

# INEEL NEWS

## Environmental Defense Institute

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### EDI Launches Independent Snake River Water Sampling Program

The Environmental Defense Institute (EDI) is launching an independent Snake River Water Sampling program to determine if pollution from INEEL is migrating through the aquifer and discharging into the river. This EDI program is a collaborative effort with the Harder Foundation and the RadioActivist Campaign of the Tides Center directed by Norm Buske. The purpose of the study is to determine what level of pollution is getting into the Snake River from the aquifer, and provide an updated and second opinion on the level of this contamination.

Revelations in recent years about radioactive and hazardous contaminants migrating into the Snake River Plain Aquifer are raising public concern because of the indisputable reliance Idahoans have on this sole source of water. There is no question that this pollution is coming from the Department of Energy (DOE) Idaho National Engineering and Environmental Laboratory (INEEL) thirty-five miles northwest of Idaho Falls directly overtop the eastern portion of the aquifer.

The Snake River Plain Aquifer is the sole source of drinking water for most of the people in southern Idaho. This aquifer contains about one billion acre-feet of groundwater, and annually supplies about 642 billion gallons of drinking water and nearly 2 million acre-feet of water for irrigation and industry. The aquifer begins near Ashton, Idaho and flows southwestward where it discharges at Thousand Springs on the Snake River near Twin Falls, Idaho. The aquifer discharge at Thousand Springs literally makes up the total flow of the Snake River due to upstream diversion for irrigation. Another major area of springs and seepage from the aquifer occurs in the vicinity of the American Falls Reservoir west of Pocatello. About 7.1 million acre-feet of water is discharged by the Snake River Plain Aquifer annually to springs and rivers.

DOE acknowledges that INEEL operations have contaminated 27,500 acre-feet of water in the aquifer in excess of Environmental Protection Agency's (EPA) drinking water standards. This level

of contamination is believed by independent analysts to be grossly understated, and fails to take into consideration the cumulative effect of dozens of radioactive and chemical pollutants. By acknowledging only individual contaminants, DOE apparently hopes to make the picture less ominous, as opposed to showing the total health and environmental impact of all the pollution in the aquifer.

The State of Idaho's INEEL Oversight Program October-December 2000 Report acknowledges plutonium 239/240 concentrations in the aquifer at 24 pico curies per liter (pCi/L). The EPA drinking water standard for plutonium is 15 pCi/L. The toxic half-life of plutonium is over 24,000 years. Groundwater contamination under INEEL's Test Reactor Area includes radioactive cesium-137, 176,400 times the EPA standard. Aquifer pollution under Test Area North includes carbon tetrachloride and trichloroethylene (TCE) at 1,020,000 and 640,000 percent of the EPA standard respectively.

How is this INEEL pollution getting into the aquifer? There are a number of routes: 1.) direct injection of hundreds of billions of gallons of wastewater into the aquifer; 2.) unlined percolation ponds that allowed the waste to seep down to the aquifer over days; 3.) floods and precipitation generate a flushing process for pollution in shallow waste dumps and contaminated soil that is forced down to the aquifer. Although DOE and state and federal regulators have known of this public hazard for decades, no comprehensive measures are being taken to stop ongoing polluting practices.

This represents a terrible legacy to leave future generations of Idahoans. Because the Snake River is a tributary to the Columbia River, this contamination eventually affects communities in Oregon and Washington that rely on this water for residential and irrigation as well as affecting coastal fisheries.

The results of EDI's Water Sampling research will be published later this year. Repetitive sampling to validate the tests are planned.⊗

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

The Environmental Defense Institute, Keep Yellowstone Nuclear Free (KYNF) and David McCoy filed a Notice July 10, 2002 threatening to sue the Department of Energy (DOE), the Environmental Protection Agency (EPA) and the Idaho Department of Environmental Quality (IDEQ) over the alleged illegal and unpermitted operation of evaporator systems that process high-level radioactive and toxic liquid waste at the INEEL.

The threatened lawsuit calls attention to the failure to observe numerous state and federal environmental laws which require permits for the facilities known as the High-Level Liquid Waste Evaporator (HLLWE), Process Waste Equipment Evaporator (PEWE), and the Liquid Effluent Treatment and Disposal plants. The Notice alleges that the DOE and its regulators (IDEQ and EPA), are allowing the operation of a deteriorating decades-old evaporator facility which is not designed to handle the type of toxic wastes it is processing. EPA regulations require specific treatment for specific waste types. 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 equipment connected to the Liquid Waste Management System evaporators 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 misclassified 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 misclassification is at a lower standard than what is required to protect the public health and safety. The lawsuit Notice accuses the IDEQ of deliberately misclassifying the evaporators to keep the system

operating. Internal DOE documents are cited which refer to the evaporators as thermal treatment systems.

Last year, EDI, KYNF, and McCoy filed two Notices of Intent challenging the Calciner and WERF nuclear waste incinerators at INEEL which the Notices' also claimed were operated without federal permits. These two nuclear waste incinerators were shut down shortly thereafter. Environmental Defense Institute's Executive Director, Chuck Broschius 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 our survival."

David McCoy states that, "The communities surrounding INEEL have been victimized by the failure of the regulators to control dangerous emissions prior to the operation of the incinerators and evaporators as required by state and federal law. These facilities also have been allowed to operate at lower standards of safety by deliberate mischaracterization. If the facility can't be permitted as a goose, the regulators call it a duck to avoid permit requirements that should be applied. The regulators have engaged in what can only be described as collusive conduct that is civilly and criminally liable under various statutes."

"INEEL has been operating without the required air permits for decades, and several of the facilities could not physically pass the legal requirements. So, the DOE and the State of Idaho have been dragging out the permit process with the hope that the facilities will complete their job before the State has to reject the permits," stated Erik Ringelberg, KYNF Executive Director. "We just want the DOE to prove that they can follow the law and operate the evaporators without contaminating our air with radioactive and hazardous waste." ⊗

# INEEL High-Level Liquid Waste Plants Violate Environmental Laws

by David McCoy

The High-Level Liquid Waste Evaporator (HLLWE) at the Idaho National Engineering and Environmental Laboratory (INEEL) which has been operating since 1996, has processed over 4 million gallons of high-level liquid hazardous and mixed radioactive wastes without the required federal permit. The Resource Conservation and Recovery Act (RCRA) requires permitted operations of hazardous waste facilities. When construction started in 1993, the HLLWE was a new facility that required an RCRA permit in advance of beginning construction. The HLLWE has operated at all times without an RCRA permit and without interim status. An RCRA permit consists of a Part A and Part B application that have received final approval.

DOE's claim for operation under interim status for the HLLWE is a self-serving legal mirage. Interim status is strictly granted only by statutory compliance. Interim status cannot be conferred by a permitting agency, consent order, or by merely listing a facility on the Part A application. The HLLWE has never complied with the statutory requirements to obtain interim status. In the absence of an RCRA permit, a facility may operate under interim status only if it was "in existence" as of July 3, 1986 and it was on the Part A application of the INEEL facility.

A study of the administrative and "permitting" history of the HLLWE reveals that the HLLWE was definitely not "in existence" by July 3, 1986. Briefly, "in existence" meant that the facility had to be operational, under construction or have had contractual commitments that could not be avoided. The facility must also have obtained all necessary permits. The HLLWE did not have the required air permit from Idaho until after 1994. None of these conditions were met by the HLLWE.

The HLLWE was listed on the Part A RCRA application for the INEEL on 9/27/90, approved by Idaho DEQ 3/19/91. However, INEEL documents preceding that Part A application listing for the HLLWE clearly indicate that the HLLWE was a "proposed" and "new" facility. Documents after the Part A application listed the HLLWE as proposed.

The actual construction of the HLLWE, according to the Defense Facilities Nuclear Safety Board

(DFNSB), did not begin until 1993. Operational testing did not occur until 1995. Operations have nevertheless continued for the HLLWE until the present.

