



LAWRENCE
LIVERMORE
NATIONAL
LABORATORY

LLNL-TR-798938

ENVIRONMENTAL IMPACT STATEMENT INFORMATION: FORENSIC SCIENCE CENTER FUTURE PROJECTS

C. Koester

December 9, 2019

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ENVIRONMENTAL IMPACT STATEMENT INFORMATION
Template 3: Future Programs/Projects/Facilities

Date: 12/2/2019

FUTURE PROGRAM/PROJECT/FACILITY INFORMATION		
PROJECT NAME/TITLE: FSC Surety Hood, additional proposed capability		
LLNL CONTACT NAME: Carolyn Koester	EMAIL: Koester1@llnl.gov	PHONE: 2-6888
NNSA PROGRAM OFFICE: TBD		
NNSA PROGRAM REPRESENTATIVE: TBD		
FUNDING SOURCE: TBD	FUNDING YEAR: TBD	
CONSTRUCTION YEAR: TBD		
CAVEATS: ESTIMATED COST BASED ON PREVIOUS SIMILAR INSTALLATION AND CONSIDERING INFLATION \$1000K		
PROPOSED PROJECT LOCATION (S200, S300, OR OFFSITE): S200		
MAJOR ENHANCEMENTS OF EXISTING FACILITY/BUILDING NUMBER: PROPOSED FOR 132N		
SQUARE FEET FOR NEW CONSTRUCTION/DEMOLITION: NOT APPLICABLE		
PURPOSE AND NEED: AS PART OF ITS MISSION, FSC WORKS IN SUPPORT OF NON-PROLIFERATION OF CHEMICAL WEAPONS. A SECOND CHEMICAL SURETY HOOD, WITH INDEPENDENT FILTRATION SYSTEMS, WOULD ENHANCE CAPABILITIES AND ALLOW INCREASED PROJECT WORK.		
PROJECT DESCRIPTION: THIS PROJECT WOULD REQUIRE MODIFICATION OF EXISTING AIR-DUCTING AND INSTALLATION OF A CHEMICAL SURETY HOOD INTO AN EXISTING LABORATORY SPACE.		

Instructions:

1. Do not send information on proposed facilities/refurbishment/demolition that are already part of the campus planning being conducted by O&B PAD – we will obtain that information separately.
2. Fill out this form or provide documents with requested information. Provide programmatic/operational parameter changes or enhancements; including any proposed changes to inventory or at-risk limits; new hazards or equipment; etc.
3. Provide any caveats on funding or approvals (i.e., NNSA approved, supported, funded, projection only, etc.)
4. If you are providing documents, please use your PAD/AD IM system to release documents to the EIS Project Office. Identify if the information is business competitive or sensitive, OUO, or UCNI. Electronic PDF versions are preferable.
5. DO NOT provide classified information. We can discuss such information separately in appropriate limited area locations.

Send this form and related documents to EIS Project Office:

Khan1@llnl.gov

925-424-2548

ENVIRONMENTAL ASPECTS ASSOCIATED WITH PROPOSED PROJECT

MATERIALS USAGE: Check the appropriate box and provide documents with information on building limits and Material-at-Risk (MAR) limits (for radionuclides, chemicals, high explosives, etc.) to be established for this facility (other than the limits established by the hazard categorization of the facility).

- | | |
|--|---|
| <input type="checkbox"/> Radioactive
<input checked="" type="checkbox"/> Hazardous
<input type="checkbox"/> Biological
<input type="checkbox"/> High Explosives
<input type="checkbox"/> Other | Installation of hood would not add to MAR limits of building. |
|--|---|

WASTE GENERATION: Check the appropriate box and provide documents with information on the various types of wastes and quantities to be generated per year.

- | | |
|---|---|
| <input type="checkbox"/> Transuranic (TRU)
<input type="checkbox"/> Low-Level
Radioactive (LLW)
<input type="checkbox"/> Mixed (MW)
<input checked="" type="checkbox"/> Hazardous
<input type="checkbox"/> Biological/Medical
<input type="checkbox"/> Universal/Electronic | Waste generated would be within current scope of B132N. |
|---|---|

WASTE GENERATION: Check the appropriate box and provide documents with information on the various types of wastes and quantities to be generated per year.

- | | |
|--|--|
| <input type="checkbox"/> Solid/Industrial
<input type="checkbox"/> High Explosives (HE)
<input type="checkbox"/> Other | |
|--|--|

EMISSIONS/DISCHARGES: Check the appropriate box and provide documents with information on types of emissions and discharges, including amounts, limits, and need for permits. For rad air emissions, specify potential curies released per year and any limits.

