

U. S. DEPARTMENT OF ENERGY, OFFICE OF SCIENCE  
NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)  
ENVIRONMENTAL EVALUATION NOTIFICATION

To be completed by "Applicant," i.e., organization with responsibilities for a "Federal action" involving application to DOE for a permit, license, exemption or allocation, or other similar actions. For assistance, refer to "Instructions for Preparing Environmental Evaluation Notification."

Solicitation/Award No. (if applicable): DE-SC0021615

Organization Name: American Museum of Science and Energy Foundation, Inc.

Proposed Action Title: American Museum of Science and Energy (AMSE) Operations

Total DOE Funding/Total Funding: \$4,556,972.00

I. Project Description: (Use explanation pages if additional space is required)

A. Proposed Project/Action (if applicable, delineate Federally funded/Non-Federally funded portions)

Ongoing operations for two existing facilities:

- 1) American Museum of Science and Energy, Oak Ridge, Tennessee, Anderson County
- 2) K-25 History Center, Oak Ridge, Tennessee, Roane County

Both of these existing facilities will continue operations as a result of the grant. See the complete application for all details on budget, objectives, and schedule in the Project Narrative.

B. Would the project proceed without Federal funding?

Yes  No

If "yes," use explanation page.

II. Description of Affected Environment: (Use explanation pages if additional space is required)

III. Preliminary Questions:

- |   |                          |                                     |
|---|--------------------------|-------------------------------------|
|   | Yes                      | No                                  |
| A. <u>Is the DOE-funded work routinely administrative or <i>entirely</i> advisory or a "paper study?"</u> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

***If "Yes", ensure that the description in Section I reflects this and go directly to Section V.***

- B. Is there any potential whatsoever for: (Provide an explanation for each "Yes" response)

- |  |                          |                                     |
|--|--------------------------|-------------------------------------|
| 1. Work to be performed outdoors?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Major modification of a building facade or interior?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Threat of violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health?        | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Siting, construction or major expansion of waste treatment, storage, or disposal facilities?                                | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Disturbance to hazardous substances, pollutants, or contaminants preexisting in the environment?                            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. The presence of any environmentally-sensitive resources?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Any potential whatsoever for high consequence impacts to human health or the environment?                                   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. The work being connected to another existing/proposed activity that could potentially create a significant impact?          | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9. Nearby past, present, and/or reasonably foreseeable future actions such that collectively significant impacts could result? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. Scientific or public controversy, uncertainty over potential impacts, or conflicts regarding resource usage?               | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

***If "No" to ALL Section III.B. questions, go directly to Section V.***

IV. Potential Environmental Effects: (Provide an explanation for each "Yes" response)

- A. Environmentally Sensitive Resources: Could the proposed action potentially result in changes and/or disturbances to any of the following resources?

- |  |                          |                                     |
|--|--------------------------|-------------------------------------|
|  | Yes                      | No                                  |
| 1. Threatened/Endangered Species and/or Critical Habitats                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Other Protected Species (e.g., Burros, Migratory Birds, Pollinators)            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Tundra, Coral Reefs, or Rain Forests  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Cultural or Historic Resources  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Important Farmland  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Non-Attainment Areas for Ambient Air Quality Standards                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Class I Air Quality Control Region  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. Special Sources of Groundwater (e.g., Sole Source Aquifer)                      | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9. Navigable Air Space   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. Coastal Zones  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. Areas with Special National Designation (e.g. National Forests, Parks, Trails) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. Floodplains and/or Wetlands  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- B. Regulated Substances/Activities: Would the proposed action involve any of the following regulated items or activities?

