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INEEL is Violating Air Emission Regulations
Watchdog Groups Charge

Total toxic organic chemical air emissions are 20 times over what is annually allowed by federal law from the nuclear waste processing plants at the Idaho National Engineering and Environmental Laboratory (INEEL). The federally established legal hourly emission limit for hazardous wastes is exceeded by 70 times. The Department of Energy (DOE), which operates INEEL, deliberately under reports radioactive and hazardous chemical emissions to state and federal regulatory agencies charged with protecting the public health and safety.

"The DOE is keeping one set of reports and then showing the regulators something different," stated Chuck Broscious, Executive Director for the Environmental Defense Institute. "DOE underreporting keeps state and federal regulators blind to the actual volume of emissions from INEEL. If regulators saw the true statistics they would require INEEL to install emission controls required by the Clean Air Act to protect public health and safety. The DOE has processed over 8 million gallons of this deadly radioactive and toxic waste at INEEL without installing necessary emission control equipment which could protect the public."

The emissions that are released from the INEEL are among the most toxic substances on the planet and include substances such as radioactive iodine-129, hydrochloric acid, carbon tetrachloride, and hydrofluoric acid which are contaminating all regional downwinder community's air, soil and the Snake River aquifer.

The Clean Air Act establishes standards for toxic and radioactive emissions that cannot be exceeded without serious penalties. The Environmental Defense Institute, Keep Yellowstone Nuclear Free and co-petitioner David McCoy are demanding that:

- the EPA immediately require that DOE install emission controls required by the Clean Air Act;
- the EPA investigate the underreporting practices of the DOE;
- the Clean Air permit be reopened for public hearing and comment.

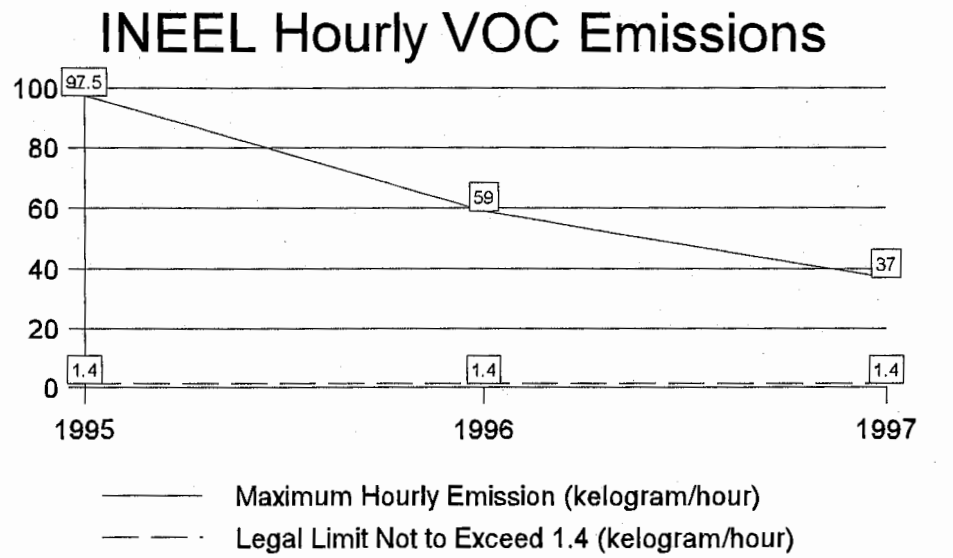
Responding to earlier allegations by the environmental groups, the EPA Office of Enforcement and Compliance in Washington, DC recently found major deficiencies in the INEEL Title V Air Permit, and informed DOE that they must resubmit the application to the State of Idaho.