RCRA is a federal environmental law ("cradle to grave" system) for hazardous waste management that requires that the facilities which receive the waste for processing and facilities to which the wastes are sent for further processing must all have an RCRA permit. None of the facilities which send wastes to the HLLWE or receive hazardous waste from the HLLWE have RCRA permits.

The facilities directly or indirectly connected to the HLLWE are the High-Level Waste Tank Farm Facility, the Process Waste Equipment Evaporator, the Liquid Effluent Treatment and Disposal facility, the New Waste Calciner Facility (currently in stand down mode), the Service Wastewater Treatment System, the two INTEC Percolation Ponds and hundreds of waste tanks.

DOE will argue that the above facilities have "interim status" and therefore legally operate. However, statutorily, interim status is not a permit. An RCRA permit is required during the operational lifetime of a facility. The PEWE and LET&D together have only recently submitted Part B RCRA application. The LET&D also never qualified for interim status because it was not in existence by 7/3/86. The HLLWE is integrally related to these two systems. The Percolation Ponds fail to meet RCRA requirements to have liners and are contaminating the groundwater. Also, because the groundwater is hydrologically linked to the Snake River, a navigable body of the United States, a National Pollution Discharge Elimination System (NPDES) permit is required. INEEL does not have a NPDES permit and is in violation of the Clean Water Act as well as RCRA.

RCRA requires that wastes sent to a facility such as the HLLWE must be characterized prior to treatment. The tank farm wastes have not been adequately characterized. This was a problem encountered with the NWCF Calciner incinerator and among the reasons the Calciner could not be permitted, in addition to its inability to meet Clean Air Act emission requirements.

Because the HLLWE was a new facility when it was built, the HLLWE was required to submit and obtain approval of the RCRA Part A and Part B applications before commencement of construction. The whole purpose of obtaining a permit for a new facility in advance is to protect the public from the operations of a facility which has not received proper scientific and regulatory scrutiny.

Because construction and operation of the HLLWE proceeded without the prerequisite permitting procedures, the public is/was denied numerous procedural protections. Among these protections were the right to public hearings, the right to make comments, have those comments reviewed and responded to in writing, the right to review the issuance of a draft permit and the right to raise legal and technical issues as well as appeal the draft permit. (Proper notice for the HLLWE should have been put in the Federal Register because it is an action within the floodplain. (10 CFR 1022 et seq.)

Numerous other protections were denied the public with respect to testing, monitoring, reporting and other technical requirements prior to operation of the HLLWE. The HLLWE releases hazardous waste to the atmosphere via the Main Stack at INTEC violating the Clean Air Act. The HLLWE releases hazardous waste to the groundwater via the service wastewater system violating the Clean Water Act.

Currently, a Part B RCRA application is pending before the Idaho Department of Environmental Quality for the PEWE and the LET&D. Numerous demands have been made by McCoy and the Environmental Defense Institute to include the HLLWE as part of that application. The DOE instead plans to wait to obtain the Part B for the PEWE and the LET&D and then do a modification for the HLLWE.

The HLLWE, along with the above facilities, is operating illegally and is subject to legal attack for operation without an RCRA permit along with numerous other causes of action. The potential civil fines for these operations are, at the least, \$25,000 per day for each violation of RCRA. The total potential fines are in the billions. Holding individual administrators responsible by findings of criminal violations of RCRA can include imprisonment and fines. Regulatory and DOE administrators would do well to begin to consider the possibility of being found culpable under RCRA for decisions which

knowingly compromise public health and safety or violate RCRA requirements.

KYNF, EDI and David McCoy furnished the IDEQ, EPA, and DOE a Notice of Intent to Sue (NOI) for the PEWE and its related facilities. The HLLWE was specifically cited in the NOI as well as in the NOI for the NWCF and other documents such as a complaint to the EPA and DOE Inspector Generals.

