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WERF Incinerator Forced to Close

The Idaho Department of Environmental Quality (IDEQ) announced that it rejected Department of Energy's (DOE) permit application to operate the WERF radioactive waste incinerator. DOE reportedly agreed to close the plant on November 1, after eighteen years of noncompliance with environmental laws. IDEQ and EPA for over a decade turned a blind eye to the WERF's inability to pass three trial burns, yet never ordered (until now) closure.

Readers of the *INEEL NEWS* appreciate that the WERF shutdown is happening NOT from DOE or IDEQ's concern for public health but from a Notice of Intent to Sue filed by the Environmental Defense Institute, Keep Yellowstone Nuclear Free, and David McCoy. The Notice laid out a concise legal argument showing not only DOE's violations but also IDEQ and EPA's violations of non-enforcement of the statutes. Credit for this long overdue shutdown goes to the public's initiative to protect our own safety when state and federal government do not.

The Notice of Intent to Sue challenged the eighteen-year operation of the WERF without the required regulatory hazardous waste incinerator permits. The State of Idaho and EPA were named in the Notice for failure to exercise their regulatory enforcement authority against an illegal incinerator operation. It is a sad commentary when the regulators supported by hundreds of millions of our tax dollars fail to enforce the law, and public interest groups must resort to litigation, before action is taken to stop the polluters.

A recent accident at INEEL also factored into the decision making process. Workers at the WERF incinerator were forced to evacuate when a September 17 wild fire threatened the plant. Operators thought the incinerator burners and other operating systems were in a cold shutdown before evacuating. However, when they reportedly returned three days later, workers found that the high-temperature burners in the secondary combustion chamber had reignited.

The main risk WERF faced was uncontrolled overheating. Without the exhaust cooling and other ventilation systems operating, the fire could destroy the filters connected to the incinerator. Breached filters mean that all the radioactive material held up since the last change out would be released to the atmosphere.

Due to the immediate proximity and physical connection of the secondary combustion chamber and the primary combustion, residual waste remaining in the primary chamber at the time of shutdown would continue to burn. DOE officials claim the WERF was never in any serious jeopardy tho no official accident report is available.

The State and EPA allow DOE to continue other incinerators and extremely hazardous "unpermittable" operations under an indefinite "interim status" exceeding the lawful operating period for even a permitted facility. The State and EPA also condone incineration of hazardous chemicals in plants that do not meet the required treatment criteria. For instance, internal IDEQ documents (gained through a Public Information Request) show that the agency secretly approved PCB waste dilution prior to incineration at WERF in clear violation of the Toxic Substances Control Act and the Resource Conservation Recovery Act.

The Environmental groups also filed a formal request with EPA and DOE Inspector Generals to investigate the chronic illegal use of "interim status" by DOE to avoid the legal requirements of the Resource Conservation Recovery Act, the Toxic Substances Control Act, and the Clean Air Act. Of major concern are the numerous unpermitted high-level radioactive and hazardous chemical incinerators and other hazardous waste treatment operations that include:

1. WERF Waste Stabilization Facility
2. NWCF High-level Waste Evaporator
3. Liquid Effluent Treatment and Disposal Evaporator
4. High-level Process Equipment Waste Evaporator
5. High-level Waste Calcine Bins
6. SMC Uranium and Chemical Incinerators
7. WERF Mixed Waste Repackaging Facility
8. ANL-W Sodium Components Maintenance Shop
9. NWCF HEPA Filter Leach Treatment Facility
10. NWCF Radioactive Debris Treatment Facility
11. ERB-II Reactor Secondary Sodium System
12. ERB-II Reactor Primary Sodium System
13. Many others too numerous to list

Wild Range Fires at Nuclear Sites

by Mary Woollen Mitchell

It sounds like a broken record with the Department of Energy (DOE) in cases of accidents and emergencies at our nations leading nuclear production sites, "The public has nothing to fear, everything is safe and no lives are in danger." We heard it when a fire destroyed nearly 48,000 acres on the Los Alamos National Laboratory site, and we heard it again when a wildfire ignited by a car accident destroyed some192, 000 acres on the Hanford Nuclear reservation. In both cases these assurances were false and made before scientific testing was even possible. At Los Alamos in fire's aftermath, an enormous amount of contaminated soil threatens to move into the Rio Grande river from summer storm runoff. A month after the Hanford fire, air samples taken offsite in the nearby cities of Richland and Pasco, Washington revealed plutonium concentrations 1000 times above background radiation.

Recently at the Idaho National Engineering and Environmental Lab (INEEL) in Idaho, two separate wildfires caused by lightening strikes raged over some 54,400 acres. One of these fires, which also forced the evacuation of 1,800 workers, came within yards of a nuclear reactor and waste pits holding highly radioactive spent nuclear fuel. Although a total disaster was very narrowly averted due to last ditch efforts by the fire crews, the conflagrations at INEEL pose hazards to those of us living in areas downwind. No comfort or credence should be taken in the words of INEEL Oversight Program physicist Doug Walker that "there wasn't any radioactivity released from these fires." Hmm, sounds familiar.

A wildfire on a nuclear site such as INEEL sows the seeds for both immediate and future harm, although it might not be so evident at the time. This most recent fire at INEEL is the biggest one in the past decade. In its fury, it burned over windblown contaminated soil resulting from nuclear operations. As it burns, the fire sends radionuclides up into the atmosphere. It's pure physics. The public should have been immediately warned about the potential hazards.

Wild fires burn off the protective layers of soil and vegetation which give stability to the ground contamination. Once the ground is burned, the radioactive materials are released. They then become airborne and are capable of traveling long distances on prevailing winds. This poses an obvious threat to communities downwind (unless you believe another famous assurance by the DOE that Jackson is not downwind!). Radioactive materials that are not released into the atmosphere pose yet a further risk. When the surface vegetation is denuded, radioactive dust flies freely and rain and snow pushes the contamination further downward, thus increasing the risk to the water table. With fall and winter precipitation and the lack of a protective layer to hold moisture, contaminants will move more quickly to the Snake River Aquifer.

The Department of Energy should have been more prepared to deal with these fires, particularly with the extreme fire danger this summer and the harrowing incidents at Hanford and Los Alamos. Considering the initial size of the fire and the type of fuel (mostly sagebrush and low vegetation as opposed to a high canopy fire), the INEEL fires could have been dealt with by a more expedient and prepared response. When the fires were burning and gaining ground, the DOE chose not to deploy a specialized aircraft capable of detecting airborne radiation from localized sources. The use of this aircraft would have given critical information about the fire and contaminants that were being released, and should have been a pro-forma response. Overflight of the burns was conducted at Hanford, but this readily available asset was not used at INEEL. Still, we are told not to worry.

DOE's pattern of continued irresponsibility and lack of proactive responses is unconscionable. This issue had grave implications to the public's health. Not only is the DOE plagued by inefficiencies, it continues to follow its decades' long pattern of deceit and denial of the problem. In the 1950's, DOE'S predecessor the Atomic Energy Commission, downplayed the hazards of atmospheric weapons testing at the Nevada test site. It was only in 1997 that we learned, from the National Cancer Institute that these tests released about 150 million curies of radio iodine a greater amount than the Chernobyl accident in 1986.

Problems like these present critical health situations for all of us. The DOE is more concerned about protecting its bureaucratic interests, than protecting public health. In addition to the fires, there is much to be concerned about at INEEL. At present they are incinerating waste without the full permits, using thermal treatment systems and embarking upon other "top secret" projects which release contaminants into the environment. The public has to be vigilant and continually challenge the existing practices at INEEL.

It is the worst fire season on record, and it is likely that additional wildfires will develop at the site only 90 miles upwind of Jackson Hole and the Yellowstone region. We implore the leadership of the DOE, as well as state and federal regulators to exercise a more expedient and strategic approach to deal with these fires, and to better monitor the disruption of radionuclides and contamination. Most of all, tell us the truth based on independent and good science, which should be our governments' greatest asset.

Mary Woollen Mitchell is Vice President of Keep Yellowstone Nuclear Free Board of Directors

INEEL Range Fire Burned More than Sage Brush

In late July and early August, 54,400 acres of the INEEL site burned in a range fire characterized as the worst on record. This was no ordinary wild fire, because it burned over known areas of wind blown radioactive soil contamination. Public health is an issue when a fire resuspends these contaminants allowing them to be carried great distances by the wind.

The windblown soil contaminated sites were mapped during the INEEL Superfund cleanup investigations. The overlap of the fire and contaminate areas occurred around the Test Reactor Area and the Idaho Chemical Processing Plant (now called INTEC). The contaminated soil maps show an elliptical northeast to southwestern pattern extending a mile in both directions from the two adjacent plants.