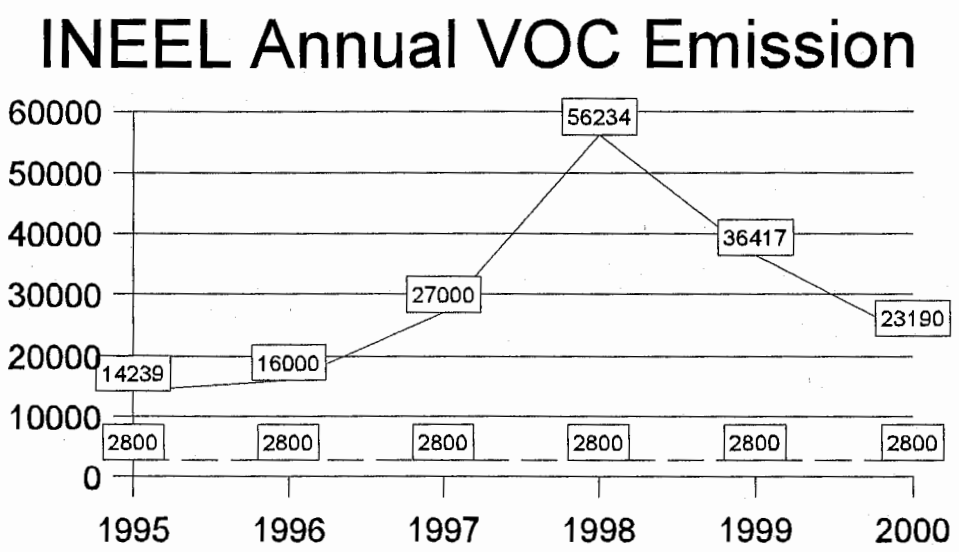
The organizations examined and compared hundreds of documents they obtained through Freedom of Information requests. The documents showed conflicting statements for amounts of deadly toxic emissions.

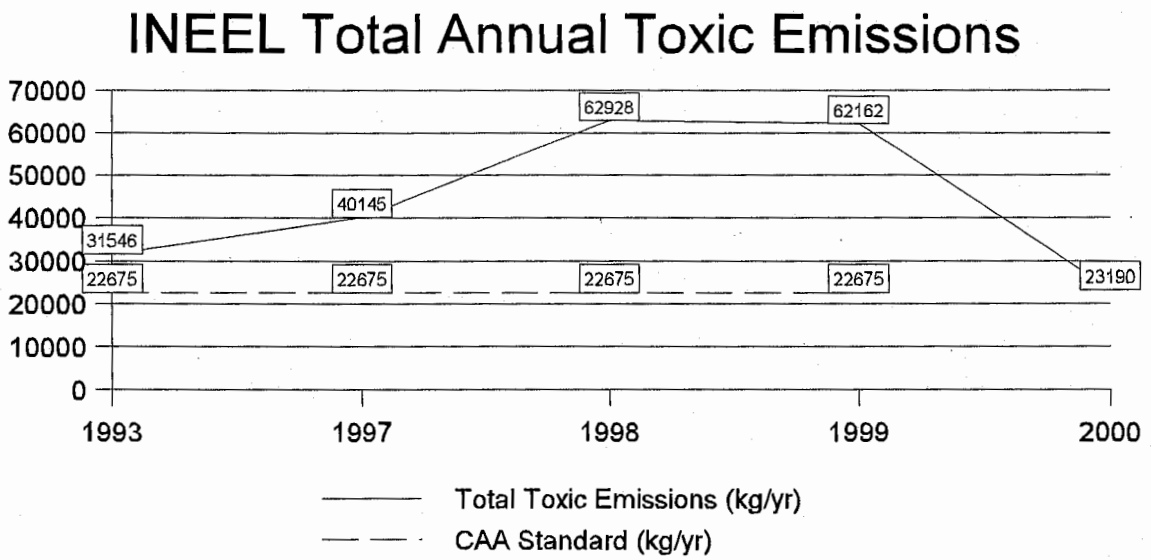
McCoy stated, "It is also significant that, although applications for hazardous waste permits have been filed, no federal hazardous waste permit has been issued for the decades long operation of the incinerators, evaporators, tank systems and other equipment used to process the radioactive and toxic wastes at the INEEL. None of these operations can meet current federal emission regulations."

The Petition and supporting documentation is available on EDI's website.

