

U.S. Department of Energy Hanford Site

Comments in Response to the Climate Commitment Act Program Rule

Chapter 173-446 Washington Administrative Code (WAC)

July 14, 2022

The United States Department of Energy (USDOE) appreciates the opportunity to comment on the State of Washington's proposed Climate Commitment Act (CCA). As will be described in more detail below, USDOE believes its emissions may already be exempt, but asks that an explicit exemption be granted. USDOE is concerned about the impact the CCA will have on its ability to carry out the mission of cleaning up the Hanford Site. While greenhouse gas emissions from Hanford are reasonably low for now, Hanford will begin in 2023 or 2024 to turn the radioactive and hazardous waste now stored in underground tanks into glass. The process will exponentially increase emissions.

In addition to mission impact, there are legal constraints that may impact USDOE's ability to comply with some provisions of the CCA. USDOE is exploring questions related to waiver of sovereign immunity, whether the fees required might be considered taxes, whether use of congressional appropriations is authorized for activities required under the CCA, and others. Given USDOE and the State of Washington's shared commitment to the Hanford mission and to addressing climate change, we hope to work with Ecology to address these matters, but also provide these comments for the rulemaking record.

Background on the Hanford Site

The United States Department of the Army established Hanford in southeastern Washington in the 1940s to produce plutonium for America's nuclear weapons program. The plutonium produced at Hanford was used in one of the atomic weapons that helped end World War II. Production of plutonium, which continued until the 1980s, resulted in significant amounts of radioactive and hazardous waste. Now USDOE is responsible for remediating this waste and restoring the approximately 560 square mile Hanford Site.

During the 1970s and 1980s, Congress passed new environmental laws and the federal government made decisions that resulted in the USDOE, the U.S. Environmental Protection Agency (EPA), and the State of Washington Department of Ecology entering into a comprehensive cleanup and compliance agreement in 1989. The Hanford Federal Facility Agreement and Consent Order, or Tri-Party Agreement (TPA), is an agreement for achieving compliance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) remedial action provisions and with the Resource Conservation and Recovery Act (RCRA) treatment, storage, and disposal unit regulations and corrective action provisions. More specifically, the TPA 1) defines and ranks CERCLA and RCRA cleanup commitments, 2) establishes responsibilities, 3) provides a basis for budgeting, and 4) reflects a concerted goal of achieving full regulatory compliance and remediation, with enforceable milestones in an aggressive manner.

In 2007, it was clear USDOE could not meet some of the deadlines in the TPA. The Tri-Party agencies began negotiations for new milestones for building and running the Waste Treatment Plant; retrieving waste from single-shell tanks; cleaning up contaminated groundwater; and preparing a life-cycle scope, schedule, and cost report. The agencies reached alignment on many issues, but were unable to reach final agreement.

As a result, Washington filed a lawsuit against USDOE after which the TPA agencies restarted negotiations and successfully resolved the remaining issues. The result of their efforts was a Consent Decree issued by the United States District Court, Eastern District of Washington, and changes to the TPA. That Consent Decree was amended in early 2016 by the court and establishes new deadlines for the construction, commissioning, and startup of the Waste Treatment Plant, as well as continued retrieval of waste from Hanford's underground tanks.

There are approximately 56 million gallons of mixed chemical and radioactive waste currently stored in Hanford Site single-shell and double-shell tanks, many of which are well past their design lives. The Waste Treatment Plant and support facilities, at full operational capacity in about 2034, are estimated, under current plans, to emit over 150,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) per year.

Climate Commitment Act and Hanford Greenhouse Gas Emissions

The Hanford Site has an Air Operating Permit, issued by Ecology, pursuant to the Washington Clean Air Act (Chapter 70.94 of the Revised Code of Washington [RCW]) and Operating Permit Regulation (WAC 173-401). The Hanford Site, pursuant to WAC 173-441, reported its greenhouse gas emissions for 2021 were 33,240 MTCO_{2e}. Calendar year 2021 was the first year Hanford exceeded 25,000 MTCO_{2e} and was required to report.

As noted above, the Waste Treatment Plant and its support facilities are currently projected to emit at least 150,000 MTCO_{2e} /year. Given the size, complexity, and scope of this first of its kind multi-billion-dollar mixed radioactive waste facility, it may not be possible from an engineering, design, or operational basis for the plant to meaningfully reduce greenhouse gas emissions without reducing its waste processing capacity. Reducing processing capacity could slow remediation of waste from tanks that are already well past their design lives, as well as jeopardizing the Hanford Site's ability to meet the important deadlines set in the Consent Decree and the TPA. In addition to the Waste Treatment Plant, there are other tank waste remediation and cleanup activities that will likely increase greenhouse gas emissions.

