SUPPLEMENTAL ENVIRONMENTAL ANALYSIS

FOR THE

RELOCATION AND PERFORMANCE OF KCNSC OPERATIONS IN BUILDING 23 KANSAS CITY, MISSOURI DOE/EA-1592-S1

U.S. Department of Energy
National Nuclear Security Administration

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ACRONYMS AND ABBREVIATIONS

APO	Apocure-601
BFC	Bannister Federal Complex
BMI	Bismaleimide
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1976
CFR	Code of Federal Regulations
CSR	Code of State Regulations
DOE	US Department of Energy
DOE/EA-1592	US Department of Energy's 2008 Environmental Assessment for the *Modernization of Facilities and Infrastructure for the Non-Nuclear Production Activities Conducted at the Kansas City Plant*
DOT	United Stated Department of Transportation
EA	Environmental Analysis
EPA	US Environmental Protection Agency
FM&T	Honeywell Federal Manufacturing and Technologies
FONSI	Finding of No Significant Impact
FR	Federal Register
GSA	General Services Administration
HS&E	health, safety, and environment
KCMO	Kansas City, Missouri
KCNSC	Kansas City National Security Campus
KCP	Kansas City Plant
KCPL	Kansas City Power & Light
LQG	Large Quantity Generator
MARSAME	Multi-Agency Radiation Survey and Assessment of Materials and Equipment
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
M&O	Management and Operations
MDNR	Missouri Department of Natural Resources
NEPA	National Environmental Policy Act, as amended
NHPA	National Historic Preservation Act
NNSA	National Nuclear Security Administration
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NOI	Notice of Intent
PCBs	polychlorinated biphenyls

RCRA	Resource Conservation and Recovery Act of 1976
R&D	Research and Development
SF	square foot/square feet
SHPO	State Historic Preservation Office
SPCC	Spill Prevention Control and Countermeasures
SSMP	Stockpile Stewardship Management Plan
Supplemental EA	Supplemental Environmental Analysis
THPO	Tribal Historic Preservation Office
TSCA	Toxic Substances Control Act of 1976
USC	United States Code

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1.0 INTRODUCTION, PURPOSE AND NEED FOR ACTION

In November 2012 the National Nuclear Security Administration (NNSA) began relocation of its non-nuclear production and procurement activities from the Kansas City Plant (KCP) located at the Bannister Federal Complex (BFC) to a new facility, the Kansas City National Security Campus (KCNSC) at 14220 Botts Road in Kansas City, Missouri. This action was reviewed in accordance with the *National Environmental Policy Act* (42 USC §§ 4321 *et seq*.; NEPA) through completion of an Environmental Assessment (EA) for the *Modernization of Facilities and Infrastructure for the Non-Nuclear Production Activities Conducted at the Kansas City Plant* (U.S. Department of Energy [DOE]/EA-1592) and supported by a Finding of No Significant Impact (FONSI), issued April 29, 2008. Section 4.3.1 of DOE/EA-1592 provides a description of the KCNSC.

The KCNSC supports more than 4,500 employees working in several research and development (R&D) and technical manufacturing disciplines (KCNSC, 2019). The KCNSC campus was planned, designed, and constructed to accommodate a workload based on the 2006 Stockpile Stewardship Management Plan (SSMP), which consisted of one program in production and one program in development. The 2018 SSMP includes a number of additional weapons programs, resulting in a significant increase in the facility's scope of work. As a result of this growth, Buildings 2, 3, and 4 of the KCNSC campus provide insufficient space to support the manufacturing and R&D workloads forecasted to support future programs and new technologies. The KCNSC facility houses NNSA office space, warehouse space, and manufacturing facilities and is operated by Honeywell Federal Manufacturing and Technologies (FM&T).[1]

The NNSA is preparing this Supplemental EA to evaluate the relocation of employees and functions that currently occur within Buildings 2, 3, and 4 at the KCNSC to another facility located at 14901 Andrews Road in Kansas City, Missouri (**Figure 1-1**). The proposed action involves the lease of additional off-site space to accommodate facility needs in the near-term and anticipated growth over the next five years. Additional alternative relocation options are being evaluated to support NNSA's Mission which is anticipated to grow beyond the additional capacity provided by relocation of activities to Building 23.

Relocation of a portion of the light manufacturing and warehouse operations that currently occur in Buildings 2, 3, and 4 of the KCNSC would relieve existing space in Buildings 2, 3, and 4 to support the increased workload. The facility proposed for lease, referred to as "Building 23" is located approximately one mile east of the KCNSC main campus. Photographs of this proposed facility and the surrounding area are provided in **Figure 1-2**.

[1] Additional information about KCNSC operations and Missions can be found online at https://kcnsc.doe.gov/.

