

November 18, 2024

MEMORANDUM FOR THE RECORD

From: Joe Barger  
NEPA Coordinator

Subject: Categorical Exclusion  
Record of Environmental Consideration

Project Title: Hot Cell Facility

Location: Washington State University  
2480 NE Roundtop Drive  
Pullman WA 99163-1300

The National Environmental Policy Act (NEPA) and associated implementing regulations (40 CFR Parts 1500-1508) require that all major actions by federal agencies be reviewed with respect to the environmental consequences on the human environment. The National Institute of Standards and Technology (NIST) is providing a congressionally directed funding grant for the Hot Cell Facility at Washington State University. Consequently, NEPA and the associated implementing regulations apply to this project.

This memorandum serves as a Record of Environmental Consideration and summarizes the determination that the Hot Cell Facility at Washington State University has been found to be categorically excluded from further environmental review under NEPA.

**Description of the Action**

This project includes the construction and operation of an addition to the Dodgen Research Facility on the campus of Washington State University (WSU). The Dodgen Research Facility is a 4-story, 24,132 square foot building that houses WSU's 1.0-megawatt research nuclear reactor.

The addition will be approximately 5,000 square feet of high bay space and will be attached to the northeast section of the existing building, specifically connected to the east wall of the reactor high bay area. The new addition and associated site work (access road, loading dock, parking lot) will cover

approximately 0.5 acres. The new addition will house hot cells (shielded chambers for the containment of radioactive materials), wet laboratory space, a teaching space, touring area, a shipping/receiving area, and a loading dock.

The existing Dodgen Storage Building (1,371 gross square feet) will be demolished to create space for the new Hot Cell Facility.

The Hot Cell Facility project is a staged process, and initially, will not result in a change of operations that are currently performed at the Dodgen Research Facility and Dodgen Storage Building. The new addition will initially be used as a passthrough area for packaged radioactive materials offered for transport offsite. These materials will be contained in shipping packages prior to entry into the hot cell facility space and will leave via the new loading dock constructed in this project. In the future, WSU may seek to perform radiological work, and use the hot cells within the new addition. This future change in operations will require additional review by applicable regulatory agencies (i.e., Washington Department of Health and U.S. Nuclear Regulatory Commission) and environmental evaluation (see the Hazardous/Radiological Materials discussion below)

Completion of this project fulfills WSU Strategic Plan goals (1: Research, Innovation, and Creativity; 2: Student Experience; 3: Outreach, Extension, Service, and Engagement; 4: Institutional Effectiveness and Infrastructure) by building on existing capacities of the Dodgen Research Facility and broadening the scope of nuclear science research, materials research, and teaching missions at WSU. The Dodgen Research Facility supports federally funded work at Pacific Northwest National Laboratory, Idaho National Laboratory and Los Alamos National Laboratory by providing unique radioactive isotopes and an accessible platform for experiments that require neutron irradiation. These radioactive isotopes are uniquely suited for production at the WSU reactor and they are critical for U.S. National Laboratory research, development, and other capabilities.

### **Specific Considerations of this Action and any Extraordinary Circumstances**

#### **- Existing Site**

Dodgen Research Facility is located on the WSU Campus. The new Hot Cell Facility will impact approximately 0.5 acres adjacent to the Dodgen Research Facility. The existing Dodgen Storage Building (1,371 gross square feet) will be demolished to create space for the new Hot Cell Facility.

Site work including: grading, excavation, minimal fill, retaining wall construction, and landscaping will be required to accommodate the new Hot Cell Facility and associated loading dock/parking lot. Approximately 10 trees will be removed. No blasting, or

dredging will be required as part of this construction project.

**- Building Staffing/Utilities**

Staffing and student population are not expected to increase significantly due to the Hot Cell Facility operation.

No significant increases in water consumption or wastewater production are expected.

Electricity use and natural gas use will increase due to the operation of the new Hot Cell Facility, but not significantly.

**- Greenhouse Gas Emissions**

Greenhouse gas emissions will increase due to the increased energy demands of the Hot Cell Facility, but again not significantly. Energy efficiency measures built into the new addition will reduce greenhouse gas emissions that result from the energy use of the building.

**- Wetlands, Flooding Potential and Resilience**

According to the United States Fish and Wildlife Service National Wetlands Inventory Map, there are no known wetlands on or adjacent to the proposed site.

The site is not located in a coastal zone and is not located within a 100- or 500-year flood zone (FEMA). The project site is 2400 feet northwest and 130 feet in elevation above the nearest FEMA flood plain.

**- Hazardous/Radioactive Materials**

The anticipated use of the Hot Cell Facility, immediately upon completion of this project, will not be subject to Washington Department of Health (WA DOH) or U.S. Nuclear Regulatory Commission (NRC) review because the Hot Cell Facility addition will not impact the reactor NRC license and will not have radioactive material work performed that would be subject to the WSU Broad Scope License (WA DOH).

