

April 2005

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Repository Citation

Shannon E. West, *Sweeping the Mess Under Hanford's Rug: How the State of Washington and its Citizens Groups Plan to Clean it Up*, 29 Wm. & Mary Env'tl L. & Pol'y Rev. 807 (2005), <https://scholarship.law.wm.edu/wmelpr/vol29/iss3/6>

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SWEEPING THE MESS UNDER HANFORD'S RUG: HOW THE STATE OF WASHINGTON AND ITS CITIZENS GROUPS PLAN TO CLEAN IT UP

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“Initiative 297 is the prescription to Protect Washington.”¹

INTRODUCTION

The land, air, and water surrounding the Hanford Nuclear Reservation (“Hanford Site”) is consumed with a disease called indifference. In response to that indifference, citizens groups in the State of Washington drafted Initiative 297 (“I-297”), deciding to act in accordance with an old but true work ethic: “If you want something done right, you have to do it yourself.” It has not been nor will it be, however, an easy road to try to make I-297 into the Cleanup Priority Act,² a Washington State law that would stop the Hanford Site from continuing to exist as the nation’s radioactive waste dump.³

Washington House Speaker Frank Chopp, a Democrat from Seattle, was asked recently about the legislature’s response to the

* Ms. West is a 2005 J.D. candidate at the Marshall-Wythe School of Law at the College of William and Mary, and received her B.A. in Government and English from the University of Notre Dame in 2002. This Note is dedicated to Ms. West’s parents, Chet and Jeanne West, and her sister, Kelly West, whose unconditional love, faith, and generosity have taught her to always follow her heart and believe in herself. She is grateful to Taisa Welhasch for inspiring her to write about this topic, and to the Editorial Board of the *William and Mary Environmental Law and Policy Review*, whose tireless efforts made this Note possible. Ms. West would like to especially thank Seamus West, whose love and support helped her to survive her last year of law school.

¹ Press Release, Heart of America Northwest, Initiative 297 to Stop National Radioactive Waste Dump Filed Today with Record Number of Signatures (Jan. 2, 2004) (quoting Dr. Jim Trimbold of Washington Physicians for Social Responsibility), available at http://www.heartofamericanorthwest.org/newsreleases/news_release_104.doc [hereinafter National Radioactive Waste Dump].

² Cleanup Priority Act, WASH. REV. CODE § 70.105E (2004).

³ National Radioactive Waste Dump, *supra* note 1.

submission of I-297 for its review. Chopp stated in a weekly media briefing, "I would say 'no action, let the voters decide.'"⁴ "No action" has been and continues to be the motto of the Bush administration, the Environmental Protection Agency ("EPA"), and the United States Department of Energy ("USDOE") in dealing with the Hanford Site, the "nation's most contaminated area."⁵

Over the past fifty-five years, residents in the Hanford Site area should have known that USDOE never cared about their health or safety. They had a right to know that USDOE was dumping radioactive and hazardous waste into unlined trenches, an action that contaminated the groundwater in the surrounding area.⁶ The citizens of Washington also had a right to know that USDOE would never fulfill any of its promises for remediation of the Hanford Site.⁷

This Note examines how the Bush administration and USDOE's attempt to transport more deadly radioactive waste to the Hanford Site, without any environmental remediation for the waste already there, forced the State of Washington to take action in its own defense by filing I-297. In particular, this Note focuses on the incompetence of USDOE in neglecting to fulfill any of its promises to clean up the Hanford Site. It also examines I-297's superior remediation plan for Hanford and the process by which it was passed with overwhelming support by Washington voters on the November 2004 general election ballot.

⁴ *Under the Dome: Initiatives*, OLYMPIAN, Feb. 5, 2004, at 2B (discussing the option lawmakers had after I-297's submission to the legislature).

⁵ Gerald Pollet, *Hanford: Toxic Deals and the Columbia River—Locke Administration Negotiated with U.S. Department of Energy to Add Waste, and Avoid Cleanup*, LOCKE'S LEGACY: WATER CRISIS (Sierra Club, Seattle, Wash.), Fall 2003, at 29, available at <http://www.waterplanet.ws/watercrisis/pdf/>.

⁶ John M. Whiteley, *The Hanford Nuclear Reservation: The Old Realities and the New*, in CRITICAL MASSES: CITIZENS, NUCLEAR WEAPONS PRODUCTION, AND ENVIRONMENTAL DESTRUCTION IN THE UNITED STATES AND RUSSIA 44-48 (Russell J. Dalton et al. eds., 1999) (outlining failures of safety management at the Hanford Site). Hanford's operators dispensed byproducts of the plutonium extraction process straight into the soil. *Id.*

⁷ See Pollet, *supra* note 5; MICHELE S. GERBER, ON THE HOME FRONT: THE COLD WAR LEGACY OF THE HANFORD NUCLEAR SITE 67 (1992).

In order to provide a foundation for understanding the issues at the Hanford Site, Part I describes the history of Hanford and how it is regulated by the government. After describing the regulatory controls over the Hanford Site, Part II examines the deceit and gross negligence with which the Hanford Site has been operated. Part III follows this examination and describes how Washington's citizens groups began to fight back against the Bush administration by opposing USDOE's plan to redefine the waste at Hanford so it could ignore deadly radioactive materials presently at the Hanford Site. Part IV inspects the lawsuit filed against USDOE for attempting to import 70,000 more truckloads of radioactive waste to Hanford before cleaning up the waste that is still there. Finally, Part V examines the aspects of I-297 that make it a superior remediation program at the Hanford Site and the vote that made I-297 a reality.

Heart of America Northwest ("HANW"), the Government Accountability Project ("GAP"), and countless citizens groups, churches, and social clubs believe that I-297 is the only way to save the area around the Hanford Site from becoming a nuclear wasteland. The executive director of HANW, Gerald Pollet, stated that "[t]he Bush administration has declared nuclear war on Washington state. We have to increase the tools we have to stop our state from becoming a national radioactive waste dump."⁸ I-297 is the tool that the citizens groups of Washington have chosen to take back control of their health and safety.

I. HISTORY OF THE HANFORD NUCLEAR RESERVATION SITE

A. *Location and Use*

Located in Eastern Washington, the Hanford Site runs along fifty-one miles of the Columbia River and is accepted as the country's most dangerous industrial facility.⁹ Comprised of 560

⁸ Karen Dorne Steele, *Citizens File Initiative to Stop Hanford Plan: Measure Would Forbid New Waste Imports Until Current Contents Cleaned*, SPOKESMAN-REV., June 10, 2003, at B1.

⁹ Pollet, *supra* note 5, at 29.

square miles of desert, the Hanford Site is approximately the same size as Rhode Island.¹⁰ Beginning in 1944, the Hanford Reservation was used to produce plutonium for nuclear weapons by way of nuclear reactors that existed on the side of the river.¹¹ The stretch of the Columbia River that runs along the Hanford Site passes “nine massive Plutonium production reactors used for nuclear weapons production that discharged their highly contaminated cooling water directly into the River or into long trenches alongside the River.”¹²

In the beginning of 1943, General Leslie Groves, the director of the Manhattan Project,¹³ wanted a location to build the first nuclear reactor in the world.¹⁴ Groves chose Hanford as the site.¹⁵ It was the ideal location in Groves’ opinion because the Columbia River dams produced adequate water and electricity, and the land possessed “sufficient isolation that nuclear accidents were regarded as tolerable.”¹⁶ On August 9, 1945, two years after the

¹⁰ Lynn Porter, *Introduction to Hanford Issues*, Hanford Watch, at <http://www.hanfordwatch.org/introduction.htm> (Jan. 2004) [hereinafter Porter, *Hanford Issues*].

¹¹ *Id.*

¹² Pollet, *supra* note 5, at 29.

¹³ MICHAEL D’ANTONIO, *ATOMIC HARVEST, HANFORD AND THE LETHAL TOLL OF AMERICA’S NUCLEAR ARSENAL 10* (1993). “Hanford had been a vital part of the famous Manhattan Project, which has made the world’s first bomb-grade plutonium, the very plutonium that powered Fat Man, the five-ton atomic bomb that exploded over Nagasaki . . .” *Id.*

¹⁴ Robert Alvarez, *The Legacy of Hanford*, *THE NATION*, Aug. 18, 2003, at 31-35, available at http://www.hanfordwatch.org/archive/Legacy_of_Hanford.htm.

¹⁵ *Id.*

¹⁶ *Id.*; see also Riley E. Dunlap et al., *Local Attitudes Toward Siting a High-Level Nuclear Waste Repository at Hanford, Washington*, in *PUBLIC REACTIONS TO NUCLEAR WASTE: CITIZENS’ VIEWS OF REPOSITORY SITING 137* (Riley E. Dunlap et al. eds., 1993). The Columbia River, the longest river in North America to end in the Pacific Ocean, was beneficial to Hanford’s plutonium production for many reasons. The “single-pass reactors” at Hanford pumped cooling water first into their reactor cores and then immediately back into the river; the Columbia River was able to supply the extensive amount of water needed to cool the reactors. The large dams of the Columbia River additionally provided the Hanford Site with the massive amounts of electricity needed to power it. Furthermore, the area surrounding the Hanford Site was secluded, making it “attractive for

commencement of the Hanford Nuclear Reservation, the Japanese city of Nagasaki was destroyed by the plutonium made from the Hanford "B" reactor.¹⁷

The land surrounding the Hanford Site, once rich with agriculture and biodiversity, was forever changed by the Hanford Site's creation.

Several Indian tribes wandered and foraged this land, and 6,000 farmers from the towns of Hanford, Richland, and White Bluffs grew fruit in orchards irrigated from the Columbia. But after the Manhattan Project expropriated 570 square miles of land in 1943, plutonium and its lasting legacy, nuclear waste, became Hanford's crop, forever altering its land.¹⁸

Since World War II, the Hanford Site in Washington, the Idaho Engineering and Environmental Laboratory in Idaho, and the Savannah River Site in South Carolina have been the three main sites used to store high-level waste ("HLW") produced from reprocessing spent fuel to extract material for plutonium- and uranium-based weapons.¹⁹ Between 1944 and the late 1980s,

military production purposes. There were few people to relocate, few eyes, ears, and lips to compromise the high degree of secrecy that needed to be maintained, and few potential casualties in the event of an accident." *Id.* (internal citation omitted).

¹⁷ Alvarez, *supra* note 14.

