

# Record of Categorical Exclusion for

OPOC® Engine Manufacturing Project

EcoMotors International, Inc.

## Description of Proposed Action:

The Department of Energy's (DOE's) proposed action is to issue a loan to EcoMotors International for the development of an engineering integration facility in Troy, Michigan and development of a manufacturing facility in Livonia, Michigan for development and production of its family of high efficiency OPOC® engines including the EM100-D diesel engines and EM70-G Gas/Flex fuel engines. Engineering integration and manufacturing operations would take place in existing facilities in which similar activities were conducted by previous owners and tenants. EcoMotors International has applied for a loan in response to the Advanced Technology Vehicle Manufacturing (ATVM) Loan Program that was established pursuant to Section 136 of the Energy Independence and Security Act of 2007, as amended, which provides for loans to eligible automobile manufacturers and component suppliers for projects that reequip, expand, and establish manufacturing facilities in the United States to produce light-duty vehicles and components that provide meaningful improvement in fuel economy, and for engineering integration costs associated with such projects.

The EM100-D High Efficiency OPOC® diesel engine and EM70-G Gas/ Flex Fuel engines can be used in passenger cars, light duty and commercial trucks, marine applications – essentially anywhere conventional gasoline or diesel powertrains are used. EcoMotors will engineer and manufacture its engines to assist in the reduction of greenhouse gas emissions, increase fuel savings and promote the use of alternate fuels. By utilizing existing engineering and manufacturing facilities that are vacant or not currently utilized at full capacity.

### *Engineering Integration Facility-Troy, Michigan*

EcoMotors proposes to purchase a currently vacant, 31,000 square foot building that will be used for engineering integration office space (17,000 sq. ft.) and engineering integration shop support (14,000 sq. ft.). The facility, located [REDACTED] in Troy, Michigan was constructed in 1998 by [REDACTED] a Tier 1 automotive supplier and was used [REDACTED] for engineering integration and testing. The facility is in close proximity to EcoMotors world Headquarters in Allen Park, Michigan.

The Troy facility will be used primarily to perform engineering integration tasks required to optimize OPOC® engines for different vehicle applications. Teams of engineers, technicians and mechanics will work with OEM partners to ensure that OPOC® engines are optimized and engineered for seamless installation into light duty vehicle platforms. This work will include highly specialized computer-aided- design/computer-aided-engineering (CAD/CAE) to produce components for testing and evaluation.

The project is expected to create at least 150 full time automotive engineering related skilled manufacturing jobs at the Troy facility. In addition, construction workers and related skilled workers will be hired to renovate interior space and install testing and evaluation equipment.

### *Manufacturing Facility – Livonia, Michigan*

EcoMotors proposes to use the DOE ATVM loan to support renovation, purchasing and installing equipment and establishing production processes necessary to prepare its OPOC<sup>®</sup> engine manufacturing facility at the existing Roush Plymouth Road Technical Center at 28156 Plymouth Road in Livonia, Michigan. General Motors – Fisher Body Division originally constructed the Roush facility in 1954 to serve as a soft trim plant. EcoMotors will lease approximately 250,000 square feet of the 1.2 million square foot building. Approximately 170,000 square feet will be used for engine production and 80,000 square feet will be used for office and support activities.

Currently, the facility's primary tenant (Roush) conducts engine development, powertrain development, emissions testing, and fabrication operations in a portion of the existing facility. The facility is owned by Ashley Capital and is located in a mixed use commercial/industrial area that is zoned for industrial use.

EcoMotors plans on initiating construction following award of the ATVM loan. The completed manufacturing facility will house: metal cutting, assembly, and kitting operations; raw material and parts intake operations; warehousing for work-in-progress and finished goods inventory, shipping operations, and maintenance; classroom for after-sales repair and other training; employee locker room; lobby and facilities for managing waste. An above-ground fuel tank may be installed proximate to the building to supply fuel for engine testing. Cold test procedures are being considered that would obviate the need for all but a small amount of diesel fuel storage. In addition to production workers, the manufacturing plant will house managers, quality assurance and sales staff, and human resources personnel with responsibility for recruitment and other employee support services.

The project is expected to create at least 630 full time manufacturing jobs at the Livonia facility. An additional 130 construction workers and related skilled workers will be hired for approximately one year to renovate interior space and install manufacturing equipment.

