

NATIONAL ENERGY TECHNOLOGY LABORATORY

Albany, OR · Morgantown, WV · Pittsburgh, PA



JAN 26 2011

MEMORANDUM FOR: ANTHONY V. CUGINI

DIRECTOR

FROM:

R. PAUL DETWILEK

ACTING DIRECTOR, ENVIRONMENTAL COMPLIANCE DIVISION

SUBJECT:

Finding of No Significant Impact and Final Environmental Assessment for National Energy Technology Laboratory Performance Verification

Laboratory, Morgantown, West Virginia (DOE/EA-1837)

Pursuant to the National Environmental Policy Act (NEPA), the National Energy Technology Laboratory (NETL) has completed its required environmental review for the Performance Verification Laboratory (PVL) Project. The environmental assessment (EA) was prepared in accordance with the Council on Environmental Quality's NEPA regulations (40 CFR Parts 1500 to 1508) and Department of Energy (DOE) NEPA implementing regulations (10 CFR Part 1021).

DOE's proposed action is to construct a new building of approximately 30,000 square feet. This steel building would be built on grade at NETL's Morgantown site on land currently occupied by a Quonset hut (Building 20). DOE would fund the project under the American Recovery and Reinvestment Act (ARRA) pursuant to ARRA Facilities and Equipment Upgrade Lab Call #09-002. After construction, the PVL would house 14 employees and include a minimum of eight test rooms/chambers, offices, restrooms, and employee kitchen space. The facility would incorporate sustainable design features and meet or exceed Leadership in Energy and Environmental Design (LEED) Gold standards.

The draft EA was distributed to the appropriate federal and state agencies. In addition, a 30-day public comment period was held from 9 December 2010 to 7 January 2011. The only comments received were inquiries on how to bid on the general contract and one inquiry as to the identity of the general contractor. As such, no changes were made in the final EA in response to comments.

The EA analyzed the potential environmental impacts of constructing and operating a PVL. Based on the analysis in the EA, DOE determined this action would result in no significant adverse impacts. This determination is documented in the attached Finding of No Significant Impacts (FONSI) and is supported by the final EA.

The proposed project would have minor and temporary impacts to traffic and greenhouse gas emissions during construction. DOE would be required to adhere to applicable permit requirements during construction and operations. All other potential environmental impacts would be negligible.

Therefore, preparation of an environmental impact statement (EIS) is not required and the Environmental Compliance Division (ECD) recommends that NETL issue a FONSI for DOE's proposed action.

RECOMMENDATION: Sign and issue FONSI

DISTRIBUTION:

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Original to NEPA File (451.1)

FINDING OF NO SIGNIFICANT IMPACT FOR THE PERFORMANCE VERIFICATION LABORATORY, NATIONAL ENERGY TECHNOLOGY LABORATORY, MORGANTOWN, WEST VIRGINIA

RESPONSIBLE AGENCY: U.S. Department of Energy (DOE)

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: DOE completed the final Environmental Assessment for the Performance Verification Laboratory (PVL), National Energy Technology Laboratory, Morgantown, WV (DOE/EA-1837). Based on the analyses in the environmental assessment (EA), DOE determined that its proposed action — to design, construct, and make operational a DOE Performance Verification Laboratory (PVL) facility for verifying the energy performance of appliances and equipment to facilitate improved enforcement of energy conservation standards and ENERGY STAR® programs — would result in no significant adverse impacts. DOE also determined beneficial impacts may result, including the creation of 24 construction-related jobs and approximately 14 permanent jobs for the operation of the PVL facility at the National Energy Technology Laboratory (NETL) in Morgantown and a reduction of greenhouse gases (GHG) at the national level due to the increased use of more efficient appliances and equipment.

BACKGROUND: The PVL would be part of NETL's Appliance Technology Evaluation Center (ATEC) and support DOE's Energy Efficiency and Renewable Energy (EERE), Building Technologies Program's (BTP's) Appliances and Commercial Equipment Standards, and ENERGY STAR programs. DOE must comply with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. §§ 4321 et seq.), Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508), and DOE NEPA procedures (10 CFR Part 1021) for this project. DOE prepared an EA to evaluate the potential environmental consequences of this proposed project.

PURPOSE AND NEED: The PVL project was proposed in response to the American Recovery and Reinvestment Act (Recovery Act) of 2009 (Public Law 111-5, 123 Stat. 115) Facilities and Equipment Upgrade Lab Call #09-002. The BTP focuses on research and development, design, and construction of energy efficient and net zero energy buildings. BTP has moved beyond component-driven research to holistically address the multiple interactions among building systems and components to develop and incorporate integrated, highly efficient energy use and performance. High performance buildings will apply technology to improve the internal-built environment, integrating various systems to manage energy use and improve comfort, safety, and environmental factors.