Due to these emissions, the CCA will require Hanford to purchase the allowances or offset emissions by sponsoring projects that permanently reduce carbon pollution. This will require additional congressional appropriations. Given that operating the Waste Treatment Plant will also require significantly higher appropriations from Congress, the likelihood of yet more federal funding for the Hanford Site is uncertain at best. Congressional action may also be necessary to unambiguously waive sovereign immunity and authorize payment of CCA fees, which could be viewed as an unauthorized tax.

Hanford is already taking actions to lower its greenhouse gas emissions. From 2015 through 2021 projects resulting in the reduction of electrical demand are estimated to have saved over 1,900 MTCO_{2e}, equivalent to approximately five percent of non-Waste Treatment Plant-related site carbon emissions. These projects were comprised primarily of lighting upgrades, but also included HVAC upgrades and improvements to the site electrical distribution system. More lighting upgrades identified by facility energy audits could result in savings of 980 MTCO_{2e} or more. Facility energy consumption will decrease with the completion of remediation activities along the Columbia River as early as 2027, which should reduce consumption by over 1,300 MTCO_{2e}.

Hanford is also studying other ways to reduce emissions, including expanded use of vanpools by subsidizing employee costs; purchasing electric fleet vehicles; installing electric vehicle charging stations; and increasing the percentage of teleworkers. Hanford hopes to have a 100 percent zero-emission fleet vehicle acquisitions by 2035, with 100 percent of light-duty vehicle acquisitions being zero-emission by 2027.

Request for Explicit Exemption from the Rule

For the reasons set forth above, the USDOE requests that Hanford's emissions be explicitly exempted from the CCA. Further, two sections of the CCA and its proposed rule support exempting the Hanford Site. The first is that RCW 70A.65.080(7)(f) exempts from the Act "emissions from facilities with North American industry classification system code 92811 (national security)." In at least one data base -- EPA's [Detailed Facility Report | ECHO | US EPA](#) -- Hanford is classified under code 92811. In fact, for much of Hanford's history it was classified under the 92811 code because Hanford performed primarily national security work. While today Hanford's North American industry classification system codes include research and development, hazardous waste treatment, remediation, etc., the Hanford cleanup mission is a continuation of its original defense mission. In fact, Hanford's cleanup is authorized through the National Defense Authorization Act and funded primarily with defense funds. Like those of other national security installations in Washington, Hanford emissions should be explicitly exempted from this program.

The second is found at proposed WAC 173-446-600, Compliance Obligations. Subsection 6(d) allows Ecology to reduce a covered entity's compliance obligations with offset credits, but those credits are capped at specified percentages or limits. The subsection, however, allows Ecology to reduce the limits, i.e., expand offset credits, if a covered entity is likely to "[v]iolate any permits required by any federal, state, or local air pollution control agency where the violation may result in any increase in emissions." This provision recognizes the possibility that there may be competing environmental obligations, which Ecology must weigh. That is most certainly the case at Hanford. Current legal requirements for vitrification of a large fraction of Hanford's tank waste will result in greenhouse gas emissions of at least 150,000 MTCO_{2e} -- and alternatives to vitrification of tank waste would result in hundreds of millions of tons less annually of such emissions.

In addition, there are a variety of legal constraints affecting USDOE's participation in the program. As an initial matter, it does not appear to USDOE that the United States has unequivocally waived sovereign immunity for this program. The federal Clean Air Act at 42

U.S.C. § 7418(a), which generally waives sovereign immunity related to air pollutants, does not extend to financial obligations other than the obligation “to pay a fee or charge imposed by any State or local agency to defray the costs of its air pollution regulatory program.” In this circumstance, sale of the allowances is designed to generate funds above the cost of the regulatory program and thus would not appear to constitute “fees or charges imposed...to defray the costs of the air pollution regulatory program.” Further, absent a waiver of sovereign immunity, DOE cannot voluntarily pay what seems to be a state tax on the federal government. These issues are of significant impact to USDOE’s participation in the proposed cap-and-invest program, and will require further consideration and discussion. USDOE welcomes further discussion with the State of Washington on these and any other matters raised in this letter.

Based on the above information, USDOE seeks explicit exemption from the rule. Such an exemption could take the form of adding “including the U.S. Department of Energy Hanford Site” to WAC 173-446-040(2)(a)(ii)(B), or adding a new subsection (D) that provides, “Emissions from the U.S. Department of Energy Hanford Site.”