Figure 1-1: Location of KCNSC and Proposed Building 23 Facility

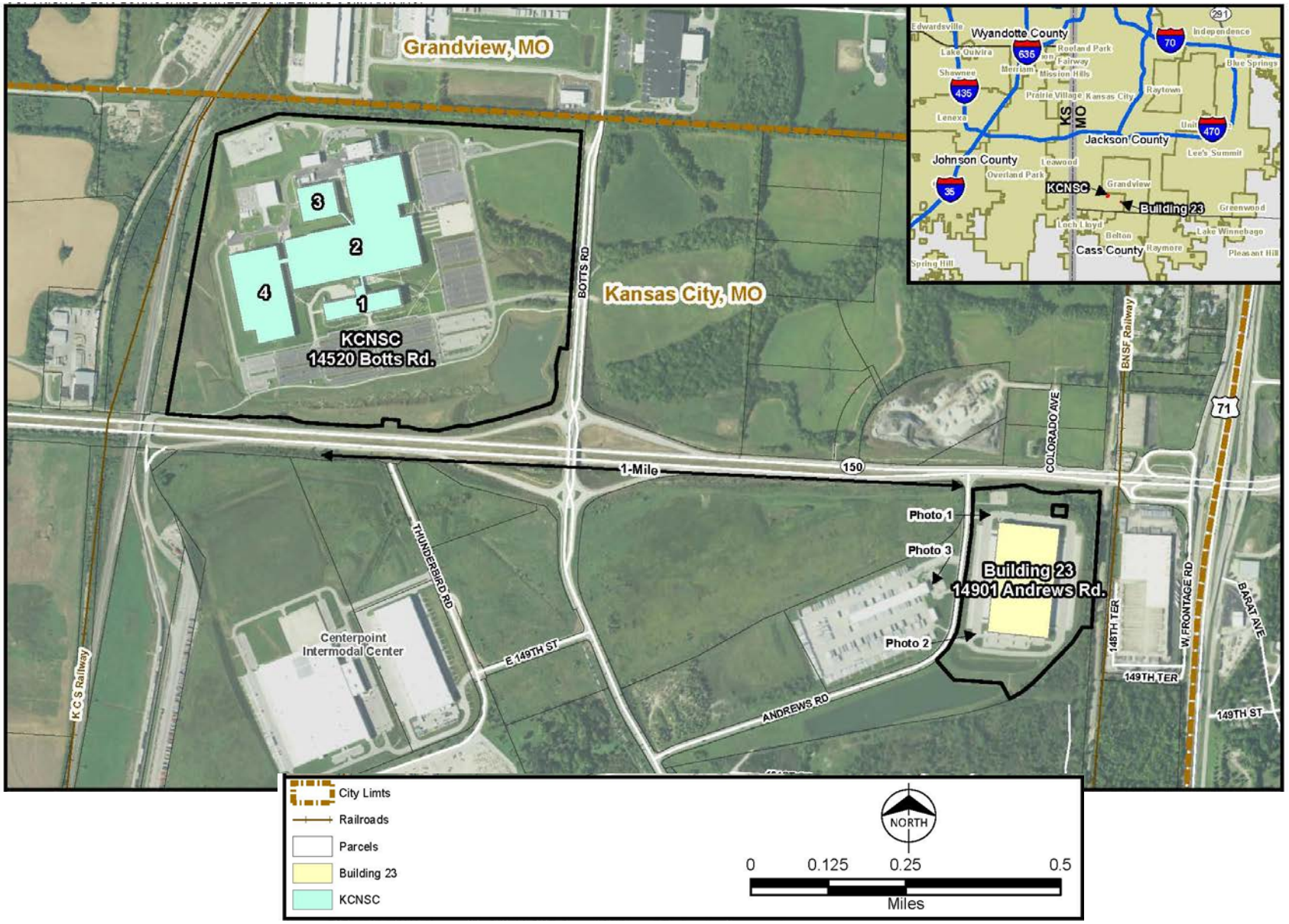

Figure 1-2: Photographs of Building 23 and Vicinity

Photograph 1: North driveway and northwest corner of building, facing east

Photograph 2: South driveway and southwest corner of building, facing east-northeast

Photograph 3: Distribution facility across Andrews Road from Building 23, facing southwest

This Supplemental EA was developed to provide additional Analysis of potential environmental impacts of NNSA relocating personnel and activities to Building 23 that were not addressed in the original DOE/EA-1592. This Supplemental EA has been prepared in accordance with the Council on Environmental Quality (CEQ) NEPA regulations (40 Code of Federal Regulations [CFR] Parts 1500 to 1508), and the DOE's NEPA implementing regulations (10 CFR Part 1021). These regulations require that NNSA consider the potential environmental impacts of the proposed action and the reasonable alternatives before determining whether to relocate existing activities to the new facility.

This Supplemental EA will provide NNSA with the information needed to make an informed decision regarding the proposed relocation and its impact on the human and natural environment.

1.1 Purpose and Need for Agency Action

The purpose and need for the proposed action is to support the Mission Needs Statement by leasing additional space to accommodate near-term manufacturing requirements at the KCNSC.

1.2 Overview of NEPA Activities to Date

On April 21, 2008, NNSA and the General Services Administration (GSA) issued the Environmental Assessment for the Modernization of Facilities and Infrastructure for the Non-Nuclear Production Activities Conducted at the Kansas City Plant (DOE/EA-1592; GSA and NNSA 2008). On April 29, 2008, NNSA and GSA issued a FONSI for their proposal to construct the new KCNSC approximately 8 miles south of the BFC to house NNSA KCP operations (73 Federal Register [FR] 23244). It was determined that the new facility would replace the old KCP and reduce the environmental footprint of KCP operations, resulting in improved energy efficiency, lower emissions, and a reduction in waste generation. Construction began on the new KCNSC in 2010 and NNSA relocated to the new KCNSC in 2013.

NNSA has since identified the need for additional operational capacity greater than that available at the KCNSC facility. Even though DOE/EA-1592 evaluated the activities to be performed at KCNSC, it did not evaluate a relocation of activities conducted at the KCNSC facility to another off-site facility. NNSA is preparing this Supplemental EA to assess the impacts of such a relocation.

1.3 Scope of this Supplemental Environmental Analysis

DOE/EA-1592, described in Section 1.2 above, reviewed the potential environmental impacts of proposed activities to support the NNSA Mission. This Supplemental EA reviews and provides additional analysis of the potential impacts that activities reviewed in DOE/EA-1592 could have under the proposed relocation of employees and activities to Building 23. The potential effects of relocating activities to the Building 23 location was not included in the original DOE/EA-1592.

This Supplemental EA:

- Describes the purpose and need for agency action and provides background information on the KCNSC (Chapter 1);
- Describes the proposed action and the no-action alternatives considered to meet the applicable facility/Mission needs (Chapter 2);
- Analyzes the potential direct and indirect effects of the proposed action and no-action alternative on the human and natural environment (Chapter 3);
- Identifies and characterizes cumulative effects that could result from the proposed action in relation to past, present, and other reasonably foreseeable future actions described in this Supplemental EA (Chapter 4); and
- Discusses applicable regulatory requirements related to the proposed relocation (Chapter 5).

1.4 Public Involvement

NNSA has coordinated with the City of Kansas City, Missouri officials and business leaders regarding the proposed relocation. NNSA will also notify the City of Grandview, Missouri of the proposed action. NNSA will not conduct a public hearing or provide a public comment period for this proposed action. The Supplemental EA will be made available online for public viewing.

NNSA will continue to coordinate with local and state agencies to maintain the applicable existing permit related to air. Because no land disturbance is required to support the proposed relocation, no consultation with outside Federal agencies is required.

2.0 DESCRIPTION OF ALTERNATIVES

This chapter describes the proposed action and no-action alternatives that NNSA analyzed to support facility needs at KCNSC. For this Supplemental EA, the proposed relocation was analyzed as independent of all other actions and activities currently occurring at KCNSC. In doing so, the assumption is made that all other facilities at KCNSC would continue to function as they do today without interruption or detrimental effects caused by the relocation of employees and activities currently occurring in Buildings 2, 3, and 4.

2.1 Proposed Action – Relocation to Andrews Road Facility (Building 23)

In order to continue to meet the KCNSC's Mission Needs Statement and maintain manufacturing and process requirements to support national security, the NNSA proposes to relocate activities, equipment, and employees currently housed in Buildings 2, 3, and 4 of the KCNSC to a new location.