The State issued a news release on August 22 that acknowledged a **"small increase** in radioactivity consistent with historical background levels, [and that State] Oversight scientists expected increased levels would be detected after the fire due to the release of **naturally occurring** radioactivity contained in the vegetation and soil."

The State failed to mention that its own monitoring data show about a 1,600% increase or 17 times background of gross alpha and a 11,000% increase or 111 times background in gross beta radiation during the INEEL fire period. Any increase in radiation exposure brings increased health risks. Even the smallest inhaled particle of plutonium in the lung can cause cancer. Plutonium is an alpha emitting radionuclide and cesium and strontium are beta/gamma emitting radionuclides. The INEEL fire was not just another range fire. "More than burnt sage was in that smoke, and the public demands honesty from its government," says Erik Ringelberg, Executive Director of Keep Yellowstone Nuclear Free. "This type of radioactivity is not naturally occurring but is a result of contamination released from INEEL nuclear operations that is clearly mapped during the INEEL Superfund cleanup process," says Ringelberg. Comparisons of the soil contamination maps and the fire maps undeniably show that the fire burned over contaminated soil sites. Only a compromised State agency with a political priority above public health and safety could claim "naturally occurring" radiation sources.

Mary Woollen Mitchell, Vice President of Keep Yellowstone Nuclear Free notes, "This is an example of how the DOE and its supposed regulating agencies misrepresent the facts." "The truth is that we have been exposed to increased levels of man-made radiation as a result of the fires at INEEL, and they are attempting to veil this in pseudo-science. " "This proves why we have never been complacent with the information we receive from the State of Idaho, especially when it pertains to our health and welfare."

The State acknowledges that cesium-137 was detected in air samples claiming "the source of the Cesium137 is unknown, but could be the result of worldwide nuclear weapons testing." Again, the State fails to acknowledge that as recently as April 1992, employees were forced to stay inside of ICPP (now called INTEC) at INEEL due to unplanned radiation release from main stack containing cesium-137 flakes two inches in diameter that landed in the same area that recently burned.

The State's air monitoring data also show about a 28,600% increase or 290 times background in beta contamination in January, about the time the Calciner high-level waste incinerator restarted. The DOE told the State that the Calciner was not operating during the January increase in radiation levels The State allowed the Calciner restart and assured us that there was no risk to the public from allowing this unpermitted incinerator to operate. When these INEEL incinerator releases are combined with the fire releases, they may exceed the national standards.

Because the State of Idaho is allowing DOE to walk away from contaminated soil sites rather than forcing them to cleanup the radioactive pollution that resulted from site operations, the State has subsequently taken the "cover our butts" position that INEEL range fires are not a threat to health and safety. The State and the Environmental Protection Agency bought into the DOE argument that "institutional control" or restriction of public access to contaminated areas was sufficient to allow DOE to "walkaway" from these sites. This shows the short sidedness and fundamental flaw in the environmental regulatory process and the effect of politics on a system supposed to protect health and safety.

The recent INEEL wild fire that burned past the fences and guards over these contaminated areas show that DOE's claim to "institutional control" is bogus. Unfortunately, the problem will continue with every wind storm between now and when new vegetation grows back to provide soil cover.

If the State is to have any future credibility, it must change its focus from INEEL coverups to genuine public health. Independent scientists generally agree that there is no safe level of radiation exposure. All radiation exposure has risks, which is why pregnant women are no longer X-rayed unless there is a life threatening situation. Radiation standards are established based on "acceptable risks" where government determines that it is acceptable if one in 10,000 of the public die from the operation of nuclear facilities. This "acceptable level of risk" is being challenged daily by independent scientists who document that the government is not telling the truth about how many people are at risk.

INEEL Whistleblower Discloses Health Problems Caused by Unsafe Work Conditions

Clint Jensen worked at INEEL for twenty-one years, the last three at the Specific Manufacturing Capacity (SMC) housed at Test Area North. SMC is where depleted uranium is fabricated into armor for the U.S. Army's M1 Abrams Battle Tanks.

Jensen, in a formal complaint to the U.S. Department of Labor, claims that a hazardous workplace made him sick and managers retaliated against him when he questioned safety conditions. His health problems started a year after he was put in charge of two incinerators that processed the uranium and chemical waste from the armor fabrication operations. His symptoms started with chronic sore throat and aching arms. After passing out three times at work, he was admitted to the hospital and remained on short term disability for five weeks. Management refuses to extent Jensen's disability leave or support his Workmen Compensation Claim.

No protective clothing or respirators are provided workers despite thick black smoke that leaks from the incinerators into the workplace. Smoke detectors are turned off so that the fire alarms would not go off causing an evacuation and a Fire Department response. On one occasion, Jensen was told to cleanup a radioactive spill without protective clothing. His shoes became contaminated in the cleanup effort and were confiscated. Management refused to report the accident and his exposure. Only after Jensen produced a voucher for new shoes to replace his contaminated shoes, did management report the incident.

At an August public meeting in Jackson, WY sponsored by Keep Yellowstone Nuclear Free, Jensen told the three hundred residents, that "DOE has taken my health away, and they need to be made accountable." Depleted uranium is now considered the major cause of the illness called "Gulf War Syndrome." U.S. artillery and tank projectiles capped with depleted uranium resulted in thousands of troops being exposed not only to Iraqi tanks hit by U.S. artillery but also US tanks and armored personnel carriers hit by friendly fire.

The SMC is a classified military manufacturing operation that like other nuclear operations has escaped outside regulatory scrutiny. The SMC incinerators that burn uranium chips, sludges, and powders do not have the required hazardous waste permits. Attorney Tom Carpenter with the Government Accountability Project is representing Jensen. Carpenter characterized the hazards of the incinerators as significant especially when they had 2,100 degree F temperature spikes during process runs. Tens of thousands of pounds of uranium are processed in these unregulated incinerators every year.

Jensen's Labor Department complaint alleges that the incinerators were homemade batch ovens that were not air tight and only had plexiglass enclosures. Smoke regularly leaked out of loose duct joints and flimsy enclosures. Management never told Jensen or other workers what kinds of radioactive and chemical hazards they were daily exposed too. Open containers of chemicals used in processing gave off fumes that spread throughout the building. Without this crucial information about the specific radioactivity and chemicals, Jensen's doctors could not offer useful treatment.

In a prepared statement delivered in Jackson, Jensen alleges that DOE and its contractor Bechtel are engaged in a coverup since day one, and he has been beating his head against the wall trying to get answers and they are not opening any doors. His symptoms include headaches, stomach cramps, dry heaves, shaking spells, dizziness and damaged nerve endings.

In an effort to keep Jensen quiet, Bechtel's SMC management increased his security clearance to prevent him from discussing his workplace experience with anyone without an equivalent or higher security clearance. Management also took away 270 days of personal leave due him in 1999. Jensen's complaint alleges DOE discrimination against him for going public with problems at the site. The Labor Department apparently rejected the claim not on the merits but on missing the 180-day filing deadline after losing his leave benefits. Doctors provided by DOE told Jensen that if he does not return to work he will be fired.

Tom Carpenter, Jensen's attorney is appealing the Department of Labor decision, which means an administrative law judge will hear his case.

The SMC project (started in 1984) has produced more than 3,000 tank armor packages for the US Army by DOE's contractor Bechtel. SMC is located at INEEL's Test Area North and has an annual budget of $53.5 million. The DOE and the Army announced in July that the SMC is expanding production and adding 20 additional jobs to the current 250 employed in the project.

In September the Environmental Defense Institute, Keep Yellowstone Nuclear Free and David McCoy filed a formal request to the Environmental Protection Agency and the Department of Energy's Inspector Generals to investigate the SMC operations. The complaint alleges that the SMC incinerators and other hazardous waste operations are operating illegally without the permits required under the Resource Conservation Recovery Act, the Toxic Substances Control Act, and the Clean Air Act.

Secrets Lies and Operation Bluenose

The old adage "what you don't know can't hurt" does not apply to toxic radioactive substances released into the environment by the United States government during secret military operations. These releases continue to affect the health of tens of thousands of Americans living in the shadow of nuclear weapons' production and testing sites.

This article explains what is currently known about one such military discharge program of radioactive substances. The information within it has been gleaned from my reading of hundreds of U.S. documents released under the Freedom of Information Act (FOIA). Many more documents, however, continue to be shrouded by a cloak of secrecy. The U.S. government's insistence that documents over forty-years old pose a threat to national security does not meet the laugh test much less the most basic test of an open democratic society.

