### INEEL NEWS Environmental Defense Institute Perspectives on Operations at the Idaho National Engineering and Environmental Laboratory

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# Environmental Advocates File Notice of Intent to Sue Over INEEL Environmental Violations

Attorney David McCoy and environmental advocate Chuck Broscious filed a Notice on June 14, 2001 threatening to sue the Department of Energy, the Environmental Protection Agency (EPA) and Idaho Department of Environmental Quality (IDEQ) over the alleged illegal and unpermitted operation of an evaporator system that processes high-level radioactive and toxic liquid waste at the Idaho National Engineering and Environmental Laboratory (INEEL).

The threatened lawsuit calls attention to the failure to observe numerous state and federal environmental laws which require permits for the facility known as the Process Waste Equipment Evaporator (PEWE). The Notice alleges that the DOE and its regulators, the IDEQ and EPA, are allowing the operation of a deteriorating 50year-old evaporator facility which is not designed to handle the type of toxic wastes it is processing. The regulators' failure to require environmental analyses and monitoring equipment for toxic and cancer-causing air emissions such as radioactive Iodine, Arsenic, Cadmium and Mercury is challenged as violating the Clean Air Act. The notice alleges that many facilities such as the Tank Farm and other high-level waste evaporators tied to the PEW evaporator legally must also have permits and are illegally operating without them.

Although the DOE has recently filed an application for a federal permit, the Notice states that the application is a sham because the evaporator system is miss-classified as a tank treatment system rather than a thermal treatment system. The Notice claims that the system cannot meet the federal standards for thermal treatment and that the miss-classification is at a lower standard than what is required to protect the public health and safety. The lawsuit Notice accuses the Idaho DEQ of deliberately miss-classifying the evaporators to keep the system operating. Internal DOE documents are cited which refer to the evaporators as thermal treatment systems.

Last year two Notices of lawsuits were filed challenging the Calciner and WERF nuclear waste incinerators at INEEL, which EDI, KYNF, and McCoy also claimed were operated without federal permits. The nuclear waste incinerators were shut down shortly after DOE, EPA and Idaho DEQ received the notices. Permit applications were pending for all of the incinerators at the time notices were filed.

Chuck Broscious stated, "After fifty years' of operation, no major operating nuclear plant at INEEL has ever been permitted because none can meet current regulatory requirements. It is a sad commentary when the public is left with no other recourse but litigation to protect the air and water we and future generations need for survival."

Attorney McCoy states that, " the regulators know that the incinerators and evaporator systems at INEEL do not and cannot comply with state and federal law. DOE engages in regulatory manipulation by submittal of incomplete and sham applications to keep illegal operations running longer. The DOE admitted in 1996 these evaporator facilities were >unpermittable=. McCoy further states that: "Idaho DEQ has gone along with the DOE farce long enough. The colossal failure of management of radioactive waste at DOE facilities at INEEL and elsewhere is a bright yellow warning light to be looked at before there is any political rush toward commercial nuclear power expansion. "

At a public meeting in Idaho Falls on June 20 the DOE announced that the agency intended to expand the PEWE hazardous waste permit to include the Liquid Effluent Treatment and Disposal (LET&D) operation. Both of these high-level and hazardous waste treatment plants and especially the LET&D are not fully described in the draft permits made public by the DOE.

The PEWE is located at the INEEL site within the two-hundred acre Idaho Nuclear Technology and Engineering Center (INTEC) formerly called the Idaho Chemical Processing Plant (ICPP or in the DOE literature called ACPP." The three-decades-old PEWE, located in INTEC CPP-604, processes high-level radioactive and hazardous liquid wastes. The PEWE is an old and complex system which is connected to virtually every waste-processing unit at INTEC and, via imports from other INEEL facilities, the whole INEEL site. DOE has yet to document that all the components (including pipes and off-gas emission systems) are RCRA compliant.

The PEWE is a series of evaporators that use steam heat to boil off hazardous waste into several parts (fractions). These fractions are 1.) the "bottoms" or the least easily boiled parts that stay in the bottom of the evaporator, 2.) the "overheads" or the part that boils off easily. There are two parts to the overheads; 1.) the volatile organic/inorganic compounds, and volatile radionuclides that go out the INTEC Main Stack without additional treatment other than particulate filters and, 2.) the overhead condensates that are sent to the Liquid Effluent and Disposal Facility (LET&D) that remove the nitric acid constituents and recycle them back to the highlevel waste system.

