



STATE OF WASHINGTON

November 24, 2008

Samuel W. Bodman, Secretary
United States Department of Energy
1000 Independence Avenue
Washington, D.C. 20585

RE: Notice of Intent to Sue for Violations of the Hanford Federal Facility Agreement and Consent Order

Dear Mr. Bodman:

The State of Washington (State), on behalf of its citizens and the Washington State Department of Ecology (Ecology), intends to file suit against the United States Department of Energy (Energy or DOE) for: (1) failing to comply with milestones, established under the Hanford Federal Facility Agreement and Consent Order (Order) with respect to tank waste treatment and tank waste retrieval; and (2) failing to comply with the hazardous waste regulations that underlie these Order requirements. This letter serves as notice of the State's intention to sue for the purposes of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6972(a)(1)(A).

Although you are familiar with the background of the Hanford site, we believe it would be useful to summarize some key aspects here. Energy's Hanford Reservation near Richland, Washington was created in 1943 to produce plutonium and uranium for use in nuclear weapons. Decades of this activity generated many millions of gallons of mixed hazardous and highly radioactive wastes that continue to be stored in Hanford's underground waste tanks. The resulting mixture is subject to regulation under the state's Hazardous Waste Management Act (HWMA), Chapter 70.105 RCW. Ecology has been authorized by the U.S. Environmental Protection Agency (EPA) to operate its hazardous waste program in lieu of the federal hazardous waste program. Under the state's program, Ecology may issue regulatory orders, either unilaterally or with the consent of the recipient, requiring that violations of the state hazardous waste requirements be corrected.

During the 1980s, the State grew increasingly concerned that Hanford's single-shell tanks (SSTs) did not comply with hazardous waste standards for tanks. These compliance issues are discussed in further detail below. In 1988, the State, Energy, and EPA began extensive negotiations that



culminated in execution of the Order on May 15, 1989. By signing the Order, and conditioned on Energy's compliance with the Order, the State gave up certain rights, including the right to sue Energy to demand immediate compliance with all hazardous waste requirements addressed in the Order. The State believed in 1989 that Hanford's compliance problems could more effectively be addressed through a consent order than through litigation. As explained below, the State no longer believes that all compliance matters can be resolved by mutual agreement of the three parties, without judicial oversight.

Hanford's mixed hazardous and radioactive tank waste threatens the health and well-being of the citizens of Washington and Oregon. We are particularly concerned about the dire consequences this waste poses for the Columbia River. The river is more than just a symbol of the Northwest. The Columbia provides water for agriculture, homes, and industries. It serves as a vital transportation corridor and a focal point for recreation. It is a significant source of energy for the Western United States. The Hanford Reach of the Columbia is critical to the survival of salmon and it is a critical resource for tribal nations.

Given these interests, we are compelled to file suit against Energy in reaction to missed and certain-to-be-missed Order milestones related to tank waste treatment and tank waste retrieval, as well as to enforce the hazardous waste management regulations that underlie those Order milestones. We will address in turn the issues of (1) tank waste treatment; and (2) tank waste retrieval.

Tank Waste Treatment

All of Hanford's 53 million gallons of high-level tank waste is "land disposal restricted" waste under RCRA and the HWMA. It is being stored in violation of the HWMA's prohibition on storing land disposal restricted waste under WAC 173-303-140(2)(b) (incorporating 40 C.F.R. § 268.50). Until it is treated into a stable form that is safe for disposal, it will continue to be stored in violation of law and continue to pose an environmental threat at Hanford.

There is currently no treatment capacity for this waste at Hanford. When the Order was signed in 1989, Energy committed to build a vitrification plant (also referred to as the Waste Treatment Plant or WTP) that would begin treating the waste stored in Hanford's double-shell tanks by 1999. This effort was important not just for converting tank waste into a safer form, but also because it would free up limited storage capacity in Hanford's existing double-shell tanks, thus allowing waste retrieval from the SSTs to move forward.

Five years later (1994), on the promise that the vitrification strategy would be expanded to include all of Hanford's tank waste, this start date was renegotiated and extended to 2004. Just two years after this renegotiation (1996), Energy adopted a "privatization" concept for building and operating the vitrification complex. Accommodating this change, the State agreed to extend the milestone for starting full-scale operations to 2008.

In 2000, after Energy abandoned its privatization plan, the State yet again agreed to another request from Energy to extend the Waste Treatment Plant milestones. The start date for full-scale operations was again extended, this time to 2011. In addition, in 2003, the State agreed to allow Energy to move forward with testing alternative waste form technologies to supplement Waste Treatment Plant capacity, as a possible alternative to constructing a second low-activity waste vitrification facility. Without this supplemental treatment capacity, and relying on the WTP alone, Energy's own planning documents indicate it will take until at least 2079 to treat all of Hanford's tank waste.