In the late 1940's and 1950's, the United States Atomic Energy Commission (AEC) and the Air Force implemented a secret program code-named Operation Bluenose. The program's objective was to determine the Soviet Union's plutonium production levels in order to evaluate the extent of their nuclear weapons' capability. The general idea behind Bluenose was to analyze fission-product gases released into the atmosphere during the Sovie Union's reprocessing of reactor fuel. (1)

Although the Air Force had developed a high altitude spy play, called the U-2, that could overfly the Soviet nuclear production sites and conduct reconnaissance, it wanted to verify not only that the Soviets were producing plutonium but how much was being produced. To accomplish this, the Air Force had to refine the fission air sampling process used the U-2 planes. Operation Bluenose was created to achieve this goal.

In order to correlate fission product sample data with what was being produced on the ground, a simulated experiment was needed. The solution: run the U.S. nuclear production plants "Soviet style" and overfly them with U-2's. (2) Since the AEC knew the U.S. plutonium production rates for each plant on an hourly basis, the monitoring sample, collected by the U-2's flying at 100,000 feet, could be correlated to a specific production rate.

To run the U.S. plants "Soviet style" required some adjustments to the differences between Soviet and U.S. plants. In the rush to catch up to the U.S., the Soviets were saving time by reprocessing "green" reactor fuel, as opposed to first cooling the fuel for a year before reprocessing. Cooling the fuel, in water pools, after extraction from the reactor allows short-lived fission by-products, like the highly toxic Iodine-131, to safely decay so less is released into the environment (3)

In the early years of the nuclear arms' race, both countries reprocessed "green" fuel; however, the Americans installed some minimally effective filters to reduce emissions and gradually increased the fuel cooling time, except for secret projects like Operation Bluenose. These projects benefitted from the release of large amounts of fission by-products and thus allowed the U-2's to more easily calibrate the air sample with the amount of nuclear fuel being processed on the ground.

This is clearly revealed by documents gained through FOIA in 1986 by the Hanford Education Action League. These documents describe how, in an effort to satisfy military intelligence needs, the AEC recommended that other tests be conducted at Hanford that would release more radiation and also asked that plant filters be disconnected. Clearly, the AEC was trying to simulate at the U.S. plants was happening in the Soviet Union by processing "green" fuel. The move to "green" fuel was also done for nuclear processing runs at Oak Ridge, Tennessee and the Idaho National Engineering and Environmental Laboratory's (INEEL) so called "RaLa Runs" during the 1940s and 1950s, despite the consequences of increased radiation releases to the public health.

While working on the Hanford Downwinders class-action lawsuit, Owen Hoffman,(4) President of the SENES Oak Ridge Center for Risk Analysis, determined that approximately 900,000 curies of Iodine-131 were released by the AEC's Hanford plants between 1944 and 19547, a period known as the Hanford Green Runs. This amount is 150,000 curies more than "official" estimates from the Center for Disease Control (CDC), estimates generated by the agency's Hanford Dose Reconstruction Health Study. The infamous Three-Mile Island meltdown released about 15 curies of Iodine-131. Clearly, the most serious nuclear accident in U.S. history pales in comparison to these Hanford releases, but they are not the only ones of similar significance.

Based on his research for the Oak Ridge National Laboratory Health Study, Hoffman also believes the RaLa Runs (the Oak Ridge equivalent of the Hanford Green Runs) are grossly underestimated by the public health agency. Although the RaLa Runs processed green reactor fuel for a different purpose: to extract isotopes used for AEC radiological warfare experiments, they were also used by the Air Force to meet the needs of Operation Bluenose. The Ra La program was transferred from Oak Ridge to INEEL where similar huge releases of radioactivity occurred. Operation Bluenose, the Hanford Green Runs, and the INEEL RaLa runs, conducted between 1954 and 1963 were distinctly separate programs. The Air Force,

however, opportunistically used them all in their Bluenose overflights.

Initially, the U-2 planes sampled for Iodine-131, but in later years, switched to Krypton-85 as the "signature of reprocessing" because it dispersed into the stratosphere where the U-2's were forced to fly to avoid being shot down by the Soviets. The switch to Krypton-85 has been confirmed in the partially declassified Operation Bluenose documents, obtained under the FOIA. From a public health perspective, Krypton is not as toxic as other fission by-products. However, its releases are indicative of large concurrent iodine, strontium, cesium, and dozens of other highly toxic radionuclides that do pose significant public health hazards. By knowing the Krypton releases, it is possible to estimate the amount of iodine and other fission product releases. Therefore, this information must be fully declassified to meet the public's right to know what pollutants were released.