- |  |                          |                                     |
|--|--------------------------|-------------------------------------|
| 13. Natural Resource Damage Assessments  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 14. Invasive Species or Exotic Organisms   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 15. Noxious Weeds  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 16. Clearing or Excavation greater than one acre or Removal of Trees Governed by Local Requirement | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 17. Dredge or Fill (under Clean Water Act, Section 404, greater than one acre)                     | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

B. Regulated Substances/Activities: Would the proposed action involve any of the following regulated Items or activities? (continued)

	Yes	No
18. Noise (in excess of regulations)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19. Asbestos Removal	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20. Polychlorinated biphenyls (PCBs)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21. Import, Manufacture, or Processing of Toxic Substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22. Chemical Storage/Use Including Emerging Chemicals (e.g., PFAS)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23. Pesticide Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24. Hazardous, Toxic, or Criteria Pollutant Air Emissions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25. Liquid Effluents	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26. Spill Prevention/Surface Water Protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27. Underground Injection	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28. Hazardous Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29. Underground Storage Tanks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30. Radioactive or Radioactive Mixed Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31. Radiation Exposure	<input type="checkbox"/>	<input checked="" type="checkbox"/>
32. Nanoscale Materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>
33. Genetically Engineered Microorganisms/Plants or Synthetic Biology	<input type="checkbox"/>	<input checked="" type="checkbox"/>
34. Ozone Depleting Substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
35. Greenhouse Gas Generation/Sustainability	<input type="checkbox"/>	<input checked="" type="checkbox"/>
36. Off-Road Vehicles	<input type="checkbox"/>	<input checked="" type="checkbox"/>
37. Biosafety Level 3-4 Laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>
38. Research on Human Subjects or other Vertebrate Animals	<input type="checkbox"/>	<input checked="" type="checkbox"/>
39. Facility footprint exceeds 5,000 Square Feet	<input type="checkbox"/>	<input checked="" type="checkbox"/>

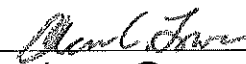
C. Other Relevant Information: Would the proposed action involve the following?

	Yes	No
40. Disproportionate Nearby Presence of Minority and/or Low Income Populations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
41. Existing, Modified, or New Federal/State Permits	<input type="checkbox"/>	<input checked="" type="checkbox"/>
42. Involvement of Another Federal Agency (e.g. license/permit, funding, approval)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
43. Action in a State with NEPA-type law	<input type="checkbox"/>	<input checked="" type="checkbox"/>
44. Action Would Require Expansion of Public Utilities/Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>
45. Depletion of a Non-Renewable Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>
46. Subject to an Existing Institutional Work Planning and Control Process	<input type="checkbox"/>	<input checked="" type="checkbox"/>
47. Other Pertinent Information Which Could Impact Human Health or the Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>

V. Applicant certification that to the best of their knowledge all information provided on this Notification is accurate:

Does this disclosure contain: classified, sensitive business, or other exempt information that DOE would not be obligated to disclose pursuant to the Freedom of Information Act. Yes  No

A. Organization Official (Name and Title): Alan Lowe / Executive Director

Signature:  Date: 3/13/24  
 e-mail: alan.lowe@amse.org Phone: 865-202-6253

B. Optional Secondary Approval (Name and Title): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 e-mail: \_\_\_\_\_ Phone: \_\_\_\_\_

Remainder to be completed by DOE

VI. DOE Concurrence/Recommendation/Determination:

A. DOE Project Director/Program Manager or Contract/Grant Management Specialist:

Has the Applicant completed this Notification correctly?

Yes

No

Does an existing generic categorical exclusion apply?

If yes, indicate: Past CX from 2020

Name and Title: Program Manager and COR

Signature: C. Johnathan Sitzler

Date: March 15, 2024

B. DOE NEPA Team Review (if requested):

Is the class of action identified in the DOE NEPA Regulations (Appendices A-D to Subpart D (10 CFR § 1021))?

Yes

No

If yes, specify the class(es) of action: B3.14

Name and Title: \_\_\_\_\_

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

Date: \_\_\_\_\_

C. DOE Counsel (if requested):

Name and Title: \_\_\_\_\_

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

Date: \_\_\_\_\_

D. DOE NEPA Compliance Officer:

The preceding pages are a record of documentation required under DOE Final NEPA Regulation, 10 CFR § 1021.410.

Action may be categorically excluded from further NEPA review. I have determined that the proposed action meets the requirements for Categorical Exclusion referenced above.

Action requires approval by Head of the Field Organization. Recommend preparation of an Environmental Assessment.

Action requires approval by Head of the Field Organization or the SC Director of Field Operations. Recommend preparation of an Environmental Impact Statement.

