaho.

Again, in the 2002 Idaho Cancer Data Registry, "There was a large increase in the number of reported cases from 2001 to 2002 (an increase of 452 cases from 2001 into 2002 as of one year after close of calendar year). Cancer sites with notable increases from 2001 to 2002 were brain, cervix, melanoma of the skin, pancreas, and stomach.. Health District No. 1, [6, & 7] had statistically significantly more cases of cancer than expected based on the rates for the remainder of Idaho."[3]

The high cancer rates in Health District 1 could be attributed to emissions from DOE's eastern Washington Hanford nuclear reservation. Dr. Allen Bensen's analysis, as well as the research conducted by Dr. Thomas Pigford which was commissioned by the US District Court hearing the Hanford Downwinders suit, both showed that causation for the high rate of cancer in the Northern Idaho Panhandle and Health District 3 (Lewiston area) can be attributed to Hanford emissions following wind patterns up the Columbia and Snake River drainage canyons.

The Hanford Downwinder litigation won two significant legal wins; 1.) the US 9th District Court of Appeals overruled the 1998 Spokane District Court ruling by Judge McDonald that previously rejected the claims of most of the plaintiffs, and remanded the case back to District Court for trial, based on Plaintiffs scientific briefs showing significantly more particulate radiation was released from Hanford than what DOE was acknowledging; 2.) the original District Court Judge McDonald was ruled to have a conflict of interest and was replaced by Judge Frem Nielsen who unsealed the report by Thomas Pigford, a nationally prominent nuclear engineer chosen by the court as a neutral scientific expert for the case.

Karen Dorn Seele, who spent a major part of her exemplary journalistic career covering Hanford, writes in the *Spokesman Review* that, " The [Pigford] report says a [CDC] $27 million, taxpayer-funded study of past radiation releases from the Hanford Nuclear Reservation is flawed and may underestimate radiation doses to Hanford downwinders. It also says the [CDC] Hanford Environmental Dose Reconstruction study didn't address the health risks from billions of radioactive 'hot' particles from Hanford plants to people living in Washington, Idaho, and Oregon during the 1940s and '50s. During the Manhattan Project and the Cold War, Hanford made plutonium for nuclear bombs. It was a messy chemical process that spewed clouds of radioactive iodine-131 and smaller amounts of other elements, including plutonium, into the air. The airborne pollution traveled hundreds of miles downwind, government studies show. At the time [Judge] McDonald said it eventually would be made public, but never unsealed it. McDonald recused himself from the Hanford case after failing to

disclose his ownership in an orchard near Hanford that he swore was radiation-free. In court orders, [current Judge] Nielsen consolidated the three related Hanford cases with 6,000 plaintiffs and established a road map for litigation." [4]

According to the Idaho Division of Health report, "Relationship of Cancer Sites to Radiation Summarized from BEIR V 1990", nearly all of the above cancers have an "established relationship to external radiation sources." The three major sources of radiation in the northwest are Hanford, INEEL, and the Nevada Test Site. [5]

State health studies also indicate problems near INEEL. Idaho's Division of Health conducted a cancer survey in counties around INEEL and the agency found higher rates than national averages. The 1995 State study analyzed cancer rates from a 17-county area for the years 1971-1992 and, when compared to the other 27 Idaho counties, found statistically significant increases in stomach cancer (observed 390 with 383 expected); brain cancer (observed 385 with 378 expected); and leukemia (observed 461 with 438.7 expected). The counties near INEEL included in the state study include Bannock, Bingham, Blaine, Bonneville, Butte, Caribou, Cassia, Clark, Custer, Fremont, Jefferson, Jerome, Lincoln, Madison, Minidoka, Power, and Twin Falls. This state-wide comparison may be understating the problem because the counties in northern Idaho have high cancer rates, possibly due to Hanford radioactivity.

In 1996 the state narrowed the previous study's parameters down to six counties south and east of INEEL including, Bingham, Bonneville, Butte, Clark, Jefferson, and Madison. The age-adjusted incidence rate for central nervous system cancers in the six-county area was 8.1 per 100,000. The rest of Idaho had a rate of 7.0 per 100,000 compared with national rate of 6.3 per 100,000. This means that there is considerably more cancer occurring in these six counties than is occurring in the rest of the state or the United States.

The observed number of central nervous system cancers for the six-county area around INEEL was 110 (89 expected, based on the rest of Idaho). The analysis was then confined to brain cancer (other central nervous system cancers such as chordoma and optic tumors were excluded). The state report notes that "a significantly higher number of cases of brain cancer, 182 were observed when 151 would be statistically expected, in the six-county area for the years 1975 to 1994." Another 1996 state analysis of a reported cluster area around the town of Moreland, in Bingham county, revealed an increased rate of brain cancers, 4 observed with 1 expected between 1980 and 1995.

