



U.S. Department of Energy Categorical Exclusion Determination Form



Program or Field Office: Office of Energy Efficiency and Renewable Energy:
Phase III Xlerator Program

Funding Opportunity Number DE-FOA-0000397

Applicant Name: Materials Innovation Technologies, LLC

Location: Fletcher, NC

Project Title Low Cost Carbon Fiber Composites for Lightweight Vehicle Parts

Proposed Action or Project Description American Recovery and Reinvestment Act:

Carbon fiber-reinforced polymer composites can help improve fuel economy in cars and buses; however, they are currently too expensive for general use. Materials Innovation Technologies LLC (MIT-LLC), together with its Tier 1 and Original Equipment Manufacturer's (OEM's) partners, proposes to demonstrate the production and use of economically and commercially viable composites based on recycled carbon fiber. MIT-LLC proposes to demonstrate the commercial viability of the Three Dimensional Engineered Preform (3-DEP™) and Co-DEP carbon fiber preforming processes by teaming with composite molders to (1) mold automotive and bus composite parts with carbon fiber preforms in (2) production type tooling at (3) production rates that (4) meet the OEM's Production Part Approval Process standards including quality engineering requirements. An important measure of success is for MIT-LLC and the Tier 1 composite molder to show the OEM the cost effectiveness of the mass savings afforded by carbon fiber composites for consideration in new lightweight designs. A key element of this cost-effective approach is the use of recycled carbon fiber produced by MIT-LLC using state-of-the-art recycling technologies. MIT-LLC proposes to partner with Tier 1 suppliers Molded Fiberglass (MFG) and International Automotive Components (IAC) and OEMs GM (automobiles) and Proterra, Inc. (electric bus). They propose to use production type tooling; run at production rates; and, satisfy the OEM's Production Part Approval Process (PPAP). MIT-LLC proposes to produce lightweight components for the automotive and mass transit markets that are made with reclaimed carbon fiber and/or hybrid blends of fibers including carbon fiber, fiberglass, natural fibers, nylon, polypropylene, and other synthetic polymer fibers.

Conditions: None

Categorical Exclusion(s) Applied: B3.6, B5.1

*-For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, see Subpart D of 10 CFR 10 21

This action would not: threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive Orders; require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities, but may include such categorically excluded facilities; disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; or adversely affect environmentally sensitive resources (including but not limited to those listed in paragraph B.(4)) of Appendix B to Subpart D of 10 CFR 1021). Furthermore, there are no extraordinary circumstances related to this action that may affect the significance of the environmental effects of the action; this action is not "connected" to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts, and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

Based on my review of information conveyed to me and in my possession (or attached) concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

ORO NEPA Compliance Officer

James L. Elmore

Date Determined:

9/17/2010