



2022 Annual Site Environmental Summary

*U.S. Department of Energy
National Nuclear Security Administration
Kansas City National Security Campus*

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U.S. Department of Energy National Nuclear Security Administration
Annual Site Environmental Summary Report CY2022
Kansas City National Security Campus

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Acronyms & Abbreviations

%	percent
°F	degrees Fahrenheit
A/BCLEPC	Albuquerque/Bernalillo County Local Emergency Planning Committee
A/BCWUA	Albuquerque/Bernalillo County Water Utility Authority
ASES	Annual Site Environmental Summary
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CPZ	CenterPoint Zimmer
CSR	Code of State Regulations
CWA	Clean Water Act
DHSEM	Department of Homeland Security & Emergency Management
DOD	Department of Defense
DOE	Department of Energy
DOT	Department of Transportation
EMS	Environmental Management System
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-know Act
FFCA	Federal Facility Compliance Act
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
FM&T	Honeywell Federal Manufacturing and Technologies, LLC
gpd	gallons per day
GSA	General Services Administration
HAPs	Hazardous Air Pollutants
HS&E	Health, Safety, & Environment
HVAC	Heating, Ventilation, and Air Conditioning
ISO	International Organization for Standardization
IWPF	Industrial Wastewater Pretreatment Facility
KAFB	Kirtland Air Force Base
KC	Kansas City
KCFO	Kansas City Field Office
KCMO	Kansas City, Missouri
KCNSC	Kansas City National Security Campus
KCNSC NMO	Kansas City National Security Campus New Mexico Operations
LEED	Leadership in Energy and Environmental Design
LLC	Limited Liability Corporation
M&O	Maintenance and Operation
MDC	Missouri Department of Conservation

MDNR	Missouri Department of Natural Resources
NELAP	National Environmental Laboratory Accreditation Program
NEPA	National Environmental Policy Act
NESHAP	National Emission Standard for Hazardous Air Pollutant
NM	New Mexico
NNSA	National Nuclear Security Administration
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
P2	Pollution Prevention
PCBs	Polychlorinated Biphenyls
PM	Particulate Matter
PMN	Pre-Manufacture Notice
POTW	Publicly Owned Treatment Works
PPA	Pollution Prevention Act
QA	Quality Assurance
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SMAL	Screening Model Action Level
SPCC	Spill Prevention Control and Countermeasures
SWPPP	Storm Water Pollution Prevention Plan
tpy	Tons Per Year
TSCA	Toxic Substances Control Act
USGS	United States Geologic Survey
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

1.1 Purpose

The purpose of this document is to present a summary of the Department of Energy's (DOE) National Nuclear Security Administration's (NNSA) Kansas City National Security Campus (KCNSC) environmental programs, activities, and compliance status for calendar year (CY) 2022. The annual Performance Evaluation Plan provides the basis for Kansas City Field Office (KCFO) customer expectations regarding Health, Safety and Environment (HS&E) performance including conformance to the HS&E Management System Description and Worker Safety and Health Program approved annually by KCFO. As described in that management system description document, this Annual Site Environmental Summary (ASES) is provided in lieu of an Annual Site Environmental Report.

The ASES is prepared annually as information for the general public and other stakeholders to:

- summarize the results of environmental compliance and monitoring programs;
- characterize site environmental management performance;
- provide compliance status with applicable environmental standards and requirements;
- highlight significant achievements, programs, and efforts which go beyond regulatory requirements; and
- provide an overview of quality assurance.

1.2 Facility Overview

The KCNSC is comprised of several campuses, split between two main locations. The majority of the operations is the KCNSC located in the Kansas City area and comprised of five campus locations, with manufacturing taking place at KCNSC Botts and KCNSC East. Four campuses are located in Kansas City, Missouri and one campus is in Olathe, Kansas. The secondary location is the KCNSC New Mexico Operations (KCNSC NMO) in Albuquerque, New Mexico and consisting of seven buildings.

