

U. S. DEPARTMENT OF ENERGY, OFFICE OF SCIENCE
INTEGRATED SUPPORT CENTER—CHICAGO OFFICE

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)
ENVIRONMENTAL EVALUATION NOTIFICATION FORM

To be completed by "Applicant," i.e., organization receiving funds and/or implementing Federal Actions as defined by 40 CFR § 1508.18. For assistance, refer to "Instructions for Preparing ISC-CH F-560, Environmental Evaluation Notification Form."

Solicitation/Award No. (if applicable): DE-SC0001271
Organization Name: Northwestern University
Title of Proposed Action: Relocation and Unification of Legacy Low Dose Tissues to Northwestern University JANUS Archive
Total DOE Funding/Total Funding: \$15,000

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

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

We are requesting federal funds to consolidate tissues and data from the Lovelace Respiratory Research Institute radiation (historically ITRI) tissue archive as well as Pacific Northwest Nat'l Lab to make them publically available along with the archived tissue and data from the Argonne National Laboratory project (already at Northwestern University). Activities proposed include packing, shipping and unpacking of large volumes of paraffin embedded animal tissues from animals exposed to external or internal radiation. It should be noted that these samples pose no hazard. For more details see optional additional 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)

NONE

No environments should be touched in any way - no radioactive or toxic waste will be produced in the course of this work.

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)

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

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

- | | | | |
|-----|--|--------------------------|--------------------------|
| | | Yes | No |
| 13. | Natural Resource Damage Assessments | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. | Invasive Species or Exotic Organisms | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. | Noxious Weeds | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. | Clearing or Excavation (indicate if greater than one acre) | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. | Dredge or Fill (under Clean Water Act, Section 404, greater than one acre) | <input type="checkbox"/> | <input 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 type="checkbox"/>
19. Asbestos Removal	<input type="checkbox"/>	<input type="checkbox"/>
20. Polychlorinated biphenyls (PCBs)	<input type="checkbox"/>	<input type="checkbox"/>
21. Import, Manufacture, or Processing of Toxic Substances	<input type="checkbox"/>	<input type="checkbox"/>
22. Chemical Storage/Use	<input type="checkbox"/>	<input type="checkbox"/>
23. Pesticide Use	<input type="checkbox"/>	<input type="checkbox"/>
24. Hazardous, Toxic, or Criteria Pollutant Air Emissions	<input type="checkbox"/>	<input type="checkbox"/>
25. Liquid Effluents	<input type="checkbox"/>	<input type="checkbox"/>
26. Spill Prevention/Surface Water Protection	<input type="checkbox"/>	<input type="checkbox"/>
27. Underground Injection	<input type="checkbox"/>	<input type="checkbox"/>
28. Hazardous Waste	<input type="checkbox"/>	<input type="checkbox"/>
29. Underground Storage Tanks	<input type="checkbox"/>	<input type="checkbox"/>
30. Radioactive or Radioactive Mixed Waste	<input type="checkbox"/>	<input type="checkbox"/>
31. Radiation Exposure	<input type="checkbox"/>	<input type="checkbox"/>
32. Nanoscale Materials	<input type="checkbox"/>	<input type="checkbox"/>
33. Genetically Engineered Microorganisms/Plants or Synthetic Biology?	<input type="checkbox"/>	<input type="checkbox"/>
34. Ozone Depleting Substances	<input type="checkbox"/>	<input type="checkbox"/>
35. Greenhouse Gas Generation/Sustainability	<input type="checkbox"/>	<input type="checkbox"/>
36. Off-Road Vehicles	<input type="checkbox"/>	<input type="checkbox"/>
37. Biosafety Level 3-4 Laboratory	<input type="checkbox"/>	<input type="checkbox"/>
38. Research on Human Subjects or other Vertebrate Animals	<input type="checkbox"/>	<input type="checkbox"/>
39. Facility footprint exceeds 5,000 Square Feet	<input type="checkbox"/>	<input type="checkbox"/>

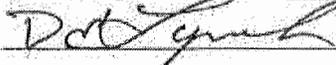
C. Other Relevant Information: Would the proposed action involve the following?

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

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

Does this disclosure contain classified, confidential, 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): David E. Lynch, Executive Director, OSR Chicago

Signature:  Date: 9/1/15

e-mail: OSR-Chicago@northwestern.edu Phone: 312-503-7955
RM SP0031543

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 the Form correctly?
Does an existing Generic Categorical Exclusion apply?

Yes No

If yes, indicate:

Name and Title: Sable Williams contract specialist

Signature: Sable Williams Date: 9/14/15

B. DOE NEPA Team Review:

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: Bl. 30

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 § 1021.400.

- 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 a Secretarial Officer. Recommend preparation of an Environmental Impact Statement.

Comments/limitations if any:

NEPA Compliance Officer:

Name: Peter R. Sieback
Signature: Peter R. Sieback Date: 9/14/2015

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

We request funds to pack, ship and unpack paraffin embedded animal tissues from animals exposed to radioactive materials.

All "hands-on" activities will be conducted indoors. While shipping part of the process can be viewed as "outdoors" shipping of these samples is fully covered by DOT guidelines. NRC states the following:

"For transportation purposes, radioactive material is defined as any material which has a specific activity greater than 0.002 microcuries per gram. This definition does not specify a quantity, only a concentration. As an example, pure cobalt-60 has a specific activity of 1,000 curies per gram, which is about 500 billion times greater than the definition. However, uranium-238 has a specific activity of only 0.3 microcuries per gram, which is only 150 times greater than the definition. Although both exceed the definition of radioactive material in their pure form, either of these materials could be uniformly mixed with enough substance, such as dirt, which would cause the concentration to fall below the definition. In the case of uranium-238, if one gram were mixed with about 150 grams of dirt (about 1/3 of a pound), the concentration could be classified as non-radioactive." <http://www.nrc.gov/reading-rm/basic-ref/teachers/11.pdf>

Radioactivity of animal samples that are shipped is well below 0.002 micro Curies per gram.

This radioactivity can not be released or extracted from the samples -- animal tissues are embedded in paraffin.