Page 1 of 2

PMC-EF2a U.S. DEPARTMENT OF ENERGY EERE PROJECT MANAGEMENT CENTER (2.04.02) NEPA DETERMINATION **RECIPIENT:Ben Franklin Technology Partners** STATE: PA PROJECT

Alternative and Clean Energy Technology Development and Commercialization Initiative TITLE :

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number DE-EE0001967 GFO-0001967-001 NT1967

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:

B3.6 Small-scale research and development. laboratory 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 operations, and pilot 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:

Solutions Mining, Inc. is performing a sub-project titled "Interactions of Temperature Variation on Precipitation of Iron from Acid Mine Drainage (AMD)" under the Alternative and Clean Energy Technology Development and Commercialization Initiative (ACE) being run by Benjamin Franklin Technology Partners (DE-EE0001967). A minor modification to the project scope is taking place. The proposed modification includes an additional laboratory study of temperature effects on the precipitation rate of iron oxide from AMD, and to analyze the precipitate for elemental analysis and particle size. The additional laboratory work would take place at EMSL Analytical Inc. located at 200 North Route 130, Cinnaminson, New Jersey.

Project activities were previously approved by two NETL NEPA reviews and covered under CX's B3.1 and B3.6. This NEPA review is specific to the additional laboratory work proposed at EMSL Analytical Inc. All other project activities remain covered by the previous NETL NEPA determinations.

The additional laboratory work includes elemental analysis using X-ray Fluorescence and particle size analysis using laser interferometry. According to the EMSL R&D Laboratory Questionnaire, no additional permits are needed for the project work beyond permits that are already in place. Project activities would not produce any liquid effluents, toxic wastes, or air pollutants. The laboratory has appropriate safety equipment and protocols in place. The equipment is monitored internally and audited biannually by the State of New Jersey.

All additional project work is composed of conventional laboratory operations; therefore the DOE has categorized this proposal into Categorical Exclusion B3.6.

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 :

EF2a prepared by Casey Strickland

SIGNATURE OF THIS MEMORA	NDUM CONSTIT	UTES A RECORD O	F THIS DECISION.

NEPA Compliance Officer Signature:

NEPA Compliance Officer

Date: 925/2012

Date:

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

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