Additional Comments and Questions

USDOE also provides the below comments related to specific provisions of the draft rule. Some comments might apply to Hanford should Ecology not grant an explicit exemption and others that staff felt were worth noting to help improve the rule. These comments should not be considered to diminish USDOE’s request for its emissions to be exempted from the CCA.

WAC 173-446-030 Applicability

This section establishes three compliance periods and describes the entities included in them. Because Hanford first reported emissions above 25,000 MTCO₂e in 2021 (not between 2015 and 2019), this section suggests the rule is not applicable to Hanford. However, WAC 173-446-050 appears to make the rule applicable to Hanford as it provides “(1) Any reporter under chapter 173-441 WAC reporting at least 25,000 metric tons of CO₂e covered emissions per calendar year for 2015 *or any year thereafter* that meets the applicability conditions in WAC 173-446-030 or 173-446-060 is automatically registered as a covered entity in Washington’s cap and invest program.” [emphasis added] USDOE suggests revising WAC 173-446-030 to clarify that the rule might also become applicable as set forth in WAC 173-446-050.

WAC 173-446-056 Cap and invest consultants and advisors

According to WAC 173-446-056(1), a “cap and invest consultant or advisor” is an individual or party that is not an owner or employee of a registered entity.” WAC 173-446-056(2) provides: “Any registered entity employing cap and invest consultants or advisors must disclose to ecology the following information for each cap and invest consultant or advisor...”. The Hanford Site uses thousands of contractors to operate the facility and many of them perform some of the activities listed in the draft rule and thereby could be deemed consultants/advisors. USDOE considers its contractors to be operators of the Hanford Site. The definition of a cap and invest consultant or advisor should exclude operators from the definition or otherwise explicitly exempt them from information disclosure requirements.

WAC 173-446-100 through 173-446-150 Program Account Requirements

This section is written for “direct corporate associations” and does not appear applicable to a federal agency. If a federal government entity will be required to comply with this rule, this section needs significant revision.

WAC 173-446-200 Total program baseline, Table 200-1

If this is a temporary placeholder, when and how will the final number be established? If other years require new rulemaking, why not this one?

WAC 173-446-210 Total program allowance budgets

Why is the allowance lower than the baseline?

Regarding Table 210-1, the total program allowance budget, if this is a temporary placeholder, when and how will the final number be established? Will rulemaking be required to fill in this information?

WAC 173-446-220 Distribution of allowances to emission-intensive and trade-exposed entities

Section (1)(a) requires submittal of information by September 15, 2022, but the intended adoption date for this rule is not until September 29, 2022. Recommend that adequate time for implementation be provided.

WAC 173-446-320 Suspension and revocation of registration

Section (4) prohibits a person from bidding in the auction if “any of the information provided by a registered entity under WAC 173-446-120 changes.” There is a lot of non-critical information that could change that should not impact bidding. For example, why should a simple change of a manager, address or other contact information prevent an entity from bidding? Recommend adding qualifiers or deleting it given Ecology’s significant discretion related to auction participation in section (1).

WAC 173-446-325 Bid guarantee

Section (1)(c) sets forth the form and manner of bid guarantees, none of which appear to be applicable to government agencies. Should a federal agency bid at auction, a guarantee will likely not be needed for an agency of the United States, or such a guarantee will need to be specifically crafted.

WAC 173-446-360 Payment for purchases

Need to allow additional time for federal entities should they be subject to this provision. Seven calendar days is not generally enough to get an invoice through the federal invoicing system.

WAC 173-446-520 Listing of offset projects using ecology compliance offset protocols

Section (3)(d): Explain how Ecology has authority to require out-of-state landowners to consent to regulation by Ecology and Washington courts.

Section (13)(a)(ii): Why is Ecology not required to keep this information as a record and follow appropriate record requirements?

Multiple sections

The proposed rule discusses the need for offset projects to comply with “all local, regional, state, or national environmental regulatory requirements, including health and safety regulations.” If an entity is not in compliance, the use of the offsets can be denied. RCW 70A.65.170(3)(d)(ii) states that offsets may be reduced if there is a violation of any permit requirements “where the violation may result in an increase in emissions.” Only non-compliances associated with increased emissions should be subject to denial of use of the offset credits. A simple paperwork non-compliance should not invalidate the offset.

In addition, under what authority is Ecology able to use a health and safety regulation non-compliance as a basis for action?