In Blaine county, a state survey requested by a local physician found that the female population younger than 70 had statistically significant elevated rates of breast cancer. Epidemiologists are studying the same factors as included in the ongoing eastern Idaho brain cancer study. In Clark County, the agency found a statistically significant increase of radiogenic cancers (25 observed, 16 expected) including eight cases of female breast cancer when only 3.2 cases were expected. In Minidoka County, the agency found 20 cases of stomach cancer when only 11.6 were expected.

The American Cancer Institute (ACI) Idaho Division also acknowledges that breast and prostrate cancers are at the top of the list of most common cancers in Idaho. ACI ranks Clark county (at the northern end of INEEL) cancer rates for breast and prostrate cancers as nearly double that of all other eastern Idaho counties as well as the national rates. [6]

An extensive 1997 National Cancer Institute (NCI) study, *Estimated Exposures and Thyroid Doses Received by the American People from Iodine-131 in Fallout Following Atmospheric Nuclear Bomb Tests,* identified the Idaho counties of Blaine, Custer, Gem, Idaho, and Lemhi (also Meagher county in Montana) as receiving the highest fallout compared to the whole country. NCI reports that; "Individuals living in these five western counties were estimated to have a cumulative average dose of 12 to 16 rads." [7] Despite these compelling reports, President Bush is going to restart nuclear bomb testing in Nevada.

Idaho's Division of Health conducted a cancer survey in counties around INEEL and the agency is finding higher rates than national averages. The 1995 study analyzed a 17-county area comparison of cancer incidence rates (1971 to 1992) and compared it to the other 27 Idaho counties. This 17-county study is similar to researcher and author of *The Enemy Within* Jay Gould's 16-county study (100 mile radius around INEEL). See figures 1 to 4 below.

The state reports reiterate that "considering the number of statistical tests that were done, the results did not indicate any unusual findings." The State survey indicated that: "Sixteen percent of respondents had another relative with brain cancer, and 48% of respondents have a relative with some type of cancer other than brain or skin cancer." Unless there is a

statistically significant difference between a local cancer rate compared to a state or national rate, then the state health department is unconcerned. A more sensible attitude from a public health perspective is: if there are radical increases in radiogenic diseases over a long period of time, then the agency is obliged to make every effort to determine the cause, determine where other cancer relatives lived, and notify the effected public. To wait until there is a statistical significance is like waiting until after the tornado hits before heading for the storm cellar.

Dr. Michael Blain's report titled *Female Thyroid and Breast Cancer Mortality (1950-69) and Incidence (1971-80) in Northern Idaho and Eastern Washington*, states "When the U. S. and Idaho state rates are employed as controls, there was an excess number of female thyroid cancer **deaths** (1950-69) in Kootenai county, Idaho (7 observed, 2.1 - 2.6 expected, $p \leq 0.05$); when the state rate is employed as comparison, there was an excess number of female breast cancers in this county (100 observed, 67.5 expected, $p \leq 0.01$)." "When the U.S. **incidence** rate (1971-80) is employed as a control, there was a statistically significant excess of female breast cancer in Kootenai (211 observed, 189 expected, $p \leq 0.01$), Latah (112 observed, 89 expected, $p \leq 0.05$), Nez Perce (148 observed, 127 expected, $p < 0.05$), and Lewis (28 observed, and 16 expected, $p \leq 0.05$) counties in Idaho."

The *State of Idaho County Cancer Incidence Project 1974-1994* report shows thyroid cancer incidence in Boundary county (5 observed 1.5 expected $p = 0.004$) and Bonner County (8 observed 4.8 expected $p = 0.056$) for counties in the Northern Idaho panhandle.

The *State of Idaho 1994 Cancer Data Registry of Idaho 1983-1992 Data* ranks the Northern Idaho Health District 1 highest with cancer mortality rate 237.6 and Health District II rate of 208.5. The state as a whole had a cancer rate of 171.6 and the US rate was 204.3 per 100,000 population.

The Figures below show graphical cancer incident rates within both a "fifty-mile" radius and a "100-mile" radius from INEEL between 1950 and 1989. Figure 7 table compares a.) Jay Gould, b.) National Cancer Institute, c.) Idaho (all counties), d.)U.S. national cancer rates. This data shows dramatic increases in cancer rates around INEEL, while the U.S. as a whole remained relatively unchanged between 1950 and 1989. The following articles offer some explanation for this health tragedy affecting tens of thousands of people.