The KCNSC Botts campus was designed and built to NNSA specifications in support of the manufacture of non-nuclear components for the nuclear weapon stockpile. Construction of the facility began in September 2010 and was completed in December 2012. The KCNSC Botts was constructed to achieve a Leadership in Energy and Environmental Design (LEED), Version 2.2, Gold certification, as defined by the US Green Building Council. In addition, the facility meets all executive orders on energy conservation. Occupancy of the new facility was initiated in November 2012 and completed in June 2014.

The KCNSC Botts campus is owned by a development company (Center Point Zimmer (CPZ)). The General Services Administration (GSA) leases the facility on behalf of the NNSA. The building and associated infrastructure (e.g., heating, ventilation, and air conditioning (HVAC) systems; cooling tower operations; boilers) is owned by CPZ and the manufacturing equipment and associated support equipment is owned by the NNSA. The

NNSA contracts manufacturing operations under a Management and Operating (M&O) contract. Currently, the NNSA's M&O contractor for the KCNSC is Honeywell Federal Manufacturing & Technologies, LLC (FM&T).

The KCNSC Botts campus covers approximately 1.5 million rentable square feet with over 3,300 surface parking spaces. During construction, soils and topography were disturbed by construction activity. These impacts were mitigated by conforming to local building codes and land disturbance permits which included erosion and sediment control provisions. Approximately 45 acres of the facility are occupied by buildings and parking lots. The remaining 140 acres of undisturbed land are utilized as a buffer zone for the facility and as aquatic resource mitigation areas.

In order to accommodate an increase in the number of personnel since the Botts campus was built, additional off-site space has been leased. Four satellite campuses of approximately 175,000 square feet of office space are currently leased. An additional approximately 275,000 square feet of future manufacturing space is also currently leased. No new space was added in 2022.

The KCNSC NMO consists of approximately 158,000 rentable square feet across six buildings located in Albuquerque, NM. Approximately 43,000 square feet is office space while the remaining 115,000 square feet is utilized for manufacturing space. No new space was added in 2022.

1.3 Environmental Regulatory Overview

Detailed discussions related to each environmental program can be found within the referenced resource documents and reports identified within this summary. Environmental and effluent monitoring are on-going activities at the KCNSC, which ensure the safety of employees, the public, and the environment; and demonstrate compliance with permits and regulatory requirements. A list of environmental regulatory requirements applicable to the KCNSC is contained in Table 1-1. A summary of federal, state, or local agency issued environmental permits for the KCNSC is provided in Table 1-2.

Environmental monitoring, including analysis and data management, is the responsibility of the FM&T HS&E organization. Administration of the KCNSC environmental monitoring program is the responsibility of program managers within the HS&E organization. The KCFO provides programmatic oversight. Local, state, and federal authorities, including the city of Kansas City, Missouri; the Missouri Department of Natural Resources (MDNR); and the Environmental Protection Agency (EPA); enforce applicable permit and regulatory requirements and provide guidance and direction to the KCNSC regarding monitoring standards and reportable actions. Environmental monitoring programs for the KCNSC are identified in Table 1-3.

