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 Newport Chemical Depot is a 7,130 acre Army facility located in West-Central Indiana. It was established in 1941 as an explosive and chemical production plant and later operated as a chemical agent destruction facility for the munitions that had been stockpiled at the site. The depot is scheduled for closure and transfer in late 2011 to the Newport Chemical Depot Reuse Authority (NeCDRA), established to acquire and redevelop the site. The chemical production activities conducted at the Depot have resulted in known and suspected contamination of soil, groundwater, surface water, and structures. Numerous landfills and dumps are present at the site. The contaminated areas are in various stages of the Resource Conservation and Recovery Act (RCRA) Corrective Action cleanup process.

Community Goals

NeCDRA has completed a preliminary redevelopment plan for the site that includes a variety of future uses, including parks, business and technology, as well as manufacturing. In collaboration with local utilities, NeCDRA is interested in installing a utility-scale renewable energy project on a 2,000-acre portion of the site. The results of this feasibility study will be incorporated into the overall master redevelopment plan for the site.

Feasibility Study: Wind

EPA and NREL are collaborating to conduct a study on the potential for wind power generation on the Newport Chemical Depot 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;
- Based on the results of the preliminary assessment, a follow-on study may:
- Assess wind resource availability;
- Identify possible system size, design and location; and
- Review the economics of the proposed system.

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