Tragic Legacy of US Development of Radiation Bombs

Not satisfied with building bigger and more powerful nuclear bombs that could obliterate whole cities (Hiroshima style but a hundred times more powerful), the U.S. nuclear weaponeers during the Cold War era launched major long-term programs to develop and test radiation bombs that would kill people but not destroy in-fracture, presumably because the US would "own" the country (like Iraq) and need the infrastructure preserved. These radiation bombs (now called weapons of mass destruction) used conventional explosives to disperse "short-lived" radio-isotopes that would kill people/animals, but preserve all the physical (buildings, power plants) facilities that would be needed when occupying forces arrived after the radiation decayed.

One of these early US programs (what would be termed today a "dirty-bomb") was called the RaLa project spanning some eleven years at Department of Energy Idaho National Engineering and Environmental Laboratory (INEEL). The term RaLa is derived from the product **ra**dioactive **la**nthanum-140 that due to its short half-life (40.2 hours) effectively became barium-140 with a half-life of 12.9 days.

Environmental Defense Institute using reports gained through the Freedom of Information Act, has documented that about two million curies of radioactive lanthanum /barium -140 was produced at INEEL and shipped to Los Alamos. [8] The Centers for Disease Control (CDC) claims in its most recent "independent" review of these releases that these RaLa shipments to Los Alamos were "motivated for diagnostic purposes."[9] Perhaps so, but on what scale, the "diagnostic" impact of a radiation "dirty bomb" on a whole city?

Two million curies of this most deadly material is an enormous quantity by any standards. This disclosure by CDC of "diagnostic" use itself challenges the agency's "independence" and fails to disclose the basic fundamentals of these releases legitimately demanded by the public.

Ask family and friends if they are registered to vote

Age-Adjusted White Female Breast Cancer Rates 1950-89 Within 50 Miles of INEEL *

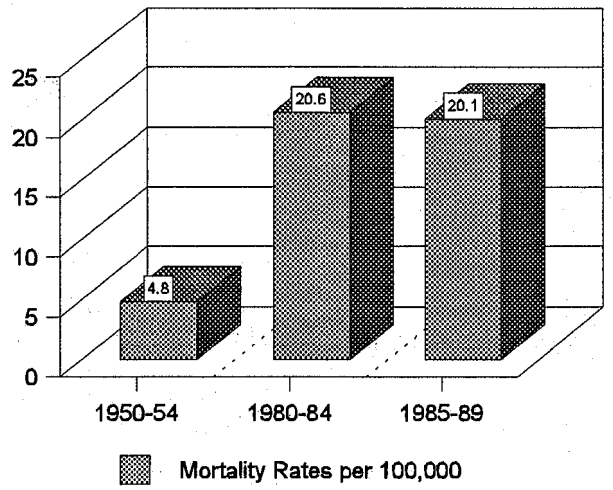


Figure 1

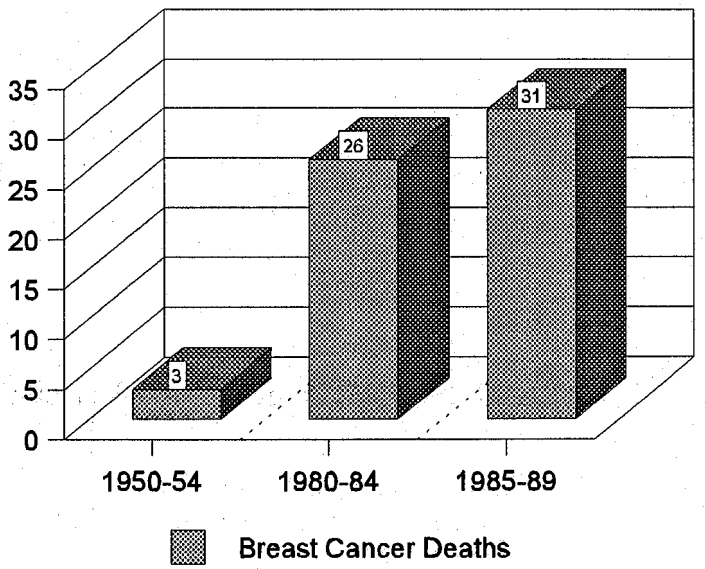
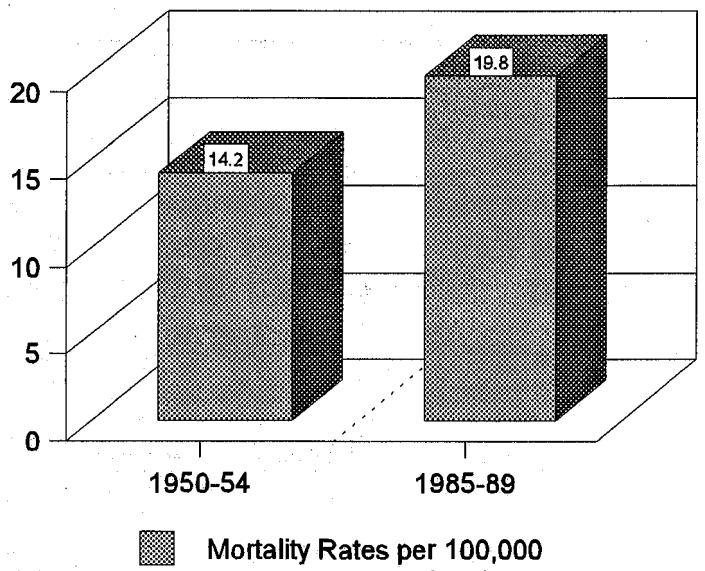