The current operation of the PEWE violates multiple aspects of state and federal law and cannot be allowed to continue. The PEWE does not even have an RCRA permit application which contains sufficient information to process that application. The facilities which discharge to the PEWE also are not RCRA permitted facilities. The facilities from which the PEWE receives wastes and the facilities to which the PEWE discharges wastes lack interim status and permits. The PEWE illegally processes wastes which are required by federal law to be processed in other facilities. The PEWE off gases are not adequately monitored and pose great danger to the public health and the environment.

The PEWE violates provisions of the Clean Air Act, RCRA, and NEPA and the petitioners request that DOE immediately halt operations of the PEWE and related operations, and suspend any further operation until such time as: 1.) appropriate NEPA analysis has been provided; 2.) RCRA permit(s) have been issued for the PEWE; and 3.) that the PEWE and all the interrelated facilities operating with the PEWE comply with all federal laws. Additional public notices and hearings which comply with the full requirements of RCRA must be provided for the public. There must be a stay of further permit processing for the PEWE until DOE adequately informs the public what is intended with respect to the PEWE and all its related facilities.

The text of the Notice of Intent can be found at EDI's website: http://home.earthlink.net/~edinst/

#### Correction

*INEEL NEWS* (April 2001) incorrectly located the new INTEC percolation waste disposal ponds. The correct location according to DOE documents is about two miles southwest of INTEC along the south bank of the Big Lost River and about two miles south of the Test Reactor Area, and two miles northwest of Central Facilities Area.

## New High-level Waste Treatment Plant Violates Regulations

Undaunted by increasing public outrage over flagrantly illegal radioactive and hazardous waste treatment operations, DOE fired up yet another INEEL plant in a desperate effort to rid itself of millions of gallons of the most deadly waste ever created on this planet. This waste is what is left-over after nuclear reactor fuel rods are dissolved with acids and solvents so that the highly enriched uranium and plutonium can be extracted.

What is even more reprehensible is the active complicity of the very state and federal environmental regulators whose mission is theoretically to protect our collective health and welfare.

Reducing the threat this high-level tank waste poses is a legitimate goal that no reasonable person will question. That being said, no one in their right mind would condone turning Idaho's otherwise pristine air into a giant landfill in the sky. Because you can't see it, smell it, or taste it this modus operandi escapes the usual challenges of other smoke stack operations. It is also useful, and intentional, that these operations are on a highly secretive and restricted nuclear reservation the size of Rhode Island.

The DOE has yet to offer the public a complete list of all the evaporators which are in operation at the INEEL and their cumulative health and environmental impacts. One of these evaporators, the High-level Liquid Waste Evaporator (HLLWE) started operating in October 1996 and functions under Interim Status (no RCRA hazardous waste treatment permit) with the blessing of the State of Idaho. According to internal DOE documents gained by EDI through the Freedom of Information Act, "The HLLWE is an integral part of the NWCF [high-level waste incinerator] operations and will increase our [DOE] efficiency by reducing the amount of liquid waste in the tank farm to be treated and the amount of calcine produced by the NWCF." This evaporator plant releases more pollutants to the atmosphere than the Calciner incinerator because the Calciner (also unpermittable) at least burns up some of the volatile organic compounds before going out the Main Stack. The Evaporator simply vaporizes the whole lot (including semi-volatile heavy metals like mercury) and sends them out the stack.

The State of Idaho, in a justified concern for the massive amount (millions of gallons) of high-level waste contained in extremely vulnerable fifty-year-old underground tanks above the Snake River Aquifer, made a

sweetheart deal with DOE to allow operation of this and other processing plants.

The State must be given credit for never granting a permit to these polluting operations because once a permit is granted it is very difficult for the State or the public to challenge the operations. There is a cadre within the State DEQ of highly dedicated public servants at the technical staff level who have systemically and courageously challenged the deficiencies of the INEEL operations. These folk never get credit for their thankless work but remain at the front lines of advocacy for the public interest. To these DEQ staffers we extend our thanks.