INEEL Toxic Volatile Organic Compound (VOC) Emissions







Total INEEL annual toxic air emissions is the combined hazardous air pollutants (HAP) and the toxic volatile organic compounds (VOC) as shown in DOE internal documents. In descending order, the three largest hazardous air pollutants for 1999 were; hydrochloric acid (21,950 kg); carbon tetrachloride (2,468 kg); and hydrofluoric acid (907 kg). Only hydrochloric acid individually exceeds the Clean Air Act Standard for **individual** hazardous air pollutant that is 10 tons/yr (9,070 kg/yr). The CAA standard for combinations of HAP is 25 tons/yr (22,675 kg/yr). **The above data do not include INTEC Calciner incinerator emissions that likely constituted the major unreported emissions.**

INEEL Radioactive Air Emissions (in Curies) [1]

Air Emission Source	1995	1998	1999	2000
INEEL Site-wide Total	25,300	6,285	4,800	4,693
Iodine-129 Emissions	0.190	0.003	0.130	0.41

The 1996 *INEEL Environmental Compliance Inventory* compiled by DOE's lead Management and Operations contractor, Lockheed Martin states: "The CPP Main Stack is one of 5 sources at the INEL [sic] which have unabated potential doses in excess of 0.1 mrem/yr, thereby requiring continuous monitoring of rad releases per NESHAPs. Since I-129 has been the single largest actual dose contributor for the INEL [sic] over the past several years it should be monitored to ensure compliance." Inadequate or none existent INEEL monitoring continues to be a crucial issue, which draws into question of the validity of accessible data that previously relied heavily on "operational knowledge" and not on monitoring.

Restart of Reactor Fuel Reprocessing Defies Regulations

The Argonne National Laboratory - West (ANL-W) operated by the University of Chicago at the Idaho National Engineering and Environmental Laboratory (INEEL) requests that the State of Idaho accept additional spent nuclear fuel for reprocessing. Under the current 1995 federal court mandate and Settlement Agreement between the State and DOE, additional commercial shipments are not allowed. Idaho Oversight Program is aggressively lobbyng the public to grant a variance to DOE to allow additional shipments to INEEL.

INEEL is already in violation of federal environmental laws including Resource Conservation Recovery Act (RCRA) and the Clean Air Act (CAA) atmospheric emission regulations. The Environmental Protection Agency (EPA) recent findings (1/29/03) states that INEEL Title V Clean Air Permit was rejected due to understated emissions thus validating this regulatory emission issue initially raised by the Environmental Defense Institute.

Additional spent nuclear fuel (SNF) reprocessing will only increase these emission violations. The proposed Argonne National Laboratory - West (ANL-W) variance offers no guarantees that upgrades to emission control systems will be required for the new SNF processing. In 1999, ANL-W alone released 1,911 curies and 402.5 curies in 2000 of radioactivity into the atmosphere. [2]

Although the ANL-W electrometallurgical SNF reprocessing uses a high-temperature melting process that generates less waste than the conventional liquid acid/solvent dissolution process used by DOE, the air emissions are apparently significantly higher due to the release of volitized radioactive and toxic contaminates. Currently, only particulate (dust) filters are used, which are ineffective at removing volitized pollution.

ANL-W SNF electrometallurgical reprocessing operations have **no** hazardous waste RCRA Part B Permit as required by federal and state law. An application for a Part B Permit is not scheduled until July 2003, with a theoretical final application after resolving State of Idaho's Notices of Deficiency slated for 10/04. [3]

The fact that ANL-W has operated for decades in apparent violation of this nation's environmental laws represents an enforcement tragedy. The State of Idaho and EPA should order the shutdown of these operations until such time as ANL-W can demonstrate that it can meet all RCRA and CAA emission and operating requirements for a Part B Permit. Moreover, it is illegal to send mixed hazardous waste to an unpermitted facility. [4]

It is irresponsible for the Idaho INEEL Oversight Program (OP) to be lobbying the public to accept a precedent setting ANL-W variance to expand the SNF reprocessing program when the operation is already apparently operating illegally. Even more outrageous is the OP public mailing that trivializes the ANL-W variance for more fuel rods to the weight of a SUV or golden retriever. [5] OP fails to inform the public that this is the most deadly toxic and radioactive material in the world. Only a few minutes of direct exposure to these reactor fuel rods would result in death from radiation exposure.