Figure 2

Breast Cancer Mortality Rates per 100,000 1950 to 1989 Within 100 Miles of INEEL *



*

Figure 3

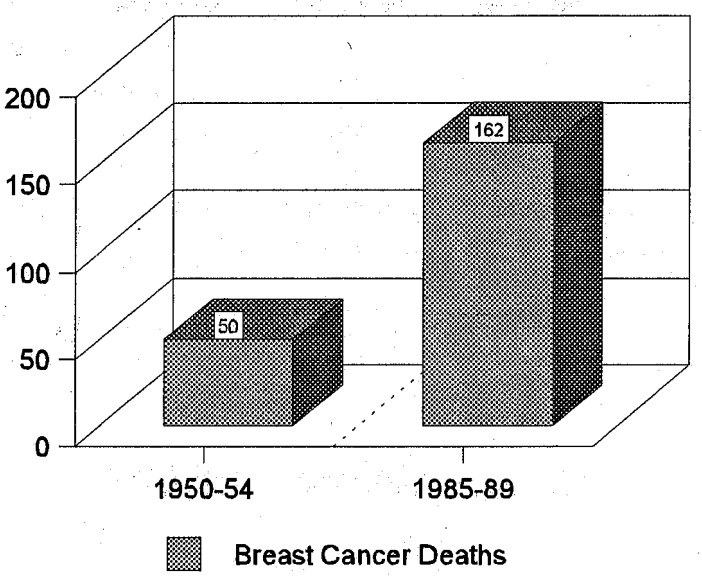


Figure 4

***The Enemy Within*, by Jay Gould with Members of the Radiation and Public Health Project, Ernest Sternglass, Joseph Mangano, William McDonnell, 1996**

Age-Adjusted Incidence Rate per 100,000 1985-94 for Central Nervous System Cancers in Bingham, Bonneville, Butte, Clark, Jefferson, and Madison Counties Surrounding INEEL*

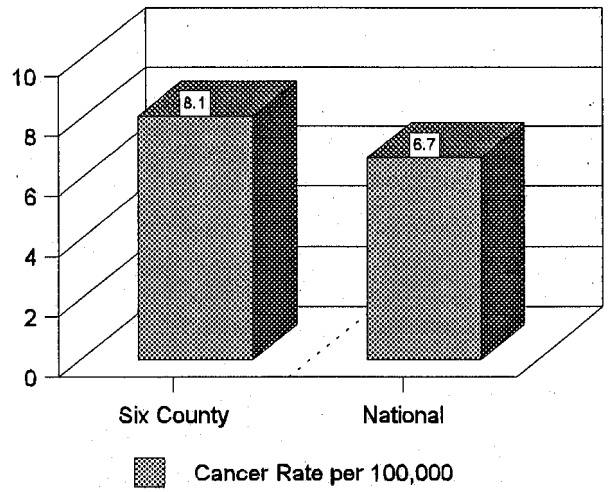


Figure 5

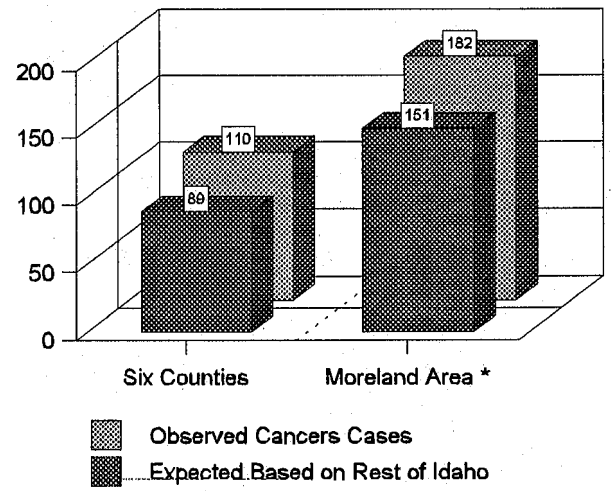


Figure 6

* Idaho Division of Health, "Idaho Public Health Brain Cancer Study" April 25, 1997