At such a time that WSU seeks to change operations and perform radiological work in the Hot Cell Addition, those changes would be evaluated by both the WA DOH and the U.S. NRC for adherence to state and federal requirements. WSU would first evaluate whether the radiological work would require a change in the current WSU Broad Scope license prior to any radiological work commencing. Similarly, if the radiological work required a change to the WSU reactor facility license, due to anticipated impact to the reactor as a result of the change, then a license amendment would be initiated by WSU to U.S. NRC and would require their processes and evaluations to commence. An environmental

evaluation may be required by WA DOH and/or the U.S. NRC depending on the nature of the work proposed.

Similar to operations at the Dodgen Research Facility, hazardous chemicals will be used at the new Hot Cell Facility and hazardous wastes will be generated. Hazardous wastes will be properly disposed by the WSU Environmental Health and Safety Office. Radiological wastes are properly disposed in accordance with the WSU Radiation Safety Program.

**- Historic/Cultural Significance**

A request was submitted to the Department of Archaeology and Historic Preservation (DAHP) of Washington State for a project review and clearance under Section 106 of the National Historic Preservation Act. The DAHP provided a response on 10/23/24 finding that “The project will have no adverse impact on historic properties” (see attached).

**- Environmental Justice**

This building addition is not expected to have disproportional adverse human health or environmental impacts to overburdened and underserved communities, including minority, Tribal, or low-income populations.

## **Effects of the Action**

No significant adverse impacts to the environment are expected from this action.

## **Categorical Exclusion**

The activities associated with this project fall within the criteria of the following Department of Commerce Categorical Exclusion (CATEX):

**A–1** Minor renovations and additions to buildings, roads, airfields, grounds, equipment, and other facilities that do not result in a change in the functional use of the real property (*e.g.* realigning interior spaces of an existing building, adding a small storage shed to an existing building, retrofitting for energy conservation, or installing a small antenna on an already existing antenna tower that does not cause the total height to exceed 200 feet and where the FCC would not require an environmental assessment or environmental impact statement for the installation). This CE does not apply in instances where the project must be submitted to the National Capital Planning Commission (NCPC) for review and NCPC determines that it does not have an applicable Categorical Exclusion.

This project is considered a minor addition to a building that does not change functional use of the real property. The project does not require review by the NCPC.

The proposed project: Hot Cell Facility at Washington State University is categorically excluded from the need for further environmental review under NEPA. Any changes to the above project will require additional NEPA review.

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Joe Barger  
NIST NEPA Coordinator

11/18/2024

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Date

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Robert C. Vaughn  
NIST Chief Facilities Management Officer

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Date

Attachment A

Washington State Department of Archaeology and Historic Preservation Correspondence

**jblackmon9@gmail.com**

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**Subject:** FW: Submitting EO21-02 Form for project 2377-2025 - WSU Pullman Campus - Dodgen Hot Cell Facility Addition  
**Attachments:** EZ PROJECT FORM - 2102 - WSU Dodgen Hot Cell Facility - Signed.pdf

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**From:** Roldan, Jeronimo (DAHP) <jeronimo.roldan@dahp.wa.gov>  
**Sent:** Wednesday, October 23, 2024 7:20 PM  
**To:** Johnson, Philip Ryan <philrjohnson@wsu.edu>  
**Subject:** RE: Submitting EO21-02 Form for project 2377-2025 - WSU Pullman Campus - Dodgen Hot Cell Facility Addition

**[EXTERNAL EMAIL]**

Hello Phil Johnson,

Thank you for contacting DAHP for consultation for your project under Executive Order 21-02. I have reviewed your material and am returning your signed EZ Project Form with a noted finding of "NO ADVERSE IMPACT" on the Washington State University Nuclear Radiation Building. As a result of our concurrence, further correspondence with DAHP on this proposal is not necessary. However, if the project scope changes significantly, please contact DAHP for consultation. Thank you for the opportunity to review and comment on this project.

Best regards,

**Jeronimo Roldan** Intl Asse AIA (He/Him) | *State Historical Architect*  
*Ph: 360-584-5900 | [Jeronimo.Roldan@dahp.wa.gov](mailto:Jeronimo.Roldan@dahp.wa.gov)*

**Dept. of Archaeology & Historic Preservation** | [www.dahp.wa.gov](http://www.dahp.wa.gov)  
1110 S. Capitol Way, Suite 30 | Olympia, WA 98501



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DAHP USE ONLY	
Date Received:	
DAHP Log #:	
Reviewer(s):	
<input type="checkbox"/> ARCHY	<input type="checkbox"/> BEU



## EZ / PROJECT FORM

Request to initiate consultation for Governor's Executive Order 21-02 (GEO 21-02) projects

# GEO 21-02

New Consultation? ☐ YES ☐ NO ☐ ADDITIONAL INFORMATION PROVIDED PER REQUEST

### Questions?

Contact DAHP at 2102@dahp.wa.gov or (360) 586-3065.

