

RE-Powering America's Land: Evaluating the Feasibility of Siting Renewable Energy Production on Potentially Contaminated Land

Lakeview, Oregon

Feasibility Studies to RE-Power Communities

The U.S. Environmental Protection Agency's RE-Powering America's Land initiative encourages renewable energy development on current and formerly contaminated land and mine sites when it is aligned with the community's vision for the site. EPA and the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) are collaborating on a project to evaluate the feasibility of siting renewable energy production on potentially contaminated sites. This effort pairs EPA's expertise on contaminated sites with NREL's expertise in renewable energy. The feasibility studies will provide site owners and communities with a realistic and achievable plan for putting renewable energy on a given site.

Site Description

The 169-acre Uranium Mills Tailing site is located one mile northwest of the city of Lakeview. In 1957, the U.S. Atomic Energy Commission entered into a contract with the Lakeview Mining Company for a uranium processing mill. The mill was constructed in 1958 but only operated for two years due to lack of ore. Investigations of the mill site in 1976 found localized areas of elevated radioactivity and suspected contaminated-material burial sites. Remediation of the site began in 1986 and was completed in 1989.

The work involved excavation and relocation of mill tailings and soil contaminated with radium, thorium, and uranium and mill-building structural debris. The excavated areas formerly occupied by the tailings pile, evaporation ponds, and mill site were backfilled and graded to conform with local slopes, and revegetated according to applicable EPA standards.

Community Goals

The Lake County Resources Initiative (LCRI) has formed a renewable energy working group that includes local communities, private business representatives, and the local energy utility. The goal of the working group is to explore local renewable energy opportunities, and all entities are in support of the project. Based on potential geothermal and other renewable resources, the long-term community goal is to develop enough renewable energy initiatives for Lake County to become a net exporter of renewable energy. This feasibility study will contribute to the ongoing investigation to accomplish this goal.

Feasibility Study: Geothermal

EPA and NREL are collaborating to conduct a study on the potential for geothermal power generation on the Uranium Mills Tailing site. The feasibility study will evaluate the technical and economic opportunities and challenges at the site. It will:

- Provide a preliminary analysis of the viability of the site;
- Assess geothermal resource availability;
- Identify possible facility type, size, and location; and
- Review the economics of the proposed facility.

Uranium Mills Tailing Site

Lakeview, Oregon

Site Facts:

Site type: Mine site

Renewable technology: Geothermal

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The information presented in this fact sheet comes from the proposal; EPA cannot attest to the accuracy of this information. Therefore, activities described in this fact sheet are subject to change.

For more information, visit www.epa.gov/renewableenergyland or contact cleanenergy@epa.gov

