FINDING OF NO SIGNIFICANT IMPACT
FOR
DOE'S PROPOSED FINANCIAL ASSISTANCE TO DOW KOKAM MI, LLC
TO MANUFACTURE ADVANCED LITHIUM POLYMER BATTERIES
FOR HYBRID AND ELECTRIC VEHICLES AT MIDLAND, MICHIGAN

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

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: DOE completed the *Final Environmental Assessment for DOE's Proposed Financial Assistance to Dow Kokam MI, LLC to Manufacture Advanced Lithium Polymer Batteries for Hybrid and Electric Vehicles at Midland, Michigan* (DOE/EA-1708). Based on the analyses in the environmental assessment (EA), DOE determined that its proposed action, providing Dow Kokam MI, LLC (Dow Kokam) with up to two types of financial assistance to facilitate construction and operation of the Midland Battery Park, would result in no significant adverse impacts. The proposed facility in Midland, Michigan would be developed to manufacture advanced lithium polymer batteries for hybrid and electric vehicles. DOE further determined that there could be beneficial impacts to the nation's air quality and the transportation industry from implementation of Dow Kokam's proposed project. In addition, beneficial local socioeconomic impacts would occur from increased employment opportunities and spending in the affected communities.

BACKGROUND: Dow Kokam's proposed project would develop its domestic manufacturing of advanced lithium polymer batteries by constructing and operating a new facility in Midland, Michigan called the Midland Battery Park. To facilitate this development, DOE is considering providing Dow Kokam with up to two types of financial assistance: (1) a grant under Funding Opportunity Announcement DE-FOA 0000026, *Recovery Act – Electric Drive Vehicle Battery and Component Manufacturing Initiative;* and (2) a loan pursuant to Section 136 of the *Energy Independence and Security Act of 2007* (Energy Act; Public Law 110-140, 121 Stat. 1492) as an automotive component supplier promoting improved fuel economy in light-duty vehicles. DOE will make separate decisions as to each type of financial assistance after considering the potential environmental impacts and other aspects of Dow Kokam's proposed project.

As part of the Recovery Act, DOE's National Energy Technology Laboratory (NETL), on behalf of the Office of Energy Efficiency and Renewable Energy's Vehicle Technologies Program, will provide up to $2 billion in federal funding to competitively selected recipients for the construction (including production capacity increase of current plants) of U.S. manufacturing plants that produce batteries and electric drive components. The proposed project is one of the applications selected under this competitive solicitation. Additionally, DOE's Advanced Technology Vehicle Manufacturing Incentive Program provides loans to eligible automotive manufacturers and component suppliers for projects that promote improved fuel economy in light-duty vehicles pursuant to Section 136 of the Energy Act. DOE's Advanced Technology Vehicle Manufacturing Incentive Program is considering Dow Kokam for a loan under this program for the same development of its lithium polymer battery manufacturing capability. The amount of the potential loan has not been determined and is a function of the federal

government's assessment of many factors, including Dow Kokam's ability to repay the loan. The loan would be used for capital and engineering integration expenses associated with the proposed project.

The federal action of providing funding for projects under these programs requires compliance with the *National Environmental Policy Act of 1969*, as amended (NEPA; 42 U.S.C. 4321 et seq.), the Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508), and DOE's NEPA implementing procedures (10 CFR Part 1021). DOE prepared an EA to evaluate the potential environmental consequences of providing financial assistance for this proposed project under the initiatives described above.

PURPOSE AND NEED: The overall purpose and need for DOE action pursuant to the Vehicle Technologies Program and the funding opportunity under the Recovery Act are to accelerate the development and production of various electric drive vehicle systems by building or increasing domestic manufacturing capacity for advanced automotive batteries, their components, recycling facilities, and electric drive vehicle components in addition to stimulating the U.S. economy. This and the other selected projects are needed to reduce the U.S. petroleum consumption by investing in alternative vehicle technologies. The proposed project will also meaningfully assist with the nation's economic recovery by creating manufacturing jobs in the United States in accordance with the objectives of the Recovery Act.