Under the proposed action, 275,000 square feet (SF) of an existing 450,000 SF facility would be leased at 14901 Andrews Road, Kansas City, Missouri 64147 (see **Figure 1-1**). This facility, referred to as "Building 23", would provide additional space to support light manufacturing and warehouse operations, freeing up existing space in Buildings 2, 3, and 4 at the KCNSC facility. The proximity of Building 23 to the KCNSC, approximately one mile to the east, would support efficient operations, mitigate increases to operational costs, and minimize disruption to employee commutes and current work environment.

Approximately 200 employees and numerous pieces of large manufacturing/warehouse equipment would be immediately relocated from Buildings 2, 3, and 4 of the KCNSC to Building 23 at Andrews Road. Over the projected timeframe for NNSA operation in Building 23, the workforce within Building 23 is projected to grow to an estimated 500 total employees. The scope of operations and supporting equipment proposed for relocation is typical of the following light manufacturing activities:

- Transfer press operations: equipment, materials, and processes to support plastic molding
- Mock factory: equipment, materials, and processes to support soldering, hand cleaning, marking, epoxy cover coating, training simulation, metal deburring, and machining
- Equipment, and processes such as re-engineering, prototyping, and testing of electrical and small mechanical components; manufacturing and testing of high voltage power supplies; development and production of electrical and mechanical assemblies; manufacturing and testing
- Refurbishment: equipment, materials, and processes to support Tester and Handling Gear Refurbishment activities
- Production maintenance: equipment, materials, and processes to support the Production Support Maintenance shop activities including part fabrication, welding, soldering, grinding, cutting, a/c repair, pressure relief device testing, pump and motor rebuilding, machine electrical and

mechanical component disassembly and repair, circuit board repair, machining, sheet metal fabrication, chemical and spare part storage.

- Logistics, receiving inspection, tool and gage: equipment, materials, and processes to support the Production Support Maintenance shop activities including equipment / material storage, dock operations, material handling and services
- Various ancillary support equipment and activities

2.2 No-Action Alternative

Under the no-action alternative, operations conducted at the existing KCNSC facility would continue without significant modification. The KCNSC facility requires additional capacity as the result of an increase in workload that exceeds the planned scope of work developed for the facility when it was commissioned and constructed. The NNSA has already taken steps to optimize operations and output at the KCNSC, including:

- Added second and third work shifts
- Purchased new and additional manufacturing equipment
- Hired 2,000 additional employees to accomplish additional workload
- In 2016, leased additional off-site office space to accommodate 96 office personnel
- In 2017, leased additional off-site office space to accommodate 435 office personnel
- In 2019, leased additional off-site office space to accommodate 400 office personnel

The current facility at KCNSC main campus has insufficient capacity to accomplish the work required to be performed to support the NNSA's Mission, which increases the risk of critical work and production deadlines not being met. As a result, because the no-action alterative would not assist NNSA in meeting the purpose and need for the project, nor does it support their forecasted workload or facility Mission, it was eliminated from further consideration.

2.3 Other Actions Removed from Further Consideration

The proposed action is intended to be a near term solution to assist the NNSA in fulfilling its national security Missions. The NNSA anticipates continued increases to workload and production needs to meet its Mission requirements. Additional long-term relocation options are being evaluated. Any additional relocation actions would require an independent review and approval under NEPA, appropriate implementing regulations, and related State and Federal regulations. In addition to the proposed action, the KCNSC evaluated the following actions which have been removed from further consideration.

2.3.1 Construction of Additional Facilities at KCNSC

Construction of additional facility space at the KCNSC is not feasible because it does not provide the additional capacity needed in a timely manner to support NNSA's Mission and continue to meet critical

deadlines. This option would not assist the NNSA in meeting its Mission in the near-term and was therefore eliminated from further consideration.

2.3.2 Construction of a New Facility at Another Location

Construction of a new facility at a new location would not be completed in time to support the near-term NNSA Mission requirements and was therefore eliminated from further consideration. The NNSA may consider construction of a new facility at another location as a long-term solution to meet NNSA Mission requirements. This action would require an independent review and approval under NEPA, appropriate implementing regulations, and related State and Federal regulations.

2.3.3 Relocation to Other Existing NNSA Facilities

Construction of new facilities or renovation of existing facilities at other distant sites were considered in the 2008 DOE/EA-1592. Generally, these alternatives were removed from consideration because they would be prohibitively expensive, posed increased technical risks from the need to relocate and re-qualify production activities, and would have a negative socioeconomic impact on the Kansas City metropolitan area. Refer to Section 3.9.2 of DOE/EA-1592 for discussion of the alternatives previously considered for relocating activities to locations outside the Kansas City metropolitan area.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

This chapter describes the existing conditions associated with the KCNSC campus and the proposed relocation site and the potential effects of the proposed action and no-action alternatives on the human and natural environment.

3.1 Affected Environment Overview

As noted previously, the KCNSC facility and Building 23 are located within the city limits of Kansas City, Jackson County, Missouri, and are located approximately one mile apart with frontage along Highway 71 (see **Figure 1-1**).

Table 3-1 provides an overview of the historic and forecast population growth in the City of Kansas City, Jackson County, and the State of Missouri. The population statistics are presented for 2010 to illustrate the baseline conditions occurring at the time the KCNSC proposed to move to its current location at 14520 Botts Road as assessed in DOE/EA-1592. The population of Missouri increased 2.3 percent from 2010 to 2018; while the population across Jackson County and Kansas City grew at a higher rate over the same time period, at 3.9 percent and 7.0 percent, respectively.

Table 3-1: Population Growth Trend by Jurisdiction

Jurisdiction:	2000[(a)]	2010[(b)]	2018 Estimate[(b)]	2030 Forecast[(c)(d)]
Kansas City, MO	441,545	459,787	491,918	Not Available
Jackson County, MO	654,880	674,158	700,307	714,702
State of Missouri	5,595,211	5,988,927	6,126,452	6,746,762

Sources:

(a) U.S. Census Bureau, Census 2000 Summary File, Profile of General Demographic Characteristics: 2000. Retrieved July 30, 2019 from https://factfinder.census.gov/

(b) U.S. Census Bureau. Kansas City, Jackson County, and Missouri Quickfacts from the U.S. Census Bureau. Retrieved July 30, 2019, from: https://www.census.gov/quickfacts/fact/table/US/PST045218

(c) 2030 forecast for Jackson County, Mid-America Regional Council (MARC) Transportation Outlook 2040. Retrieved July 30, 2019 from http://www.to2040.org/forecast.aspx

(d) 2030 forecast for Missouri, Missouri Office of Administration, 200-2030 Projections. Retrieved July 30, 2019 from https://oa.mo.gov/budget-planning/demographic-information/population-projections/

Table 3-2 presents the 2010 and 2018 race/ethnicity and income and poverty statistics for the same jurisdictions. All jurisdictions experienced a decrease in the percentage of White, non-Hispanic residents but increases in the percentages of Asian and multi-racial residents. The percentage of Hispanic residents also increased across all jurisdictions during this timeframe.