<input type="checkbox"/> Radioactive Air Emissions <input type="checkbox"/> Hazardous Air Pollutant Emissions <input type="checkbox"/> Greenhouse Gas; Ozone-depleting substances <input type="checkbox"/> Criteria Pollutant Emissions <input type="checkbox"/> Discharges to Arroyo/Surface Waters <input type="checkbox"/> Discharges to Storm Drains <input type="checkbox"/> Discharges to Sanitary Sewer <input type="checkbox"/> Discharges to Ground <input type="checkbox"/> Other	EMISSION GENERATED WOULD BE WITHIN CURRENT SCOPE OF B132N.
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HAZARDOUS EQUIPMENT USAGE: Check the appropriate box and provide information on any new equipment and hazards, and any safety measures to protect workers and the environment.

- | | |
|--|-----------------|
| <input type="checkbox"/> Lasers
<input type="checkbox"/> Accelerators
<input type="checkbox"/> X-Ray Equipment
<input type="checkbox"/> RGDs including Computed Tomography
<input type="checkbox"/> High Explosives
<input type="checkbox"/> Hazards Exterior to Building
<input type="checkbox"/> Other | Not applicable. |
|--|-----------------|

RESOURCE DISTURBANCE: Check the appropriate box and provide any information on any resources that would be disturbed. Include any soil disturbance activities and activities near sensitive resource areas.

<input type="checkbox"/> Archaeological/ Cultural Resources <input type="checkbox"/> Historic Building Mods <input type="checkbox"/> Ecological Resource/ Conservation <input type="checkbox"/> Floodplain Issue (near Arroyos or buffer zones) <input type="checkbox"/> Wetlands <input type="checkbox"/> Land Use/Land Mgt <input type="checkbox"/> Other	NOT APPLICABLE.
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OTHER: Check the appropriate box and provide information on any of the following environmental aspects not included above. For offsite activities, identify if the proposed location would be within an existing Federal facility.

<input type="checkbox"/> Offsite Activities <input type="checkbox"/> Tenant or Concessionaire Activities <input type="checkbox"/> Environmental Noise <input type="checkbox"/> New Authorization Basis (USQ, SQR) <input type="checkbox"/> Potential for Worker/Public Exposure to Haz/Rad Materials <input type="checkbox"/> Transportation of Haz/Rad Materials <input type="checkbox"/> Other	NOT APPLICABLE.
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ENVIRONMENTAL IMPACT STATEMENT INFORMATION
Template 3: Future Programs/Projects/Facilities

Date: 12/2/2019

FUTURE PROGRAM/PROJECT/FACILITY INFORMATION		
PROJECT NAME/TITLE: Emergency Power for R1033 B341(FSC laboratory)		
LLNL CONTACT NAME: Carolyn Koester	EMAIL: koester1@llnl.gov	PHONE: 2-6888
NNSA PROGRAM OFFICE: N/A		
NNSA PROGRAM REPRESENTATIVE: N/A		
FUNDING SOURCE: FSC Internal / Sponsor	FUNDING YEAR: as soon as practical	
CONSTRUCTION YEAR: as soon as practical		
CAVEATS: scoped, but not yet implemented; estimated cost \$100K		
PROPOSED PROJECT LOCATION (S200, S300, OR OFFSITE): S200		
MAJOR ENHANCEMENTS OF EXISTING FACILITY/BUILDING NUMBER: B341 R1033		
SQUARE FEET FOR NEW CONSTRUCTION/DEMOLITION: N/A		
PURPOSE AND NEED: Analysis activities currently conducted in the lab in support of multiple sponsors require that precious samples and reagents be stored frozen (-80 C). While freezers in B341 R1033 are alarmed, it is not feasible to move samples and reagents to another building should B341 power fail. We wish to add emergency electrical power, via a generator, to support freezer units during a power outage. While emergency power is considered a necessity for similar laboratory work at LLNL, B341, which is primarily an Engineering Building, lacks available emergency power. In order to maintain a state-of-the-art laboratory, emergency power is needed to provide protection of samples and reagents.		
PROJECT DESCRIPTION: Taking an LLNL shops-based approach to construction, the scope of the work would be to install a commercial-grade diesel generator, non-bypass isolation automatic transfer switch, and distribution panel. New receptacles would be installed near the existing normal power receptacles for the supported equipment.		