Table 1-1 Environmental Regulations and Requirements

Environmental Regulation	Requirements Summary
Clean Air Act (CAA)	The CAA 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, greenhouse gas emission reporting, emergency release regulations, and operating permit requirements. Under the CAA, states may administer and enforce CAA provisions by obtaining EPA approval of a State Implementation Plan.
Clean Water Act (CWA)	The CWA established the National Pollutant Discharge Elimination System (NPDES), which is designed to control pollutants discharged to U.S. surface waters. The EPA sets effluent limitations, and permits are required for discharges from point sources.
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) /Superfund Amendments and Reauthorization Act (SARA)	CERCLA contains provisions for liability, compensation, and cleanup for past hazardous waste activities and emergency response for hazardous substances released to the environment. SARA Title III Emergency Planning and Community Right to Know (EPCRA) requires reports on Hazardous Chemical usage and release reporting.
Toxic Substances Control Act (TSCA)	TSCA contains requirements for the reporting, use and manufacture of new and existing chemicals. TSCA also establishes prohibitions of, and requirements for the manufacture, processing, distribution in commerce, use, disposal, storage, and marking of Polychlorinated Biphenyls (PCBs) and PCB items.
Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)	FIFRA restricts the application of pesticides and herbicides through a state-administered certification program.
Resource Conservation and Recovery Act (RCRA)	RCRA governs the generation, storage, handling, treatment, and disposal of hazardous waste.
Federal Facilities Compliance Act (FFCA)	The FFCA mandates compliance with RCRA by Federally owned facilities.
Pollution Prevention Act (PPA)	The PPA of 1990 establishes the federal government's priority for source reduction followed by recycling rather than treatment or disposal of waste or pollutants.
National Environmental Policy Act (NEPA)	NEPA is a federal policy, which requires the consideration of environmental impact prior to decision making.

Table 1-2 Permits

Permit	Expiration Date	Permit #	Regulating Agency
CAA			
Special Case De Minimis Permit (NNSA)	March 2, 2028	032018-001C	MDNR
Special Case De minimis Permit (CPZ)	February 22, 2028	022018-007B	MDNR
Operating Permit	July 31, 2023	22/23 AQ-OP-90	KCMO
CWA			
Stormwater Permit (Botts) No Exposure Certification	July 26, 2025	MO-NX00441	MDNR
Stormwater Permit (KCNSC East) No Exposure Certification	December 4, 2024	MO-NX00745	MDNR
Wastewater Discharge Permit	December 31, 2027	n/a	KCMO

Table 1-3 Environmental Monitoring Programs

Monitoring Program	Purpose
Stormwater Outfalls	In lieu of a stormwater permit, the KCNSC operates under two (2) No Exposure Certifications. Facilities that qualify for a No Exposure Certification are not required to seek coverage under a permit. In order to ensure ongoing routine compliance with the No Exposure Certification, the KCNSC has developed and implemented a Storm Water Pollution Prevention Plan (SWPPP).
Industrial Wastewater	Provides data relating to compliance with metal finishing standards and discharge of industrial wastewater to the combined sanitary sewer system. Compliance monitoring of the effluent from the Industrial Wastewater Pretreatment Facility (IWPF) is performed.
Combined Sanitary	To ensure that effluent, which includes discharge from IWPF, meets Kansas City ordinance for sanitary and pretreatment standards for industrial wastes and to comply with the sanitary discharge permit.
Air Emissions	Emissions are calculated under a process approved by MDNR. Emissions are based on emission factors associated with manufacturing processes and material disbursements to the various manufacturing operations.

This report summarizes the significant information resulting from the environmental compliance and effluent monitoring programs at the KCNSC during 2022. In addition to complying with all applicable environmental regulations, the KCNSC strives to improve performance by reducing the environmental impact of operations through several voluntary programs. FM&T/KC and NM are both certified under International Organization for Standardization (ISO) 14001. ISO 14001 is an internationally recognized standard which serves as the foundation of an Environmental Management System (EMS).

2.0 SITE DESCRIPTION

2.1 Kansas City Locations

2.1.1 Site Location / Description

The KCNSC Botts facility is located approximately 16 miles south of the center of Kansas City, Missouri within the incorporated city limits (see Figure 2-1). It consists of approximately 185 acres of land that was previously zoned for agriculture and is located on the northwest corner of the intersection of Missouri Highway 150 and Botts Road. The site is bordered on the west by an active railroad line owned by the Kansas City Southern Railroad Company and on the north by property owned by CenterPoint Development Company (Figure 2-2). Prior to development of the site as the KCNSC, the property was utilized for agricultural purposes.

The KCNSC East (Building 23) campus is located approximately one mile east of the KCNSC Botts campus. It was a preexisting warehouse/light manufacturing facility prior to KCNSC taking occupancy. The NNSA leases approximately 275,000 of the 450,000 square feet of the facility. The remaining portion is leased to another tenant and used as a distribution center.