## White House Plans to Gut the Clean Air Act

On June 14<sup>th</sup>, the Bush Administration announced its plans to roll back a major part of the Clean Air Act called the New Source Review. This regulation was promulgated in 1996 with implementation in 1999 by Clinton Administration EPA Administrator Carol Browner. The rule offered existing polluting plants a three-year grace period to get into compliance by 2002. Another major component of the New Source Review requires new emission standards to kick in if a polluter made any changes to the operation

For instance if an old coal fired power plant's furnace failed and needed to be replaced, the utility would be required to also upgrade the emission control systems so that the new Clean Air Act standards are met before restarting the operation.

Lobbyists for the polluters, including the Department of Energy (DOE), convinced the White House to repeal the regulations before the final compliance deadline comes up in September of 2002. The obscene spin the Administration has put on this announcement is that it will help the polluters reduce their emissions by allowing them to make system changes without burdening them with meeting the new Clean Air Act standards. In other words, allow them to operate indefinitely without coming into emission compliance.

The DOE lobbied hard for rescinding the New Source Review because the agency was faced with closing its mixed hazardous and radioactive waste incinerators. At the Idaho National Engineering and Environmental Laboratory (INEEL), DOE was forced, after threatened litigation from EDI, to shutdown the WERF and Calciner incinerators because they could not meet the new Clean Air Act regulations.

If President Bush is successful in rolling back the hard won Clinton Administration regulations, the polluters will save a lot of money and the public health and safety will continue to be compromised.

Other currently operating INEEL mixed hazardous and high-level radioactive waste processing units such as the High-Level Liquid Waste Evaporator, the Process Equipment Waste Evaporator, and the Liquid Effluent Treatment and Disposal plants will be allowed to continue to operate in violation of the Clean Air Act if President Bush has his way.

The State of New York reportedly is going to file a lawsuit challenging the Bush Administration's gutting of the environmental regulations. New York is downwind of the old mid-west coal fired power plants, whose toxic air emissions have caused massive forest and lake destruction from the pollution-generated acid rain.

The INEEL waste is what was left after nuclear reactor fuel was dissolved in acid/solvent solutions and nuclear bomb materials extracted. This waste is the most toxic material in the world, and therefore warrants the most meticulous compliance with all regulatory standards. Tragically, just the opposite is the case. DOE is using secrecy of its nuclear operations as well as its enormous political and economic clout to circumvent to law.

The repeal of the Clean Air Act New Source Review is a shameful money grab by private corporations and an Administration trying to cut radioactive waste treatment costs, which justifiably outrages conservatives and progressives alike because pollution affects everyone regardless of their political beliefs. ⊗

### **EPA Issues DOE 30-Day Ultimatum for Info on Clean Air Violations**

In October 2001, the Environmental Defense Institute (EDI) and David McCoy filed a formal Petition with EPA's Office of Enforcement and Compliance Assurance requesting that the agency investigate Clean Air Act violations at the INEEL. Based on the credible and detailed allegations in EDI's Petition, EPA subsequently launched an investigation. After nearly a year, EPA is still waiting for DOE to send the information needed to

complete the investigation. Out of frustration, on June 4, 2002, EPA issued a 30-day ultimatum against DOE for documentation covering over forty compliance issues at the INEEL. DOE requested and received an extension until August to supply the requisite information to EPA.

Although it is frustrating that it took EDI's own lengthy investigation, as a public interest advocate, to expose the INEEL Clean Air Act violations, it is heartening that EPA is finally starting to function as a regulatory agency. It must be noted that EPA is a defendant in EDI, KYNF, and McCoy's Notice of Intent to Sue over these and other violations of environmental laws. EPA's actions are a clear vindication of EDI's claims for anyone who doubted the veracity of the organization's legal arguments. The agency's notice to DOE states, "Failure to comply with this letter may result in an enforcement action including civil and administrative penalties of up to \$27,000 per day of noncompliance, Section 113 of the Clean Air Act. In addition, the submission of knowingly false or misleading statements may result in imprisonment of up to two years, or a fine of up to \$10,000 ... or both." It is tragically ironic that one of the major violators of this nation's environmental laws is the federal government's own Department of Energy. This must add a crucial new dimension to President Bush's "Home Land Security" which is as fundamental to public health and safety as stopping terrorist attacks.