¹⁸ Whiteley, *supra* note 6, at 29 (quoting Karen Dorne Steele); see also William Schreckhise, *The Development of Interest Group Activism at Hanford*, in CRITICAL MASSES: CITIZENS, NUCLEAR WEAPONS PRODUCTION, AND THE ENVIRONMENTAL DESTRUCTION IN THE UNITED STATES AND RUSSIA 29 (Russell J. Dalton et al. eds., 1999). Karen Dorn Steele has been a reporter for the *Spokesman-Review* since the late 1980s. Her journalistic efforts prompted the full and timely disclosure of Hanford documents in 1986. *Id.*

¹⁹ U.S. GEN. ACCOUNTING OFFICE, NUCLEAR WASTE: CHALLENGES TO ACHIEVING POTENTIAL SAVINGS IN DOE'S HIGH-LEVEL WASTE CLEANUP PROGRAM 5-6, GAO-03-593 (June 17, 2003), available at <http://www.gao.gov/new.items/d03593.pdf> [hereinafter NUCLEAR WASTE]. "About 94 million gallons of untreated high-level waste is stored at DOE facilities at Hanford, Washington; Savannah River,

nuclear reactors located along the Columbia River continued to produce plutonium for nuclear weapons.²⁰ Yet, many of the tanks built at the Hanford Site were designed to last only ten to forty years.²¹

Producing plutonium has caused the Hanford Site to become “the world’s largest environmental cleanup project,” possessing “several hundred thousand metric tons of radioactive and hazardous waste.”²²

B. Ownership and Regulatory Powers

The federal government owns the Hanford reservation, which is managed by USDOE.²³ However, Washington owns its ground and surface waters, thus possessing “the groundwater beneath the Hanford Site, the Columbia River, and all ground and surface waters within the State over or through which DOE must transport the radioactive and hazardous transuranic wastes.”²⁴

South Carolina; and near Idaho Falls, Idaho—primarily in underground tanks. This waste would fill an area the size of a football field to a depth of about 260 feet.” *Id.* at 1.

²⁰ Porter, *Hanford Issues*, *supra* note 10. The process of producing plutonium involves two main processes. In a plutonium production reactor, uranium metal is irradiated. At a chemical separations plant, spent nuclear fuel cools and is treated. Plutonium is then separated from the uranium and other radioactive by-products. U.S. ENVTL. PROT. AGENCY, FEDERAL FACILITY CLEANUPS: EPA REGION 10 NEEDS TO IMPROVE OVERSIGHT OF REMEDIATION ACTIVITIES AT THE HANFORD SUPERFUND 100-K AREA, Rep. No. 2003-P-00002, at 2 (Nov. 4, 2002), available at <http://www.epa.gov/oig/reports/2002/hanford.pdf> [hereinafter FEDERAL FACILITY CLEANUPS]. In order to extract plutonium, spent rods from the nuclear reactors are dissolved in nitric acid, resulting in the generation of massive amounts of highly radioactive and chemical waste. Porter, *Hanford Issues*, *supra* note 10.

²¹ NUCLEAR WASTE, *supra* note 19, at 6 (stating that “[m]ost of [the] tanks . . . have already exceeded their design life.”).

²² FEDERAL FACILITY CLEANUPS, *supra* note 20, at 2.

²³ *Id.*

²⁴ Complaint for Declaratory and Injunctive Relief, *Washington v. Spencer Abraham et al.*, No. CT-03-5018-AAM (E.D. Wash. Mar. 4, 2003), at 3, at <http://www.atg.wa.gov/hanford/documents/nov2004/March%202003%20Complaint.pdf> [hereinafter Complaint].

USDOE's regulatory powers are shared with EPA and the Washington Department of Ecology ("WDOE"), a state agency, because the Hanford Nuclear Reservation is subject to both federal and state environmental laws.²⁵

C. *Governing Statutes and Agencies*

Federal laws govern the treatment and disposal of HLW at the Hanford Site. The Nuclear Waste Policy Act of 1982 ("NWPA")²⁶ was enacted to dispose of HLW²⁷ and spent fuel through the creation and development of a separate repository—a "permanent deep disposal system."²⁸ Under the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA" or "Superfund"),²⁹ EPA is required to conduct hazardous release reporting and cleanup programs.³⁰ "EPA's goal . . . is to select cleanup remedies that are protective of human health and the environment, maintain protection over time, and minimize untreated waste" as set forth in the National Contingency Plan ("NCP").³¹

In Washington, the Hanford Federal Facility Agreement and Consent Order ("FFACO") was established after negotiations coordinated FFACO under CERCLA, a Consent Order under the

²⁵ See GERBER, *supra* note 7, at 210 (discussing the Tri-Party Agreement ("TPA") between the U.S. Department of Energy ("USDOE"), EPA, and the Washington Department of Ecology ("WDOE")).

²⁶ 42 U.S.C. § 10101 et seq. (2000).

²⁷ "High-level waste contains radioactive components that emit dangerously intense radiation." NUCLEAR WASTE, *supra* note 19, at 5. USDOE may seek clarification of its authority to determine which radioactive waste should be managed as HLW. *Id.* at 4-5.

²⁸ NUCLEAR WASTE, *supra* note 19, at 8.

²⁹ 42 U.S.C. § 9601 et seq. (2000).

³⁰ FEDERAL FACILITY CLEANUPS, *supra* note 20, at 4.

³¹ *Id.* In establishing the procedures and regulations for CERCLA cleanup efforts under NCP, the choice of remedy shall be contingent "on whether it provides overall protection of human health and the environment; compliance with Applicable or Relevant and Appropriate Requirements; long term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; implementability, including technical feasibility; and cost effectiveness." *Id.*

Resource, Conservation, and Recovery Act ("RCRA"), and Washington's Hazardous Waste Act.³² FFACO mandates that USDOE institute cleanup programs at existing sites.³³ FFACO is also supposed to "establish a framework and schedule for implementing response actions in accordance with CERCLA, including milestones."³⁴

In addition to other federal and state hazardous waste laws, Washington created the Model Toxics Control Act ("MTCA").³⁵ MTCA assures the citizens of Washington remediation standards that will shield people from being exposed to cancer, where the risk of cancer is more than one in 100,000.³⁶ Also, unless cleanup is completely unattainable, MTCA standards provide that the cleanup should be adequate enough for unrestricted use by the public.³⁷

Perhaps the most influential agreement came about when USDOE, EPA, and WDOE created the Tri-Party Agreement ("TPA") in 1989.³⁸ A comprehensive environmental cleanup program, TPA establishes that 99% of the waste that exists in HLW tanks will be extracted.³⁹

Unfortunately, the appropriate remedy for the removal of 99% of the nuclear waste at the Hanford Site is not yet available.⁴⁰

³² *Id.*

³³ *Id.*

³⁴ *Id.* at 8. Under this agreement, EPA is required to enforce "FFACO milestones. In the event the DOE fails to comply with a term or condition of the FFACO, a stipulated penalty may be assessed in an amount up to \$5,000 for the first week and up to \$10,000 for each additional week of noncompliance." FEDERAL FACILITY CLEANUPS, *supra* note 20, at 9.

³⁵ WASH. REV. CODE ANN. § 70.105D (West 2005).

³⁶ Pollet, *supra* note 5, at 29.

³⁷ *Id.*

³⁸ See, e.g., GERBER, *supra* note 7, at 210; Pollet, *supra* note 5; Porter, *Hanford Issues*, *supra* note 10. Negotiated and amended multiple times since its inception in 1989, TPA is comprised of target dates to complete specific cleanup goals, referred to as enforceable "milestones." *Id.*

³⁹ Marc Fioravanti & Arjun Makhijani, *Containing the Cold War Mess*, Institute for Energy & Environmental Research, available at <http://www.ieer.org/reports/cleanup/summary.html> (Oct. 1997) (discussing the management of tanks containing high-level waste).

⁴⁰ *Id.*

Therefore, the 99% removal goal is "arbitrary and environmentally unsound;"⁴¹ the remaining 1% of the waste volume in these HLW tanks will probably consist of millions of curies of radioactivity because USDOE's solutions are not related to stopping current risks or extended management of the waste.⁴²

TPA also creates problems of authority by creating "dual coverage," placing the Hanford Site "under the jurisdiction of several environmental statutes Because of the way the TPA applies regulations to Hanford, any site that has both active and inactive hazardous-waste-producing components is technically covered by *both* RCRA and Superfund."⁴³ Therefore, both the State of Washington and USDOE have regulatory powers at Hanford.

II. "DOWNWINDERS" AND DECEPTION

A. HEDR: "Downwinders" Fight Back

In response to pressure from the public, USDOE established the Hanford Environmental Dose Reconstruction Project ("HEDR").⁴⁴ Supervised by the Center for Disease Control ("CDC"), HEDR's purpose "was to estimate and reconstruct all radionuclide emissions from Hanford from 1944 to 1972, in order to ascertain whether neighboring individuals and animals had been exposed to harmful doses of radiation."⁴⁵

USDOE now acknowledges that over 1 million gallons of waste have been unintentionally leaked from the Hanford Site.⁴⁶ The creation of HEDR also pressured USDOE to admit that between

⁴¹ *Id.*

⁴² *Id.*

⁴³ Glenn Zorpette, *Hanford's Nuclear Wasteland*, SCI. AM., May 1996, at 96.

⁴⁴ Dunlap et al., *supra* note 16, at 139.

⁴⁵ *In re Hanford Nuclear Reservation Litigation*, 292 F.3d 1124, 1128 (9th Cir. 2002) (holding the district court erred in dismissing plaintiffs' claims before discovery reached the phase of individual causation, finding plaintiffs were correct in their understanding of generic causation, and concluding plaintiffs' case was prejudiced by district court's delayed decision requiring them to satisfy precise threshold dose levels of exposure).

⁴⁶ NUCLEAR WASTE, *supra* note 19, at 6 n.3.

1946 and 1966 approximately 121 million gallons of deadly radioactive waste was *intentionally* released from the Hanford Site; the radioactive waste was deposited directly into the soil because Hanford lacked available tank space.⁴⁷ Jack Geiger, a medical professor who worked as part of a task force for the Physicians for Social Responsibility, noted that the most inconceivable aspect of USDOE's deception was that

the government's suppression of the information for four decades. . . . compares unfavorably to that of the devastating nuclear releases at the Chernobyl plant in the Soviet Union. Chernobyl released more radioactivity, but . . . its cover-up lasted a few weeks, while Hanford's went on for four decades. . . . "Chernobyl was an accident. Hanford was deliberate. Chernobyl was a singular event, the product of faulty reactor design and human error. Hanford was a chronic event, the product of obsessive secrecy and callous indifference to public health."⁴⁸

HEDR released information that "[i]n 1945 alone '345,000 curies of radioiodine (I-131), generated by the chemical separation of plutonium from the irradiated fuel rods, was released into the atmosphere."⁴⁹ This contaminated gas spread throughout Eastern

⁴⁷ *Comments on Revised Draft: Hanford Solid Waste (Radioactive and Hazardous) Waste Program Environmental Impact Statement (RD-HSWEIS) to the U.S. Department of Energy (USDOE)*, Heart of America Northwest Research Center, at 3, at http://www.heartofamericanorthwest.org/reportspubs/hsweis_comments_03.doc (June 10, 2003) [hereinafter *RD-HSWEIS*]; see also NUCLEAR WASTE, *supra* note 19, at 6 n.3.