Construction on the WTP began in July 2002. The project was beset with problems from the start. The majority of factors contributing to these problems have been within Energy's control. These factors include: poor project management; poor contractor oversight; failure to resolve technical issues, such as hydrogen gas buildup and pulse jet mixer problems; and failure to plan for, and then promptly address, seismic issues identified as early as 2002. As a result of Energy's actions and inaction, the waste treatment project is years behind schedule and billions of dollars over budget.

All of the current Order milestones relating to tank waste treatment are beyond recovery. Energy has already missed the following milestones related to tank waste treatment:

- M-062-08: By June 30, 2006, submit a Hanford Tank Waste Supplemental Treatment Technologies Report on alternative waste forms.
- M-062-11: By June 30, 2007, submit final Hanford tank waste treatment baseline.
- M-062-07B: By December 31, 2007, complete assembly of the low-activity waste melter; move high-level waste melter #1 to high-level waste building.

Energy submitted no requests for extension prior to missing these milestones. Therefore, for the above milestones, Energy has failed to comply with its legal obligations under the Order and is in violation of the Order.

In addition, based on its lack of progress and its own admissions, Energy will also miss the following key tank waste treatment milestones. These milestones are subject to "anticipatory enforcement" language in the Order providing that "Compliance . . . is defined as the performance of sufficient work to assure with reasonable certainty that DOE will accomplish series M-62 major and interim milestone requirements":

- M-062-09: By February 28, 2009, start "cold commissioning" of WTP (i.e., first feed of stimulant to process building).

- M-062-10: By January 31, 2011, complete “hot commissioning” of WTP (i.e., achieve “sustained throughput”; demonstrate availability of WTP complex to achieve M-062-00A).
- M-062-00A: By February 28, 2018, complete tank waste pre-treatment and vitrification of no less than 10% (by volume) and 25% (by activity).
- M-062-00: By December 31, 2028, complete treatment of all tank waste.

Energy currently indicates it can begin Waste Treatment Plant operations in 2019, some eight years beyond the current Order milestone and twenty years beyond the original start date negotiated in the Order. Energy has not indicated a date by which it expects to have supplemental treatment capacity available to augment the WTP. Energy has similarly not officially indicated an end date by which it expects to complete the treatment of all Hanford tank waste, although Energy has informally indicated that it believes it is possible to complete all waste treatment by 2047. However, we have serious doubts whether this timeframe is achievable if Energy continues on its path of poor planning, poor management, and failure to seek sufficient funding to keep the project on track.

In the meantime, without any treatment capacity available, high-level waste has remained moribund in Hanford’s tank systems. Currently, some 23 million gallons of high-level waste is being stored in 28 double-shell tanks (DSTs). These tanks are nearly full, with only three million gallons of additional space currently available to hold waste retrieved from SSTs. As the timeline for treating Hanford’s waste becomes further extended, these tanks themselves will approach the end of their design lives.

The remainder of the tank waste (approximately 30 million gallons) is being stored in 149 SSTs. The State’s concerns with this storage are described below.

Tank Waste Retrieval and Tank Closure:

All of Hanford’s single-shell tanks (SSTs) are now decades beyond their original twenty-to-thirty year design lives. None come close to meeting state requirements for designing and operating hazardous waste storage tanks. Specifically, the SSTs lack structural integrity; lack secondary containment; and lack leak detection as required by WAC 173-303-400(3) (incorporating by reference 40 C.F.R. § 265.193(a)(3), (b), and (c)). All 149 SSTs have been identified to the State as “unfit for use” by Energy itself. *See* Letter dated June 27, 2002, from James E. Rasmussen, DOE Office of River Protection, to Michael Wilson, Department of Ecology. This triggers an obligation under WAC 173-303-400(3) (incorporating by reference 40 C.F.R. § 265.196) to remove the waste from the tanks and close the tanks pursuant to state standards.

At least sixty-seven of the SSTs have already leaked, releasing at least one million gallons of waste to the soil. This released waste includes hazardous waste constituents such as chromium, numerous other heavy metals, and volatile organic compounds, all of which are harmful to human health or the environment. In addition, the tank waste contains highly radioactive, long-lived radionuclides that, once released, will persist in the environment for tens of thousands of years. Energy's failure to comply with hazardous waste tank standards thus has the effect of unleashing other, concomitant threats to human health and the environment.

In November 1997 Energy confirmed that contamination from leaking tanks had reached ground water, more than 200 feet below the surface. Once contaminants released from the tank farms reach the groundwater, they will commingle with already-existing plumes and will migrate towards the Columbia River. Additional releases from these tank farms will only worsen the condition and may well create a situation beyond the scope of any future mitigation. This makes it critically important to act now to prevent any further releases to the environment.