In view of the White House's desire to gut the Clean Air Act (see previous article) it is uncertain if EPA will be allowed to follow through with a credible investigation or if President Bush will force EPA Administrator Christine Todd Whitman to back-off the agency's enforcement action against DOE. Given that Bush Administration is loath to spend money on environmental compliance in favor of tax-cut giveaways to the wealthy and big corporate contributors, the EPA's enforcement follow-through is problematic.

Another recent example of the Bush Administration's pressure on EPA is Region 10's July 1, 2002 issuance of final hazardous waste enforcement authority to the State of Idaho. This EPA Region 10 action was taken despite extensive public opposition to the ubiquitous climate of non-enforcement of the law and lack of political will to shut down non-compliant high-level radioactive and hazardous waste processing operations at INEEL.

## IDEQ Gets Religion ?

In September of 2001, EDI and David McCoy filed a Petition with EPA Region 10 in Seattle (which has jurisdiction over Idaho) for the removal of the Idaho Department of Environmental Quality (IDEQ) as the enforcement agency for federal hazardous waste laws. These laws, called the Resource Conservation Recovery Act (RCRA), were established in the 1970's to curb the burgeoning pollution caused by the mismanagement of hazardous waste. RCRA is a comprehensive "cradle to grave" law covering all treatment, storage, and disposal of all hazardous waste.

Up until 1984, the DOE successfully claimed exemption from compliance with RCRA based on the 1954 Atomic Energy Act. A 1984 lawsuit filed by the Legal Environmental Assistance Foundation (et.al.) resulted in a precedent setting federal court ruling that effectively ended DOE's sovereign immunity to RCRA when hazardous chemical waste is mixed with radioactive waste.

Although EPA has primary enforcement authority for RCRA, in recent years that authority is frequently delegated to state enforcement agencies that demonstrate the capacity to implement the statutory mandate. The State of Idaho received a preliminary RCRA enforcement authority in 1991 from EPA with the provision that it would be reviewed in 2001. EPA gave notice in 2001 that they intended to give Idaho permanent RCRA authority. EDI and McCoy challenged this action by filing a formal Petition with EPA that is based on Idaho's decade long history of non-enforcement of RCRA at the INEEL. As of this writing, EPA has yet to issue a final ruling on Idaho's status, presumably due to the EDI Petition's extensive documentation of Idaho's aversion to RCRA enforcement.

This reality check jolt is generating encouraging results at IDEQ in the form of a very recent Notice of Deficiency (NOD) the agency issued against DOE. Nearly all the INEEL non-compliance issues EDI raise in the Petition are itemized in the NOD. These developments are occurring in the context where Idaho is a named defendant in two EDI Notices of Intent to Sue the agency for non-enforcement of environmental laws under its

jurisdiction. It is uncertain if Idaho's NOD is just more "cover their butt paper" issued to gain back RCRA enforcement authority, or if the agency has in fact mustered the political will to implement its statutory mandate. The real test will be if Idaho utilizes its legal authority to demand that DOE closedown all non-compliant operations at INEEL, and initiate construction of new "state of the art" emission compliant waste processing plants.

## New Nuclear Age Looms Like a Black Mushroom Cloud

Recent unilateral abrogation by the Bush Administration of nuclear weapons treaties is justifiably scaring the living daylights out of the civilized world. After the fall of the former Soviet Union, most thought the nuclear threat would fade away along with the Cold War. The nuclear "Doomsday Clock" has effectively been wound up again.

A recent "End the Nuclear Danger, Urgent Call" headline in *The Nation* reads: "A decade after the end of the cold war, the peril of nuclear destruction is mounting. The great powers have refused to give up nuclear arms, other countries are producing them and terrorists groups are trying to acquire them.