⁴⁸ SETH SHULMAN, *THE THREAT AT HOME: CONFRONTING THE TOXIC LEGACY OF THE U.S. MILITARY 98-99* (1992) (quoting Jack Geiger, medical professor at the City University of New York Medical School).

⁴⁹ Craig A. Barr, *A Practical Guide to Proving and Disproving Causation in Radiation Exposure Cases: Hanford Nuclear Site and Radioactive Iodine*, 31 GONZ. L. REV. 1, 2-3 (1996). Covering a 75,000 square mile area, emissions at the Hanford Site were examined using computer models and algorithms to approximate the occurrence and frequency of radionuclide releases into the air and water of the Columbia River. *In re Hanford Nuclear Reservation*, 292 F.3d at 1128.

Washington and contaminated both vegetation and cattle.⁵⁰ From 1952 to 1954, radioaruthenium (Ru-103 Nru-106) was also dispensed into the atmosphere.⁵¹

In 1990, HEDR's report, *Initial Hanford Radiation Dose Estimates*,⁵² informed the public of the massive amounts of radioactive and non-radioactive materials that had been released from Hanford since the 1940s.⁵³ The report determined that iodine-131 had mobilized downwind from Hanford and contaminated the grass.⁵⁴ Cows grazed on this contaminated grass and, as a result, produced milk that contained radiation.⁵⁵ Approximately 13,500 people were significantly exposed to radiation by drinking milk from the affected cows.⁵⁶

From these 13,500 people exposed to radiation, a group of Tri-Cities residents formed a coalition called the "Downwinders."⁵⁷ The Downwinders claimed that local families were afflicted with serious illnesses, including thyroid cancer, as a result of the Hanford Site's activities.⁵⁸ The illnesses occurring around the Hanford Site were disproportionate, and the cause of the illnesses was thought to be from the hazardous releases at the Site.⁵⁹ The Downwinders believed that releases were intentional and massive when the Hanford Site was first in existence, but that the releases still occurred in smaller amounts due to the inadequate radioactive containers used at the Hanford Site.⁶⁰

⁵⁰ Barr, *supra* note 49, at 1, 3.

⁵¹ *Id.*

⁵² Gerald F. Hess, *Hanford: Cleaning Up the Most Contaminated Place in the United States*, 38 ARIZ. L. REV. 165, 180 (1996).

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ Dunlap et al., *supra* note 16, at 139. "Downwinders' accumulated doses in excess of thirty-three rads." Hess, *supra* note 52, at 180. Unfortunately, children suffered the highest doses, with 1200 children accumulating more than 650 rads. "[T]he current EPA standard for airborne radiation is 0.025 rads per year." *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *Id.*

HEDR's report "sparked a blaze of litigation."⁶¹ Thousands of individual plaintiffs filed complaints in the U.S. District Court for the Eastern District of Washington, alleging various illnesses resulting from the radioactive emissions at the Hanford Site.⁶² Plaintiffs alleged that five companies under contract with the United States had intentionally or negligently operated the Hanford Site.⁶³ Between 1943 and 1987, defendants E.I. DuPont de Nemours & Company, General Electric Company, UNC Nuclear Industries, Inc., Atlantic Richfield Company, and Rockwell International Corporation all acquired license agreements with the federal government to operate the Hanford Site.⁶⁴ Plaintiffs claimed that the intentional or negligent emissions and exposure to radioactive waste from the Hanford Site proximately caused personal injury and property damage.⁶⁵ Certain plaintiffs proceeded individually in a consolidated complaint after the district court delayed class certification.⁶⁶

Defining the "generic causation" standard necessary to prove liability became the central issue in the case.⁶⁷ Plaintiffs claimed they only had to prove that the radiation emissions from the Hanford Site had the potential effect of rendering the illnesses claimed by the plaintiffs.⁶⁸ Defendants insisted that the "doubling dose" standard be applied—plaintiffs would have to show that they

⁶¹ *In re Hanford Nuclear Reservation*, 292 F.3d at 1128 (9th Cir. 2002).

⁶² *See generally In re Hanford Nuclear Reservation*, 1998 U.S. Dist. LEXIS 18091 (E.D. Wash. 1998).

⁶³ *In re Hanford Nuclear Reservation Litigation*, 292 F.3d at 1127.

⁶⁴ *Id.*

⁶⁵ *Id.* Plaintiffs brought causes of action for "negligence, strict liability, trespass, nuisance, misrepresentation, negligent and intentional infliction of emotional distress, wrongful death, and conspiracy." *Id.* In addition, plaintiffs sought damages and remedies, including "compensatory damages for physical, emotional, and economic harm, punitive damages, medical monitoring, compelled disclosure of all relevant information, and abatement and remediation of ongoing and threatened releases of radioactive and non-radioactive hazardous substances." *Id.* at 1128-29.

⁶⁶ *Id.* at 1128.

⁶⁷ *In re Hanford Nuclear Reservation Litigation*, 292 F.3d at 1130.

⁶⁸ *Id.*; *see also* Barr, *supra* note 49, at 16 (identifying "[t]he criteria which epidemiologists use to determine whether causation has been established").

had been "exposed to a specific dose of radiation that statistically 'doubled their risk' of harm."⁶⁹ The defendants additionally alleged that the plaintiffs failed to prove by a preponderance of evidence that it was more probable than not the specific ailments from which they suffered were caused by the toxic emissions at the Hanford Site.⁷⁰ The district court granted the defendants' motion for summary judgment.⁷¹ The U.S. Court of Appeals for the Ninth Circuit, on the other hand, reversed and remanded the district court's decision, "holding that the 'doubling of the risk' standard used by the district court was erroneous."⁷² One issue that swayed the Ninth Circuit was that even a small amount of radiation released from the Hanford Site could have undeniably produced the wide array of illnesses that the plaintiffs were suffering with.⁷³

B. *Uncovering the Deception: Human Radiation Experiments*

The Downwinders absorbed the iodine-131 into their bodies, most likely into their thyroid glands.⁷⁴ When the Hanford Site was

⁶⁹ *In re Hanford Nuclear Reservation*, 292 F.3d at 1130; see also Barr, *supra* note 41, at 13 (explaining the calculation of the "double dose" standard).

⁷⁰ *In re Hanford Nuclear Reservation*, 292 F.3d at 1130. Defendants argued that the specific ailments were also present in humans in an unexposed atmosphere outside of the Hanford radius. *Id.*

⁷¹ *Id.* at 1131. The district court agreed with the test established in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d 1311 (9th Cir. 1995), and stated that to show "generic causation, each individual plaintiff had to prove not only that radiation is capable of causing injury, but that he or she had been exposed to a threshold dose of radiation that statistically doubled the risk of harm over the risk that exists for the general population." *Id.* at 1131.

⁷² V. Thomas Meador III et al., *Anti-Toxins: Defense Counsel in Mass Toxic Tort Cases Can Frequently Prevail by Challenging Plaintiffs' Proof of Both General and Specific Causation*, 26 L.A. LAWYER 33, 38, July/Aug. 2003; see also *In re Hanford Nuclear Reservation*, 292 F.3d at 1135 (stating that "the district court should not have ventured into individual determinations at this stage of discovery when there had not been full disclosure of individual plaintiff's circumstances").

⁷³ Meador III et al., *supra* note 72, at 38.

⁷⁴ Hess, *supra* note 52, at 180; see also *In re Hanford Nuclear Reservation*, 292 F.3d at 1128 ("The HEDR concluded that I-131 emissions peaked during the

created, some effects of iodine, both radioactive and stable, were known.⁷⁵ Around 1948, *Collier's* reported that, "[t]he thyroid cannot distinguish between ordinary iodine and radioactive iodine . . . the thyroid . . . commits suicide when it accepts radioactive iodine."⁷⁶ Approximately 400 billion gallons of radioactive iodine were directly deposited into the soil at the Hanford Site.⁷⁷ Yet, the Atomic Energy Commission kept this information from the public, praising the environmental conditions at the Hanford Site by stating that "[m]inute quantities of radioactive contamination in air, vegetation, soil, surface water, and groundwater are detected by radio-chemical means . . . All radioactive materials routinely detected beyond the plan perimeter are at or below one-tenth of the maximum permissible limits."⁷⁸

In December 1993, the U.S. government was exposed as USDOE Secretary Hazel O'Leary allowed the public, for the first time, to view "terrifying, previously secret United States government documents that verified our government purposely and repeatedly exposed citizens to radioactive fallout to determine the extent of any health effects."⁷⁹

President Clinton's Executive Order 12,891 subsequently established an Advisory Committee on Human Radiation Experiments

period from 1944 to 1946, when an estimated 88% (685,000 curies) of Hanford's total iodine emissions occurred."); Alvarez, *supra* note 14.

⁷⁵ GERBER, *supra* note 7, at 84.

⁷⁶ *Id.* The Atomic Energy Commission determined from unclassified reports that the thyroid gland picks up and utilizes nearly all of the iodine in the human system, normally about 80 times as much as any other tissue . . . Special fission-made iodine [I-131] . . . can . . . destroy human thyroid tissue, if it can get at it. Since it is attracted to thyroid tissue, it can be used to destroy it, whether or not it is diseased.

Id. (citations omitted).

⁷⁷ Alvarez, *supra* note 14 (claiming this staggering amount would be enough to form a contaminated lake that could submerge Manhattan to a depth of over eighty feet).

⁷⁸ Whiteley, *supra* note 6, at 37.

⁷⁹ Leonard W. Schroeter, *Human Experimentation, the Hanford Nuclear Site, and Judgment at Nuremberg*, 31 GONZ. L. REV. 147, 149 (1995).