When the Order was signed in 1989, Energy committed to retrieve tank waste from the SSTs and close the SST system in compliance with state hazardous waste standards. These milestones have been renegotiated several times since 1989 to accommodate different strategies for tank retrieval. Despite the State's willingness over time to renegotiate these milestones, as of the date of this letter, Energy has already missed the following tank waste retrieval and closure milestones:

- M-045-00B: By September 30, 2006, complete "near term" SST waste retrieval from C-Farm (16 tanks). (To date, only five C-Farm tanks have been retrieved, with Tank C-106 in a waiver process.)
- M-045-05A: By March 31, 2007, complete waste retrieval from tank S-102. (To date, retrieval of tank S-102 is not completed.)

Energy submitted no requests for extension prior to missing these milestones. Therefore, for the above milestones, Energy has failed to comply with its legal obligations under the Order and is in violation of the Order.

In addition, based on its lack of progress and its own admissions, Energy will miss the following key tank waste retrieval milestone. This milestone is subject to "anticipatory enforcement" language in the Order providing that "Compliance . . . is defined as the performance of sufficient work to assure with reasonable certainty that DOE will accomplish series M-45 major and interim milestone requirements":

- M-045-05: By September 30, 2018, complete waste retrieval from all SSTs.

Under Energy's current planning, there is no defined (or even projected) end date for SST retrievals. Energy's current five-year plan provides for only one to two retrievals per year until the WTP begins treating waste (Energy currently assumes that the WTP will begin treating waste in 2019, despite a current TPA deadline to begin treating waste by 2011). Energy has informally indicated that it believes it is possible to complete all SST retrievals by 2040. However, we have serious doubts whether this timeframe is achievable if Energy continues on its path of poor planning, poor management, and failure to seek sufficient funding to keep retrievals on track.

On Energy's present course, it is inevitable that additional tanks will leak and release more mixed hazardous and highly radioactive waste to the soil, the ground water, and eventually the Columbia River. Even SSTs presumed to be "sound" today could, in fact, leak when retrieved. Tank integrity could become compromised to the point that retrieval is no longer possible. This potential may become exacerbated by an intervening event such as an earthquake. This situation will only worsen as retrievals are further delayed. Delays in waste retrieval today will make future retrieval increasingly difficult, costly, and risky. The window for retrieving waste is closing.

This situation is untenable. Energy has violated the Order and is violating the hazardous waste regulations on which the Order is based. The citizens of Washington cannot accept the position in which they have been put by Energy's repeated failures to comply with the Order, and the human health and environmental risks posed by those failures.

Since the spring of 2007, we have attempted to negotiate a resolution to this matter that would allow us to reach agreement without the State first having to file a lawsuit. The State has now concluded that Energy will only treat and retrieve tank waste in a timely manner if a court intervenes, establishes a schedule, and maintains oversight of the work until it is completed. We are filing suit to achieve this result. We intend to seek a judicial order that: (1) compels Energy to move with all deliberate speed to construct, operate, and maintain the capacity to treat all of Hanford's tank waste into a stable form, safe for disposal; (2) compels Energy to move with all deliberate speed to retrieve the tank waste now stored in SSTs and place it into compliant storage; and (3) compels Energy to take such other actions as are necessary to mitigate the potential environmental effects of its current delays.

The State's suit will name as defendants the United States Department of Energy, Samuel A. Bodman in his capacity as Secretary of the Department of Energy, Shirley J. Olinger in her capacity as manager of the Office of River Protection, Department of Energy, and David A. Brockman in his capacity as manager of the Richland Operations Office, Department of Energy. Pursuant to 42 U.S.C. § 6972(a)(1)(A), it will cite Energy's failure to comply with the Order's tank waste retrieval and tank waste treatment milestones, as well as the hazardous waste management regulations that underlie those milestones.

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Because the State's complaint will allege violations of RCRA Subchapter III, 60 days' advance notice before filing the complaint is not required. *Covington v. Jefferson County*, 358 F.3d 626 (9th Cir. 2004). A copy of the complaint we will file on November 26, 2008 is enclosed. Counsel for the State in this suit are Rob McKenna, Attorney General; Mary Sue Wilson, Senior Assistant Attorney General; and Andrew A. Fitz, Thomas J. Young, and Allyson Zipp, Assistant Attorneys General. Counsel may be reached at P.O. Box 40117, Olympia, Washington 98504-0117. The telephone number is (360) 586-6770.

Sincerely,



ROB MCKENNA
Attorney General
State of Washington



CHRISTINE O. GREGOIRE
Governor
State of Washington

RMM/COG/jlg

Enclosure

cc: Michael B. Mukasey, Attorney General of the United States
Stephen L. Johnson, Administrator, U.S. E.P.A.
Elin Miller, Regional Administrator, U.S. E.P.A. Region X
Ines Triay, Acting Assistant Secretary for Environmental Management, U.S. D.O.E.
David A. Brockman, Manager, Richland Operations Office
Shirley J. Olinger, Manager, Office of River Protection
James A. McDevitt, U.S. Attorney