Permits are a significant legal and regulatory issue, which, thanks to the State of Idaho, is still open for debate. We do not agree with the State's acquiescence to allow continued operation of these pollution sources, but applaud their resistance to offer rubber stamp hazardous waste permits, which would then be extremely difficult to challenge.

The real problem lies at the highest state political level, which apparently consistently overrides their own agency's technical staff and allows the DOE to continue operating non-compliant radioactive/ hazardous waste treatment plants under interim status, which is also illegal since that option expired in 1992.

Nevertheless, under federal waste management provisions of the Resource and Conservation Recovery Act, when a facility cannot comply with the requirements for a permit it is the duty of the Idaho DEQ to demand closure proceedings be initiated.

The whopper of misguided good-old-boy deals was negotiated in 1995 by former Idaho Governor Phil Batt in the infamous Settlement Agreement with DOE, which states under Section E (3) "Operation of the High-Level Waste Evaporator. DOE shall commence operation of the high-level waste evaporator by October 31, 1996, and operate the evaporator in such a manner as to reduce the tank farm liquid waste volume by no fewer than 330,000 gallons by December 31, 1997. Efforts will continue to reduce the remaining volume of the tank farm liquid waste by operation of the high-level waste evaporator."

According to internal documents gained by EDI through the Freedom of Information Act, the HLLWE processes 11,000 gal/day. It is located at INTEC in CPP-659 New Waste Calciner Facility (NWCF) building, which was built in 1978 and apparently does not meet containment standards or current seismic building standards. Federal statutes under the Resource Conservation Recovery Act (RCRA) specifically identify each hazardous waste contaminate that must be managed, treated, and disposed under strict guidelines.

These laws were passed after public revulsion over flagrant waste mismanagement forced Congress to take

action by passing the Federal Facility Compliance Act. Ironically, it is federal nuclear operations that are the single largest polluters. Not even goliaths like Boise Cascade or Simplot could get away with such flagrant violations of this nation's environmental laws. DOE has known since it lost a landmark court battle in 1987 brought by public interest groups that it must comply with these environmental laws.

The hazardous wastes processed by the HLLWE are the same as those processed by the Calciner incinerator and the other high-level waste evaporators which include at least 128 RCRA hazardous waste constituents, thirty-five of which require carbon absorption, chemical oxidation, wet air oxidation, or combustion treatment described in 40 CFR 268.40. The HLLWE simply does not meet the required treatment standards or the new Clean Air Act requirements under the Maximum Achievable Control Technology (MACT) standards for major sources of hazardous air pollutants outlined in (40 Code of Federal Regulations 63.112).

The MACT identifies hazardous waste treatment sources at "Federally Operated Treatment Works" and/or "site remediation" to comply with the same standards as commercial operations. [Federal Register 10/26/99 page 57576] Of the 128 RCRA listed hazardous waste contaminates processed by the HLLWE, 68 are **also** listed in the MACT list of hazardous air pollutants.

DOE as well as the State and EPA regulators claim that the more stringent MACT standards do not apply to the HLLWE or the other two high-level waste evaporator operations at INEEL. EPA Region 10 officials in Seattle went so far as to claim that: "Our air folks indicated that the MACT standards are very source specific (i.e., Dry Cleaning, Wood Furniture, Chromium Chemical Manufacturing, etc.) and that the units you [EDI] mentioned did not appear to fit into any of the MACT source categories."

The State and EPA seem to be arguing that it is the type of facility which generates toxic emissions, which is supposed to come under the MACT standards, rather than the toxic emissions themselves. This interpretation makes no sense because the purpose of the MACT standards is to protect public health and safety. What is the logic in regulating a dry cleaning plant when an evaporator processing high-level radioactive waste can escape regulations? Weyerhaeuser's CEO would likely give up his stock options if he thought he could get such regulatory complicity to pollute.

Apparently, the main reason DOE is so adamant against coming under the MACT standards is because performance tests are required to demonstrate compliance with the Clean Air Act. It is doubtful that DOE could meet the required performance tests. Previous challenges by EDI/KYNF and McCoy on other INEEL waste treatment

plants have shown non-compliance and resulted in near immediate closure of the operations.