Comments/limitations if any:

NEPA Compliance Officer:

Name: \_\_\_\_\_

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

Date: \_\_\_\_\_

Optional Additional Narrative: (add additional detail to description to Sections I and II or explanations to responses in Sections 3 and 4.

The American Museum of Science and Energy (AMSE), originally named the American Museum of Atomic Energy, was established in 1949 in a former cafeteria building to provide educational programs focused on the Department of Energy's (DOE) past, present, and future missions. In 1975, the museum moved to the Tulane Avenue facility, where it continued to provide the general public with energy information. The name of the museum was changed to the American Museum of Science and Energy in 1978. Public Law 106-554, enacted December 21, 2000, designated the museum operated by the Secretary of Energy in Oak Ridge, Tennessee, as the 'American Museum of Science and Energy.' See also 42 U.S.C. § 7142a. In 2018 AMSE moved to a newly renovated 15,000 square-foot (sf) space located at 115 Main Street East in Oak Ridge, Tennessee. This facility is located in Anderson County.

AMSE has been considered one of the top tourist attractions in the Knoxville area, and it attracts about 65,000 visitors per year. Among other activities, AMSE provides interactive curriculum-based classroom programs for school groups and STEM education programs. AMSE houses permanent and rotating exhibits, provides live demonstrations, hosts evening events consistent with the AMSE mission, and holds spring, summer, and fall camp programs for students. AMSE is also the starting point for bus tours of sites on the federal government's Oak Ridge Reservation, and it hosts the National Park Service (NPS) programs and events for the Manhattan Project National Historical Park. The facility operates seven (7) days a week. The AMSE facility includes an exhibit area for permanent and temporary exhibits. The facility also includes a lobby area with an information desk and monitors, two classrooms, one 150-seat lecture hall, a retail shop and office space for museum staff and volunteers. AMSE houses five major exhibit topic areas listed below and an Oak Ridge regional kinetic map of Oak Ridge and DOE's historical landmarks and video wall

- The Manhattan Project
- National Security
- Big Science
- Energy Leadership
- Environmental Restoration

In addition to the American Museum of Science and Energy, the AMSE Foundation is tasked with operating a second facility located in Roane County. The K-25 History Center (K-25), opened in February 2020, tells the history of the Manhattan Project and the incredible story of the K-25 gaseous diffusion plant. Its mission is to both present the history of the site and the intense effort to create the atomic bomb, and to explain the science behind such an

immense and important undertaking. Dedicated customer service representatives and volunteers work at K-25, and other AMSE staff members divide their time between AMSE and K-25. The Executive Director of AMSE is also the Executive Director of the K-25 History Center.

The hours of K-25 mirror those of AMSE. The facility, pictured below, includes an orientation theater, and exhibits showing the history of Oak Ridge and the Manhattan Project. Then the focus changes to the K-25 facility and the men and women who made it successful. A special exhibit space helps tell the story of K-25 and the Manhattan Project. Office and workspaces are available for both staff and volunteers.

□7

Additionally, AMSEF partners with the Manhattan Project National Historical Park to present the story of the Manhattan Project when possible through activities such as special exhibits and public programs. AMSE's mission is to educate visitors about the Manhattan Project history and DOE's impact on science, energy, environmental restoration and national security. More generally, AMSEF contributes to the advancement of the teaching of science, technology, engineering and mathematics (STEM), a mission vital to the continued success of DOE and our nation. These activities benefit DOE in several ways. For example, exhibits at both AMSE and K-25 show how the Manhattan Project, and especially the work done in Oak Ridge as part of that work, changed the world. Through the immense efforts of the government, victory was gained in the war, and a new atomic age dawned. AMSEF tells that story and then shows how DOE continued to grow on that mission, serving our nation through research and the development of new technologies. In addition, AMSEF helps advance and highlight DOE's role in education, in advancing the important STEM disciplines that will determine the future of the country. And those educational efforts will also help advance the next generation of DOE employees, ensuring that the agency stays at the forefront of scientific and engineering research and development. It also should be noted that this support of AMSEF would continue DOE's vital role in and partnership with the Oak Ridge community, a community it created and that continues to be dedicated to helping advance the agency's mission.