Table 3-2: Population Statistics in the Project Jurisdictions – 2010 and 2018

Race/Ethnicity [a,b]

	White Alone (non-Hispanic or Latino)		Black/ African American Alone		Asian Alone		American Indian/ Alaska Native/ Native Hawaiian or Pacific Islander		2 or more races		Hispanic or Latino		Minority Percentage	
Jurisdiction	**2010**	**2018**	**2010**	**2018**	**2010**	**2018**	**2010**	**2018**	**2010**	**2018**	**2010**	**2018**	**2010**	**2018**
Kansas City, MO	59.2%	55.5%	29.9%	28.7%	2.5%	2.8%	0.7%	0.5%	3.2%	3.3%	10.0%	10.2%	38.2%	39.7%
Jackson County, MO	66.9%	62.3%	23.9%	23.8%	1.6%	1.9%	0.7%	0.9%	3.1%	3.2%	8.4%	9.1%	30.5%	29.9%
State of Missouri	82.8%	79.3%	11.6%	11.8%	1.6%	2.1%	0.6%	0.8%	2.1%	2.3%	3.5%	4.3%	15.3%	17.0%

Income and Poverty

	Median Income [c,d]		Percent Below Poverty [c,d]		Unemployment Rate[e]		DHHS Poverty Threshold Family of 4 (100%)[f]	
Jurisdiction	**2010**	**2018**	**2010**	**2018**	**2010**	**2018**	**2010**	**2018**
Kansas City, MO	$44,113	$50,136	18.2%	17.3%	9.2%	5.9%	$22,050	$25,100
Jackson County, MO	$46,252	$50,652	16.1%	13.8%	8.8%	5.7%		
State of Missouri	$46,262	$51,542	14.5%	13.4%	7.4%	5.8%		

Sources:

a US Census Bureau, Census 2010 Summary File, Profile of General Population and Housing Characteristics: 2000. Retrieved August 2, 2019 from https://factfinder.census.gov/

b US Census Bureau. Kansas City, Jackson County, and Missouri Quickfacts from the US Census Bureau. Retrieved July 30, 2019, from: https://www.census.gov/quickfacts/fact/table/US/PST045218

c US Census Bureau, Census 2006-2010 American Community Survey 5-Year Estimates. Retrieved August 2, 2019 from https://factfinder.census.gov/

d US Census Bureau. Kansas City, Jackson County, and Missouri Quickfacts from the US Census Bureau. Retrieved July 30, 2019, from: https://www.census.gov/quickfacts/fact/table/US/PST045218

e US Census Bureau, Census 2013-2017 American Community Survey 5-Year Estimates. Retrieved August 2, 2019 from https://factfinder.census.gov/

f DDHS = US Department of Health and Human Services; Federal Poverty Level; https://publichealthonline.gwu.edu

3.1.1 Existing KCNSC Facility

The existing KCNSC facility is located on approximately 192 acres of land approximately 16 miles south of the center of Kansas City within the incorporated city limits (refer to **Figure 1-1**). The property, located at the northwest corner of the intersection of Missouri Highway 150 and Botts Road, is zoned for Urban Redevelopment. The facility is comprised of multiple buildings, parking areas, and general open space. Section 4.3 of DOE/EA-1592 provides additional descriptions of the affected environment at the KCNSC.

3.1.2 Building 23

Building 23 is located at 14901 Andrews Road, just south of Missouri Highway 150. The property consists of approximately 37 acres of land zoned for manufacturing use, the majority of which is developed with an existing large industrial facility and paved roads and parking areas. The facility encompasses approximately 450,000 SF in total. Under the proposed action NNSA would lease approximately 275,000 SF of the facility. The portion of the facility already leased to another tenant is used as a distribution center.

Infrastructure and Utilities - The entrance to the property is south of Missouri Highway 150, approximately 2,000 feet west of the intersection of Missouri Highway 150 and US Highway 71. The property is bordered on the north by Missouri Highway 150 and on the west by Andrews Road. There are two western driveway entrances from the north-south portion of Andrews Road, and a paved road encircling the facility on all sides. Large paved parking areas surround the building. The facility is equipped with multiple loading docks to accommodate inbound and outbound shipments.

There are open vegetated areas along the north, east, and south perimeter of the property. An active BNSF rail line runs north-south adjacent to the eastern property boundary. A natural gas pipeline operated by Tallgrass Interstate Gas Transmission, LLC runs east-west along the northern portion of the property and a pipeline valve station is located at the northwest corner of the property. The 37-acre property where Building 23 is located is a part of the eastern portion of the larger CenterPoint Intermodal Center.

Building 23 receives electric service from Kansas City Power and Light (KCPL) via an electric transmission line that runs adjacent to Andrews Road and east-west along and south of Missouri Highway 150, adjacent to the Building 23 property. The facility has existing connections to Kansas City, Missouri (KCMO) water and wastewater services. Several communications providers also have service in the area. Building 23 is currently equipped with an Early Suppression Fast Response (ESFR) sprinkler system for fire suppression.[2] The nearest fire station (Grandview FD #2) to both the KCNSC and Building 23 is located at 14600 Byars Road in Grandview, approximately 1.4 miles to the east. The closest KCMO fire station (KCFD 45) is located at 500 E. 131st Street, approximately 5.1 miles northwest of Building 23.

[2] http://www.cushmanwakefield.com/en/properties/s119063578-1

Belton Regional Medical Center (ER and trauma center) is located approximately 4.7 miles southeast of Building 23 (17065 S. 71 Highway, Belton, Missouri).

Stormwater - Development of the Building 23 site (by others) incorporated infrastructure to manage on-site stormwater that satisfies KCMO design standards.

Waste Management - Section 5.3.5 of DOE/EA-1592 describes the types of waste generated and existing waste management and recycling activities that occurred at the previous KCP. This referenced description is also applicable to current operations at the KCNSC main campus and to operations planned for relocation to Building 23, with two notable exceptions. No waste from remediation projects and no radioactive waste (including low-level) would be generated at Building 23 under the proposed action.

3.2 Environmental Impacts - Resource Categories with No or Minimal Effects

Under several resource categories, no or very minimal effects are anticipated to occur either because resources are not present or because neither of the alternatives evaluated would result in land disturbance or construction activities. These categories and the effects of the proposed action alternative and no-action alternative are summarized in **Table 3-3** below.