Former Idaho Governor Andrus originally initiated litigation in 1991 against DOE because the Department tried to expand a "testing" program for Fort St. Vrain SNF. In fact, Andrus sent Idaho State Police to the border to block the shipments to INEEL because DOE intended to dump all the Fort St. Vrain fuel at INEEL.

DOE has already reneged on the Settlement Agreement imposed by the Federal Court in 1995 related to stipulated requirements to remove all high-level and transuranic radioactive waste from INEEL. Idaho is now back in court trying to get the federal judge to force DOE to fulfill its legal obligations. DOE is not only thumbing its nose at environmental law but also at the federal court sanctions.

This new ANL-W variance is yet another back door precedent setting attempt to keep the ANL-W Breeder Reactor program alive by repackaging its SNF reprocessing as a waste processing mission. This

is within the context that both ANL-W and INEEL as a whole are currently unwilling to manage this deadly waste within regulatory standards. [6]

ANL-W SNF reprocessing of the Framatone fuel rods in itself will not yield any information on why the reactor fuel rods failed. Only a completely different and unrelated "destructive test" like that conducted by the INEEL Naval Reactor Facility can provide that data. The underlying Idaho agenda here is therefore not "safety" but ANL-W SNF reprocessing mission creep.

ANL-W electrometallurgical reprocessing has already been tested and requires no additional experimentation to "validate" the process. Therefore, the Idaho Oversight Program (OP) claim is unfounded that ANL-W "wants to demonstrate whether its electrometallurgical treatment process can convert commercial spent fuel to a form that's safer to store, transport, and dispose."

Idaho Oversight Program (OP) claim is also unfounded that: "The process also renders uranium more resistant to use in making nuclear weapons." The fact is that the ANL-W electrometallurgical treatment process is specifically designed to separate out weapons grade fissile material. The primary (in addition to environmental emissions) public opposition to this electrometallurgical project was the proliferation of small "foot-print" technology for nuclear weapon material production that can be operated undetected in a small industrial building anywhere in the world. OP states that the ANL-W process "could have world-wide benefits" which again would exacerbate the danger of proliferation of this technology for making nuclear bombs.

The OP March publication even alludes to this by stating: "Argonne's treatment process would extract the **usable uranium** and about 21 kilograms of solid ceramic and metal waste."[emphasis added] "Usable" means in real terms, it can be used for reactor fuel or nuclear weapons.

Given that other SNF examination projects (Chalk River, Canada, Studsvil, Sweden, and Vallecitos, California) are available to evaluate nuclear fuel safety problems, there is no credible need to use un-permitted and non-compliant ANL-W. The presumption is these other operations are in compliance with their respective environmental regulations, which is currently unknown.

If ANL-W is granted a variance, there are no apparent guarantees that the waste will be managed any better than the current non-compliant ANL-W underground "storage" facilities called the Radioactive Scrap and Waste Facility (RSWF). Additional high-level and TRU waste interned in this operation will only further exacerbate the current INEEL waste crisis, and potentially further add to more radioactive contaminate migration to the Snake River Aquifer.

ANL-W's solid high-level and transuranic waste storage site (RSWF) is seldom acknowledged. It has 12-foot-deep steel walled underground repositories (27 rows on 12 ft centers and 40 rows on 6 ft. centers for a total of 1200) that provide shielding from the intense radiation. According to DOE, the existence of severely corroded storage wells coupled with the lack of a monitoring program for soil contamination was identified as a vulnerability. RSWF had as of 1981, 81 cubic meters containing 9,823,000 Ci of radioactive materials, including 40.73 grams of plutonium. [ID-10054-81@19] Responding to pressure, ANL-W upgraded 1,016 of the RSWF vaults in 1995 and plan on upgrading another 350 in the next three years.[RSWF] Even the new upgrades do not meet regulatory requirements for spent fuel storage because the contents cannot be inspected due to the welded cap on the top of the vault. The regulators, however, granted ANL-W a variance.