("ACHRE").⁸⁰ The Executive Order defined "human radiation experiments" as "(1) [E]xperiments on individuals involving intentional exposure to ionizing radiation. . . .(2) [E]xperiments involving intentional environmental releases of radiation that (A) were designed to test human health effects of ionizing radiation; or (B) were designed to test the extent of human exposure to ionizing radiation."⁸¹

The principal function of ACHRE was to identify files pertaining to the Cold War and make those files accessible to the general public.⁸² ACHRE's final report was released in October 1995, providing recommendations for government action and suggestions for remedies.⁸³

Thyroid cancer and other forms of thyroid damages are just some of the illnesses linked to radioactive iodine. USDOE conducted a Qualitative Risk Assessment in 1994, identifying the presence of hexavalent chromium at the Hanford Site.⁸⁴ Over ten years later, hexavalent chromium continues to seep into the Columbia River.⁸⁵ The levels of hexavalent chromium at Hanford surpass Washington's Chronic Ambient Water Quality Standard for the Protection of Freshwater Aquatic Life for the pollutant.⁸⁶ USDOE, instead of attempting to remedy the pollution of the Columbia River, has merely identified the wildlife that will be affected.

Potential ecological receptors along the Hanford Reach of the Columbia River, where the groundwater

⁸⁰ *Id.*

⁸¹ *Id.*; see also Exec. Order No. 12,891, 59 Fed. Reg. 2935 (Jan. 15, 1994).

⁸² Schroeter, *supra* note 79, at 150.

⁸³ *Id.*

⁸⁴ FEDERAL FACILITY CLEANUPS, *supra* note 20, at 21. This assessment revealed the presence of hexavalent chromium could result in terrible consequences for the environment, which would need a cleanup measure in place. As a metallic element, when chromium is converted to its hexavalent form, it can easily be dissolved in water, enabling the hexavalent chromium to move throughout rivers and lakes with ease. See *id.*

⁸⁵ See *id.*

⁸⁶ *Id.*

from the 100-KR-4 Operable Unit discharges, include fish and other organisms that live and spawn in the river, on the river bottom, and along the shoreline; birds and other animals that use the river and adjacent wetlands; and predators, such as the herons, that consume aquatic organisms. Receptors may come in contact with chromium-contaminated groundwater as it discharges into and mixes with water in the river, or as it issues from the riverbank seepage before flowing into the river.⁸⁷

In 2002, levels of carbon tetrachloride were calculated in the vapor of one of Hanford's burial ground trenches.⁸⁸ The amount of carbon tetrachloride in the trenches surpassed the smallest lethal amount in the atmosphere for people by 176 percent.⁸⁹

Instead of enacting remedial measures to deal with this obvious risk to human health, USDOE expanded the use of burial ground trenches for imported waste from other nuclear weapons complex sites.⁹⁰ The burial ground trenches contain unknown hazardous substances and are subject to state and federal hazardous waste laws. More than ten years ago, Washington banned the expansion or construction of new unlined trenches.⁹¹ It is therefore illegal for USDOE to expand these trenches and add new ones.⁹²

These are only some of Hanford's disturbing and deadly substances that could potentially leak and harm humans and the

⁸⁷ *Id.* at 22.

⁸⁸ Pollet, *supra* note 5, at 30. Carbon Tetrachloride is a "poison, carcinogen, and reproductive toxin." *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*; see also *RD-HSWEIS*, *supra* note 47, at 1. However, USDOE repeatedly ignores the law and expands these trenches, many of which are over 1000 feet. For example, in 1997, USDOE expanded a trench that was already 1160 feet long. USDOE did not give a second glance to its illegal actions. Pollet, *supra* note 5, at 30.

⁹¹ *RD-HSWEIS*, *supra* note 47, at 31.

⁹² *Id.*; see also Pollet, *supra* note 5, at 30. "Ecology's Director Tom Fitzsimmons has refused to require a full MTCA investigation of the releases, and said that he committed to USDOE to allow continued use of the trenches." *Id.*

environment. A scientist with USDOE's Pacific Northwest National Laboratory, Timothy Jarvis, believes enough contaminated materials have been dumped at the Hanford Site to have "the potential to induce cancer in every person currently on the planet, 208 million times over."⁹³

IV. USDOE RECLASSIFICATION SCHEME

A. *The Bush Budget: Speeding Up Disaster*

The Bush administration has continuously cut corners and ignored safety considerations since George W. Bush was elected President in 2000. In the first two years of his first term, President Bush's proposed fiscal budget dramatically cut spending designated for the cleanup of the Hanford Site.⁹⁴ HANW responded that the cutbacks would cause "the U.S. Department of Energy, which runs Hanford, . . . [to fall] \$235 million short of what Department of Energy budget documents claimed would be the amount required to fund all essential safety and cleanup work required next year by the Hanford Clean-Up Agreement and environmental laws."⁹⁵

In 2002, Washington State officials calculated that approximately \$1.7 billion was needed from the federal government in order for the cleanup at Hanford to stay on track.⁹⁶ In early March

⁹³ Alvarez, *supra* note 14.

⁹⁴ Press Release, Heart of America Northwest, Bush Budget Cuts Nuclear Waste Clean-Up: Budget is a Whopping \$235 Million Short for Essential Safety and Clean-Up Work Required By the Hanford Clean-Up Agreement and Environmental Laws in 2002 (Apr. 10, 2001), at <http://www.heartofamericanorthwest.org/newsreleases/release041001.html> [hereinafter Bush Budget Press Release]; see also *In Our View: Watch Hanford; If We Let Down Our Guard, Cleanup Will Almost Certainly be Shortchanged*, COLUMBIAN, Nov. 23, 2003, at C10.

⁹⁵ Bush Budget Press Release, *supra* note 94.

⁹⁶ Editorial, *Keep Promises; Don't Shortchange Hanford*, SEATTLE TIMES, Feb. 7, 2002, at B6 [hereinafter *Keep Promises*]. "The estimate assumes spending approximately \$1 billion for the Office of River Protection, which handles Hanford's crud-filled and leaking tanks, and the vitrification project to turn radioactive waste into manageable glass blocks. The balance would be spent on the rest of Richland cleanup operations." *Id.*

2002, USDOE, WDOE, and EPA agreed to cut \$30 billion from the cleanup cost of Hanford and deduct 35 years off the projected cleanup date in the process.⁹⁷

The Bush administration attempted to pacify Washington's citizens by promising \$150 million more to the Hanford Site and projecting that the cleanup at Hanford would be completed as early as 2025.⁹⁸ In response, Washington Governor Gary Locke relied solely on fiscal numbers and ignored the potential for the devastating effect this new cleanup plan would produce. He believed the Bush administration's plan was "the best news for Hanford since the signing of the original clean up agreement."⁹⁹

Promises, however, are sometimes better in theory than in practice. After evaluating USDOE's plan to accelerate cleanup at Hanford, the Hanford Advisory Board declared that "[i]t appears the plan may sacrifice quality and rigor for cleanup required by current laws and regulations for the sake of expediency."¹⁰⁰ While the Bush administration declared billions of dollars could be saved by completing the cleanup work sooner,¹⁰¹ it failed to inform the public of the detrimental and illegal practices it would employ to reach its goal.

B. USDOE's "Incidental" Changes: High-Level and Low-Level Waste

The Bush administration praised its own nuclear site remediation plans for cost-effectiveness and risk reduction.¹⁰² USDOE

⁹⁷ Craig Welch, *Hanford Cleanup Still Needs Viable Plan: Leaky Tanks Present Technical Challenge*, SEATTLE TIMES, Mar. 10, 2002, at B1.

⁹⁸ See *id.* The previous target date, however, was 2070. *Id.*

⁹⁹ *Id.*

¹⁰⁰ Editorial, *Energy Should Open Up About Hanford Cleanup*, SEATTLE TIMES, June 23, 2002, at C2 (quoting the Hanford Advisory Board) [hereinafter *Hanford Cleanup*].

¹⁰¹ See NUCLEAR WASTE, *supra* note 19, at 3; Welch, *supra* note 97.

¹⁰² See Press Release, Dept. of Energy, Department of Energy and Washington State Agree to Pursue Accelerated Cleanup Strategy for Hanford Site (Mar. 6, 2002), at http://www.energy.gov/engine/content.do?PUBLIC_ID=13047&BT_CODE=PR_PRESSRELEASES&TT_CODE=PRESSRELEASE.

and the Assistant Secretary for Environmental Management commenced an initiative in February 2002 "to accelerate the schedule and reduce the costs of cleaning up high-level and other radioactive and hazardous waste, while focusing its resources on reducing risks to human health and the environment at its sites."¹⁰³ USDOE decided that not only would it ignore the potential negative effects of an accelerated cleanup program at Hanford, but it would also blatantly disregard the TPA agreement it had previously entered into.

The TPA required that 99% of the 53 million gallons of HLW occupying the outdated tanks at Hanford would be extracted.¹⁰⁴ The low-level waste ("LLW") was given less strict requirements for remediation. Unilaterally, USDOE decided that to "get rid of more than 1 million gallons of high-level radioactive sludge . . . [i]f you're the U.S. Department of Energy, you simply call it low-level radioactive sludge."¹⁰⁵

The crux of USDOE's proposal was its attempt to reclassify HLW and LLW and separate the two forms of radioactivity.¹⁰⁶ LLW is immobilized and stored at the Hanford Site close to the surface of the ground, in containers such as vaults or canisters.¹⁰⁷ However, the regulations of NWPA and TPA require HLW to be transported to a geological repository for disposal.¹⁰⁸ HLW is

¹⁰³ NUCLEAR WASTE, *supra* note 19, at 1.

¹⁰⁴ *Hanford Cleanup*, *supra* note 100. Vitrification of these wastes was to be completed by 2028. Pollet, *supra* note 5, at 32.

¹⁰⁵ Editorial, *Nuke-and-Switch; Once Again, Feds Get Caught Trying to Dodge Hanford Cleanup*, COLUMBIAN, July 14, 2003, at C6 [hereinafter *Nuke-and-Switch*].

¹⁰⁶ See NUCLEAR WASTE, *supra* note 19, at 3.

¹⁰⁷ *Id.* at 9; see also Charles Pope, *Inslee Raps Hanford Waste Plan: House Endorses His Motion Against Reclassification*, SEATTLE POST-INTELLIGENCER, Oct. 3, 2003, at B1.