Table 3-3: Resource Categories Where No or Minimal Effects Would Occur

Resource Category	Relocation Alternative	No-Action Alternative
Land Use	No effect – Employees and operations moved to an existing facility in an established industrial park; no site infrastructure or transportation infrastructure to be improved or developed. No changes in the use or footprint of the existing KCNSC facility	No effect – Existing KCNSC facility would continue operations consistent with current Mission.
Climate	No effect – No land disturbance to occur	No effect – no change in the existing KCNSC facility would occur
Geology	No effect – No land disturbance to occur	No effect – no change in the existing KCNSC facility would occur
Soils	No effect – No land disturbance to occur	No effect – no change in the existing KCNSC facility would occur
Groundwater Hydrology	No effect – No land disturbance to occur	No effect – no change in the existing KCNSC facility would occur
Surface Water Hydrology	No effect – No land disturbance to occur; there are no wetlands, waters of the US, or floodplains mapped on the property. Industrial wastewater is described in Section 3.3.2	No effect – no change in the existing KCNSC facility would occur
Flora and Fauna	No effect – No land disturbance to occur, site already developed in an established industrial park	No effect – no change in the existing KCNSC facility would occur

Resource Category	Relocation Alternative	No-Action Alternative
Air Quality & Permitting	Minimal effect – transfer of operations to the new location would move the minimal air emissions associated with relocated operations to the Building 23 area and require installation of exterior exhaust equipment and an exterior nitrogen tank; no new or modified air permit is required for either action; site emissions would be addressed under the existing KCNSC permit	No effect – existing KCNSC facility would continue to operate under appropriate requirements.
Historical and Cultural Resources	No effect – No land disturbance to occur	No effect – no change in the existing KCNSC facility would occur
Aesthetics	No effect – Only identification and wayfinding signage would be added to the exterior of the building. Existing KCNSC aesthetics would not change.	No effect – existing KCNSC facility aesthetics would not change.

3.3 Environmental Impacts – Resource Categories with Effects

Impacts resulting from the proposed action would occur within the following categories: Socioeconomic Resources, Stormwater and Industrial Wastewater, and Waste Management. The effects of the no-action alternative in these categories are also described.

3.3.1 Socioeconomic Resources

The category of socioeconomic resources includes environmental justice, income, and employment; health and human safety; infrastructure; transportation; and utilities and community services.

3.3.1.1 Environmental Justice, Income, and Employment

Proposed Action – The KCNSC contributes substantially to the socioeconomics of the region by employing approximately 4,500 people. Under the proposed action, approximately 200 employees will be initially relocated from the KCNSC to Building 23 one-mile east, located in an existing industrial campus. NNSA projects that the number of employees at Building 23 would increase from 200 to 500 over the next five years. Immediate relocation of employees to Building 23 would vacate space at the KCNSC to allow the NNSA to carry out near-term plans to hire several hundred additional employees to be located at the KCNSC, thereby maintaining current levels of employment at KCNSC. The number of employees at the KCNSC would be expected to increase over time based on current workload projections.

Both the KCNSC and Building 23 are located within sparsely populated areas of Kansas City. No displacements and no changes to surrounding neighborhoods would occur. Based on the analysis of impacts for resource areas, no significant adverse impacts from relocation and operations at Building 23 are expected. No disproportionately high impacts to minority or low-income populations would occur.

No-Action – KCNSC is also located in a light industrial area. Under the no-action alternative, employment at the KCNSC would be largely maintained at current levels in the short-term and would be expected to increase over time to support the current and anticipated workload and the facility's Mission. No displacements and no changes to surrounding neighborhoods would occur. Based on the analysis of impacts for resource areas, no significant adverse impacts from the no-action alternative and the continued current operations at the KCNSC would be expected. No disproportionately high impacts to minority or low-income populations would occur.

3.3.1.2 Health and Human Safety

Proposed Action - Occupation of Building 23 would involve limited building interior and exterior renovation activities to support the relocated operations. No building demolition would occur at the Building 23 site or at the KCNSC. Discussion of potential noise impacts from construction in Section 5.3.8 of DOE/EA-1592 is applicable to the limited renovation activities that would occur at Building 23. Methods to address waste generated by these activities is discussed in Section 3.3.3 of this Supplemental EA.

Human health and safety impacts to the general public for Building 23 operations would be the same as those of current KCNSC operations. Additionally, the tenant currently occupying the space within Building 23 adjacent to the 275,000 SF that would be leased by NNSA has constructed a floor to ceiling fire rated separation wall to protect other building occupants in the event of a fire in the NNSA-leased space.

Refer to Section 4.2.3 of DOE/EA-1592 for discussion of human health and safety considerations at the previous KCP BFC, which are applicable to current NNSA operations at the KCNSC. The following activities or manufacturing supplies that are currently used in Buildings 2, 3, and 4 of the KCNSC would not be used at Building 23:

- Uncovered outdoor use or storage of materials
- Energetic materials (explosives) such as those shipped United States Department of Transportation (DOT hazard class 1.1 through 1.6)
- No direct shipments to Building 23, all directed through main facility
- Use or storage of powdered materials associated with additive manufacturing
- Use or storage of beryllium, beryllium-containing alloys, and beryllium-containing compounds, or lead (other than soldering)
- Use or storage of hydrofluoric acid (HF), Apocure-601-Bismaleimide (APO-BMI), or cyanide
- Use of open beam x-rays or Class 3B/4 lasers
- Use or generation of unbound engineered nano-particles
- Use or storage of asbestos; all forms (CAS 1332-21-4)

- Use or storage of chlorodiphenyls (Poly Chlorinated Biphenyls, PCBs, such as CAS 53469-21-9 (42%) and CAS 11097-69-1 (54%)); 4,4'-Methylene bis(2-chlorobenzenamine) (MOCA) (CAS 101-14-4); or 4,4'-Methylenedianiline (MDA) (CAS 101-77-9)
- Radioactive/radiological materials without Senior Management/NNSA approval

NOTE: Any use of radioactive/radiological materials would require a detailed radiological survey, which could lead to additional investigations (i.e., a Multi-Agency Radiation Survey and Site Investigation Manual/Multi-Agency Radiation Survey and Assessment of Materials and Equipment [MARSSIM/MARSAME] Site Investigation) and DOE Order 458.1 Radiation Protection of the Public and the Environment requirements may be required when releasing the facility and equipment back to unrestricted use.

Sections 5.2.9 and 5.3.9 of DOE/EA-1592 describe hazard analyses and considerations for the prior KCP BFC and for the KCNSC. Similar hazard analyses and emergency plans would be completed for Building 23 operations.

No-Action - Under the no-action alternative, no additional impacts to human health and safety beyond current and planned activities would occur at KCNSC. Operations conducted at the KCNSC that potentially affect workforce health and safety are described in Section 4.2.3 (Socioeconomic Resources) of DOE/EA-1592.

3.3.1.3 Transportation and Infrastructure

Proposed Action - Approximately 200 employees would initially be located at Building 23, with growth to approximately 500 employees expected over a five-year period. The anticipated change in commuting time of employees is nominal based on the one-mile distance between facilities. Existing roadways and utilities that service the site have adequate capacity to support the anticipated workforce and facility operations. The area is served by Missouri 150 Highway, a four-lane divided expressway with grade separated interchanges, including at Botts Road and Highway 71. Employees and increased traffic patterns would be distributed over two working shifts per day. The existing transportation network in the vicinity of Building 23 is anticipated to accommodate the immediate and projected traffic volumes associated with the proposed relocation and subsequent staffing increases. The existing Building 23 parking areas would accommodate the immediate staffing and delivery needs with possible restriping or minor expansion of parking areas needed in the future to accommodate the forecasted increase in staffing levels. Building 23 parking areas may also be utilized as overflow parking areas for those who work at the KCNSC main campus. If utilized as an overflow parking area, some KCNSC main campus employees would be directed to park at Building 23 and would be transported via shuttle to and from the KCNSC main campus.

Materials would be transported daily from KCNSC to Building 23 resulting in a minimal increase in truck traffic on the one-mile segment of Missouri Highway 150 between the two facilities. This increase is not anticipated to impact traffic flows or require construction of additional turn lanes. All materials used at Building 23 would originate from KCNSC. Outbound shipments originating from Building 23 would be transported to KCNSC for shipment to customers. No direct receipt of shipments from other sources would occur at Building 23. No freight rail connection is needed to support the uses within Building 23.

No-Action - No employees, equipment, or activities would be relocated. All employee and delivery traffic accessing KCNSC would be unchanged. Parking capacity improvements may be required in the future to address increased employment to support the forecasted workload.

3.3.1.4 Utilities and Community Services

Proposed Action - Existing electrical power to Building 23 is sufficient to support the planned manufacturing and R&D workloads. A 3,000 AMP, 480 Volt 3 phase main panel, 11 additional electrical panels to support individual work/equipment areas, and a building grounding system would be installed within the building interior to support planned equipment use.

Within the building envelope, restroom and kitchen facilities would be installed requiring that connections be made to existing water and sanitary sewer lines. Exterior plumbing vents would be also be installed.

The use of gaseous nitrogen, which will be managed in accordance with appropriate health, safety, and environment (HS&E) protocols, is required for some facility operations. A concrete pad and gaseous nitrogen tank would be constructed on the exterior of Building 23. The tank would be screened in conformance with KCMO site development standards. No permit is needed for the nitrogen tank.

Building 23 is approximately one mile east of the KCNSC and would be serviced by the same emergency services indicated in Section 3.1.2 of this Supplemental EA. This distance would result in a minimal increase or decrease in travel times by emergency responders to or from each facility depending on the responders originating point or route taken.

No-Action - No employees, equipment, or activities would be relocated. All utility loads and uses would remain the same. Travel times by emergency responders to or from KCNSC would remain the same as occurs today.

3.3.2 Stormwater and Industrial Wastewater

Proposed Action - The activities proposed at Building 23 would generate effluents from manufacturing and maintenance operations; however, these effluents would be containerized and be disposed of in accordance with applicable regulations. There will be no industrial wastewater discharges into the existing sanitary sewer system. No industrial wastewater permit is required. The proposed action would not

require ground disturbance or increase the amount of existing impervious cover at the site initially. Depending on the number of employees added in the coming years, minor expansion of parking areas may be needed to accommodate additional employees. At this time, the extent of that possible expansion has not been defined. Site stormwater would be managed by the swales, ditches, and detention facilities already developed and present on the site. A site-specific No Exposure Certification would be pursued for Building 23 in lieu of a formal National Pollutant Discharge Elimination System (NPDES) permit. Administrative controls would be implemented to ensure compliance with the certification.

Therefore, there would be no adverse environmental impacts to water quality associated with the proposed action, and an industrial wastewater permit would not be required for Building 23 operations.

No-Action - No changes would occur in the equipment, processes, or management of stormwater or industrial wastewater in KCNSC, as described in Section 5.3.3 of DOE/EA-1592.

3.3.3 Waste Management

Proposed Action - NNSA estimates that total quantities of waste generated from all operations at the KCNSC and Building 23 may increase by approximately 20 percent above current generation rates, due to the planned increases in manufacturing capacity supported by the relocation. Onsite waste management staff (employed by the KCNSC Management and Operations (M&O) contractor) would be housed at Building 23 and would conduct waste management operations and coordination. Onsite staff would also prepare shipments and contract with local permitted waste management and recycling contractors for collection and offsite waste management. All wastes generated at Building 23 would be transported directly to a licensed disposal facility. The KCNSC has an existing DOT Security Plan for the transport of hazardous wastes, as required under 49 CFR 172.800; the proposed action would be covered under this existing KCNSC plan.

Minimal construction waste would be generated during interior renovation of Building 23 as described in Section 3.3.1.2 of this Supplemental EA. Any construction and demolition waste generated during facility improvement activities would be managed in accordance with guidance provided in Missouri Department of Natural Resources (MDNR) technical bulletin “Managing Construction and Demolition Waste” (MDNR, 2017).

Nonhazardous waste would be disposed of at a locally permitted sanitary landfill such as the Johnson County [Kansas] Landfill or, if available, a local landfill permitted solely for construction-type debris. Minimal hazardous waste is anticipated to be encountered or generated during renovation of Building 23. If encountered, any hazardous waste would be handled in compliance with applicable regulatory requirements. These measures would minimize hazards for worker safety.

The operations conducted within Building 23 would be classified by the US Environmental Protection Agency (EPA) as a Large Quantity Generator (LQG) of hazardous waste and would be required to obtain

an EPA Identification number. An LQG is defined as an entity that generates more than 1,000 kg (kilograms) of hazardous waste per month or more than one kg of acutely hazardous waste per month.[3] A containment pad would be constructed within the existing facility structure to store hazardous waste. This pad would be removed upon termination of NNSA operations at Building 23. Work equipment, processes, or activities that involve radioactive materials would only be allowed within Building 23 with Senior Management/NNSA approval. If such materials are approved for use a detailed radiological survey, which could lead to additional investigations such as MARSSIM/MARSAME and release of the property under DOE Order 458.1 may be prepared prior to releasing the facility and equipment back to unrestricted use.

No-Action - Under the no-action alternative, all current operations and equipment generating wastes would remain at the KCNSC. Because of the facility constraints at KCNSC, increases in operational levels and therefore increase in the production of all wastes would be restricted until another short-term solution or the implementation of the long-term solution is undertaken to support current and future workload increases. The no-action alternative does not support NNSA's need to meet operational and production obligations.

3.4 Intentional Destructive Acts

Section 5.3.9 of DOE/EA-1592 discusses the considerations and evaluation of potential intentional destructive acts prior to the construction of the KCNSC at Botts Road. This information and threat level designation would be applicable to Building 23 under the proposed action.

DOE considers intentional destructive acts (i.e., acts of sabotage or terrorism) in all its EAs and EISs. After review of the types of operations and potential hazards that would be relocated from KCNSC to Building 23, NNSA has determined that the likelihood of such acts for the proposed action would be low. It is possible that random acts of theft or vandalism could happen as in any other location. The act of relocating the functions included under the proposed action would not create a particularly attractive target or opportunity for terrorists or saboteurs to inflict adverse impacts to human life, heath, or safety.

[3] Additional information and requirements regarding categories of hazardous waste generators is provided online from the U.S. EPA at https://www.epa.gov/hwgenerators/categories-hazardous-waste-generators.

4.0 CUMULATIVE IMPACTS

4.1 Current and Reasonably Foreseeable Future Actions

Kansas City, Missouri, is a mixed-use community with industrial activities, offices, parks and recreation, and residential areas. The activities associated with such mixed use produce impacts across all resource areas assessed in this Supplemental EA. This Supplemental EA accounts for these impacts in the affected environment descriptions for the relocation alternative. This Supplemental EA assumes that such uses would continue into the future, producing additional impacts across the various resources in the region. For example, facilities would be repaired as required, jobs would be gained and lost, and community services (e.g., hospitals, education, and police) would continue to provide needed services to the area.

The area surrounding the KCNSC and Building 23 is designated for continued industrial use west of Highway 71 and for suburban uses (e.g., residential, commercial, light industrial) to the east of Highway 71. The land west of Building 23 is part of the CenterPoint Intermodal Facility that contains a number of industrial and distribution businesses. The vacant land between the main intermodal development and Building 23 would most likely be developed for industrial uses within the next five years. Additionally, land north of Highway 150 and east of Botts Road is also on the market to support commercial/industrial development.

4.1.1 Kansas City National Security Campus

Since the publication of DOE/EA-1592 in April 2008, the NNSA has completed the move to the new KCNSC. The facility is operated by Honeywell FM&T (NNSA, 2017). Section 4.3 of DOE/EA-1592 provides a description of the baseline environmental conditions at the current KCNSC property (Botts Road), prior to construction of the facility. Section 5.3 of DOE/EA-1592 provides a description of the environmental consequences of development of the KCNSC at Botts Road.

4.1.2 Additional Leased Spaces

Construction began on the new KCNSC in 2010 and NNSA relocated to the new KCNSC in 2013. To address the expanding workload and lack of adequate space at KCNSC, NNSA leased three additional off-site office spaces for additional office personnel from 2016 to 2019. **Table 4-1** summarizes additional leased office space and number of personnel located with each lease.

Table 4-1: KCNSC NNSA Additional Leased Office Space; Categorical Exclusions 2016-2019

Year	Number of Personnel Relocated	Office Space Lease Location	NEPA ID; Applicable Categorical Exclusions
2016	96	KCNSC South: 15431 Andrews Rd., Kansas City MO 64147	NSC 16-02 B1.24 Property Transfers
2017	423	KCNSC West: 6700 W. 115th St. Overland Park KS 66211	KCNSC 17-03 B1.24 Property Transfers
2019	400	KCNSC North: 9221 Ward Parkway, Kansas City, MO 64114	KCNSC 18-02 B1.24 Property Transfer

Source: NNSA, August 2019

4.2 Potential Cumulative Impacts

Relocation of employees and activities to Building 23 results in no cumulative impacts. The relocation of the described activities to Building 23 is a near-term solution to a capacity issue at KCNSC. The NNSA is evaluating long-term solutions to address their ongoing Mission at KCNSC. The proposed action addresses very immediate needs while allowing time for NNSA to establish an appropriate long-term plan. Use of Building 23 results in no direct impacts to sensitive natural resources. Building 23 is located in a developing industrial area and does not introduce additional traffic or land uses that are not compatible with residential or other suburban land uses.

It was determined that relocation of the described activities to Building 23 would not significantly contribute to cumulative environmental impacts in the project area.

5.0 REGULATORY REQUIREMENTS

This chapter provides a discussion of regulatory requirements associated with the proposed action. The following summarizes additional regulatory requirements and permitting that would be necessary for the proposed relocation.

5.1 Regulatory Agencies

Federal and State laws and local ordinances are the basis for the environmental, safety, and health requirements for KCNSC and NNSA facilities and operations. In addition to DOE, EPA, DOT, and the US Department of Labor are responsible for implementing Federal environmental, safety, and health statutes. The implementation direction can be statutory or by Executive Order. The EPA has delegated permitting and enforcement for the *Clean Air Act*, *Clean Water Act*, and RCRA to MDNR; however, EPA retains oversight of such State programs.

State agencies operate under their own statutory authorities to establish and enforce environmental, health, and safety laws. MDNR administers environmental regulatory programs that affect NNSA facilities and operations and is responsible for the protection and improvement of Missouri land, air, water, and recreation resources. Most State environmental regulations are in Title 10 of the *Missouri Code of State Regulations*. In addition, the City of Kansas City administers the Industrial Wastewater Pretreatment permitting program.

The *Clean Air Act*, *Clean Water Act*, and the *Resource Conservation and Recovery Act* (RCRA) have the greatest effect on the KCNSC, which maintains related permits. Other regulations that affect the KCNSC are those adopted under the *Toxic Substances Control Act of 1976* (TSCA) and the Department of Transportation (49CFR 171-180). In addition, the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) and Emergency Planning Right-to-Know (EPCRA) impose requirements on hazardous materials.

5.2 Federal, State, and Local Environmental Statutes and Regulations

Table 5-1 lists major Federal statutes, regulations, and Executive Orders applicable to the proposed action.

Table 5-2 lists major State and local statutes, regulations, and orders also applicable to the proposed action. NNSA currently complies with these and other regulations applicable to operations at the KCNSC and would maintain compliance for those applicable to operations relocated to Building 23.

Table 5-1: Major Federal Environmental Laws

Environmental Law and Regulation	Requirements
Clean Air Act	Enacted in 1970, the *Clean Air Act* provides air quality standards for criteria pollutants, control technology standards for hazardous air pollutants and new sources, a construction permit program, regulations on ozone-depleting substances, Section 112(r) emergency release regulations, and operating permit requirements. Missouri has an EPA-approved program administered by MDNR.
Clean Water Act	The 1972 amendments establish the National Pollutant Discharge Elimination System (NPDES) to control pollutants discharged to Waters of the United States from a point source. EPA establishes technology-based effluent limitations and requires permits for discharges. Missouri has an approved program administered by MDNR. The Act contains requirements for oil spill control and prevention. The City of Kansas City administers the Industrial Wastewater Pretreatment permitting program.
Comprehensive Environmental Response, Compensation, and Liability Act	Enacted in 1980, CERCLA establishes requirements for hazardous materials that may be subject to certain reporting requirements.
Superfund Amendments and Reauthorization Act	Enacted in 1986, this Act increased State involvement in the CERCLA program and increased program focus on human health problems posed by hazardous waste sites. The 1986 Act created the Emergency Planning and Community Right-to-Know program and requires reporting of hazardous chemical usage and release.
Toxic Substances and Control Act	Enacted in 1976, this Act establishes procedures for reporting the use and manufacture of specific new and existing chemicals. It establishes certain prohibitions and regulates the manufacture, processing, distribution, use, disposal, storage, and marking and labeling of certain hazardous materials.
Resource Conservation and Recovery Act	Enacted in 1976, RCRA regulates the generation, storage, handling, treatment, and disposal of hazardous wastes.
Community Environmental Response Facilitation Act of 1992	This Act amends CERCLA to establish a process for the identification, before termination, of Federal activities on property that does not contain contamination. It requires prompt identification of parcels that would not require remediation to facilitate the transfer of such property for economic redevelopment.
Federal Facilities Compliance Act (Public Law 102-386)	This Act waives sovereign immunity for Federal facilities under RCRA, including the KCNSC, and requires development of plans and agreements with States for the management of specific waste streams.
Pollution Prevention Act of 1990	This Act establishes the Federal Government's preference for source reduction followed by recycling rather than treatment or disposal of waste or pollutants.
National Environmental Policy Act of 1969	Enacted in 1970, NEPA establishes a national policy that requires consideration of environmental impacts in Federal decision making. A Federal agency considering an action that could impact the human environment must prepare an environmental assessment. If such assessment determines that impacts could be significant, the agency must prepare a more detailed analysis in the form of an environmental impact statement.

Environmental Law and Regulation	Requirements
Occupational Safety and Health Act of 1970	DOE, through 10 CFR Part 851, exercises its jurisdiction over worker safety and health programs at KCNSC by substantially adopting *Occupational Safety and Health Act of 1970* standards to enhance safe, healthy working conditions in places of employment throughout the United States. While DOE and EPA each have a mandate to reduce exposure to toxic substances, the Administration's jurisdiction is limited to safety and health conditions in the workplace environment. In general, under the Act, each employer must furnish all employees a place of employment that is free of recognized hazards that are likely to cause death or serious physical harm. Employees have a duty to comply with the occupational safety and health standards and all related rules, regulations, and orders.
Department of Transportation	Created in 2004, the Pipeline and Hazardous Materials Safety Administration (PHMSA), an agency of DOT, carries out a national safety program, including security matters, to protect against the risks to life and property inherent in the transportation of hazardous materials in commerce by all transportation modes.

Table 5-2: Major State and Local Environmental Laws, Regulations, and other Potentially Applicable Requirements

Environmental Law and Regulation	Requirements
Missouri Revised Statutes, Chapter 653, Air Conservation – Title 10 Code of State Regulations (CSR) Division 10, Chapters 1–6	Establishes the State program implementing the *Clean Air Act*. Requires permits to construct, modify, or operate an air contaminant source, and adopts the primary National Emission Standards for Hazardous Air Pollutants for State enforcement.
Missouri Revised Statutes, Chapters 640 and 644, Clean Water Law – Title 10 CSR Division 20, Chapters 1–15	Establishes the State Program implementing the *Clean Water Act*. Requires permits for discharges to State waters, establishes water quality standards, and regulates storage tanks.
Missouri Revised Statutes, Chapter 260 Environmental Control, Chapter 260.353-430 Missouri Hazardous Waste Management Law, Chapter 260.200-260.345 Missouri Solid Waste Management Law – Title 10 CSR Division 25, Chapters 1–19; 10 CSR Division 24 Chapters 1–5 and 10 CSR Division 10 CSR Division 100 Chapters 1–5	Establishes for Missouri a program that incorporates the requirements of CERCLA, RCRA, *Federal Facilities Compliance Act,* and *Toxic Substances and Control Act*. Regulates aspects of storage tanks. Requires permits for hazardous waste storage and disposal facilities and remediation of contaminated sites.
Missouri Revised Statutes, Sections 260.1000 to 260.1039 (*Missouri Uniform Environmental Covenants Act*)	Creates a standard for the development and application of environmental covenants that increases their reliability when used as part of the cleanup of contaminated sites.
Code of Ordinances of Kansas City, Missouri; Chapter 88	Contains regulations for land development and use.
Code of Ordinances of Kansas City, Missouri; Section 60-130 to 60-147	Outlines requirements for industrial/sanitary wastewater permit.

5.3 Environmental Permits, Certifications, and Registrations

The section provides a description of environmental permits required for implementation of the proposed action. Permits and actions required for the proposed relocation to Building 23 are included in **Table 5-3**.

Table 5-3: Required Permits, Certifications, and Registrations

Permit/Certifications/Registration	Agency	Additional Information
Special Case De Minimis Permit	MDNR	*Clean Air Act*
No Exposure Certification for exclusion from NPDES Stormwater Permitting	MDNR	*Clean Water Act, NPDES*
Facility Identification Number for registration as a Large Quantity Generator (LQG)	MDNR	Under the *RCRA* (1976), NNSA would register with the U.S. EPA as an LQG of hazardous waste; a permit is not required
DOT Security Plan for the transport of hazardous wastes, as required	US DOT	49 CFR Part 172, Subpart I

5.4 Consultations

Because no land disturbance is required to support the proposed relocation, no consultation with outside Federal agencies is required.

6.0 REFERENCES

Environmental Assessment (EA) for the *Modernization of Facilities and Infrastructure for the Non-Nuclear Production Activities Conducted at the Kansas City Plant* (U.S. Department of Energy [DOE]/EA-1592); issued April 21, 2008.

Finding of No Significant Impact (FONSI) for the *Modernization of Facilities and Infrastructure for the Non-Nuclear Production Activities Conducted at the Kansas City Plant* (U.S. Department of Energy [DOE]/EA-1592); issued April 29, 2008.

Kansas City National Security Campus (KCNSC). 2019. Nuclear Security Mission. Retrieved 30 July 2019 from https://kcnsc.doe.gov/Missions.

MDNR. 2017. Managing Construction and Demolition Waste. Retrieved 21 August 2017 from https://dnr.mo.gov/pubs/pub2045.htm.