The purpose and need for the Advanced Technology Vehicle Manufacturing Incentive Program is to provide loans to projects that will help achieve the goals of Section 136 of the Energy Act. These goals are to re-equip, expand, and establish manufacturing facilities in the United States that produce light-duty vehicles and components that meaningfully improve fuel economy.

DESCRIPTION OF THE PROPOSED ACTION: DOE is considering providing Dow Kokam MI, LLC with up to two types of financial assistance for its proposed project. DOE's Proposed Action under the Vehicle Technologies Program is to provide Dow Kokam with $161 million in financial assistance in a cost-sharing arrangement to facilitate construction and operation of the Midland Battery Park. DOE's Proposed Action under its Advanced Technology Vehicle Manufacturing Incentive Program is to provide Dow Kokam MI, LLC with a loan for the Midland Battery Park project.

Dow Kokam's proposed project would construct and operate a new facility to manufacture advanced lithium polymer batteries for hybrid and electric vehicles at the Midland Battery Park. The facility would have the capacity to build 1.2 billion watt-hours of batteries annually, enough to power 60,000 fully electric and hybrid vehicles operating with an average 20-kilowatt-hour battery system. The Midland Battery Park would be constructed on a 50-acre vacant site that is zoned industrial and surrounded by other industrial and commercial facilities in Midland, Michigan. The new battery manufacturing facility would be about 770,000 square feet and would require a new 1- to 2-mile-long electric transmission line. At peak operations, about 900 people would be employed with an annual payroll of $34 million.

ALTERNATIVES CONSIDERED: In addition to the Proposed Action, DOE considered the No-Action Alternative as required under NEPA. Under the No-Action Alternative, DOE would not provide

funds to Dow Kokam for the proposed project. For purposes of the EA, DOE assumed that the project would not proceed without DOE funding. 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 and considered 15 environmental resource areas in the preparation of the EA. However, DOE did not analyze in detail those resource areas that it did not anticipate would be impacted by the proposed construction and operation of the Midland Battery Park. Construction and operation of the park would be compatible with existing and future land uses in the area, and would have no or negligible impacts to soils and geology, noise, visual resources, cultural resources, and environmental justice. Impacts to traffic flow on roads used to access the project site would be minor after construction of a planned new intersection at the project site entrance. Emissions of greenhouse gases from the production of power needed for operations would be more than offset by the reduction of gasoline consumption by electric and hybrid-electric vehicles using batteries produced at the facility, and emissions of other air pollutants would be minor.

About 50 acres of marginal habitat for plants and animals would be cleared and graded at the project site. This would not significantly impact any plant or animal species because the project site is small and isolated from larger tracts of undisturbed land, and because plant and animal species at the site are common and widespread in the region. Construction of an electric transmission line across the Tittabawassee River could adversely impact migratory birds, wetlands, and a State-protected plant species. The transmission line should be designed to avoid wetlands and State-protected species, as well as minimize the risk of collisions and electrocutions by migratory birds.

Construction of the Midland Battery Park would require grading and filling 9.45 acres of isolated, depressional wetlands. The wetlands on the proposed site are not regulated under federal or state laws, as determined through consultation with the State of Michigan. These wetlands are surrounded by urban development, are more than 1.4 miles from the nearest river, have no connection to any other stream or surface water, and have minimal value for wildlife habitat and biodiversity conservation. Potential impacts on surface water flow and sediment transport, resulting from loss of these low quality wetlands would be minimized by constructing detention basins to temporarily store surface water runoff. For these reasons, DOE determined that grading and filling of these wetlands would not cause significant adverse impacts.