The Environmental Defense Institute submitted a request to EPA Headquarters to issue an official determination on this crucial legal/regulatory question on the MACT applicability to the INEEL waste treatment operations. Stay tuned!

### Nuclear Caused Current Energy Shortage by David McCoy

Before Senator Larry Craig and Rep. Mike Simpson continue their flight to nuclear nirvana, taxpayers would hope they first land for a reality check. The seeds of the current U.S energy crisis were sown by hundreds of billions of taxpayer dollars which were wasted on nuclear power by the federal government and utilities. We've already crashed once on that road and need to remember the lessons. Nuclear power plants failed to come on line, ran at less than their touted efficiency, and shut down decades before their predicted design lifetimes ended. The resulting massive cost overruns, debts and development losses were forced into our electric bills. Major price hikes without supply of a single kilowatt resulted for millions of us in the Northwest.

U.S. investment capital wasted on nuclear power has been a major factor in the U.S. inability to keep pace with increases in energy consumption. During the trillion dollar expansion of nuclear plant building in the 1960s and 70s, the utilities boasted that nuclear energy would be "too cheap to meter." Nuclear power plants rarely came on line with less than fifty to one hundred percent cost overruns. Nuclear developed 1/10th the power and 1/100th the numbers of plants its proponents claimed.

The economics of nuclear were so poor that plans for hundreds of nuclear plants were dropped. Remember the Washington Public Power Supply System known as WHOOPS --the 2.5 billion dollar debacle of twenty nuclear power plants which could not be completed in the state of Washington? We Idaho Falls electric customers are still paying every month on our utility bills for nuclear plants that were not completed nearly two decades ago.

Many nuclear reactors that were built operated at far less than the promised efficiency with continuing shutdowns for safety problems. The Trojan nuclear reactor outside Portland, Oregon, was shut down fifteen years before its supposed 40-year design ended due to corrosion damage.

Experts laughed at the idea of a meltdown -- the China Syndrome. The Rasmussen Nuclear Reactor Safety Study commissioned by the NRC speculated in a footnote about a hydrogen explosion in a reactor vessel. That translated to national terror when Three Mile Island experienced a near meltdown. Three Mile Island's radioactive remains were shipped three thousand miles to Idaho. Nuclear reactors are still viewed as so unsafe that Congress continues to pass an Act to limit insurance company liability.

Plutonium wastes were dumped into the soil over Idaho's Snake River aquifer by engineers at the Idaho National Engineering and Environmental Laboratory. The experts told us for years that plutonium couldn't be carried through soil by water. Recent studies indicate that up to 27% of plutonium in fact is soluble in moist underground conditions. Plutonium wastes are showing up in test wells at INEEL.

The dark side of nuclear power is the failure to manage radioactive wastes which are deadly for millennia, proliferation, theft of bomb materials, missing and unaccounted for bomb grade material. The Nuclear Regulatory Commission is proposing rules to exclude the public from nuclear power licensing proceedings. Thousands of tons of spent nuclear fuel from commercial nuclear plants sit in spent fuel pools around the country. No state, including Idaho, is willing to accept the wastes.

Sen. Craig and Rep. Simpson would best serve the public by considering safer more cost effective alternative technologies. The per kilowatt costs of alternative energies are competitive without the societal and environmental risks. Conservation, efficiency, fuel cells, solar, wind and silicon are the new frontier for energy development.

David B. McCoy is an attorney and environmental legal analyst living in Idaho Falls, Idaho.

# New INEEL Radioactive Waste Dump

DOE is moving rapidly toward finalizing the construction design of a mixed radioactive and hazardous waste dump at INEEL with the concurrence of the State of Idaho and EPA. **DOE will hold a public meeting July 16 (5-8 pm) at the Idaho Falls Shilo Inn on the project.** Recently released information gained by EDI through the State Public Information Request process reveals significant deficiencies in the DOEs dump design. It is ironic that the engineering design study for the new dump inadvertently reveals the categorical deficiencies of the previous radioactive/ chemical waste disposal practices of the distant and recent past. For instance DOE, with the regulators approval, dumped highly radioactive

and hazardous chemical waste at the Test Reactor Area Warm Waste Pond remediation project. No liners no nothing.... just consolidate the waste into one pile, cover it up, and walk away...calling it "remediation." No court in the land would concur with this type of gross violation of environmental law. The agencies can get away with these actions because there are few legal avenues for challenging Superfund (CERCLA) cleanup.