Figure 7

White Female Breast Cancer Mortality Rates 1950-89 Counties Within 50 and 100 Miles of INEEL

	Age-Adjusted Mortality Rates Per 100,000			Percent Change		Number of Deaths		
	1950-54	1980-84	1985-89	1980-84/ 1950-54	1985-89/ 1950-54	1950-54	1980-84	1985-89
Gould 50 Mile 100 Mile	 4.8 14.2	 20.6 22.3	 20.1 19.8	 333% 57%	 322% 39%	 3 50	 26 161	 31 162
National Cancer Institute 50 Mile	12.6	23.5	21.1	87%	67%			123
Idaho	18.9	22.3	18.9	18%	<1%	242	585	571
United States	24.4	24.9	24.6	2%	2%			

Enemy Within, J. Gould, E. Sternglass, J. Mangano, W. McDonnell, et al., 1996

CDC's INEEL Health Study

Jonathan Moreno, in his book *Undue Risk, Secret State Experiments on Humans,* notes that, "It took more than forty years for the whole story of the [Hanford] Green Run to be brought to light, and it surely seems to provide a suitable occasion for outrage at government irresponsibility, as felt by many who live in the surrounding community. First, it was by no means a unique event. By 1995 the DOE determined that between 1944 and the 1960's there had been several hundred secret intentional releases of radioactive material. Besides Hanford they took place at U.S. Army Dugway Proving Ground in UT, Bayo Canyon, NM, Nevada Test Site, Idaho, and in the Alaskan wilderness. What Americans did not know for decades was that radioactive fission products were being deliberately released on and over U.S. soil by our own government. Called the 'Green Run' because of the young or 'green' fuel that was used, the release was no accident. It was part of a series of tests conducted by the Hanford, Washington, nuclear facility. At Los Alamos the RaLa tests of radio-lanthanum (lanthanum-140) for measuring atomic bomb implosion also involved intentional releases. About 0.4 excess cancer deaths in Los Alamos County could have been expected from the RaLa tests."[10]

Downwinders of INEEL also paid a significant price because the RaLa production released enormous quantities of radiation into the atmosphere between 1954 and 1963 (82 separate process runs). This is the INEEL equivalent of Hanford's "Green-Runs" because the nuclear fuel throughput was "cooled" only hours or a couple days before being processed at the Idaho Chemical Processing Plant (ICPP). "Normally" reactor fuel is allowed to "safely" cool in water pools for about a year to allow short-lived radiation to "decay" before processing to reduce the release of large amounts of these mostly unfilterable volitized radionuclides. The RaLa project's focus was on the short-lived radio-isotopes that could be used in a radiation bomb, therefore the time factor from the irradiated reactor fuel/slugs extraction time to processing at the ICPP had to be minimized.

CDC's analysis reports of the ICPP RaLa Run emissions adamantly contend that only the relatively small low-power INEEL Materials Test Reactor (MTR) provided the ICPP RaLa Run throughput. Based on hundreds of documents gained through the Freedom of Information Act definitively show an elaborate RaLa program for rapid fuel/slug extraction from Hanford high-power production reactors, and shipment to INEEL's ICPP for processing. The Hanford shipping system involved at least two sets of truck convoys, each mounted with 4 casks (Garrett Freight Company provided the trucks), in constant transit between Hanford's reactors and the INEEL.

Hanford's formerly classified secret documents (recently declassified to respond to the Environmental Defense Institute (EDI) Freedom of Information Act (FOIA) requests) show "only one week decay time is allowed for shipments and separation" for the Hanford/INEEL/LANL RaLa Run shipments. [11] CDC acknowledges that Hanford irradiated uranium slugs were shipped to INEEL but adamantly refuses to acknowledge these shipments were part of any "green fuel" processing at the ICPP. Fundamentally, processing of "green fuel" releases enormous amounts of radiation to the atmosphere. Moreover, CDC's reports only acknowledge 32 RaLa Runs, whereas EDI's FOIA documents show 82 RaLa Runs. These are crucial issues to the public because it draws into question the integrity and completeness of CDC's "Aerosol Releases from the ICPP" report. For more detailed discussion and references see EDI website; www.environmental-defense.institute.org/publications. A major issue for the public since CDC started the INEEL Dose Reconstruction study, was the integrity and completeness of CDC document retrieval and review process. This is as fundamental as it gets for any research project because if all the relevant documentation is not put into the review data-set, the eventual findings will lack crucial credibility. Documents EDI has gained over numerous FOIA requests over may years related to INEEL operations, and extensively cited in EDI's comments to CDC are apparently not included in CDC's reports. A search of CDC document database [12] determined that nearly all the documents cited by EDI were NOT in CDC's database and therefore presumably not reviewed by CDC.