2.1.2 Climate

The climate in the region is characterized as humid and continental, with warm summers, moderately cold winters, and moderate annual precipitation. From 1981 to 2010, the annual mean temperature in Kansas City was 54.5 °F. The coldest month is January, with a mean temperature of 28.8 °F and the warmest month is July, with a mean temperature of 78.3 °F. The coldest recorded temperature was -19 °F in December 1989 and the highest recorded temperature was 110 °F in July 1984. The annual mean precipitation is 38.83 inches, and the annual mean snowfall is 18.6 inches (NCCI 2010).

Figure 2-1 Kansas City Area Map – Location of the KCNSC

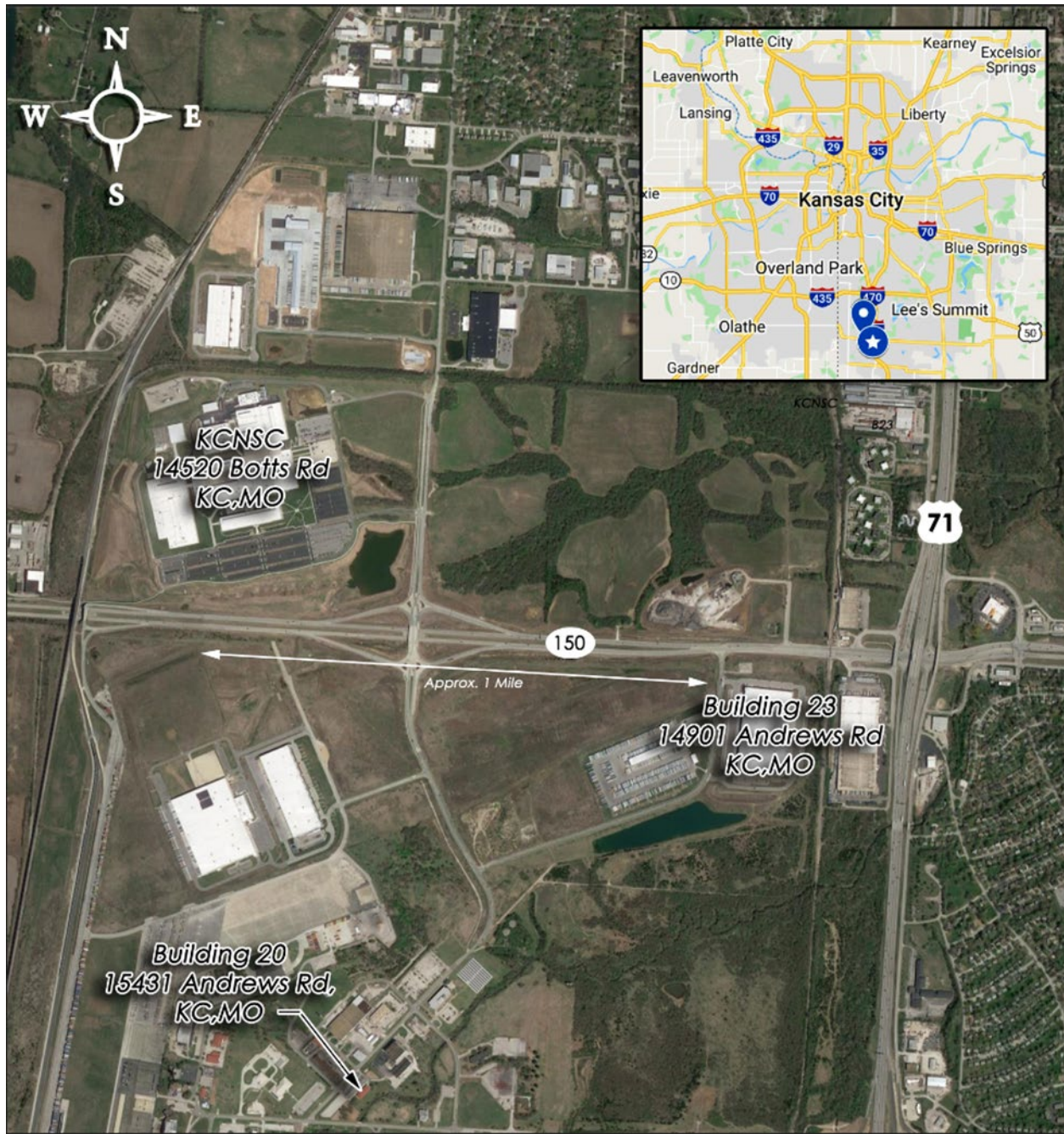
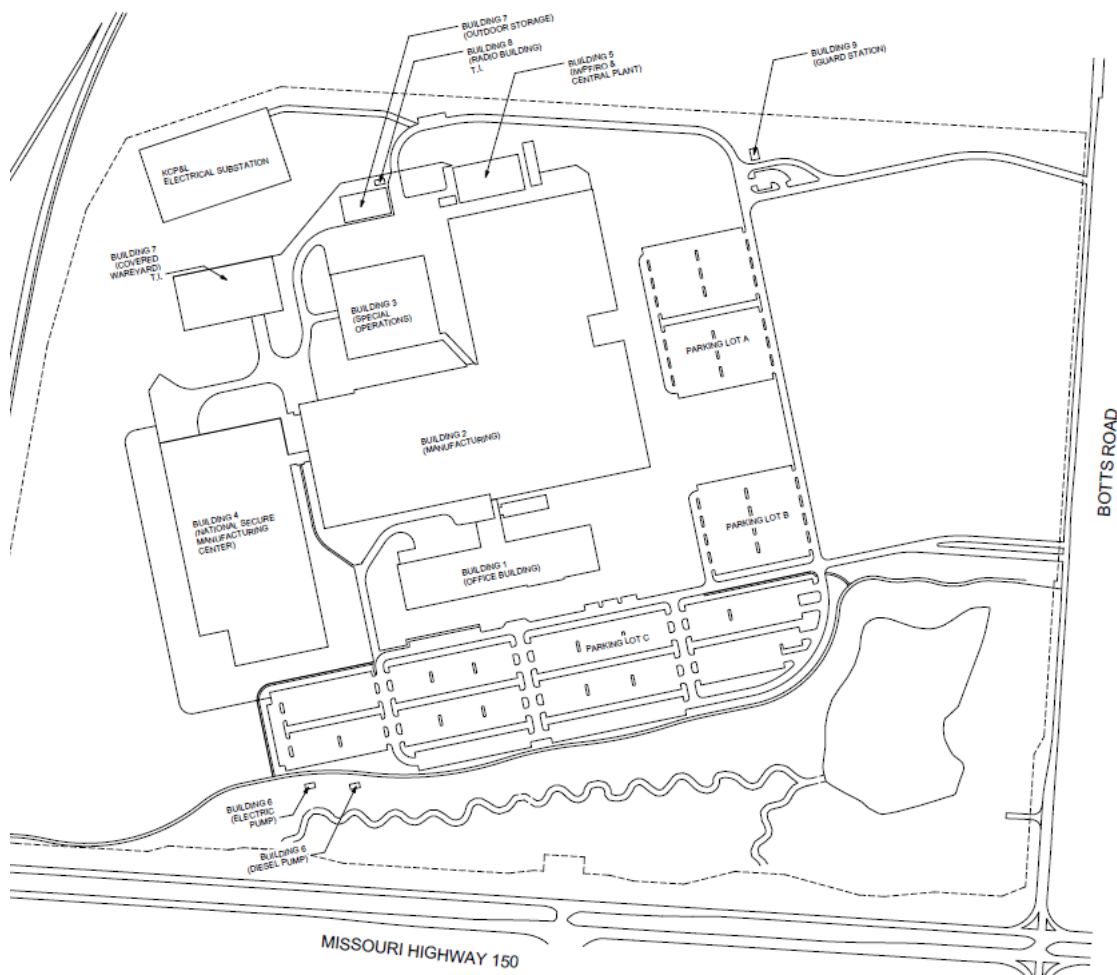