ANL-W radioactive airborne releases for the 1952-81 period were 44,580 Ci. [ID-10054-81@19] DOE claims that ANL-W additionally dumped 1.1 million curies at the INEEL burial grounds (RWMC) between 1952 and 1983. [EG&G-WM-10903] ANL-W's Zero Power Physics Reactor fuel is releasing fission product because the uranium has oxidized and hydrided on approximately 25% of the plates, causing stainless steel cladding to bulge. In a few isolated cases, the cladding is breached. A total of 83,276 spent fuel elements/assemblies are stored at ANL-W. [DOE Spent Fuel Working Group Report, p.25] [7]

Information on Iraq War
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www.unitedforpeace.org
http://moveon.org
http://wave.prohosting.com/palouse

Idaho Considers Allowing Reprocessing Nuclear Spent Fuel Public Comment Denied Reasonable Comment Period

by David McCoy

Sending commercial spent fuel rods from the La Salle nuclear power reactors in Illinois to Idaho National Engineering and Environmental Laboratory (INEEL) is a violation of the 1995 Settlement Agreement. Providing a waiver to the 1995 Settlement Agreement allows the DOE camel's nose back into the tent for reprocessing spent nuclear fuel in Idaho. The Settlement Agreement is crystal clear: spent fuel can only be shipped to INEEL in accordance with the terms and conditions of the Settlement Agreement. Spent fuel shipments are limited only to DOE spent fuel and from Fort St. Vrain (under limited conditions). **No legal authority exists to allow a one-time waiver of the Settlement Agreement for the shipment of commercial spent fuel to INEEL for reprocessing.**

The Settlement Agreement was the resolution of a lawsuit filed in federal court which contained numerous findings. The Settlement Agreement (p. 13) provides for "continuing jurisdiction of the Court..." Under the Settlement Agreement, Oversight or another entity lack the unilateral authority to set aside the Settlement Agreement without going back into federal court to accomplish the waiver.

Oversight has presented no legal authority which is based upon any language contained in the Settlement Agreement, for Idaho or its INEEL Oversight Program to propose the waiver. Oversight has incorrectly presented the idea that a one-time waiver to the 1995 Settlement Agreement can be made for a private commercial entity, the Framatone Corporation. The Settlement Agreement only gives Idaho the ability "to waive performance by the **federal parties** of any terms, conditions and obligations contained in this Agreement." (Emphasis supplied). The Settlement Agreement does not provide Idaho the right to request a waiver for private commercial entities in Illinois or elsewhere to ship spent fuel to INEEL for reprocessing, inspection or other activities. Idaho and Oversight thus have no authority to request a one-time waiver to the 1995 Settlement Agreement for INEEL to receive spent fuel from commercial nuclear reactors in Illinois.

Likewise, ANL-W has offered no legal authority from the Settlement Agreement that allows ANL-W as a private institution operating on the DOE INEEL site to request an exception to the Settlement Agreement in order to benefit a private commercial corporation, the Framatone Corporation. Oversight has additionally not provided any statement as to the authority or due process to be used by Oversight or any other person or state agency of Idaho to accomplish a waiver of the terms of the Settlement Agreement.

Idaho has no authority to attempt to undo or act counter to federal law by allowing a waiver under the Settlement Agreement. The 3/03 Oversight states, " Argonne's treatment process would extract the usable uranium and about 21 kilograms of solid ceramic and metal waste." The extraction of "usable uranium" from commercial spent fuel violates the Presidential Directive 8 signed by President Jimmy Carter in 1977. This executive order renounced reprocessing and plutonium breeder research. The order was declassified in 1994 and survives today as President Bill Clinton's Presidential Decision Directive 13. For reprocessing research to resume, the directive would have to be either rescinded or reinterpreted. Because the executive orders are federal law they are preemptive. While Oversight may be in favor of cranking up a plutonium reprocessing economy it is currently prohibited from doing so.