The Midland Battery Park would be constructed in an area where soils are widely contaminated with dioxin from past manufacturing activities. Groundwater south of the project site is also known to be contaminated with vinyl chloride and Freon 11. Concentrations of dioxin in soils at the project site are within the allowable limits for construction and operation of industrial facilities. Dow Kokam would be required to implement adequate health and safety practices to minimize the risk of exposure to dioxin during construction. Dow Kokam would also be required to obtain a permit from the State of Michigan Department of Environmental quality and implement associated permit requirements for the safe handling and treatment of contaminated groundwater prior to pumping and discharging the water. One transmission line route evaluated in this EA would cross a floodplain known to have high soil

concentrations of dioxin in some areas. Requirements for soil disposal and other due care actions would be implemented during installation of power poles in areas where soil concentrations exceeded the applicable contact criterion. This work would be completed with State of Michigan oversight.

The City of Midland and the surrounding area would experience long-term beneficial economic impacts from increased employment opportunities and spending in the local economy.

Under the No-Action Alternative, the project would either be delayed, as Dow Kokam sought other funding sources, or abandoned altogether. The potential environmental consequences, if the project was delayed, could be different if the project was modified. If abandoned, the potential environmental consequences would not occur. Furthermore, the potential beneficial impacts would change or not occur.

PUBLIC AVAILABILITY: DOE issued the Draft EA on January 15, 2010, and advertised its release in the *Midland Daily News* on January 15, 16, and 17. In addition, DOE sent copies for public review to the Grace A. Dow Memorial Library in Midland, Michigan. The Draft EA was also posted on the NETL web site. DOE established a 30-day public comment period that began on January 15, 2010 and ended February 15, 2010.

The Draft EA was distributed to various federal, state, and local agencies. DOE conducted consultations with the Saginaw Indian Tribe of Michigan, the responsible U.S. Fish and Wildlife Service field office, and the Michigan State Historic Preservation Officer. A representative of the Tribe stated that the Tribe had no information concerning the presence of any Indian traditional cultural properties, sacred sites, or other significant properties on the proposed project area. A letter from the State Historic Preservation Office supported DOE's determination that no historic properties would be affected by the proposed project. Although no formal response was sent from the USFWS, DOE concluded that the proposed project would have no effect on federally listed threatened or endangered species, based on information obtained from the USFWS's *Midwest Region Section 7(a)(2) Technical Assistance Website.*

Correspondence was also received from Region 5 of the U.S. Environmental Protection Agency (EPA) and the Southeast Michigan Council of Governments. In response to EPA comments, additional information was added to the Final EA to better describe the potential impacts and associated permitting requirements that could result from constructing the facility and the associated transmission line in areas with potentially contaminated soil and groundwater. The Southeast Michigan Council of Governments acknowledged receipt of the Draft EA but provided no comments.

Copies of the Final EA and this FONSI will be sent to stakeholders that provided comments or consultation, and will be available at DOE's National Energy Technology Laboratory 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 provide up to two types of financial assistance, and Dow Kokam MI, LLC's proposed project, to construct and operate a facility to manufacture advanced lithium polymer batteries for hybrid and electric vehicles in Midland, Michigan, would have no significant impact on the human

environment. Although the proposed project would increase air emissions, requiring new construction and operating permits, these changes would be minor and the project proponent would be required to adhere to permit requirements during construction and operations of the Midland Battery Park. The proposed project would also eliminate 9.45 acres of low quality wetlands on this 50-acre site surrounded by other industrial or commercial facilities. However, these wetlands have been determined to be non-jurisdictional, therefore requiring no permit to remove them and no mitigation to replace them. The important wetland functions of water retention and surface water flow control would be replaced by constructed retention ponds at the site.

Soil and groundwater contamination at the project site are anticipated to be below action levels requiring cleanup. The applicant will be required to develop plans for managing soil if monitoring results determine that action is required. If dewatering is required during construction, surface water discharges would require a National Pollutant Discharge Elimination System permit. Oversight for these activities would be provided by the State of Michigan's Department of Environmental Quality. Beneficial local socioeconomic impacts are expected to occur from increased employment opportunities and spending in the affected community. All other 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 Finding of No Significant Impact.

Issued in Pittsburgh, PA, this 30th day of April 2010.

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