

**NEPA REVIEW SCREENING FORM**

**I. Project Title:**

CATEGORICAL EXCLUSION FOR SMALL-SCALE RESEARCH AND DEVELOPMENT PROJECTS USING NANOSCALE MATERIALS, 300 AREA, RICHLAND, WASHINGTON - 2013

**II. Project Description and Location (Including Time Period over which proposed action will occur and Project Dimensions - e.g., acres displaced/disturbed, excavation length/depth, area/location/number of buildings, etc.):**

PNNL proposes to (1)conduct indoor small-scale research and development projects using nanoscale materials; (2)carry out pilot-scale projects using nanoscale materials; (3) complete minor modifications of existing laboratory rooms to support projects using nanoscale materials in the 300 Area. Activities involving nanoscale materials include, but are not limited to 1)nanoscale capabilities to design surfaces, interfaces, and thin films for selective chemical and physical properties 2)nanoscience and nanotechnology, including condensed phase and interfacial chemical physics, oxide surface science, catalysis and chemical transformation 3)minor modifications to rooms, equipment, and instrumentation in direct support of laboratory operations associated with the use of nanoscale materials. These activities would take place at multiple indoor laboratories in the 300 Area.

Activities would include reasonably foreseeable actions necessary to implement the proposed action, such as radiological control and safety support; sample, chemical, and material transport; project closeout; waste management, transport, treatment, storage and disposal; maintenance, development, and demonstration of processes, instruments and detectors; consulting and planning with sponsors and collaborators; maintenance, calibration, transport and use of analytical and research equipment; and award of grants and contracts.

1. Each activity would comply with DOE Policy 456.1 and DOE Order 456.1.
2. Each activity would be conducted within existing structures that provide appropriate wastewater storage/handling and additional confinement or controls appropriate to the nature of the materials and equipment used in the project. Wastes would be dispositioned in accordance with applicable local, state, and federal regulations, and DOE Orders and guidelines.
3. Each activity would comply with applicable facility safety and environmental administrative controls and permit requirements and would remain compliant with applicable facility, local, state and federal regulations, and DOE Orders and guidelines.
4. Each activity could use hazardous and/or radioactive materials, should the use be necessary. Inventories would be maintained at the lowest practicable levels while remaining consistent with continuing operations and research goals, pollution prevention measures, applicable permits and licenses and waste minimization practices.

**III. Reviews (if applicable):**

Biological Review Report #: \_\_\_\_\_

Cultural Review Report #: \_\_\_\_\_

Additional Attachments: \_\_\_\_\_

**IV. Existing NEPA Documentation**

YES NO

Is the proposed action evaluated in a previous EA, EIS, or under CERCLA?

If "NO," proceed to Section V. If "YES," List EA, EIS, or CERCLA Document(s) Title and Number:

And then complete Section VI. Provide electronic copy of Initiator/ECO signed NRSF to DOE NCO for information only. DOE NCO signature is not required.

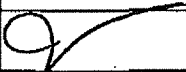
**NEPA REVIEW SCREENING FORM (continued)**

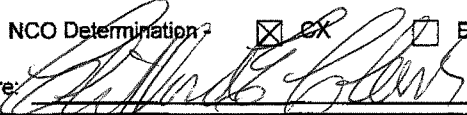
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DOE/CX-00044 Rev 1

| V. Categorical Exclusion   | YES                                 | NO                       |
|--|-------------------------------------|--------------------------|
| Does the proposed action fall within a class of actions that is listed in Appendixes A or B to Subpart D of 10 CFR Part 1021?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Are there extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal?                                       | <input type="checkbox"/>            | <input type="checkbox"/> |
| Is the proposal connected to other actions with potentially significant impacts or result in cumulatively significant impacts (not precluded by 40 CFR 1506.1 or 10 CFR 1021.211)? | <input type="checkbox"/>            | <input type="checkbox"/> |
| List CX to be applied and complete Categorical Exclusion Integral Elements (where an action might fit within multiple CXs, use the CX that best fits the proposed action):         |                                     |                          |
| CX B3.15, Small-scale indoor research and development projects using nanoscale materials   |                                     |                          |

| Categorical Exclusion Integral Elements   | YES                      | NO                                  |
|---|--------------------------|-------------------------------------|
| Does the proposed action threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, or health, including DOE and/or Executive Orders?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does the proposed action require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does the proposed action disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does the proposed action adversely affect environmentally sensitive resources?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does the proposed action involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species such that the action is NOT contained or confined in a manner designed, operated, and conducted in accordance to applicable requirements to prevent unauthorized release into the environment? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| If "NO" to all Categorical Exclusion Integral Elements questions above, complete Section VI, and provide to DOE NCO for final Approval/ Determination and signature in Section VII.   |                          |                                     |
| If "YES" to any of the Categorical Exclusion Integral Elements questions above, contact DOE NCO for additional NEPA Review.   |                          |                                     |

| VI. Responsible Contractor Signatures      |                |  |        |
|--|----------------|--|--------|
|  | Name (Printed) | Signature  | Date   |
| Initiator                                  |                |  |        |
| Cognizant Environmental Compliance Officer | Amanda Stegen  |  | 5/1/13 |

| VII. Approval/Determination  |   |
|--|---|
| DOE NEPA Compliance Officer:   | <u>Cliff Clark</u>  |
| Based on my review of information conveyed to me and in my possession (or attached) concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class of action: |   |
| NCO Determination:   | <input checked="" type="checkbox"/> CX <input type="checkbox"/> EA <input type="checkbox"/> EIS |
| Signature:    | Date: <u>6/24/2013</u>  |