#### **Number and title of categorical Exclusion:**

The actions that would be taken pursuant to the ATVM loan for the EcoMotors facilities are consistent with and are covered by categorical exclusions B1.31 for the retooling and reequipping of the Roush Plymouth Road Technical Center in Livonia, Michigan, and B5.1 for the engineering integration work that would be performed at the West Square Lake Road, Troy, Michigan facility. The full text of the categorical exclusions is as follows:

B1.31, as provided in 10 CFR § 1021, Appendix B to Subpart D, Relocation of machinery and equipment, such as analytical laboratory apparatus, electronic hardware, maintenance equipment, and health and safety equipment, including minor construction necessary for removal and installation, where uses of the relocated items will be similar to their former uses and consistent with the general missions of the receiving structure.

B5.1, as provided in 10 CFR § 1021, Appendix B to Subpart D, applies to actions to conserve energy, demonstrate potential energy conservation, and promote energy efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of

solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings or proposed DOE legislation.

**Regulatory Requirements defined in 10 CFR § 1021.410 (b):**

The proposed ATVM loan and related actions described above were subjected to an environmental due diligence review by ATVM staff to ensure they are consistent with the specific categories of actions (categorical exclusions) contained in Appendix B of 10 CFR Part 1021 and the conditions for applying categorical exclusions specified in Section 410 of Part 1021. To ensure that the requirements of Appendix B were met, the Environmental Report in the original EcoMotors International ATVM application submitted 12-23-2009 was reviewed. In addition to the environmental documentation reviewed, conference calls with EcoMotors staff and their consultants were conducted to fully understand the scope of the activities being proposed. In addition, a site visit by ATVM Environmental Compliance Division staff to the Livonia, Michigan facility was conducted on June 6, 2011. A representative from COMAU, the engine manufacturing process design contractor, provided a detailed explanation of the processes to be used and the emission streams associated with those processes. The results of the environmental due diligence review produced the following findings:

- The proposed loan project does not threaten a violation of applicable statutory, regulatory or permit requirements for environmental, safety and health, including DOE and /or Executive Orders;
- The proposed loan project does not require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities;
- The proposed loan project does not disturb hazardous substance, 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;
- The proposed action is not a connected action as set forth in 40 CFR § 1508.25(a)(2)); and
- The proposed action is not part of a DOE proposal for which an EIS is being prepared and therefore a categorical exclusion is not precluded by 40 CFR § 1506.1 or 10 CFR § 1021.211.

The environmental due diligence review also determined that the proposed project associated with the ATVM loan does not adversely affect any environmentally sensitive resources, including the following:

- Property of historic, archaeological, or architectural significance designated by Federal, state, or local governments or property eligible for listing on the National Register of Historic Places;
- Federally-listed threatened or endangered species or their habitat (including critical habitat), Federally-proposed or candidate species or their habitat, or state-listed endangered species or their habitat;
- Wetlands regulated under the Clean Water Act (33 U.S.C. 1344) and floodplains; or
- Special sources of water (such as sole source aquifers, wellhead protection areas, and other water sources that are vital in a region.

The Comment section below is provided for any necessary clarifications concerning the findings listed above. Signature by EcoMotor's designated representative in the Corporate Validation section is an indication of EcoMotor's concurrence with the findings and determinations presented above.

Comment: \_\_\_\_\_  
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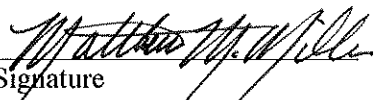
**Corporate Validation:**

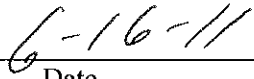
Name and Title (Print): O. John Coletti  
President and Chief Operating Officer Date: June 15, 2011

Signature: \_\_\_\_\_  


**Determination:**

Based on my review of information conveyed to me and in my possession concerning the proposed action, as NEPA Compliance Officer (as prescribed by DOE Order 451.1B), I have determined that the proposed loan and associated actions involve no extraordinary circumstances (10 CFR 1021.410(b)) and fit within the specified categories of actions in Appendix B of 10 CFR 1021 described above, and are hereby categorically excluded from further review under the National Environmental Policy Act (42 USC 4321, as amended).

\_\_\_\_\_  
  
Signature  
Matthew McMillen  
NEPA Compliance Officer  
Loan Programs Office

\_\_\_\_\_  
  
Date