Ensuring industry compliance with energy efficiency standards is of vital importance, and the need for facilities to complete enforcement testing is critical. Testing of commercial equipment and appliances as well as residential appliances is a key element based on the vast number of products in the market. The goals are to increase energy efficiency and reduce energy costs to consumers. The PVL facility would play a major role in assuring that commercial and residential consumers are well informed, and thus can purchase energy-efficient appliances with

confidence. This project would provide a facility to conduct testing and verification, and to develop new testing procedures for various appliances and equipment.

DESCRIPTION OF THE PROPOSED ACTION: DOE's proposed action is to design and construct an approximately 30,000 square foot building at the Morgantown, West Virginia site of NETL to house the PVL. The PVL would be an advanced laboratory capable of conducting energy performance verification and enforcement testing on a broad range of appliances and equipment. The design would incorporate sustainable design features and meet or exceed Leadership in Energy and Environmental Design (LEED) Gold standards (not inclusive of test facilities). A minimum of eight test facilities would be in the PVL, each providing the ability to test a specific type of product. The PVL would be designed to maximize flexibility for reconfigurations and expansions of testing facilities capabilities. Construction and operation of the PVL would ensure that consumers and the nation achieve the energy savings intended by conservation standards and ENERGY STAR programs. The cost of the project is estimated at \$13.9 million.

ALTERNATIVES CONSIDERED: In addition to the proposed action, DOE considered the No-Action Alternative as required under NEPA. DOE determined that other alternatives, such as leasing a private structure off-site or renovating an existing structure onsite, were not reasonable alternatives. Under the No-Action Alternative, DOE would not proceed with the project as proposed and the project would be delayed as DOE sought other locations and funding sources to meet the objectives. This assumption establishes a baseline against which the potential environmental impacts of the proposed project are compared.

ENVIRONMENTAL CONSEQUENCES: DOE evaluated the potential environmental consequences of the proposed project and the No-Action Alternative.

DOE considered eighteen environmental resource areas in the preparation of the EA. However, not all areas were evaluated at the same level of detail. DOE conducted a more-detailed analysis on areas that would have the potential for significant adverse environmental impacts or have the potential for controversy. The areas DOE evaluated in more detail included traffic and GHG. For these areas, DOE determined there would be minimal potential for adverse environmental impacts. Slight increases in traffic would occur during the construction and operational phases of the project. GHG emissions generated by the construction and operation of the PVL facility would be negated by the reduction of GHG due to the improved energy efficiency of appliances and equipment over time at the national level.

The other environmental areas DOE evaluated for potential impacts were: socio-economic (economics and employment, population and housing, residential and commercial displacements, and environmental justice); land use; parks, recreation areas; vegetation and wildlife; threatened and endangered species; water quality/streams; flood plains; wetlands; groundwater; public facilities and services; utilities; air quality; noise and vibration; waste site evaluation; cultural resources (historic, archaeological, and Native American); and visual resources. DOE determined there would be no potential for adverse impacts for these resource areas, or that the impacts would be minimal, temporary, or both.

Under the No-Action Alternative, the project would either be delayed, as DOE sought other locations and funding sources, or abandoned altogether. Implementation of the No-Action Alternative would result in no potential adverse environmental impacts, but would also result in no beneficial impacts.

PUBLIC AVAILABILITY: DOE issued the draft EA on December 9, 2010, and advertised its release in the *Dominion Post* on December 9, 10, and 11, 2010. In addition, DOE sent an electronic link to NETL's EA web site and a hard copy for public review to the City of Morgantown Main Public Library in Morgantown, West Virginia. DOE established a 30-day public comment period that began December 9, 2010, and ended January 7, 2011.

The draft EA was distributed to various federal, state, and local agencies. DOE conducted formal consultations by mail with the responsible U.S. Fish and Wildlife Service (USFWS) field office and the State Historic Preservation Officer (SHPO) in West Virginia. DOE received correspondence supporting a determination of no adverse effect on buildings, sites or structures eligible for or included in the *National Register of Historic Places* from the SHPO. No response was received from USFWS.

Three comments were received regarding the construction contractor and bid process. Responses were supplied at the time of receipt, with no changes necessary to the analysis of potential environmental impacts. All comments and responses are included in the Public Comment Addendum at the end of the EA.

Copies of the final EA will be available at DOE's NETL web site at http://www.netl.doe.gov/publications/others/nepa/ea.html.

DETERMINATION: On the basis of the evaluations in the final EA, DOE determined that its proposed action – to design and construct an approximately 30,000 square foot building at NETL's Morgantown site to house the PVL – would have no significant impact on the human environment. The potential environmental impacts identified and analyzed in the EA would be negligible. Therefore, preparation of an environmental impact statement is not required and DOE is issuing this FONSI.

Issued in Pittsburgh, PA, this 24 day of January 2011.

Anthony V. Cugini Director

National Energy Technology Laboratory