

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



RECIPIENT: Colorado School of Mines

STATE: CO

PROJECT TITLE : Quenching and Partitioning Process Development to Replace Hot Stamping of High Strength Automotive Steel

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000560	DE-EE0005765	GFO-0005765-001	GO5765

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:

A9 Information gathering, analysis, and dissemination	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
B3.6 Small-scale research and development, laboratory operations, and pilot projects	Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rational for determination:

Colorado School of Mines (CSM) would utilize DOE and cost share funding to conduct a three year research and development project that moves the quenching and partitioning process development to replace hot stamping of high strength automotive steel from Technology Readiness Level (TRL) 5 through TRL 6. The overall project objective is the development of automotive steel materials that enable the replacement of hot stamping whilst ensuring the same properties of the formed part would result in significant energy saving and productivity gain. Project work would be completed at the following locations (R&D Laboratory Questionnaires have been submitted for all locations):

1. Colorado School of Mines, 1500 Illinois Street, Golden, CO 80401
2. Los Alamos National Laboratory, Los Alamos, NM
3. AK Steel Research, 705 Curtis St., Middletown, OH 45043
4. U. S. Steel Research and Technology Center, 800 East Waterfront Drive, Munhall, PA 15120

The project consists of three budget periods with multiple tasks (see the Statement of Project Objectives for further details).

- Task 1: Alloy Design and Test Matrix Development
- Task 2: Laboratory Material Production
- Task 3: Tensile Properties Assessment
- Task 4: Initial Microstructural Characterization
- Task 5: Microstructure/Property Data Analysis
- Task 6: Local Formability Study
- Task 7: Detailed Microstructural Characterization
- Task 8: Project Management and Reporting

According to the R&D laboratory questionnaires, all required permits are in place and no additional permits are needed for project activities. All locations have appropriate safety protocols and safety equipment in place for the anticipated project activities that would occur at each facility. No air pollutants that would exceed discharge limits would be created by the project. All liquid effluent or hazardous substances would be handled, stored, and/or disposed of according to all local, state, and federal requirements.

Based on review of the project information and the above analysis, DOE has determined that the proposed project activities would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed project activities are consistent with actions contained in DOE categorical exclusions A9

"Information gathering, analysis, and dissemination," and B3.6 "Small-scale research and development, laboratory operations, and pilot projects," and is categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

Casey Strickland 06/06/13

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

NEPA Compliance Officer

Date: _____

6/19/2013

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: _____