You may also find answers to your questions online at [www.dahp.wa.gov/2102](http://www.dahp.wa.gov/2102).

**Please be aware that this form may only initiate consultation. For some projects, DAHP may require additional information to complete our review. A historic property inventory form or archaeological survey may need to be completed by a qualified cultural resource professional.**

**NOTE: To save this fillable form you must fill it out in Adobe Acrobat or use the PRINT to PDF function in Acrobat Reader. In Reader choose File > Print and choose Adobe PDF as the printer. The file will save to your computer.**

**NOTE: The form will automatically adjust to fit all your information.**

### SECTION 1: PROJECT INFORMATION

Project Title:	Provide 1-2 sentence summary of the project.	
Property Name: <i>if applicable</i>		
Project Address:		
City / State / Zip:	County:	Township / Range / Section: <i>leave blank if unsure</i>

### SECTION 2: PROJECT DESCRIPTION

Project includes (check all that apply):	NEW CONSTRUCTION	DEMOLITION	GROUND DISTURBANCE	REHABILITATION / RENOVATION	ACQUISITION
Are any buildings 45 years or older going to be impacted in any of the above ways by this project?	YES	NO	NOT SURE	Check here if the project involves multiple resources. If so, attach a table including all information in Sections 1 and 2 for each resource.	
If you do not know the age of the building(s) this is usually available through the county assessor web parcel search. To find this page put in the name of the county, Washington assessor property search into your web search engine of choice. I.e.. Adams county Washington assessor property search.					
Are there any Federal funds, lands, permits, or licenses involved in/required by this project?	YES	NO	NOT SURE	If Yes, what Federal Agency?	
Have you already received a grant?	YES	NO, WE ARE APPLYING NOW	NO, WE HAVE NOT APPLIED YET	NOT SURE	

### SECTION 3: STATE AGENCY INFORMATION

*Leave blank if unknown*

State Agency:	Grant / Loan Program Name:	Direct Appropriation?
Contact Person:	Phone:	e-mail:
Funding biennium?	Requested grant / loan amount:	Total project amount:

### SECTION 4: CONTACT INFORMATION

*If different from State Agency contact person.*

Submitter Name:	Submitter Organization:
Submitter Address:	City / State / Zip:
Submitter Phone:	Submitter e-mail:

### DAHP DETERMINATION (DAHP USE ONLY)

- |  |  |
|--|--|
| <input type="checkbox"/> <b>EXEMPT</b> from GEO 21-02 review.                                      | <input type="checkbox"/> The project will have an <b>ADVERSE IMPACT</b> on historic properties.                  |
| <input type="checkbox"/> There are <b>NO HISTORIC PROPERTIES IMPACTED</b> by the proposed project. | <input type="checkbox"/> DAHP requires <b>ADDITIONAL INFORMATION</b> in order to complete review (see attached). |
| <input type="checkbox"/> The project will have <b>NO ADVERSE IMPACT</b> on historic properties.    | <input type="checkbox"/> SURVEY REQUIRED <input type="checkbox"/> INADVERTENT DISCOVERY PLAN REQUIRED            |
|  | <input type="checkbox"/> MONITORING REQUIRED   |

  
DAHP REVIEWER

DATE \_\_\_\_\_



**Instructions:** Please describe the type of work to be completed. Be as detailed as possible to avoid a request for additional information. Be sure to describe all ground disturbing activities in the appropriate box below and provide photos of areas of work.

**SECTION 5: ATTACHMENTS**

Please email completed form  
and all attachments to:

**2102@dahp.wa.gov**

MAP - Be sure to show the project boundary and location  
of property(ies). *See Section 7 on Page 3 for optional template. May  
also submit online through WISAARD using eAPE.*

DESCRIPTION / SCOPE OF WORK - Describe the project,  
including any ground disturbance. *See Section 6 for an optional  
template.*

SITE PLAN / DRAWINGS - Indicate location and dates of  
resources, proposed improvements and ground disturbance, etc.

PHOTOGRAPHS - Attach digital photographs showing the project  
site, including images of all resources. *Photos submitted through  
WISAARD may suffice.*

**SECTION 6: ADD'L PROJECT INFORMATION**

Provide a detailed description of the proposed project:

Describe the existing project site conditions (include building age, if applicable):

If there are ground disturbing activities proposed, describe them *including the approximate depth of ground disturbance*:

**Instructions:** Please attach a MAP clearly showing the project area. Please [click here for tutorial on creating a map](#) if you don't have one clearly showing the project area.

**SECTION 7: MAP / Area of Potential Effect**

**CLICK IN THE BOX ABOVE TO ADD A MAP**  
**MAP MUST BE IN JPG FORMAT**