The environmental emissions data on Operation Bluenose, Ra La, and other secret military programs remain classified forty years later despite public demands for full disclosure. The importance of declassifying this information lies not only in the public's right to know what we collectively were subjected to without our consent but also in establishing the government's liability to compensate those who suffered from radioactive releases.

Robert Alvarez, former senior Department of Energy (DOE) policy advisor, claims that the rationale for keeping radiological release data classified on the grounds that it could be used to estimate U. S. plutonium production is no longer valid and a clear-cut abuse of secrecy.(5) Arjun Makhijani, head of the Institute for Energy and Environmental Study, agrees, adding that U.S. plutonium production rates are publicly known because of treaty disclosure requirements.(6) Clearly, the refusal to declassify emission data cannot be supported on the basis of national security.

David Albright, Director of the Institute for Energy and International Security, is a member of DOE Secretary's Openness Advisory Committee. He thinks that continuing to classify the Iodine and Krypton releases is an unwise policy.(7) According to Albright, no single individual DOE or Air Force declassification officer should decide what radiation emissions to declassify and what to keep secret. Albright also contends that the amount of Krypton releases are known. Frank Von Hipple conducted a publicly available study for the International Atomic Energy Commission (IAEC) for all nuclear production facilities worldwide. The IAEC developed its own Krypton tracking system to verify zero nuclear bomb production under the Nuclear Non-Proliferation Treaty.

Despite the IAEC disclosures, the information is not detailed enough to isolate individual nuclear production site releases, information vitally needed to establish the amount of radiation released for specific plants during specific periods. Dose reconstruction health studies require fission by-product environmental release data from a specific nuclear plant, sometimes on an hourly basis, so it can be merged with meteorological data, thereby, allowing scientists to determine what pollutant went where and who was effected. This is why detailed operating history and throughput of each nuclear production plant must be declassified.

Secret document title lists, obtained during the Hanford Environmental Dose Reconstruction Study, confirmed that the INEEL was involved in Operation Bluenose in the 1950s. Starting in 1991, the Environmental Defense Institute, filed FOIA requests to DOE Hanford, INEEL and the Air Force for documents related to the Bluenose project. Although Hanford sent eight of the twenty-eight documents requested, portions of these reports were "blacked out" or otherwise censored because, according to the government, release of this information "would compromise national security." The data quantifying radioactive releases were blacked out as well as page numbers, so it is impossible to determine if pages were deleted and what the magnitude of the release was.

The CDC is currently conducting an INEEL Dose Reconstruction Health Study to determine what radioactivity was released from the site over its operating history. Although it would seem as if the government is doing all it can to answer the public's questions, history proves otherwise. As a member of CDC's INEEL Health Effects Advisory Committee at the time, I was shocked when, in 1994, the CDC publicly announced that Operation Bluenose did not involve radiation releases and, therefore, was irrelevant to the dose reconstruction study. CDC was later forced to recant this statement after censored FOIA documents clearly documented that Operation Bluenose involved radioactive releases from INEEL and other sites.

The CDC also blocked its own Advisory Committee from recommending that DOE release an index of classified INEEL documents (it was the Hanford index that first disclosed the existence of Operation Bluenose). The INEEL index was the only way the public could independently determine if the CDC was accessing all relevant information needed to establish the INEEL radioactive releases, particularly, Operation Bluenose and the Ra La Runs.

CDC's contractor confirmed that in June of 2000, approximately 900 boxes of documents related to INEEL's radiological releases were destroyed.(8) These boxes, achieved at INEEL and the Seattle Federal Information Center, contained millions of pages of information that has

been lost forever. Hanford also acknowledged twenty-seven "lost" (or perhaps destroyed) Bluenose documents. The DOE's systematic destruction of this information means we may not have anything substantive left to uncover under the Freedom of Information Act; the American public may never know the whole truth.

Allen Benson, author of Hanford Fallout, the first comprehensive analysis of the Hanford Green Runs says no federal agency can be trusted to tell the truth about U.S. radioactive releases.[9] As a scientific consultant on the Hanford Downwinders class action suit, Benson believes that the only hope lies in well financed litigation that can bring in independent scientists to reveal, through court ordered discovery, what harm the public was really subjected to from the government's negligent actions.