The Idaho National Engineering and Environmental Laboratory (INEEL) lacks the appropriate federal permits under the Resource Conservation Recovery Act (RCRA) and the Clean Air Act (CAA) for atmospheric emissions. It would moreover be illegal for the spent fuel rods to be shipped to INEEL because the rods constitute mixed waste and must be sent to a RCRA compliant facility.

The Oversight Program's public mailing use of the golden retriever dog analogy for comparison with the spent fuel volume in six spent fuel rods is ridiculous considering the toxic potential of the waste being processed. (Why not instead compare the waste to four 10 pound bags of Idaho #1 potatoes?) Oversight has missed the point entirely.

Idaho has been horribly polluted by the activities of reprocessing radioactive and chemical waste from the DOE and sent from other commercial entities. The job has been mismanaged in the past and is currently mismanaged, i.e., lack of RCRA and/or CAA permits, excessive emissions and contamination of the Snake River aquifer.

Recent findings by EPA (1/29/03) state that the INEEL Title V Clean Air Permit was rejected due to understated emissions of hazardous air pollutants. Additional Spent Nuclear Fuel (SNF) reprocessing will only increase these emission violations. The proposed Argonne National Laboratory - West (ANL-W) variance offers no guarantees that upgrades to emission control systems will be required for the new SNF processing. In 1999, ANL-W released 1,911 curies and 402.5 curies in 2000 of radioactivity into the atmosphere.

The notion that because Idaho already has so much toxic waste and is a nuclear waste dump for the U.S. "a little more toxic waste can't hurt us" is wrong to use as a reason to import more waste. Oversight should bring itself to the idea that the nuclear and chemical waste in Idaho should be cleaned up to protect the environment while excluding the addition of more waste into Idaho.

ANL-W SNF electro-metallurgical reprocessing operations have **no** hazardous waste RCRA Part B Permit as required by law. An application for a Part B Permit is not scheduled until July 2003, with a theoretical final application after resolving IDEQ's Notices of Deficiency slated for 10/04.

Oversight Monitor has failed to inform the public that ANL-West's nuclear project for Generation IV reactors is a proposal to bring commercial nuclear reactors back into production and operation in Idaho. The Mission Change statement and commitment of federal resources to begin this project have been conducted in the absence of any Environmental Impact Statement.

Oversight has provided an extremely limited time until April Fools Day for comments on this important issue. I received a mailing from Oversight of the Monitor on March 15, 2003. Framatone Corporation's "short time frame" to "make a decision on who does the work" should not be used by Oversight to impose an unreasonable comment period on the citizens of Idaho who were involved for years in litigation to prevent precisely the importation of more commercial spent fuel into Idaho.

Newsletter Endnotes:

1. (a) 1998 INEEL National Emission Standard for Hazardous Air Pollutants [NESHAP] - Radionuclides, Annual Report June 1999, USDOE Idaho Operations Office, DOE/ID-1010342(98), page 24.
   (b). Supplement Analysis of the INEEL Portion of the April 1995 Programmatic Spent Nuclear Fuel Management and INEEL Environmental Restoration and Waste Management Programs Final Environmental Impact Statement, September 2002, DOE/ID-11022, page 8-1.16.
   (c) Idaho High-Level Waste and Facilities Disposition Final Environmental Impact Statement, September 2002, DOE/EIS-0287, page 4-30.
2. Idaho High-Level Radioactive Waste Final Environmental Impact Statement, page 4-30.
3. Hazardous Waste Management Act / Resource Conservation Recovery Act Work Plan for the INEEL, Revision Date September 12, 2002, page 8, USDOE Idaho Operations Office.
4. McCoy, David, B., Comments on Proposed Argonne National Laboratory Variance, 3/18/03.
5. State of Idaho Oversight Program Monitor, March 2003.
6. INEEL has no site-wide RCRA Part B Permit because its operations currently can not meet regulatory standards.
7. Citizens Guide to INEEL, Environmental Defense Institute, 1998, page 157 to 161.

For More Information on These Issues See Environmental Defense Institute Website
http://personalpages.tds.net/~edinst