Figure 2-2 KCNSC Site Map



2.1.3 Soils

The soil on the western portion of the KCNSC is Sharpsburg silt loam, with 2% to 5% slopes. This loam is characterized by deep, gently sloping, moderately well drained soil on convex ridge tops. Permeability is moderately slow and surface runoff is medium. Natural fertility and available water capacity are high. Organic matter content is high, and the shrink-swell potential is moderate.

The soil on the southwestern portion of the site is also Sharpsburg silt loam with 5% to 9% slopes. This moderately sloping, moderately well drained soil occurs on convex side slopes and narrow, convex ridge tops. Permeability is moderately slow and surface runoff from cultivated areas is medium. Natural fertility is medium and available water capacity is high. The organic matter content and the shrink-swell potential are moderate.

The Greenton silty clay loam, with 5% to 9% slopes, is located on the eastern portion of the property. This deep, moderately sloping, somewhat poorly drained soil occurs on upland side slopes. Permeability is low and surface runoff from cultivated areas is medium. The available water capacity and natural fertility are high. Organic matter content is moderate. The shrink-swell potential is high in the subsurface.

2.1.4 Groundwater Hydrology

The Western Interior Plains aquifer system underlies most of Kansas, the eastern and southern parts of Nebraska, and a small area in west-central Missouri. The aquifer system consists of lower units in rocks of Ordovician and Cambrian age, a shale confining unit of Mississippian and Devonian age, and an upper aquifer unit comprised of Mississippian limestone. The thickness of the aquifer (including the confining unit) ranges from less than 500 feet to more than 3,000 feet. The aquifer system is thin or absent on structural uplifts and is thickest in downwarps. Regional groundwater in the aquifer system flows towards the east-southeast. Much of the water discharges from the aquifer system in the transition zone between the Western Interior Plains and the Ozark Plateaus aquifer systems. The aquifer system is considered to have a low permeability.

Dissolved-solids concentrations of water in the Western Interior Plains aquifer system are typically greater than 1,000 milligrams per liter. In thick, deeply buried parts of the aquifer system, dissolved-solids concentrations of more than 200,000 milligrams per liter have been reported. The elevated concentrations are due in part to the slow movement of groundwater in the aquifer system.

The Western Interior Plains aquifer system is not generally developed for potable use because it is deeply buried and contains highly mineralized water. Locally, deeply buried parts of the aquifer system contain oil and gas; some brine (that is a by-product of hydrocarbon production) is injected into disposal wells, which are completed in permeable parts of the system (USGS 1997).

Previous site assessment indicated the sporadic presence of shallow groundwater at depths ranging from approximately 5 to 11 feet below ground surface at the site. Groundwater is not utilized at the facility. Background groundwater samples collected onsite did not indicate the presence of hydrocarbon, pesticide, or herbicide contamination.

2.1.5 Surface Water Hydrology

The KCNSC is located within the Little Blue River Watershed. Site runoff flows into unnamed tributaries that flow generally to the east into the Little Blue River. The Little Blue River then drains into the Missouri River. The KCNSC does not lie within the 100- or 500-year floodplains.

2.1.6 Flora and Fauna

The KCNSC is located within the Wooded Osage Plains Level IV Ecoregion, characterized by little bluestem-sideoats grama prairie, big bluestem-Indiangrass prairie, cordgrass wet prairie, and oak woodlands. Prior farming activity resulted in the removal of any native habitats that may have been present around the KCNSC. Remnants of habitats may be present along drainages and on undeveloped parcels primarily located to the west. Non-native, human created habitats such as

residential neighborhoods and golf courses support wildlife species adapted to human development.