"Poorly guarded warheads and nuclear material in the former Soviet Union may fall into the hands of terrorists. The Bush Administration is developing nuclear 'bunker busters' and threatening to use them against non-nuclear countries. The risk of nuclear war between India and Pakistan is grave.

"Despite the end of the cold war, the U.S. plans to keep large numbers of nuclear weapons indefinitely. The latest US-Russian treaty, which will cut deployed strategic warheads to 2,200 leaves both nations facing 'assured destruction' and lets them keep total arsenals (active and inactive, strategic and tactical) of more than 10,000 warheads each.

"The dangers posed by the huge arsenals, threats of use, proliferation and terrorism are linked: The nuclear powers' refusal to disarm fuels proliferation, and proliferation makes nuclear materials more accessible to terrorists.

“The events of September 11 brought home to Americans what it means to experience a catastrophic attack. Yet the horrifying losses that day were only a fraction of what any nation would suffer if a single nuclear weapon were used on a city.

“The drift toward catastrophe must be reversed. Safety from nuclear destruction must be our goal. We can reach it only by reducing and then eliminating nuclear arms under binding agreements.” See [www.thenation.com](http://www.thenation.com) and sign on to “Urgent call.”

## EDI's Environmental Advocacy at Work for You

Since 1989 when EDI was founded, we have continued to fill a needed environmental advocacy role of promoting the democratic development of responsible public policy concerning Idaho's human and natural environment. Since the turn of the millennium, EDI, in collaboration with other environmentalists has focused on legal challenges to the massive violations of environmental laws perpetrated by the DOE here in Idaho.

- Filed a Notice of Intent to Sue that resulted in the closure of the INEEL New Waste Calcine Facility high-level waste incinerator.
- Filed a Notice of Intent to Sue that resulted in the closure of the WERF mixed hazardous and radioactive waste incinerator.
- Filed a Notice of Intent to Sue DOE, EPA, and Idaho over the operation of the Process Equipment Waste Evaporator high-level radioactive plant.
- Filed a formal legal Petition with EPA for the removal of Idaho as the hazardous waste enforcement agency.
- Filed a formal legal Petition with EPA to investigate violations of the Clean Air Act at the INEEL high-level waste processing plants.
- Challenged the permitting of mixed hazardous and radioactive waste processing operations in the Big Lost River flood zone.
- Filed a legal challenge to the INEEL high-level waste tank closure plan that would turn INEEL into a permanent nuclear sacrifice zone.

- Filed a Notice of Intent to Sue over the operation of the High-level Liquid Waste Evaporator.

The full text of each of the above initiatives can be found on EDI's website under publications.

<http://personalpages.tds.net/~edinst>

## What Can You Do?

Call your members of Congress and express your concerns. The Congressional switchboard number is 202-224-3121. Call and ask for your member of Congress.

## Doctor Alice Stewart Dies at 95

One of the giants of epidemiology, Dr. Alice Stewart, has died at age 95. Dr. Stewart unequivocally demonstrated the relation between X-ray exposures of pregnant women and leukemia incidence among offspring. She then went on to show that the cancer rate of Hanford workers was higher than expected even though their average radiation exposures were no more than twice background.

We each have our personal stories I'm sure. Although EDI met with Dr. Stewart many times over the years, the time that stands out is when she agreed to come to Idaho Falls in 1990. The Independent Peer Review Panel headed by John Till was wrapping up its assessment of DOE's INEEL Dose Evaluation. Dr. Stewart met with the Panel as well as officials of the Idaho Department of Health and Welfare, and she made a compelling case for conducting an independent INEEL Dose Reconstruction health study lead by the Centers for Disease Control (CDC).

Dr. Stewart patiently and methodically described how the CDC study should be organized and what epidemiological approaches based on her vast experience should be applied. Dr. Stewart's passing leaves a huge gap that will not be easily filled.