Operation Bluenose is only one of dozens of major nuclear releases to the environment that caused serious harm to those living downwind of this nations' nuclear weapons' production facilities. Continued denial of federal agencies to declassify information needed to reveal the truth about what hazards we are being subjected to without our consent is a travesty of democracy. The only national security issue at state here is the American public's shattered confidence in our government's willingness to put health and safety above minimization of liability for past negligence.

Environmental Defense Institute thanks Karen Hallgren as contributing editor on this Bluenose article

Endnotes

1. The Richland, Washington Tri-City Herald added that in the 1940s Walt Singlevich headed a classified program known as Operation Bluenose whose object was to determine soviet plutonium production by analysis of fission product gases given off during the reprocessing of reactor fuel. The intentionally released radioactive gasses were part of this test program. This release was achieved by hauling "green" irradiated fuel from the 100 area over to the 200-B Plant were it was dissolved in nitric acid and purple iodine was vented up the stack. It was later found that Iodine-131 was not an accurate indicator of plutonium processing throughput. The noble gas Krypton-85 was found to be the only isotope which could accurately be tracked from the off-gases and that is what Francis Gary Powers was sampling in 1960 when he was downed by the Soviets. His U-2 spy plane had a Cold Finger sampler intake on its wingtip to sample air at 100,000 feet over the USSR for its Krypton-85 content.

2. D'Antonio, Michael; Atomic Harvest, Hanford and the Lethal Toll of America's Nuclear Arsenal, 1993. D' Antonio notes a series of articles in the Portland Oregonian newspaper that interviewed Carl Gamertsfelder, a retired Hanford radiation control manager who was at the site during the Green Runs. Gamertsfelder corroborates the above Tri-City Herold article. According to D' Antonio, Gamertsfelder characterized the Green Runs as it had related to the intrigue and espionage of the Cold War. The United States had been trying to spy on Soviet weapons factories from the stratospheric perspective of exotic surveillance aircraft. The aircraft, and monitoring stations at sites bordering the Soviet Union, could be equipped with devices that would measure the pollution coming out of Russian plutonium plants. But in order to know how the emissions related to the volume of uranium being processed, the Americans needed to simulate Soviet manufacturing methods. To do this, they ran the Hanford processing plants Soviet style, shortening the cooling period and allowing higher levels of pollution to go out the stack. They then measured off-site radiation and worked out a formula that would turn readings from monitoring devices into estimates of the enemy's bomb-production rate. Since the Soviets processed green uranium, in order to stay competitive in the arms race, Hanford had to conduct Green Runs too.

3. Morgan, Karl Z., Peterson, Ken M., The Angry Genie, One Man's Walk through the Nuclear Age, 1998. Morgan, former head of the International Atomic Commission for twenty years, and head of Oak Ridge National Laboratory Health Physics, notes in his book The Angry Genie, that the Hanford Green Runs were permitted in part to complement the chemical warfare studies of the effects on the neighboring populations downwind. The rationale was the need to test their instruments in calibrating the fallout pattern. The exposed "expendables" primarily Native Americans were not told of this until 1990. Not surprisingly, a high incidence of thyroid carcinoma has appeared in this population. Morgan believes that this revolting treatment of humans was also revealed when DOE was forced in 1994 to declassify documents detailing extensive human radiation experiments conducted on Americans by the Atomic Energy Commission.

4. Owen Hoffman email to the author dated September 6, 2000. Also see "Evaluation of the HEDR Source Term and HTDS Power Calculations" F. Owen Hoffman, et. al. SENES Oak Ridge Inc. March 1999, page 26.

5. Robert Alvarez email to the author dated August 31, 2000, and September 1 and 2, 2000, in addition to numerous phone conversations on the issue.

6. Arjun Makhijani in a phone conversation with the author on September 1, 2000.

7. David Albright in a phone conversation with the author on September 1, 2000.

8. John Till, President of Risk Assessments Corp. current contractor for Centers for Disease Control INEEL Dose Reconstruction Study. His comments come from email to the author dated June 20, 2000.

9. Benson, Allen B.Ph.D., Hanford Radioactive Fallout, Hanford's Radioactive Iodine-131 Releases (1944-1956) 1989. Allen Benson in a phone conversation with the author on September 4, 2000