

PMC-ND

(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**



RECIPIENT: A-Tech Corporation

STATE: NM

PROJECT TITLE: Rotation-Enabled 7-DOF Seismometer for Geothermal Resource Development

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0005511	GFO-0005511-002	GO5511

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.
B3.11 Outdoor tests and experiments on materials and equipment components	Outdoor tests and experiments for the development, quality assurance, or reliability of materials and equipment (including, but not limited to, weapon system components) under controlled conditions. Covered actions include, but are not limited to, burn tests (such as tests of electric cable fire resistance or the combustion characteristics of fuels), impact tests (such as pneumatic ejector tests using earthen embankments or concrete slabs designated and routinely used for that purpose), or drop, puncture, water-immersion, or thermal tests. Covered actions would not involve source, special nuclear, or byproduct materials, except encapsulated sources manufactured to applicable standards that contain source, special nuclear, or byproduct materials may be used for nondestructive actions such as detector/sensor development and testing and first responder field training.

Rationale for determination:

Applied Technology Associates (ATA) would utilize DOE and cost share funds to develop a seismic measurement tool for high-temperature geothermal applications. Phase I of this work consisted of research, development, and modeling of rotational seismometer technologies. The award has been given a Go decision on their Phase I report and is now moving into Phase 2. At the direction of the DOE, ATA re-scoped the Phase 2 effort to fit reduced budget limits and meet the reprioritized technical goals specified by DOE. This NEPA determination is for the remaining Phase 2 work.

Phase 2 activities include design work, prototype builds, testing, documentation, and publication. Project work would occur at ATA Laboratories, Sandia National Laboratories, and the USGS's Albuquerque Seismological Laboratory in Albuquerque, New Mexico. Additionally, ATA, its consultants and Sandia National Laboratories would seek opportunities to test the prototypes as loaners to existing laboratory and industry test sites to obtain rotational seismic data in parallel with traditional linear seismic measurements. Project activities would occur at existing facilities. No physical modifications or changes in use, mission, or operation of existing facilities is anticipated under the project. No modifications to, or new permits, licenses or authorizations are anticipated under this project. Work completed at other federal sites/DOE laboratories may be subject to additional NEPA review and approval by the cognizant NEPA Compliance Officer.

Based on review of the project information, DOE has determined that the Phase 2 activities would not have a significant

individual or cumulative impact to human health and/or environment. DOE has determined that these activities are consistent with actions contained in DOE categorical exclusions A9 "Information gathering, analysis, and dissemination," B3.6 "Small-scale research and development, laboratory operations, and pilot projects," and B3.11 "Outdoor tests and experiments on materials and equipment components," and are 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.

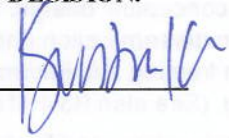
Note to Specialist :

This NEPA Determination does not require a tailored NEPA provision
Geothermal Technologies Office
Casey Strickland 04/14/15

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

Electronically Signed By: Kristin Kerwin
NEPA Compliance Officer



Date: 4/16/2015

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: