

FMC-EF2a

(2.04.02)

**U.S. DEPARTMENT OF ENERGY  
EERE PROJECT MANAGEMENT CENTER  
NEPA DETERMINATION**



RECIPIENT: Missouri DNR, Division of Energy

STATE: MO

**PROJECT TITLE :** MO - IEEP: Continental Casting, LLC - Compressed Air Improvements

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-000052	EE0000131	GFO-0000131-013	EE131

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**

## Description:

**B5.1** 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.

## Rational for determination:

The Missouri Department of Natural Resources proposes to provide \$69,066 of SEP funds to Continental Casting, LLC, at the Monroe City Plant located at 801 Second Street in Monroe City, MO and the Palmyra Plant located at 7063 County Road 328, Palmyra, MO. Continental Casting was originally started back in 1974 as a tool and die shop and over the years has grown by adding on plastic injection molding, CNC machining, aluminum die casting, and zinc casting services. They provide these services for a number of industries including but not limited to automotive, communications, electronics and other consumer products.

Continental Castings is proposing two projects that consist of lighting replacement and compressed air system improvements.

**Project 1 – Lighting:** Continental Castings will replace the 870 existing 400 watt metal halide fixtures with 840 fluorescent highbay fixtures that will include 700 6 Lamp TSHO and 150 4 Lamp TSHO. The energy savings will be over 25% and the maintenance factor along with longer lamp life will be added savings. The 6 bulb fixtures will be used in the production area where high lighting levels are needed to meet the customer part and quality specifications. The 4 lamp fixtures will be installed in the dock and warehouse areas. The performance of these fixtures will allow for a reduction in the number of fixtures. The projected energy savings is 547,841 KWHrs annually.

**Project 2 - Compressed Air Improvements:** Continental Castings will replace older technology equipment, 1-125 HP compression in each plant with variable speed rotary screw air compressors with sequencers with this equipment the demand requirements can be met and varied from shift to shift and during the weekends. Based on current demands this will yield an approximate energy reduction of 50%. The projected energy savings is 690,660 KWHrs annually.

Since this project includes only lighting and equipment upgrades in existing buildings, there will be no new disturbance and no impacts to biological resources are expected.

**Air Emissions**

Continental Casting estimates this project will reduce GHG Emissions 577 MT/Yr. The emission estimates are attached in the PMC.

**Waste Stream**

Continental Casting, LLC has obtained the ISO 14001 Environmental Certification. All waste streams are reviewed by Continental Casting personnel to ensure proper recycling and disposal. The waste stream generated by this project



will be managed as follows:

1. Used metal Halide bulbs will be handled by an approved third party contractor at a cost of \$1.50 per bulb.
2. The metal Halide fixtures will be separated into like categories of aluminum, steel, copper and plastic and sold to a metal recycler (fixtures are non-PCB).
3. Waste oil from the air compressors will be removed, stored and then picked up by an approved waste oil recycler at a cost of approximately \$.50 per gallon.
4. The replaced compressors will be sold as used equipment or sold to a metal recycler.
5. Cardboard packaging from the new light fixtures will be handled by the local sheltered workshop for recycling at no cost.

The waste stream management plan is attached in the PMC.

**SHPO**

The original facility was built in 1974 with the other facilities being constructed in 1976 and 1990. All of the facilities are pre-engineered metal construction and have designated areas for light and heavy manufacturing. Therefore, this project falls under the Programmatic Agreement between the Missouri DNR- Division of Energy, The Missouri SHPO and the US Dept of Energy and is categorically exempt from further review because the is less than 45 years old. The PA is attached in the PMC.

DOE has reviewed the information for the proposed project and determined that this project does not pose a significant impact to human health or the environment. Therefore, this project is Categorical Excluded under B5.1 "Actions to Conserve Energy".

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Prepared by Chris Paulsen

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature:

  
NEPA Compliance Officer

Date:

5/31/11

**FIELD OFFICE MANAGER DETERMINATION**

Field Office Manager review required

**NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:**

- Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature:

Field Office Manager

Date: