PMC-EF2a
(2.0.6.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: NREL **STATE:** CO

PROJECT TITLE : Joyce Street Warehouse Facility; NREL Tracking Number 12-012

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-12-012	GO28308

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

CX, EA, EIS APPENDIX AND NUMBER:
Description:

DOE/EA 0619 (NREL Joyce Street)	Environmental Assessment for Relocation of NREL's Research Experiments (1992)
B1.35 Drop-off, collection, and transfer facilities for recyclable materials	Siting, construction, modification, and operation of recycling or compostable material drop-off, collection, and transfer stations on or contiguous to a previously disturbed or developed area and in an area where such a facility would be consistent with existing zoning requirements. The stations would have appropriate facilities and procedures established in accordance with applicable requirements for the handling of recyclable or compostable materials and household hazardous waste (such as paint and pesticides).
B1.31 Installation or relocation of machinery and equipment	Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

Rational for determination:

BACKGROUND

This proposed project is for the continued operation of the Joyce Street Facility by the National Renewable Energy Laboratory (NREL) located at 6800 Joyce Street, Arvada, Colorado.

NREL began leasing office and industrial space at this building in 1992. The 96,000 SQFT facility was constructed in 1980 in an industrial/commercial development park setting, and was formerly used as photovoltaic manufacturing facility by Glasstech, Inc. Approximately 6,400 SQFT of the front portion of the building consists of unused office space, but is part of NREL's lease. An additional 4,600 SQFT of the southeast corner of the building is occupied by the building's owner, Summit Container. The remaining 85,000 SQFT is used by NREL for the following functions:

- Electronics Shredding
- Storage Cages for various groups
- Excess Property
- Records Storage
- Laser Lab

PROPOSED ACTION

An Environmental Assessment (DOE/EA 0619 - Relocation of NREL Research Experiments) was completed in 1992 to address the environmental consequences associated with research activities that were proposed to be relocated to the Joyce Street facility into commercial laboratory and warehouse space. Of the three research activities proposed, only two, the Amorphous Silicon Deposition Laboratory (ASDL) and the Scanning Hartman Optical Tester (SHOT) / Optomechanical Laboratory, were relocated to the Joyce Street facility. However, the ASDL was relocated to the South Table Mountain Site when laboratory space became available several years ago. A laser laboratory, the Optomechanical Laboratory, is still located at the Joyce Street facility, and has one Class IIIa laser. The main objective for this laboratory is to measure the surface accuracy of concentrating solar power collectors by providing quantifiable optical data for facets and collectors assemblies during operating conditions in a controlled environment and supporting the development of high annual optical performance for low-cost collector designs. Loads that mimic real field conditions can be applied to facets using a unique mounting apparatus developed at NREL, the Mount and

Gravity Measurement Apparatus (MaGMA). Changes in a facet's surface are quantified with in-house surface measurement tools, Visual Scanning Hartmann Optical Tester (VSHOT), Sandia Optical Fringe Analysis Slope Tool (SOFAST), or photogrammetry. Currently, this Optomechanical Laboratory including surface measurement tools (e.g., VSHOT and SOFAST) is planned to be moved to the Energy Systems Integration Facility (ESIF) in the near future. According to the NREL Program Manager no activities are planned for the Optomechanical Laboratory prior to the move to the ESIF. The relocation of the equipment and infrastructure of the Optomechanical Laboratory to ESIF is included as part of this Proposed Action.

Electronics shredding is currently conducted to destroy data sensitive electronics including media disks, compact disks, hard drives, and other storage devices. The Industrial 380/500 Hard Drive and Tape Destroyer (shredder) has been in operation since 2009 and is a GSA approved device designed specifically for shredding these items and other electronic materials.

Remaining activities at the Joyce Street facility can be categorized as storage. Several NREL groups have storage cages at the facility. Records are stored here as well prior to final disposition at the Federal Center by the National Archives and Records Administration (NARA). Excess government property is also stored at the Joyce Street facility including office furniture that is surplus and electronic (non-data) equipment. There are also small quantities of toner cartridges, paper, and batteries. These are all recycled through existing procedures. Materials are moved using hand carts and forklifts. The forklifts are powered by batteries or propane gas depending on the type of forklift.

PRIOR NEPA DETERMINATIONS
Use of the Joyce Street Facility was originally analyzed in DOE/EA-0619 and resulted in a Finding of No Significant Impact (FONSI) determination in 1992. This NEPA document is hereby incorporated by reference.

IMPACTS OF PROPOSED ACTION
With the exception of the electronics shredding operation, all current and reasonably foreseeable activities at the Joyce Street Facility were included as part of the Proposed Action analyzed in DOE/EA-0619. The potential impacts of the continuing operation of the facility would actually be less than what was analyzed in this document as the ASDL has been relocated to the NREL STM site and the Optomechanical Laboratory will be relocated in the near future to the ESIF. The operation of the ASDL was determined in DOE/EA-0619 to be the activity at Joyce St with the greatest potential for impacts to human health and the environment due to storage and use of hazardous gases and solvents. While the leasing and use of the Joyce St Facility for limited laboratory operations and storage was initially intended to last for five years, the continued use of this facility for these purposes does not increase the impact beyond what was analyzed in DOE/EA-0619. The facility is an industrial facility located in an industrial office park.

NREL employs a rigorous environmental, health and safety program for the electronic shredding activities at the Joyce Street Facility. Operators are given mandatory safety training and a Standard Operating Procedure Manual has been developed. Used batteries, shredded hard drives, electronic devices, and electronic components are not handled as hazardous waste, but rather managed and recycled under the Colorado Department of Public Health & Environment's Universal Waste Regulations. All batteries and magnets are removed from electronic devices prior to shredding. These batteries and magnets are shipped to a certified Universal Waste recycler or in the case of Lithium Ion batteries, are shipped to a U.S. EPA permitted battery recyclers. According to the SOP manual (SOP-0794: Safe Operating Procedure for JBF Industrial 380/500 Hard Drive and Tape Destroyer), no air or water emissions are created by this process. Additionally, the shredder has a lid that is closed during the shredding process that aids in reducing emissions. Fugitive emissions are considered to be de minimis according the NREL H&S POC. Shredded materials are then collected and shipped off-site as Universal Waste by a permitted electronic waste recycling vendor, Metech Recycling, which is a registered State of Colorado recycling facility and holds all of the proper federal, state, and local environmental permits.

Once the ESIF is finished being built, the Optomechanical Laboratory will be relocated from the Joyce Street Facility to the ESIF, approximately 8.5 miles away at NREL's main campus, the South Table Mountain site. The transfer of the laboratory equipment and support infrastructure will be conducted in accordance with applicable federal, state, and local regulations, including U.S. Department of Transportation Hazardous Materials Regulations. The transportation of equipment from Joyce Street to ESIF will result in a de minimis amount of air emissions.

NEPA DETERMINATION
DOE has determined that the continued operation of the Joyce Street Facility for primarily storage with limited laboratory activity remains bound by the environmental impact analysis presented in DOE/EA-0619 and its 1992 FONSI. The electronic shredding operation for the beneficial recycling of electronics while maintaining necessary data security protocols and the relocation of the Optomechanical Laboratory to ESIF are consistent with the classes of actions contained within DOE Categorical Exclusion B1.31 and B1.35.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

EF2a prepared by Rob Smith on 09/05/12 and revised on 09/13/12.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Electronically Signed By: Lori Gray / Lori Gray Date: 9/13/2012

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

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

Field Office Manager's Signature: _____ Date: _____

Field Office Manager