It must be noted that during CDC's initial document retrieval/review work, INEEL launched a

massive document destruction program. CDC's contractor at the time, Risk Assessments Corp.(RAC), provided the agency with detailed information of this document destruction process, however, CDC took no apparent action to stop it. The RAC status report on documents relevant to the INEEL Dose Reconstruction Study reveals that some 1,254 boxes of documents have been destroyed or are otherwise missing. A single box could hold 5,000 pages, so the total loss of information could be in excess of 6 million pages. [13]

Additionally, EDI's FOIA requests to the U.S. Air Force for copies of documents related to Hanford/INEEL radiation release reports were categorically rejected by the USAF based on the argument that they remain classified "secret" to protect "national security." Again, these are requests for forty-year-old documents!! Moreover, CDC effectively blocked the release of an index of classified documents related to INEEL radiation releases, initially claiming it did not exist, and later when EDI documented that in fact CDC already had the list, was forced to recant the existence of the index. To this day, CDC has yet to release the index of INEEL classified documents.

CDC, being the good soldier in this collective government coverup, not only refused to advocate for the Air Force document release, the INEEL index of classified documents, but also refused to even acknowledge the detailed listing of EDI's FOIA request (also sent to CDC) to the US Air Force or even note their existence in their INEEL reports. In the interest of fundamental research credibility, CDC does not even get the giggle award.

CDC Analysis of INEEL Aircraft Nuclear Propulsion Project

The Aircraft Nuclear Propulsion Project (ANP) was the American misadventure (1955 to 1961) into using nuclear reactors to power planes (modified B-36NB bombers) for long periods of time over the North Pole so they would be immediately ready for an attack on the former Soviet Union. Initial research, development, and testing was done at INEEL's Test Area North (TAN). Later actual airborne hot tests were conducted out of Carswell Air Force Base in Fort Worth, Texas. [14] A huge heavily radiation shielded aircraft hangar was built at INEEL/TAN to permanently house the nuclear powered plane.

The extensive testing of the ANP nuclear powered jet engines at INEEL, individually called the Initial Engine Tests (IET), operated over 1,575 hours at high-power and released enormous amounts to radiation to the environment. Current radiation emissions to the air estimates range between seven and eight million curies. [15] These estimates are believed, via EDI's independent review of relevant documents, to be significantly understated.

CDC has issued another revised draft of emissions from the INEEL Aircraft Nuclear Propulsion Project (ANP) that once again is indefensibly narrow in focus due to CDC's arbitrary constraints on its contractor research. CDC's contractor "task order" only allowed a more in depth review of three ANP runs. That being said, it must be noted that CDC research contractor Sanford Cohen and Associates (SC&A) found through additional analysis of DOE's public statements of only three (ANP/IET runs number 3.4, and 10) of the more than 26 ANP/IET tests that, "In brief, the combined estimated releases of 686,200 curies by IETs # 3,4, and IET # 10 is nearly seven times the combined release of 99,440 curies estimated for all other IETs that employed reactor power during the test" and publicly reported by DOE. [16] Despite these disclosures, CDC failed to summarize for the public what radiation was released even by its more in-depth analysis, thus making it more difficult for the public to appreciate the importance of these limited revelations. Specifically, the above radiation release numbers just for IET Runs Number 3,4, and 10 using SC&A own numbers total about to six million curies.[17] It is unclear why SC&A apparently never stated that in the context of the above citation of 686,200 curie disclosure. The CDC data is presented in "scientific notation" (i.e. 1.26E+04) that is legitimate from a purely scientific standard, however few members of the public reviewing the data will be able to translate scientific notation into "real numbers" (1.26E+04 = 12,600). EDI believes that CDC has an ethical obligation to provide reports that state information and appropriately summarize it in language/numbers that the general public can easily understand.

EDI's analysis using formerly classified secret documents and CDC contractor reports shows that between 7 and 8 million curies of radioactivity were released to Idaho's air during the ANP program between 1955 and 1961. EDI submitted formal comments to CDC 6/23/04 that documents our analysis. [18] This and

other INEEL radiation releases had a significant health/safety impact on INEEL Downwinders that CDC adamantly refuses to summarize, not only for INEEL releases but also fallout disposition in Idaho from the Nevada Test Site bomb releases. The public is systematically denied a comprehensive picture on their radiation exposure from ALL U.S. government nuclear programs.