¹⁰⁸ NUCLEAR WASTE, *supra* note 19, at 8. HLW is waste containing radioactive elements that release extremely hazardous radiation. Due to this radiation, the waste has to be contained in isolation in a strong protective layer such as concrete. "Low-level waste is . . . radioactive material that is not high-level radioactive waste, spent nuclear fuel, transuranic waste, or certain by-product material . . ." *Id.* at 18 n.16.

defined by NWPA as the "leftovers of reprocessing" spent nuclear fuels.¹⁰⁹

Approximately 53 million gallons of HLW is stored in nearly 200 tanks beneath the ground at the Hanford Site.¹¹⁰ What lies in these tanks, however, is the subject of conflict between USDOE and Washington. Citizens characterize the waste in the Hanford tanks as a "deadly stew of radioactive leftovers, toxic chemicals and who knows what else."¹¹¹ Over ninety-eight percent of the tank waste is liquid leftovers, which could be extracted from the tanks for processing.¹¹² The conflict between Washington and USDOE

¹⁰⁹ Matthew L. Wald, *Energy Department Is Challenged Over Waste Disposal Methods*, N.Y. TIMES, Mar. 4, 2002, at A1; see also *Natural Res. Def. Council v. Abraham*, 271 F. Supp. 2d 1260, 1262 (D. Idaho 2003). The actual language used by Congress to define HLW in NWPA is

(A) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and

(B) other highly radioactive material that the Commission, consistent with existing law, determines by rule requires permanent isolation.

42 U.S.C. §10101(12)(A) (2000).

¹¹⁰ *Nuke-and-Switch*, *supra* note 105; see also Pollet, *supra* note 5, at 29 ("The most intensely radioactive High-Level Nuclear liquid wastes . . . were discharged into 149 Single Shell Tanks and 29 newer Double Shell Tanks. At least 68 of the Single Shell Tanks have leaked over a million gallons.").

¹¹¹ *Nuke-and-Switch*, *supra* note 105.

¹¹² *Id.*; see also *Natural Res. Def. Council*, 271 F. Supp. 2d at 1262.

After frequent bombardments, the fission reaction becomes inefficient and the rods are removed. Even so, the uranium and plutonium pellets are not entirely spent, and contain a large amount of energy potential. To extract the still-usable isotopes, the pellets are dissolved in an acid bath. This reprocessing procedure leaves highly radioactive particles suspended in an acid chemical solution as a liquid waste. The acid is neutralized and the liquid is placed in storage tanks. Over time, the particles sink to the bottom of the tanks forming a sludge while the liquid remains on top.

Id.

arises from the more expensive task of determining how to treat the waste at the bottom of the tanks.¹¹³

USDOE has been attempting for years to redefine as "incidental" the material at the bottom of Hanford tanks.¹¹⁴ "Incidental" waste is treated as LLW; therefore, redefining the sludge at the bottom of the Hanford tanks as incidental means that it no longer has to be buried deep underground as HLW.¹¹⁵ USDOE requested that EPA declare the redefined incidental wastes as safe enough to store and dispose of the wastes indefinitely.¹¹⁶ USDOE's goal is to reclassify ninety percent of the fifty-four million gallons of waste as "incidental."¹¹⁷

Environmental groups believe USDOE "intends to leave literally thousands of gallons of the highly radioactive sediments and sludges at the bottom of the underground tanks, cover the waste in place with concrete, and hope for the best."¹¹⁸ These groups also fear that the reclassification scheme will allow this "incidental" waste, with the potential to be radioactive for tens of thousands of years, to mobilize out of the tanks by rain or groundwater.¹¹⁹ Already, certain parts of the Columbia River contain groundwater that is over 1200 times the legal limit of contamination required by federal drinking water standards.¹²⁰

USDOE's plan to redefine and "separate tank waste into high-level waste and 'low-level' waste is unsound because it will result in the shallow land disposal of millions of curies of long-lived

¹¹³ *Nuke-and-Switch*, *supra* note 105. After the liquid waste has been pumped out, "what's left [is] a sort of deadly bathtub scum that ranges in consistency from mayonnaise to rock salt." *Id.*

¹¹⁴ Wald, *supra* note 109.

¹¹⁵ *Id.*; see also NUCLEAR WASTE, *supra* note 19, at 27.

¹¹⁶ NUCLEAR WASTE, *supra* note 19, at 31. If EPA complies, the waste will stay immobilized. *Id.*

¹¹⁷ *Id.* at 26.

¹¹⁸ Wald, *supra* note 109.

¹¹⁹ *Id.* "More than one million gallons of toxic goo have leaked into ground water that feeds the river." Welch, *supra* note 97.

¹²⁰ Press Release, Protect Washington, Two Reports Show Need for I-297 to Clean Up Hanford (July 28, 2004), available at http://www.heartofamericanorthwest.org/reportspubs/I297News_07_28_04.pdf.

radioactivity.”¹²¹ As of 1997, the anticipated amount of LLW was close to seventy percent greater than the entire amount of HLW.¹²² USDOE, adhering to the Nuclear Regulatory Commission’s (“NRC”) Class C waste regulations, intended to dispose of the LLW on the Hanford Site in shallow land burials.¹²³ However, Class C waste can still emit significant quantities of radionuclides.¹²⁴ Therefore, USDOE blatantly ignores the effects that shallow burial could have on the nearby Columbia River.¹²⁵

USDOE paints a very pretty picture of its accelerated cleanup program. However, the plan fails to resolve or even consider the problem of long-term HLW management, which could result in more expensive remediation programs in the future. Attorney General Christine Gregoire doubts USDOE’s intentions.

Washington will not sit back and allow the Federal government to declare the Hanford cleanup a success by simply moving the goal line. That is not “accelerated cleanup” by our standards. We have far too much at stake to allow our legacy to be defined by how much we leave behind.¹²⁶

As a result, USDOE’s proposal for the Hanford tank remediation is not instituting a protection measure to solve the problem of long-term HLW management. Instead, the act of burying Class C LLW in shallow land burials may be the foundation for a much more expensive remediation in the future.

¹²¹ Fioravanti & Makhijani, *supra* note 39, at 16.

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ Attorney General Christine Gregoire, Oversight Hearing on the U.S. Dept. of Energy Env’tl Management (EM) Program’s Accelerated Cleanup Initiative, and Proposed Changes to EM’s Science and Technology Program, Remarks to the U.S. Senate Committee on Energy and Natural Resources (July 11, 2002).

C. *An Unfair Balance: Reducing Vitrification and Increased "Closed" Tanks*

If USDOE is able to reclassify deadly radioactive waste to meet its own ulterior motives, then the Bush administration will accomplish its goal to avoid vitrifying seventy-five percent of the HLW at the Hanford Site.¹²⁷ Under the TPA, all LLW should be "glassified" and stored in a retrievable glass form.¹²⁸ However, USDOE intends to bury this LLW permanently in shallow landfills, without glassifying the waste,¹²⁹ and using cement as the only barrier to the waste because vitrification is a much more expensive process.¹³⁰

The Hanford Site uses the vitrification process in its separate of waste into high-level and low-level. Of the available technologies used in the cleanup programs, vitrification is the most expensive but also the most effective.¹³¹ However, USDOE's Assistant Secretary for Environmental Management, Jessie Roberson, stated in November of 2001 that her highest priority in cutting costs for the environmental budget was to "eliminate the need to vitrify at least 75 percent of the waste scheduled for vitrification."¹³²

D. *Order 435.1*

Order 435.1 was created in July of 1999 by USDOE as an instructive manual of how to dispose and qualify HLW at the

¹²⁷ Pollet, *supra* note 5, at 31.

¹²⁸ *RD-HSWEIS*, *supra* note 47, at 3.

¹²⁹ *Id.* USDOE's plan "will tremendously increase both the amount of waste in the landfills and their impact to groundwater; i.e., Technetium alone from the tank wastes increases the contamination of groundwater by 20%." *Id.* Technetium is not a waste material that USDOE wants included as HLW and will not, therefore, be vitrified under its plan. *Id.*

¹³⁰ *Nuke-and-Switch*, *supra* note 105.

¹³¹ Alvarez, *supra* note 14. Vitrification is a "complex process involving heavy shielding and extensive remote handling that converts long-lived nuclear wastes into glass logs for permanent geological disposal." *Id.*

¹³² *Id.*

Hanford Site.¹³³ The order describes the process by which USDOE can define waste as incidental, and deem the waste outside the regulation requirements defined by NWPA.¹³⁴

Under Order 435.1, HLW is reclassified as incidental waste if it meets the following criteria:

- 1) key radionuclides must be removed to the extent technically and economically practical;
- 2) the waste must meet safety requirements comparable to the performance objectives set out in 10 C.F.R. part 61, Subpart C; and
- (3) the waste must be managed in accordance with the DOE's requirements for low-level waste as set forth in Chapter IV of the Manual, provided the waste is incorporated into a solid physical form that does not exceed concentration limits for Class C low-level waste set out in 10 C.F.R. § 61.55, or must meet such alternative requirements for waste classification and characterization as DOE may authorize.¹³⁵

As part of the Order, USDOE must first satisfy these conditions, then obtain a technical review of the conclusions drawn by USDOE from NRC, who can concur or not. If NRC concurs, USDOE classifies the waste as "incidental."¹³⁶

In an "Orwellian slight of hand,"¹³⁷ USDOE wanted to redefine over three quarters of its most dangerous radioactive waste by describing this waste as "incidental,"¹³⁸ which means it can be combined with cement and buried in shallow holes or just left alone.¹³⁹ USDOE wants to refer to this waste as "incidental" even though the National Academy of Sciences stated that the hazards

¹³³ *Id.*

¹³⁴ *See* Natural Res. Def. Council v. Abraham, 271 F. Supp. 2d 1260, 1262 (D. Idaho 2003).

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ Alvarez, *supra* note 14.

¹³⁸ *Id.*

¹³⁹ *Id.*

at the Hanford Site “will persist for centuries, millennia, or essentially forever.”¹⁴⁰

E. Judicial Response to USDOE's Reclassification Scheme: Natural Resources Defense Council, et al. v. Spencer Abraham and United States

On July 2, 2003, the District of Idaho invalidated Order 435.1.¹⁴¹ The National Resources Defense Council (“NRDC”), the Yakama Indian Nation, the Shoshone-Bannock Tribe, and the Idaho-based Snake River Alliance¹⁴² brought the cause of action against Order 435.1.¹⁴³ NWSA states that HLW is defined as:

- (A) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and
- (B) other highly radioactive material that the Commission, consistent with existing law, determines by rule requires permanent isolation.¹⁴⁴

Order 435.1 describes the process by which USDOE can define waste as incidental and therefore not subject itself to the regulation requirements as defined by NWSA.¹⁴⁵ USDOE defines incidental wastes as those that “do not warrant geologic repository disposal because of their lack of long-term threats to the environment and man.”¹⁴⁶ The threshold issue in the case was whether

¹⁴⁰ *Id.*

¹⁴¹ *See generally* *Natural Res. Def. Council v. Abraham*, 271 F. Supp. 2d 1260 (D. Idaho 2003).