Initially, this decision to construct the ICDF as a legally compliant dump was welcome news since the Environmental Defense Institute (EDI) has for years criticized DOE's illegal waste "disposal" practices in dumps that would not even meet municipal garbage landfill regulations let alone radioactive and hazardous chemical waste regulations. After detailed EDI analysis of the design reports, it is clear that DOE plans to repeat the mistakes of the past by locating the new dump (called the INEEL CERCLA Disposal Facility) (ICDF) not only in a flood zone, but also over Idaho's sole source aquifer.

In short, the issue is not the construction of the new dump, but the issue is **where** it is to be built on the INEEL site. EDI's position is that there are credible alternative sites on the INEEL that are not over the aquifer or in a flood zone. DOE plans to locate this dump immediately south of INTEC (formerly known as the Chem Plant), which also is in the 100-year flood plain of the Big Lost River. The plan calls for 516,000 cubic yards of waste to be buried about 40 feet below the surface with a low berm around the top edge to fend off surface water. That is the equivalent of a 310-foot high stack on a football field. Comparing the elevation of the top of the ICDF berm (4920 feet above sea level) and the center of INTEC of 4919 feet, which USGS designates in the flood zone, the ICDF berm offers little to no protection from major flooding events.

The ICDF design claims structural integrity for 1,000 years, which is not adequate given that the interned waste will be deadly for tens of thousands of years. Even more disturbing is the fact that the design only can survive a 25-year/24 hour storm event based on the INEEL storm experiences between 1967 and 1976 and a maximum of 2.5 inches of rain. In a bogus attempt at conservatism the designers (CH2M Hill) added the 1957, 1963, 1964, and 1995 storm events to their calculations, which with the exception of 1969, effectively missed major flood years.

The US Geological Survey released a 1998 report that modeled the **median** (average between maximum and minimum) 100-year flow rates in the Big Lost River as opposed to the maximum rate of 11,600 cf/s of just a 100year flood, and not including any additional cascading events like the failure of Mackay Dam. The USGS flood map shows the northern half of the ICPP under water. The ICPP as a whole is about as flat as a tabletop with only a couple feet change in elevation north to south. The crucial point here is that even the slightest variation in a Big Lost River "average" flood would put the ICDF underwater, assuming the dump was on the surface, which it is save for a low insignificant berm.

Proportionally more variation in floods would inundate the dump the deeper the ICDF is buried below the surrounding terrain. INEEL has experienced significant flooding events (localized and site-wide) in 1962, 1965, 1969, 1982, and 1984. In an effort to mitigate the flooding problem, DOE built a diversion dam on the Big Lost River that is designed to shunt floodwaters to the south and away from INEEL facilities, USGS found structurally and hydraulically deficient. USGS recommended that DOE fund a more detailed flood study that would include a 500-year analysis due to the critical nature of the nuclear operations on the INEEL site, but DOE refused to fund the project. A non-speculative scenario is a one-half of one percent increase in the predicted median 100-year flood that would over-top the ICDF cap and overwhelm the liner due to the 30-foot hydraulic pressure at the bottom of the dump. Even if the liner holds, who is going to be around in 150 years to pump out the leachate collection system and dispose of it?

Under the circumstances even the most adolescent practitioner of common sense would not choose a flood plain over top of a sole source aquifer for dumping the most toxic waste known to human kind. Add to this the fact that DOE has already successfully contaminated the Snake River Aquifer due to five decades of mismanagement of its toxic waste, and one must reasonably conclude that the State and EPA regulators must be out to lunch for agreeing to the siting of the ICDF dump.

# Just Say "no" to Renewing Nuclear Tests

By Steve Erickson and Preston J. Truman

Is the Bush administration preparing to break out of the nuclear weapons testing moratorium? Recent statements and actions by top players within the administration and its shadow cabinet of unreconstructed Cold Warriors may just be trial balloons to test the waters to see if anyone will object to a resumption of testing and abrogation of treaties subscribed to by the United States.

