

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



RECIPIENT: GKN Hydrogen Corp

STATE: CA

PROJECT TITLE: Metal Hydride-Based Hydrogen Storage Supporting Onsite Hydrogen Infrastructure at WGL/Washington Gas

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002792	DE-EE0010748	GFO-0010748-001	GO10748

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

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

Description:

<b>A9 Information gathering, analysis, and dissemination</b>	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.)
<b>B3.6 Small-scale research and development, laboratory operations, and pilot projects</b>	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.
<b>B5.22 Alternative fuel vehicle fueling stations</b>	The installation, modification, operation, and removal of alternative fuel vehicle fueling stations (such as for compressed natural gas, hydrogen, ethanol and other commercially available biofuels) on the site of a current or former fueling station, or within a previously disturbed or developed area within the boundaries of a facility managed by the owners of a vehicle fleet. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to GKN Hydrogen Corp (GKN) to design, fabricate, and test a mobile hydrogen refueling system for dispersal of hydrogen to vehicles.

Award activities would be executed over three budget periods (BP). BP1 activities would spread over three locations. Metal hydride alloy loading into tubes and racking would occur at GKN's facility in Bruneck, Italy. Assembly, integration, and laboratory testing would occur at GKN's US headquarters in Carlsbad, California. Deployment and commissioning of the refueling system would occur at Douglas County Public Utilities District (DCPUD) headquarters in East Wenatchee, Washington. BP2 and BP3 activities include demonstration and operation of the system for two years. During that time field data would be collected and analyzed.

Award activities in Italy and California would occur entirely within existing research and development facilities that are purpose-built for the type and scale of activities being proposed. A 480V step-up transformer would be installed at DCPUD to accommodate increased power load. Ground disturbance from the installation of the step-up transformer and mobile fueling system would be limited to the existing parking lot of DCPUD. No modifications to the existing facility would be required. No change in the use, mission, or operation of existing facilities would arise out of this effort.

Based on FEMA National Flood Hazard Map data accessed on June 7, 2024, the proposed project would be located within a flood hazard area. The proposed temporary mobile installation would be installed within a flood hazard zone that either falls between the 100-year and 500-year zones or is subject to the 100-year flood zone with flood depths less than one foot. As the project is temporary and mobile, and falls within a zone prone to minimal flooding, DOE has determined the project activities would not have the potential to impact the floodplain from water displacement. Therefore, DOE has determined that a floodplain assessment under 10 CFR 1022 is not required.

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website identifies one endangered species (Gray Wolf), two threatened species (Yellow-billed Cuckoo and Bull Trout), and one candidate species (Monarch Butterfly) which may occur in the proposed project area at DCPUD. The project would not involve any tree cutting or vegetation clearing. DOE determined consultation was not required for these species as there is no suitable habitat within or adjacent to the project site.

A permit may be required for distribution of hydrogen at DCPUD's headquarters. Significant air impacts are not anticipated as emissions would be temporary and intermittent. GKN and DCPUD would obtain and comply with all applicable federal, state, and local permits, requirements, and regulations.

Award activities would involve hazards such as handling and use of pressurized gas, hydrogen gas, and coolants. Hazardous materials would be utilized, managed, stored, and disposed of in accordance with applicable federal, state, and local environmental regulation. Hazards would be mitigated via existing corporate and governmental health and safety policies and procedures, including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments.

DOE has considered the scale, duration, and nature of the proposed activities to determine potential impacts on sensitive resources, including those of an ecological, historical, cultural, and socioeconomic nature, and found no effects that would be expected to result from the proposed project activities.

## NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

If during project activities the recipient or their contractors encounter any cultural materials (i.e. historic or prehistoric), all activities must cease in the vicinity of the discovery immediately. The recipient must inform the DOE Project Officer of the discovery so that an evaluation of the discovery can be completed prior to continuing work.

Notes:

Hydrogen and Fuel Cell Technologies Office (HFTO)  
NEPA review completed by Amy Lukens, 6/7/2024.

## FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

DOE has determined that work to be carried out outside of the United States, its territories and possessions is exempt from further review pursuant to Section 5.1.1 of the DOE Final Guidelines for Implementation of Executive Order 12114; "Environmental Effects

Abroad of Major Federal Actions.”

The proposed action is categorically excluded from further NEPA review.

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

NEPA Compliance Officer Signature:  Electronically Signed By: Melissa Parker Date: 6/10/2024  
NEPA Compliance Officer

**FIELD OFFICE MANAGER DETERMINATION**

- Field Office Manager review not required
- Field Office Manager review required

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

Field Office Manager's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Field Office Manager