¹⁴² Alvarez, *supra* note 14.

¹⁴³ *Natural Res. Def. Council*, 271 F. Supp. 2d at 1260. This case also involved two other sites—the INEEL facility in Idaho and the Savannah River site in South Carolina. *Id.* at 1262.

¹⁴⁴ *Id.* at 1262.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

Congress had ever specifically addressed the question of how to define different types of waste.¹⁴⁷ In NWPAs, Congress defined HLW and used the word "including" to illustrate the definition given. United States District Judge B. Lynn Winmill stated that "NWPAs' definition of HLW considers both the source of the waste and, in the case of solids derived from liquid waste, its hazard. It is undisputed that the waste stored at Hanford, INEEL, and Savannah River is highly radioactive and the result of reprocessing."¹⁴⁸ Judge Winmill ruled that USDOE could not "reclassify these wastes through a 'whim' and must process them for geological disposal."¹⁴⁹ She declared that Order 435.1 was not instituted to allow USDOE to determine the presence of incidental waste, but rather organized the test so that USDOE had complete control over how to treat a particular waste.¹⁵⁰

NRDC attorney Geoff Fettus stated that "[i]f you follow the DOE's arguments to their logical conclusion, we might as well dispose of the equivalent of several thousand tons of spent commercial reactor fuel in unlined shallow burial near important water supplies."¹⁵¹ Soon after this ruling, on July 17, 2003, USDOE Assistant Secretary Roberson requested that Congress overturn the district court's decision.¹⁵² In response, members of the Washington State delegation went to the House floor, led by Representative Jay Inslee of Washington's Fourth District, in order to combat the Bush administration's attempt to reclassify high-level nuclear waste.¹⁵³ State attorneys from Washington, Idaho, Oregon, and South Carolina insisted that allowing the reclassification system to be used would "give the Department [of Energy] blanket discretion to exempt such wastes from long-standing management and disposal requirements."¹⁵⁴ With a

¹⁴⁷ *Id.* at 1264.

¹⁴⁸ *Natural Res. Def. Council*, 271 F. Supp. 2d at 1265.

¹⁴⁹ Alvarez, *supra* note 14.

¹⁵⁰ *Natural Res. Def. Council*, 271 F. Supp. 2d at 1265.

¹⁵¹ Alvarez, *supra* note 14.

¹⁵² *Id.*

¹⁵³ Alex Fryer, *Washington Lawmakers Stop Bush From Reclassifying Nuclear Waste*, SEATTLE TIMES, Oct. 3, 2003, at B1; see also Editorial, *Playing Fair with Nuclear Cleanup*, SEATTLE TIMES, Oct. 5, 2003, at D2.

¹⁵⁴ Fryer, *supra* note 153.

unanimous voice vote, the House voted in favor of Inslee's motion demanding that the representatives of the House on the Energy Legislation Conference Committee remove the Bush administration and USDOE's reclassification plan.¹⁵⁵

V. RESPONSE TO BUSH'S PLAN TO TRANSPORT HIGHLY RADIOACTIVE PLUTONIUM WASTE TO HANFORD

A. *Broken Promises*

USDOE Secretary Abraham already promised Congress, in 2002, that the extended cost of waste disposal would weigh in all decisions regarding disposal.¹⁵⁶ Yet Secretary Abraham has failed to consider a proposal that offsite generators of hazardous waste be charged by USDOE for the extensive, long-term costs of disposal.¹⁵⁷ Instead, Abraham charges these offsite generators barely fifty percent of the cost of disposal.¹⁵⁸ Failing to charge these offsite generators violates state hazardous waste laws that require financial assistance for the monitoring and closure costs that disposal sites incur.¹⁵⁹

The full cost of importing waste must be recovered.¹⁶⁰ Additionally, Secretary Abraham and USDOE have failed to investigate alternative locations to the Hanford Site for waste

¹⁵⁵ *Id.*

¹⁵⁶ *RD-HSWEIS*, *supra* note 47, at 34.

¹⁵⁷ *Id.*

¹⁵⁸ *Id.* "There is no doubt that charging [for] the fully burdened, long-term costs [of disposal] has environmental benefits, including waste reduction, encouragement of pretreatment and consideration of alternative regulated, lined disposal facilities that do charge closure and monitoring fees." *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *See id.* at 18.

In 1999, USDOE charged offsite generators \$14.05 per cubic foot (\$495 per cubic meter) for LLW Category I disposed at Hanford, whereas the cost of disposal (including both variable and fixed costs) was \$1,046 per cubic meter. This included no charges for the long-term monitoring or closure of the burial grounds.

RD-HSWEIS, *supra* note 47, at 18.

disposal.¹⁶¹ However, the HANW Research Center has conducted an extensive comparison. Research conclusively demonstrates that in comparing USDOE's landfill alternatives, the most reasonable course of action with the least environmental impact resides in a lined, regulated landfill in Clive, Utah.¹⁶² "[O]perated by 'Envirocare of Utah,' [the landfill] has never released waste, has leachate collection systems and both ground water and soil column (vadose zone) monitoring that far exceed USDOE's low-level burial grounds, and is not located above drinkable ground water."¹⁶³ As a condition of Utah's landfill permit, disposal charges include the costs of long-term monitoring and closure.¹⁶⁴

Despite the existence of the Utah landfill, USDOE still insists on using the unlined soil trenches at Hanford for disposal.¹⁶⁵ The Hanford trenches also

lack leachate collection; are not properly capped after waste is dumped in them; have no independent regulatory oversight and quality assurance to prevent illegal disposal of unknown or hazardous wastes; do not have a legally compliant ground water and soil column monitoring system; [and] are releasing hazardous substances to [the environment].¹⁶⁶

Finally, the "offsite generators pay less than 50% of the current costs of disposal, as estimated by USDOE's own studies, and none of the long-term, fully burdened costs of disposal for monitoring, remediation, and closure."¹⁶⁷

The Hanford Site already bears too much of the burden for the storage of nuclear waste.¹⁶⁸ Almost 60% of the United States'

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ *Id.*

¹⁶⁴ *Id.*

¹⁶⁵ *See id.*

¹⁶⁶ *RD-HSWEIS*, *supra* note 47, at 18.

¹⁶⁷ *Id.*

¹⁶⁸ GOVERNMENT ACCOUNTABILITY PROJECT, BRIDGING THE GAP: HANFORD'S "KNOWING ENDANGERMENT" 4 (Fall 2003), available at <http://www.whistleblower.org/uploads/BridgeGapFall2003.pdf>.

defensive HLW, over 80% of USDOE's highly radioactive reactor fuel, and more than 60% of USDOE's plutonium-contaminated transuranic waste are already stored at Hanford.¹⁶⁹

In December of 2002, a deal was struck between USDOE and the State of Washington in which Washington agreed not to block the transportation of 170 barrels of waste from Ohio and California to the Hanford Site.¹⁷⁰ Washington believed that it was only accepting this waste "temporarily, until the waste [could] be sent to an underground salt mine in New Mexico for permanent burial."¹⁷¹ Washington's main concern was USDOE's plans for cleaning up the 78,000 barrels of waste that were already stored in Hanford's trenches.¹⁷²

In exchange, USDOE promised to establish a time table by March 1, 2003.¹⁷³ Milestones were to be created and a seven-year time table was supposed to outline the steps USDOE would utilize to facilitate the disposal of the 78,000 barrels of waste at Hanford.¹⁷⁴ USDOE and Washington agreed to formulate a "compliance schedule for the retrieval designation, treatment, and ultimate transport of this material for disposal at the Waste Isolation Pilot Plant (WIPP), a repository near Carlsbad, New Mexico constructed specifically for the deep geological disposal of transuranic waste."¹⁷⁵ USDOE was reluctant to set a timetable but it did make an empty promise that for every barrel shipped to the Hanford Site, two barrels from Hanford would be transported to New Mexico for permanent burial.¹⁷⁶

Washington fulfilled its promise to USDOE, accepting approximately fifty barrels of waste from Ohio and California between

¹⁶⁹ *Id.*

¹⁷⁰ Craig Welch & Andrew Garber, *State Sues Over Waste Shipments: Federal Actions at Hanford are Targeted*, SEATTLE TIMES, Mar. 5, 2003, at B2.

¹⁷¹ *Id.*

¹⁷² *See id.*

¹⁷³ Editorial, *Energy's Broken Promise and a Ripe Lawsuit*, SEATTLE TIMES, Mar. 10, 2003, at B2 [hereinafter *Energy's Broken Promise*]; *see also* Editorial, *Following the Right Course in Hanford*, SEATTLE TIMES, Dec. 19, 2002, at B6.

¹⁷⁴ *See Energy's Broken Promise*, *supra* note 173.

¹⁷⁵ Complaint, *supra* note 24, at 8.

¹⁷⁶ Welch & Garber, *supra* note 170.

December 2002 and March 2003.¹⁷⁷ Not surprisingly, USDOE failed to uphold its end of the agreement—no commitment to a specific timetable to facilitate the disposal of waste at Hanford was established.¹⁷⁸ USDOE also claimed it would not be subject to penalties if a deadline was not met.¹⁷⁹ The spokesman for GAP, Tom Carpenter, stated that “[t]rucking in off-site nuclear waste at Hanford is the Bush administration’s signal that it intends Hanford to become . . . another national nuclear-waste dump for time immemorial.”¹⁸⁰

B. The Court Weighs In: Washington Takes On the Federal Government

When USDOE again reneged on a promise it had made with WDOE, the state finally could not take the deceit anymore. On March 4, 2003, Washington filed a lawsuit against the federal government seeking a permanent injunction against the transportation of waste to Hanford until USDOE made a serious commitment to dealing with the 78,000 barrels of waste that Hanford already stored.¹⁸¹ The lawsuit was based on the idea that Washington, under Superfund, had a right to stop shipments of nuclear waste to the Hanford Site because it did not satisfy the requisite environmental standards.¹⁸²

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

¹⁷⁹ *Washington Files Suit Against DOE to Halt TRU Shipments to Hanford*, 42 ENERGY COMMUNITIES ALLIANCE BULLETIN, Mar. 2003, at 7, available at <http://www.energyca.org/PDF/March03Bulletin.pdf>.

¹⁸⁰ Welch & Garber, *supra* note 170.