If these are only trial balloons, they must be pierced now before they take flight, and the Utah congressional delegation has a moral responsibility to wield the pins.

In the last week of June, the Bush team ordered

nuclear weapons scientists to study a range of options to "reduce lead times" to resume nuclear bomb explosions at the Nevada Test Site. The weapons laboratories argue that testing is needed to assure that the stockpile is reliable, and some fear that the long lead times to prepare tests give political opponents opportunities to prevent renewed testing.

Frank Gaffney, a former defense official and prominent conservative analyst and adviser, stated in May that "we're going to have to resume on a limited basis underground testing of our nuclear arms."

In a March 12 letter to Secretary of State Colin Powell, Senate Foreign Relations Committee Chairman Jesse Helms called on the administration to repudiate the signed but unratified Comprehensive Test Ban Treaty. The New York Times reported May 9 that Defense Secretary Donald Rumsfeld seems more inclined to deploy missile defenses and develop nuclear forces than to negotiate with Russia or China.

In April and May, the U.S. accused the Chinese of preparing for a nuclear weapons test, according to Washington Times reports in April and May, and similar accusations have been leveled at the Russians, as reported in the New York Times.

In the meantime, the Bush administration is putting on the diplomatic pressure to dismantle the ABM Treaty to pave the way for ballistic missile defense. Rumsfeld has stated that there may be a dozen different components to BMD, including the stationing of weapons in space. Not only would this constitute a unilateral abrogation of the Outer Space Treaty, it would likely involve a resumption of nuclear testing to complete development of Nuclear Directed Energy Weapons projects the national weapons labs have experimented with for two decades.

Taken together, these developments lead to an inescapable suspicion — that the U.S. is preparing to unilaterally jettison a less than perfect arms control regime fostered by every president since Eisenhower that has kept Armageddon at bay. These policy maneuverings threaten a costly and dangerous new arms race and are alarming to our allies as well as our adversaries. Most alarming to the constituents of Utah's congressional delegation is the prospect of more nuclear tests upwind, especially those who have suffered painful losses and grievous wrongs from being unwitting "active participants in the nation's nuclear weapons program." Despite the commendable efforts of Utah's congressmen to achieve a greater measure of justice for the downwinders, uranium miners, atomic veterans, and defense workers exposed to radiation in the name of national security, allowing testing to begin again promises new generations of victims even as the those sick and dying from the last round hold their governmentissued IOUs. The people will not tolerate being bombed again! No political spin, no tortured logic, no fear

mongering that the Russians or the Chinese or the North Koreans will be here in the morning, no assurance that "there is no danger" will suffice this time.

The assurances we need are that our elected representatives will do everything in their power to prevent a resumption of nuclear testing. Utahans must demand this now! Steve Erickson of Salt Lake City is director of the Citizens Education Project. Preston J. Truman is director of Downwinders.

## Independent Reviewer Blasts INEEL Worker Health Program

Attorneys representing a worker at INEEL recently welcomed the findings of an independent doctor about significant deficiencies in the industrial health program that could have led to undocumented worker exposures, but criticized the conclusion that workplace exposures were not the likely cause of his illnesses.

The report by Dr. Melissa McDiarmid, hired by the U.S. Department of Energy (DOE) to review the medical history and occupational work history of INEEL worker Clint Jensen, was released by the DOE today. DOE owns the INEEL site, a nuclear weapons production facility, operated by Bechtel Babcock and Wilcox (BBWI).

Jensen, a production technician with over twenty years of service to INEEL, worked with depleted uranium ("DU") materials at the site's secret Special Manufacturing Capability ("SMC"), which makes DU armor for M1 Army Abrams tanks. While incinerating solutions containing DU, Jensen received several acute exposures to unidentified substances. He was not given a respirator, and the incinerator was of "home-made" design, consisting of two lab ovens bolted together. He was exposed to chemicals and radioactive materials both routinely and through increasing incinerating and spillage.

Jensen began to experience headaches, dizziness, shaking, blurred vision, blackouts, and gastro-intestinal disorders, even a cancerous tumor. He started raising concerns to his employers about workplace exposures to depleted uranium and other unknown chemicals. Though sick, Jensen's employer denied him medical leave and workers compensation and Jensen started racking up unpaid doctor bills. Jensen began to think that his employer was retaliating against him for raising concerns, so he turned to the Government Accountability Project ("GAP"), a non-profit watchdog organization is based in Washington, D.C and Seattle, WA that protects whistleblowers.

GAP filed a complaint on Jensen's behalf with the

Department of Energy and the Department of Labor. Dr. McDiarmid was hired to investigate questions surrounding his workplace exposures. The findings in Dr. McDiarmid's report included:

1.) A March 1998 spill involving radioactive and other contaminated materials that resulted in contamination of Jensen's clothing (and which was likely responsible for a high uranium count in Jensen's urine) was not documented by the company (BBWI), revealing "significant deficiencies in the industrial hygiene program" at SMC;

2.) There is a lack of on-site expertise in the industrial hygiene program at SMC, including: a.) Lack of training and experience on the part of the SMC Industrial hygienist; b.) Spot checks for basic elements of a hygiene program were found wanting; c.) "No truly competent person was identified by me who would have the working knowledge and experience to know what hazards to expect in a new operation . . ."

3.) Little sampling data exists for any substance except DU (depleted uranium);

4.) There is a disconnect between the safety program and the health program;

5.) The bio-assay program at SMC (which analyzes contaminants from possible exposures) requires a full review, especially the practice of automatically subtracting large uranium values for every measured result (which Dr. McDiarmid characterized as a "poor practice")

On the issue of potential chemical exposures, Dr. McDiarmid was able to verify that Jensen encountered potential exposures to acids and trichloroethane (a neurotoxin absorbed through the skin and as a vapor). She stated, "[w]hile sufficient industrial hygiene documentation does not exist to adequately characterize Mr. Jensen's exposure intensity or duration to these substances, there are little data to indicate that he was likely significantly exposed to them."

GAP lawyer Tom Carpenter noted that "while Dr. McDiarmid excoriated the site's lack of an industrial hygiene program, and knowing full well that the exposure data was inaccurate and incomplete for Mr. Jensen, she nonetheless unfairly placed the burden of proof on Jensen to prove that workplace exposures caused his medical conditions." Carpenter further stated, "It is clear that INEEL failed to supply Mr. Jensen and, by extension, other SMC workers, with a safe work environment."

Carpenter also pointed to the framework provided by the new compensation laws for DOE workers who work around radioactive and toxic materials. Under that policy, when a worker proves that he worked around radioactive or hazardous materials, has suffered an illness and can show an ineffective industrial hygiene program (with inaccurate or incomplete data), the benefit of doubt is given to the victim, not the perpetrator. Compensation, including lifetime medical screening and treating, is then granted to the worker if that worker has suffered cancer.

GAP also pointed out that Dr. McDiarmid failed to take into consideration DOE's own studies of worker illnesses and cancers - which found increases in gastrointestinal and nervous disorders.

These same studies, ignored by Dr. McDiramid, were presented to White House by an interagency review team and subsequently served as underpinning for the compensation law for DOE radiation workers.

In light of the findings of Dr. McDiramid's report, related to the lack of worker protection at SMC, GAP is calling upon the Department of Energy to - -

1.) Conduct a formal Price Anderson Act investigation into the lack of an adequate or effective industrial hygiene program at SMC, resulting in the knowing endangerment of workers there;

2.) Provide medical monitoring, screening and treatment for all SMC workers;

3.) Resolve the outstanding issues with Clint Jensen related to his case, including reinstating his sick leave, reimbursing doctor bills and other costs that he has incurred, reimbursing back pay for lost work days, and ongoing medical monitoring and treatment, regardless of his employment status at INEEL.

Clint Jensen is waiting to see how the Department of Energy and his employer, BBWI, will respond to McDiarmid's report, and whether any reforms will be undertaken. A case is still pending before the U.S. Department of Labor between Jensen and BBWI, and Jensen has been kept out of the SMC program pending Dr. McDiarmid's review. GAP's phone number is 206-292-2850 or see their website at www.whistleblower.org