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3. Provide any caveats on funding or approvals (i.e., NNSA approved, supported, funded, projection only, etc.)
4. If you are providing documents, please use your PAD/AD IM system to release documents to the EIS Project Office. Identify if the information is business competitive or sensitive, OUO, or UCNI. Electronic PDF versions are preferable.
5. DO NOT provide classified information. We can discuss such information separately in appropriate limited area locations.

Send this form and related documents to EIS Project Office:

Khan1@llnl.gov

925-424-2548

ENVIRONMENTAL ASPECTS ASSOCIATED WITH PROPOSED PROJECT

MATERIALS USAGE: Check the appropriate box and provide documents with information on building limits and Material-at-Risk (MAR) limits (for radionuclides, chemicals, high explosives, etc.) to be established for this facility (other than the limits established by the hazard categorization of the facility).

- | | |
|--|--|
| <input type="checkbox"/> Radioactive
<input type="checkbox"/> Hazardous
<input type="checkbox"/> Biological
<input type="checkbox"/> High Explosives
<input checked="" type="checkbox"/> Other | |
|--|--|

WASTE GENERATION: Check the appropriate box and provide documents with information on the various types of wastes and quantities to be generated per year.

- | | |
|--|----------------|
| <input type="checkbox"/> Transuranic (TRU)
<input type="checkbox"/> Low-Level
Radioactive (LLW)
<input type="checkbox"/> Mixed (MW)
<input type="checkbox"/> Hazardous
<input type="checkbox"/> Biological/Medical
<input type="checkbox"/> Universal/Electronic | Not applicable |
|--|----------------|

WASTE GENERATION: Check the appropriate box and provide documents with information on the various types of wastes and quantities to be generated per year.

- | | |
|--|--|
| <input type="checkbox"/> Solid/Industrial
<input type="checkbox"/> High Explosives (HE)
<input type="checkbox"/> Other | |
|--|--|

EMISSIONS/DISCHARGES: Check the appropriate box and provide documents with information on types of emissions and discharges, including amounts, limits, and need for permits. For rad air emissions, specify potential curies released per year and any limits.

<input type="checkbox"/> Radioactive Air Emissions <input checked="" type="checkbox"/> Hazardous Air Pollutant Emissions <input type="checkbox"/> Greenhouse Gas; Ozone-depleting substances <input type="checkbox"/> Criteria Pollutant Emissions <input type="checkbox"/> Discharges to Arroyo/Surface Waters <input type="checkbox"/> Discharges to Storm Drains <input type="checkbox"/> Discharges to Sanitary Sewer <input type="checkbox"/> Discharges to Ground <input type="checkbox"/> Other	Considering that other S200 buildings already have emergency power, emissions would most likely be comparable to those already considered for LLNL (small, incremental increase).
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HAZARDOUS EQUIPMENT USAGE: Check the appropriate box and provide information on any new equipment and hazards, and any safety measures to protect workers and the environment.

- | | |
|--|----------------|
| <input type="checkbox"/> Lasers
<input type="checkbox"/> Accelerators
<input type="checkbox"/> X-Ray Equipment
<input type="checkbox"/> RGDs including Computed Tomography
<input type="checkbox"/> High Explosives
<input type="checkbox"/> Hazards Exterior to Building
<input type="checkbox"/> Other | Not applicable |
|--|----------------|

RESOURCE DISTURBANCE: Check the appropriate box and provide any information on any resources that would be disturbed. Include any soil disturbance activities and activities near sensitive resource areas.

<input type="checkbox"/> Archaeological/ Cultural Resources <input type="checkbox"/> Historic Building Mods <input type="checkbox"/> Ecological Resource/ Conservation <input type="checkbox"/> Floodplain Issue (near Arroyos or buffer zones) <input type="checkbox"/> Wetlands <input type="checkbox"/> Land Use/Land Mgt <input type="checkbox"/> Other	None
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OTHER: Check the appropriate box and provide information on any of the following environmental aspects not included above. For offsite activities, identify if the proposed location would be within an existing Federal facility.

<input type="checkbox"/> Offsite Activities <input type="checkbox"/> Tenant or Concessionaire Activities <input checked="" type="checkbox"/> Environmental Noise <input type="checkbox"/> New Authorization Basis (USQ, SQR) <input type="checkbox"/> Potential for Worker/Public Exposure to Haz/Rad Materials <input type="checkbox"/> Transportation of Haz/Rad Materials <input type="checkbox"/> Other	Generator operated to provide emergency power would be expected to produce environmental noise. Noise expected to be comparable to other units in service.
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