¹⁸¹ *Id.*; see also Complaint, *supra* note 24, at 2. Washington sought in its complaint to prohibit USDOE “from shipping any additional such wastes to Hanford until DOE 1) has fully complied with NEPA, 2) has undertaken a decision making process based on current facts and circumstances, in full compliance with the Administrative Procedure Act (APA), and 3) has complied with the HWMA.” *Id.*

¹⁸² Annette Cary, *Initiative 297 Foes Believe It Will Pass*, TRI-CITY HERALD, Oct. 28, 2004. However, “[o]pponents of the initiative believe that forbidding the federal government to bring waste to Hanford violates the Atomic Energy Act and interstate commerce laws.” *Id.*

Essentially, the State claimed that USDOE “had not adequately evaluated the options, effects and risks of handling the imported waste at Hanford.”¹⁸³ U.S. District Court Judge Alan McDonald temporarily banned waste imports because he did not feel that USDOE had fully assessed the possible risks to Hanford or Washington along the truck routes.¹⁸⁴ For example, 70,000 truckloads travel along Washington highways¹⁸⁵ and in doing so become “dirty bombs,” threatening the lives of citizens all over Washington.¹⁸⁶

Judge McDonald felt that the plaintiffs had demonstrated a “serious question” regarding a 1997 nationwide study to compose an Environmental Impact Statement (“EIS”) and whether USDOE had a legal commitment to construct an EIS on the extent of the risk of adding waste to Hanford.¹⁸⁷

Under the Freedom of Information Act, HANW was able to obtain documents that demonstrated:

¹⁸³ Linda Ashton, *Judge Pressed to Block Waste Shipments*, SEATTLE TIMES, May 3, 2003, at B3.

¹⁸⁴ Press Release, Heart of America Northwest, Federal Court Orders Halt to Bush Administration Plan to Truck Highly Radioactive Plutonium Waste to Hanford (May 13, 2003), available at http://www.heartofamericanorthwest.org/newsreleases/news_release_may_13.doc [hereinafter Federal Court Orders Halt].

¹⁸⁵ *Protect Washington—Stop Nuclear Waste Dumping: Initiative 297* (Heart of America Northwest, Seattle, Wash.), 2003, at 2, available at http://www.heartofamericanorthwest.org/protect_washington/protectwa_web.pdf [hereinafter *Protect Washington*].

¹⁸⁶ Paul Scukovsky, *U.S. to Negotiate Faster Cleanup of Hanford Waste*, SEATTLE POST-INTELLIGENCER, Dec. 17, 2002, at A1. The trucks would be like “dirty bombs[,] . . . truckloads . . . with extremely high radiation levels traveling through Portland, the Columbia Gorge and mountain passes.” *Id.* (quoting Gerald Pollet); see also Marvin Resnikoff & Amanda Schneider, *Unnecessary Risks: Trucking the Nation’s Radioactive Waste to Hanford* (Heart of America Northwest, Seattle, Wash.), Oct. 2004, available at http://www.heartofamerica.northwest.org/index_page.html (discussing the potential shipments to Hanford and how dangerous the truck routes are when considering accidents and economic impacts).

¹⁸⁷ Federal Court Orders Halt, *supra* note 184.

USDOE officials attempted to keep their plans to ship TRU to Hanford from being disclosed to citizens' groups or the State; . . . USDOE attempted to piecemeal the decision to avoid disclosing that it would ship very large amounts of TRU to Hanford from many sites under plans approved by top USDOE officials; . . . USDOE officials said that Hanford would make receipt of Remote Handled TRU a "higher priority" than Hanford Clean-Up Work. . . . Storage of TRU at Hanford was known by USDOE officials to violate hazardous waste laws; and an earthquake would release Plutonium from storage buildings causing 30 to 200 offsite fatal cancers.¹⁸⁸

USDOE claimed in defense that while the waste was stored at Hanford it was exempt from state and federal hazardous waste laws.¹⁸⁹ According to Colleen French, a USDOE representative, "it's irresponsible to drum up concerns about transportation of waste."¹⁹⁰ Judge McDonald felt differently, stating that USDOE was trying "to avoid disclosing and considering the total amount of TRU waste it intends to ship to Hanford."¹⁹¹

VI. DAVID AND GOLIATH: WASHINGTON'S CITIZENS GROUPS FIGHT BACK

A. *I-297: Finding a Purpose*

Washington's citizens realized that in order to protect their own welfare and the welfare of their families, they could no longer wait for their state's government and USDOE to negotiate another "milestone" that will be ignored. Therefore, on June 9, 2003,

¹⁸⁸ *Id.*

¹⁸⁹ Welch & Garber, *supra* note 170.

¹⁹⁰ Cary, *supra* note 182.

¹⁹¹ Federal Court Orders Halt, *supra* note 184.

Protect Washington, a coalition of citizens groups, filed I-297.¹⁹² The initiative's purpose is to:

prohibit sites at which mixed radioactive and hazardous wastes have contaminated or threaten to contaminate the environment, such as at the Hanford Nuclear Reservation, from adding more waste that is not generated from the cleanup of the site until such waste on-site has been cleaned up and is stored, treated, or disposed of in compliance with all state and federal environment laws.¹⁹³

I-297 will be known as the Cleanup Priority Act ("CPA") if it is passed into law¹⁹⁴ and added as a new chapter to Title 70 of the Washington Revised Code.¹⁹⁵ Though I-297 would apply to many of the facilities that exist in Washington, it was the decision by USDOE to double the amount of waste at the Hanford Site that prompted citizens groups to take action.¹⁹⁶ I-297 "is the ultimate citizen sacrifice of time and effort to change state policy and to require that laws be followed, when all other avenues have failed . . . [i]t will make state policy the principle we all learned in kindergarten: you can't keep adding to your mess until you've cleaned up."¹⁹⁷ The initiative mainly prohibits importing additional

¹⁹² Press Release, Heart of America Northwest, Citizen Groups File Ballot Initiative That Will Stop Shipments of Radioactive Nuclear Waste to Hanford (June 9, 2003), available at <http://www.heartofamericanorthwest.org/PRCitizensFile030609.htm> [hereinafter Ballot Initiative].

¹⁹³ Initiative to the Leg. § 1. (Olympia, Wash., submitted Jan. 29, 2004), available at <http://www.secstate.wa.gov/elections/initiatives/text/i297.pdf> [hereinafter I-297].

¹⁹⁴ *Id.* § 12.

¹⁹⁵ *Id.* § 14.

¹⁹⁶ Ballot Initiative, *supra* note 192; see also Pollet, *supra* note 5, at 32 (explaining how the failure of federal and state departments to meet any of their commitments regarding cleanup of the Hanford Site prompted public interest groups to draft and distribute I-297).

¹⁹⁷ Pollet, *supra* note 5, at 32; see also *Initiatives and Referendums*, Washington Voter, at <http://www.washingtonvoter.org/default.asp?id=107> (last visited Mar. 31, 2005) [hereinafter Washington Voter]. Under Washington's Constitution, any

hazardous waste to a site like Hanford until the government is able to fund and complete the remediation of the massive amounts of radioactive and hazardous waste already present at the site.¹⁹⁸ Tom Carpenter, previously mentioned as the director of the GAP nuclear whistleblower programs,¹⁹⁹ states, “[a]ccepting more dangerous radioactive waste from other states that will add to our already over-capacity site, make our cleanup problems worse and expose Washington citizens to unacceptable risks is just plain wrong. We just won’t accept it.”²⁰⁰

B. I-297: What Does It Promise to the Citizens of Washington?

First and foremost, I-297 ensures that Washington will no longer be used as USDOE’s national radioactive waste dump.²⁰¹ Specifically, I-297 mandates that WDOE will utilize its authority in the regulation of radioactive and nuclear mixed waste “to prevent the import of waste from other sites across the country until the waste at Hanford is cleaned up and stored, treated or disposed of in compliance with all state and federal laws . . . NO ADDITIONAL WASTE UNTIL HANFORD IS CLEANED UP.”²⁰² I-297 will also strengthen the enforcement capacity of TPA by mandating that the first priority of each applicable site will be cleaned up.²⁰³

citizen with the right to vote can invoke the legislative powers of initiative and referendum. Accordingly, on behalf of himself or a named organization, the registered voter can propose to either establish a new state law or “amend or repeal an existing statute.” *Id.* Voters must sign the initiative after reviewing its complete text. To be included on the ballot or reviewed by the legislature, enough voters have to sign a minimum number “equal to eight percent of the number of votes cast for the office of governor at the last regular gubernatorial election.” *Id.*

¹⁹⁸ See Ballot Initiative, *supra* note 192.

¹⁹⁹ National Radioactive Waste Dump, *supra* note 1.

²⁰⁰ Ballot Initiative, *supra* note 192.

²⁰¹ See *id.*; National Radioactive Waste Dump, *supra* note 1.

²⁰² Betty Tabbutt, *League Board Votes to Support Initiative 297 Concerning Mixed Radioactive and Hazardous Waste*, 45 WASH. ST. VOTER 5 (2003), available at http://www.lwwwa.org/voter_newsletter/Vtr45-2fall03.pdf.

²⁰³ *Protect Washington*, *supra* note 185, at 2; see also I-297, *supra* note 193, § 2(2) (“Cleanup is the state of Washington’s top priority at sites with hazardous

I-297 mandates that permits for mixed waste storage, treatment, and disposal facilities, at which any mixed wastes have been released into the environment, shall specify that the owner or operator of the site will provide funding for an advisory board that comprehensively represents the public.²⁰⁴ I-297 also provides a definition of "mixed waste":

any hazardous substance or dangerous or extremely hazardous waste that contains both a nonradioactive hazardous component and a radioactive component, including any such substances that *have been released* to the environment, or *pose a threat of future release*, in a manner that may expose persons or the environment to either the radioactive or radioactive hazardous substances.²⁰⁵

This definition of mixed waste is included to ensure that the cumulative risks associated with mixed wastes stored at Hanford will be scrutinized.²⁰⁶ Mixed wastes are further discouraged from being stored at the Hanford Site through I-297's creation and implementation of a mixed waste surcharge.²⁰⁷ The mixed waste surcharge will be incurred, in addition to an already established service charge, by applicants or permit holders for mixed waste facilities in Washington.²⁰⁸ The money received from the mixed

waste contamination that threatens our rivers, ground water, environment, and health. Adding more waste to contaminated sites undermines the cleanup of those sites.").

²⁰⁴ I-297, *supra* note 193, § 9(1).

²⁰⁵ *Id.* § 3(9) (emphasis added).

²⁰⁶ *Id.*

²⁰⁷ *Id.* § 3(10).