EDI emphasizes in the strongest terms possible, that CDC's review of even the INEEL emissions is incomplete due to its failure to include all programs and all emissions to the environment. Additionally, CDC must analyzed ALL emissions in detail. That work is yet to be done. CDC research contractors only do what limited work the contractual task order funds. So the contractor cannot be faulted for an unrealistic and arbitrary CDC limitation on the "scope of work."

The Agency for Toxic Substances and Disease Registry (ATSDR), a sub-agency to CDC, is apparently trying to provide bureaucratic cover for CDC by establishing that if an INEEL off-site radiation dose did not exceed 5,000 mrem effective dose averaged over 70 year lifetime, there is no concern for radiogenic cancer risk among members of the public. The fact is, according to analysts, a thyroid dose equivalent to an effective dose of 5,000 mrem would be 100 rads, and likely fatal. EPA's maximum radiation standards are based on a 4 mrem/yr exposure. Even EPA's maximum exposure limit of 4 mrem/yr is challenged by credible independent scientific analysts as being "not protective of human health." What is the public to discern from all this but that something is radically wrong with these public health agencies we fund through tax dollars which are not protecting the public health!

One might think that the Idaho Division of Health (IDH), officially tasked with oversight of CDC's INEEL Dose Reconstruction Health Study and permanent member of the INEEL Health Effects Subcommittee, would be engaged. As of 6/25/04 the official IDH representative stated that "we have not generated any comments/reviews at this time." [19] This is after the 6/1/04 deadline for comments, so presumably the State of Idaho is apparently co-conspiring with the CDC's deficient documentation. What else is one to believe absent any published documentation ? Idaho taxpayers could justifiably wonder about the quality of IDH's oversight role, and the agency's purported mandate to protect the health and safety of the citizens of Idaho.

Another major fundamental methodology problem with the way CDC and its subagency National Institute for Occupation Safety (NIOSH) split up research between "on-site" (worker) and "off-site (us) was a faustian deal with DOE/INEEL if there ever was one (divide and conquer). NIOSH evaluates INEEL worker exposure using a largely discredited methodology of radically incomplete worker exposure records (comparing workers with radiation badges with workers in the same area without radiation dosimeter badges), and National Center for Environmental Health (NCEH) evaluates off-site exposures utilizing the huge geography (equivalent to the state of Rhode Island) of INEEL to discount the effective doses due to the significant distances to the boundary.

Unless these fundamental health study methodology problems are corrected, the CDC/NIOSH research will lack scientific credibility and not provide the information the public expects and demands about the whole truth on what we were exposed to during this sordid part of American history. Moreover the public cannot make informed decisions on the government's plans to restart nuclear bomb testing in Nevada without this historical information. For more information see CDC's website at www.cdc.gov/nceh/radiation/

EDI Renews Pressure on EPA Inspector General to Follow up on INEEL Deficiencies

The EPA Office of Inspector General (OIG) responded to a September 13, 2001 formal petition from Keep Yellowstone Nuclear Free, Environmental Defense Institute and David B. McCoy related to the Idaho Department of Environmental Quality and EPA Region 10 hazardous waste law enforcement deficiencies. The OIG issued a report in February 2004 that stipulated that the State of Idaho and the EPA Region.10 in Seattle, WA (with jurisdiction over Idaho enforcement of federal laws) must show that appropriate enforcement actions are taken to ensure INEEL is in compliance with all federal environmental laws. This Inspector General report required action by Region 10 EPA as follows:

"**ACTION REQUIRED:** In accordance with EPA Manual 2750, you, as the primary action official, are required to provide this office with a written response within 90 days of the final report date. The

response should address all recommendations. For corrective actions planned but not completed by the response date, please describe the actions that are ongoing and provide a timetable for completion. Reference to specific milestones for these actions will assist in deciding whether to close this report in the assignment tracking system." [20] As of this writing there is no indication that Idaho or EPA Region 10 have taken the above action. For a copy of EDI's letter to EPA/OIG see our website.

INEEL Moves Ahead With Closure of High-Level Radioactive Waste Tanks Despite Court Orders

Idaho Department of Environmental Quality a Notice of Intent (6/16/04) to permit DOE to close five INEEL high-level waste tanks. For more information on this affront to Federal District Court orders prohibiting such closures and ongoing U.S Circuit Court of Appeals deliberations that will determine if DOE will be allowed to leave huge amounts of waste permanently in the tanks and the final disposition of all of DOE's high-level radioactive tanks nation-wide, see EDI's Website.

