Comment Period: Proposed Plan for Cleanup of 100-BC Area

Comment Deadline: December 9, 2019

Say What?
A step by-step-guide to creating a comment you can stand by.

1. What are you commenting on?

Background

This comment period is focused on the proposed plan for finalizing cleanup of the 100-BC Area at the Hanford Site. The 100-BC Area covers 4.5 square miles of the Hanford Site. The 100-BC Area includes B and C reactors which have both been deactivated, but several waste sites remain where soil and groundwater has been contaminated. You are likely familiar with the B-Reactor, which is now a National Historic Landmark under the National Park Service, which offers free tours of the reactor museum. The C-Reactor is “cocooned” to allow for radioactive decay for around 75 years. A separate cleanup decision will be made about the reactor itself.

Both reactors produced plutonium for nuclear weapons from 1944-1969 which created a lot of radioactive and toxic chemical waste which ended up in the soil and groundwater in the 100-BC Area.

The Department of Energy got a head start on the cleanup of this area through interim cleanup actions. They removed most of the buildings from this area and cleaned up 82 waste sites. Most notably much was done to remove large concentrations of hexavalent chromium through two “big digs” which were completed in 2014 near C-Reactor. The removal of this chromium reduced the need for long-term groundwater treatment in 100-BC, but there is more to be done.

The proposed plan compares six different options for finishing the cleanup of 100-BC Area. DOE and EPA have selected Alternative 2 as the preferred cleanup plan. It happens to be the cheapest of the plans and primarily consists of a wait and see approach wherein institutional controls are used to keep people from digging up contamination while it decays in the ground. Under this cleanup plan one waste site would be actively cleaned up.

Cleanup Plan Options

- DOE and EPA’s preferred path forward, Alternative 2 proposes institutional controls (keeping people out of contaminated areas using things like fences, zoning restrictions, signs, barriers) for 30 waste sites; Removal, Treatment, and Disposal (RTD) for one waste site; no action for 82 waste sites, and dealing with groundwater treatment through monitored natural attenuation (MNA) in which no contaminants are removed from the groundwater, but some monitoring of contaminant levels occurs.

- DOE’s preferred cleanup plan estimates that controls will be needed for 187 years near the B-Reactor spent fuel basin to keep people out while contamination decays or naturally attenuates. If DOE decided to proceed with the more aggressive cleanup alternatives in the plan --with more removal, treatment, and disposal of soil -- DOE would only need to keep people out of this area for 39 years.

- There are two deeper contaminated soil sites close to the river with Strontium-90 and Cesium-137 which will require monitoring and keeping people out/restricting use until the year 2247.
Some proposed plan options would treat contaminated groundwater extracted from the 100-BC system using the 100-K pump and treat facility to reduce the amount of chromium in the groundwater in a shorter period of time. There is no groundwater treatment in the preferred alternative.

DOE’s preferred alternative leaves long-lived radiological contamination deeper than 15 feet in the ground that has the potential to harm human health and the environment for thousands of years. For example, one site in the proposed plan contaminated with Carbon-14 will require 12,110 years of monitoring and institutional controls to keep people safe. Another option is to excavate 9 of the 23 waste sites like this site identified in the proposed plan, removing the majority of the mass of contamination and eliminating the need for institutional controls.

**How Does the Decision-Making Process Work?**
The EPA is the primary regulatory agency on this decision which is being made under CERCLA (the Comprehensive Environmental Response, Compensation, and Liability Act) also known as the Superfund law. The Proposed Plan will be out for public comment until December 9, 2019. DOE and EPA will make a final decision in a Record of Decision following review of public comments. In general, the agencies are evaluating what the risk is for leaving different amounts of waste behind, how much each cleanup scenario costs, and technical feasibility, e.g. do they have the tools needed to perform the cleanup?. They pick the scenario that they believe balances those factors. As part of the official public comment period, you get to share your values and input that they are required to consider in making that decision.

2. How will you submit your comments to the Department of Energy Richland Office?
   - **What are the options?**
     - **By Email:** 100BCAreaPP@rl.gov

3. **Is there a deadline?**
   Yes, midnight PST on December 9, 2019.

4. **Will there be a public meeting?**
   No.

5. **What information is available to learn about the issue?**
   - [100-BC Proposed Plan](#)
   - [Tri-Party Agency Fact Sheet on the Proposed Plan](#)
   - [September 16, 2019 Agency Presentation on the 100-BC Proposed Plan](#)
   - [Joint Press Release on the Proposed Plan: Hanford Challenge and Columbia Riverkeeper](#)
   - [Hanford Advisory Board Advice #296 on a draft of the Proposed Plan](#)
   - [Dec 2019 DRAFT Hanford Advisory Board Advice on 100-BC Proposed Plan](#)
   - [Hanford Challenge Comments on the Proposed Plan](#)
   - [Sample Public Comments on the Proposed Plan by Hanford Challenge](#)
   - [Oregon Department of Energy Comments on the Proposed Plan](#)
   - [Columbia Riverkeeper Sample Comments](#)

6. **Given what you know at this point, are you ready to say something?**
   - If yes, say it! If no, look to examples for help, see above. [Sample Comments here](#).