²⁰⁸ *Id.* § 9(4)(b).

This mixed waste surcharge shall be no less than fifteen one-hundredths of one percent of the first two hundred million dollars of annual site budget for all related clean-up activities, of which five one hundredths of one percent shall be available for grants to local government. The mixed waste surcharge for public and local government participation grants shall be five one-hundredths of one percent of the portion of any estimated

waste surcharge will be deposited in a state toxics control account.²⁰⁹ From this account, WDOE will issue local government and public participation grants to be used for "(i) assistance in public review of mixed waste permit, closure, and cleanup decisions; and, (ii) review of, and public comment on, site budgets, compliance costs and funding priorities."²¹⁰

As a part of CPA, the unlined trenches will no longer be used to store mixed LLW.²¹¹ The State of Washington already prohibits the addition of waste to unlined trenches containing mixed radioactive and hazardous wastes.²¹² However, USDOE has consistently ignored state law, believing it is "exempt from regulation of its deadly radioactive wastes being dumped in unlined soil trenches (some of which are longer than 3 football fields)."²¹³

In locations where the disposal of mixed waste is reasonably perceived by WDOE to have occurred, Section Six of I-297 expressly orders WDOE to contact site owners and operators of these landfills and waste storage facilities that have unlined soil trenches within sixty days of the commencement of CPA.²¹⁴ In doing so, WDOE is to order these site owners or operators to first desist from the disposal of any waste in these unlined trenches within thirty days of WDOE's order.²¹⁵ The site owners and operators are also required to begin an inquiry into the actual components of the unlined trenches, investigating all potentially hazardous materials present.²¹⁶ After identifying the substances in the unlined trenches, the occurrence or potential occurrence of a

annual site clean-up budget exceeding two hundred million dollars.

Id.

²⁰⁹ I-297, *supra* note 193, § 9(4)(b).

²¹⁰ *Id.* § 9(4)(a).

²¹¹ Tabbutt, *supra* note 202, at 5.

²¹² *See* I-297, *supra* note 193, § 2(5)(b).

²¹³ *Protect Washington*, *supra* note 185, at 2; *see also* Ballot Initiative, *supra* note 192. USDOE's indifference resulted in "a 180 square-mile underground lake of lethal radioactive water [that] threatens the Columbia River and drinking water sources." *Id.*

²¹⁴ I-297, *supra* note 193, § 6(1)(a).

²¹⁵ *Id.* § 6(1)(a)(i).

²¹⁶ *Id.* § 6(1)(a)(ii).

release of hazardous materials must also be investigated.²¹⁷ “A plan for waste retrieval, treatment, closure, and monitoring for the unlined soil trenches” must also be created where the guidelines for a schedule are based on anticipated leakage of waste.²¹⁸ Finally, a ground water and soil column oversight system must be established within two years of WDOE’s order to cease disposal in all unlined trenches.²¹⁹ Section Six of I-297 also includes a provision that makes the expansion of the trenches illegal where “there is a reasonable basis to believe mixed or hazardous wastes are buried or stored that have not been fully characterized to conclusively determine that no mixed or hazardous wastes are present.”²²⁰

C. *Going to the Polls*

In Washington, an initiative like I-297 is submitted to the legislature for its regular session in January.²²¹ Voters submitted I-297 for the January 2004 session, allowing the legislature to proceed with one of three options.²²² First, the legislature could have adopted I-297, whereby it would become the Cleanup Priority Act without being sent to the ballot.²²³ Additionally, the legislature could have either ignored or rejected I-297, forcing it to appear as a measure on the November election’s general ballot.²²⁴ The third option was for the legislature to propose an “alternative version” of I-297, whereby both proposals would be present on the November 2004 ballot.²²⁵

²¹⁷ *Id.* § 6(1)(a)(iii).

²¹⁸ *Id.* § 6(1)(a)(iv).

²¹⁹ *Id.* § 6(1)(a)(v).

²²⁰ I-297, *supra* note 193, § 6(b)(2)(a).

²²¹ Washington Voter, *supra* note 197.

²²² Press Release, Washington Secretary of State, Initiative to the Legislature 297 Certified (Jan. 29, 2004), available at http://www.secstate.wa.gov/office/news.aspx?news_id=232 [hereinafter Initiative Certified].

²²³ *Id.*; see also Washington Voter, *supra* note 197 (“[T]he measure then becomes a law which cannot be amended for two years.”).

²²⁴ Initiative Certified, *supra* note 222.

²²⁵ *Id.*

The legislature did not act on I-297.²²⁶ However, the citizens groups who submitted I-297 preferred the decision to be made by the people anyway.²²⁷ The official summary of I-297 on the November ballot was:

This measure would establish additional requirements for regulating mixed waste (radioactive and nonradioactive hazardous substances) sites, such as the Hanford Nuclear Reservation. The measure would set standards for cleanup and granting permits, would prohibit waste disposal in unlined soil trenches, and require cleanup of tank leaks. Permits would not allow adding more wastes to facilities until existing contamination was cleaned up. Additional public participation would be provided and enforcement through citizen lawsuits would be authorized.²²⁸

There was a concern, however, that Hanford contractors and USDOE would try to confuse Washington voters by passing an alternative to I-297.²²⁹ Obviously, the number of people who read and signed I-297 had not swayed USDOE from trying to deceive the public.

The Bush administration was also no longer able to dodge the bullet of Hanford Site remediation. Washington State Senator Adam Kline stated that I-297 had such a large impact on politics that every time President Bush campaigned in the Northwest, he was questioned about

²²⁶ Chris Mulick, *Hanford Cleanup Advocates Gather 282,000 Signatures*, TRI-CITY HERALD, Jan. 3, 2004 ("I'm somewhat embarrassed some of our legislators have not endorsed this [I-297]' said state Sen. Adam Kline, a Seattle Democrat who argued that the measure would boost the Tri-City economy.").

²²⁷ National Radioactive Waste Dump, *supra* note 1 (noting the potential impact of I-297 on the 2004 presidential election in Washington and Oregon).

²²⁸ *State Vote 2004: Election Profile*, National Conference of State Legislatures, available at <http://www.ncsl.org/ncsl/db/elect98/profile.cfm?year=2004&state=WA> (last visited Mar. 31, 2005).

²²⁹ Rebecca Gold, *Signatures Submitted to Halt Hanford Nuclear Shipments*, SEATTLE TIMES, Jan. 3, 2004.

why he wants to use our region as a national radioactive waste dump. Where candidates stand on Initiative 297 brings home to people the impact of the choices they make on Election Day Voters see the real impact to their families when they think of 70,000 truckloads of radioactive waste heading through our communities.²³⁰

D. Voters Say "Yes" to I-297 and USDOE Fights Back

Senator Kline was right—the voters of Washington ignored the empty promises of the Bush administration in November 2004 and voted overwhelmingly in favor of I-297; all but two counties in Washington voted to pass I-297 into law.²³¹ I-297 was passed with 1,812,581 votes, representing 69.09% of all those who voted.²³² Gerald Pollet, the chief sponsor of I-297 and the Executive Director of HANW, stated that the passage of I-297 shows that “[i]t’s clear that the rule of the people of the state of Washington is that Hanford needs to be cleaned up before more waste can be dumped there.”²³³

However, the federal government was not about to implement the wishes of Washington’s citizens without a fight. It has filed a lawsuit against the state, alleging that CPA (formerly I-297), was unconstitutional and preempted by federal law.²³⁴ As such, there has been no implementation of CPA since it was enacted as law in December 2004.²³⁵ However, Judge McDonald declared that the

²³⁰ National Radioactive Waste, *supra* note 1.

²³¹ *Washington State 2004 General Elections*, Washington Secretary of State, at <http://vote.wa.gov/general/measures.aspx?a=297> (last visited Apr. 1, 2005) (showing the election results for I-297 by county).

²³² *Id.*

²³³ *Future of Hanford Initiative in Doubt Despite Voters' Approval* (KOMO 1000 News, Seattle, Wash.), Nov. 3, 2004, at <http://www.komotv.com/news/story.asp?ID=33785>.

²³⁴ Annette Cary, *Judge Says Hanford Cleanup Initiative Will Not Be Enforced*, TRI-CITY HERALD, Feb. 9, 2005.

²³⁵ *Id.*

decision about I-297 will be made by Washington's Supreme Court, rather than a federal court,²³⁶ stating that

[t]his court believes the CPA is susceptible of an interpretation that would avoid or substantially modify the federal constitutional challenge. Because of its very recent enactment, the CPA has not been subject to any interpretation by the courts of the State of Washington. Accordingly, it is respectfully requested that the Washington Supreme Court consider and answer (the questions on the meaning of the Act proposed by the Washington Attorney General).²³⁷

The decision by Judge McDonald "is a significant victory for the voters of Washington State, a significant victory for Hanford Clean-Up, and a significant victory for the principle that a state's highest court should decide what the state's voters intended when they pass an initiative."²³⁸ Despite Washington's overwhelming support of CPA, its fate remains unknown for the time being.

CONCLUSION: WHO'S GOT THE POWER?

I-297, now enacted as law, prevents the federal government from using the Hanford Site as a national radioactive waste dump. As the November general election results demonstrate, the citizens of the State of Washington will no longer be silenced with empty promises from USDOE about cleanup and remediation at the Hanford Site. Though the federal government is trying to prevent the implementation of CPA, the citizens of Washington will not be silenced again.

²³⁶ Order Granting Motion to Certify, *Inter Alia*, No. CV-04-5128-AAM, United States v. Hoffman et al. (E.D.C. Wash. Feb. 8, 2005).

²³⁷ Press Release, Heart of America Northwest, Washington Supreme Court Will Decide Meaning of Initiative 297, Not a Federal Court (Feb. 8, 2005), available at <http://www.hoanw.org/pdf/020805.pdf>.

²³⁸ *Id.* (quoting Gerald Pollet, the chair of the Yes on I-297: Protect Washington Committee).

CPA's inclusion of mandatory public oversight will make the owners and operators of places like the Hanford Site accountable, both financially and operationally, for any negligence in the treatment or storage of mixed wastes—past, present, or future. With the approval of I-297, power is restored to Washington's citizens, as CPA "puts control back into the hands of the people of Washington to stop more deadly nuclear waste shipments to Hanford and protect our communities and our children from more harm."²³⁹ CPA will finally provide Washington's citizens with the security of knowing that each time they take a shower, drink a glass of water, or simply breathe, they are not being contaminated by the mess left behind by the United States government.

²³⁹ Ballot Initiative, *supra* note 192.