Endnotes

1. Cancer in Idaho - 2000, Annual Report of the Cancer Registry of Idaho, December 2001, page 5. http://www.idcancer.org
2. Cancer in Idaho - 2001, Annual Report of the Cancer Registry of Idaho, April 2003, page 5.
3. Cancer Data Registry of Idaho, Annual Report, Cancer in Idaho 2002, April 2004, pages 5 & 72, that shows Health District Nos. 1 (p=0.05 or less), and Health Districts 6, & 7 (p=0.01 or less) had statistically significantly more cases of cancer than expected based on the rates for the remainder of Idaho. http://www.idcancer.org/annualreports.html
4. Steele, K,D, *Spokesman Review* 6/5/03
5. For more on this topic see EDI's Newsletters August and November 1997.
6. (a) American Cancer Society, Idaho Division Bonneville Unit, M. O. Huntington, M.D. "Public Education Awareness: The Key to Cure." (b) *The Enemy Within*, by Jay Gould with Members of the Radiation and Public Health Project, Ernest Sternglass, Joseph Mangano, William McDonnell, 1996. (c) Idaho Division of Health, "Idaho Public Health Brain Cancer Study" April 25, 1997. (d) Comparison of Cancer Incidence Rates Between Selected Counties and the Remainder of the State of Idaho, Cancer Cluster Analysis Work Group, Idaho Department of Health and Welfare, March 1995. (e) The Petkau Effect, The Devastating Effect of Nuclear Radiation on Human Health and the Environment, Ralph Graeub, 1994.
7. Estimated Exposures and Thyroid Doses Received by the American People from Iodine-131 in Fallout Following Atmospheric Nuclear Bomb Tests, A Report from the National Cancer Institute, October 1997, U.S. Department of Health and Human Services, page ES 2.
8. Comments on Centers for Disease Control INEEL Dose Reconstruction Study Atmospheric Source Terms for the INEEL Idaho Chemical Processing Plant, 2/6/04, Environmental Defense Institute. www.environmental-defense-institute.org
9. CDC/SC&A Atmospheric Source Terms for INEEL ICPP, 11/03, page 1.1.
10. Moreno, J. D., *Undue Risk, Secret State Experiments on Humans*, Freeman publisher, pages 151- 157. Jonathan Moreno, a former senior staff member of President Clinton's Advisory Committee on Human Radiation Experiments, is Kornfeld Professor of Biomedical Ethics and Director of the Center for Biomedical Ethics at the University of Virginia. Also see *The Plutonium Files, America's Secret Medical Experiments in the Cold War*, Eileen Welsome, Delta Publications.
11. Scheduling RaLa Shipments, 7/30/54, Hanford document Nos. HW-32594 and HAN- 56557.
12. CDC INEEL Document Database, 1/31/04, sent by request to EDI by C.M. Wood, CDC/NCEH/Radiation Studies Branch, Atlanta, GA.
13. For more details on document destruction see EDI Comments on CDC Task Order 5 (September 2000) submitted by Chuck Broscious, 3/5/01. www.environmental-defense-institute.org/publications
14. *American Portrait*, Belo Productions, offers an extensive video documentary on the whole history of the Aircraft Nuclear Propulsion project, including actual footage of the converted B-36 NB bomber equipped with nuclear powered jets, and the more recent/current and top-secret development of this nuclear powered aircraft/rocket engine. Also see EDI Citizens Guide to INEEL pages 19 - 24.
15. EDI Comments to CDC, 6/23/04, submitted by Chuck Broscious.
16. "A Critical Review of Source Terms for Select Initial Engine Tests Associated with the Aircraft Nuclear Propulsion Program at INEL." CDC/SC&A, July 2003, page ES-4.
17. CDC/SC&A, July 2003, pages ES- 9 to13. The data is presented in "scientific notation" (ie. 1.26E+04) that is legitimate from a purely scientific standard, however few members of the public reviewing the data will be able to translate scientific notation into "real numbers" (1.26E+04 = 12,600). EDI believes that CDC has an obligation to provide reports that state information that the general public can easily understand.
18. Comments on CDC INEEL Dose Reconstruction Health Study, SC&A "Aerosol Releases from the ICPP 1957 - 1959" and " Critical Review of Source Terms for Select IET Associated with the Aircraft Nuclear Propulsion Program, EDI, June 23, 2004. www.environmental-defense-institute.org/publications
19. Bureau Chief, Idaho Division of Health, email to Broscious 6/24/04
20. EPA Office of Inspector General (OIG) report forward "Memorandum" from Carolyn Cooper to John Iani, 2/5/04