Three federally listed species are found for Jackson County, Missouri by the U.S. Fish and Wildlife Services: the gray bat (endangered), the Indiana bat (endangered), and the northern long-eared bat (threatened). There are no records of species or habitats of federal or state conservation concern within one mile of the KCNSC Botts site (MDC 2007).

2.1.7 Historical or Cultural Resources

Prior to initiating construction activities, the Missouri State Historic Preservation Office reviewed the Cultural Resource Assessment and determined that a Phase One Archeological Survey was not required, and historic properties would not be affected at the KCNSC. No items of archeological significance were found during construction excavation.

2.1.8 Socioeconomic Environment

Population

Kansas City, Missouri, the largest of approximately 100 incorporated cities in the greater Kansas City area, is situated on the western border of Missouri at the confluence of the Missouri and Kansas Rivers. The population of Kansas City, Missouri (from the 2020 census), was 501,957. The Kansas City Metropolitan Statistical Area (#3760), which consists of ten counties in Missouri (Bates, Caldwell, Cass, Clay, Clinton, Jackson, Johnson, Lafayette, Platte, and Ray) and seven counties in Kansas (Atchison, Franklin, Johnson, Leavenworth, Linn, Miami, and Wyandotte) reflected a 2022 estimated population of 2,170,458. Kansas City, Missouri/KS, is the 31st largest metropolitan area in the nation.

Environmental Justice

Executive Order No. 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, directs federal agencies to identify disproportionately high and adverse human health or environmental effects of their actions on minority or low-income populations. Pursuant to this Order, the federal agencies conducted an evaluation of the effects of construction of the KCNSC on the socioeconomic environment and environmental justice. Based upon 2000 census data, 33,406 people live within a three-mile radius of the KCNSC. Within a three-mile radius 21.3% of the population identified itself as minority and 9.7% of people live below the poverty level. For comparison, 441,545 people lived in the City of Kansas City, with a minority population of 39%, and 14% of the population live below the poverty level (KCMO 2007a & 2007b). Based on the analysis of impacts for resource areas, no significant adverse impacts from construction and operation activities at the KCNSC were identified.

2.2 Kansas City National Security Campus New Mexico (KCNSC NMO)

KCNSC NMO is an applied-science and engineering organization engaged in technical, operational, mechanical, and logistical support through research, analysis, testing, and field operations that support NNSA's Secure Transportation and Emergency Response missions, as well as the national laboratories, other DOE contractors, the Department of Defense, and other Federal and non-Federal agencies. KCNSC NMO often uses the significant

engineering, analytical, and manufacturing capabilities of the KCNSC to provide support to their customers.

All operations and processes conducted at KCNSC NMO are of a type and nature routinely encountered by the public in general industry. Small quantities of chemicals typical of machining operations, electronics repair, and spray painting are used. DOT Hazard Class 1.3 and 1.4 explosives are stored at the Craddock A Facility. Air emissions are managed under a single Source Registration for the painting and chemical use operations primarily at the Craddock campus facilities.

KCNSC NMO typically is a Small Quantity Generator of hazardous waste for the calendar year and often meets the EPA definition of a Very Small Quantity Generator. There are no continuous industrial wastewater flows and the few small batch industrial wastewater discharges that occur typically meet the publicly-owned-treatment-works discharge limits directly or they are shipped offsite as regulated waste. Stormwater at the Craddock campus facilities is managed under an EPA *“No Exposure Certification for Exclusion from National Pollutant Discharge Elimination System Storm Water Permitting.”*

In summary, KCNSC NMO operations have a negligible environmental “footprint.”

2.2.1 Site Location/Description

The KCNSC NMO is located approximately 5 miles south-southeast of the center of Albuquerque, New Mexico within the city limits. It consists of seven buildings zoned for non-residential business and light manufacturing usage. The KCNSC NMO is located near the northwest corner of Albuquerque International Airport.

2.2.2 Climate

The climate in the region is characterized as cold and semi-arid, with warm to hot summers, cool to cold winters, and low annual precipitation. From 1981-2010, the annual mean temperature in Albuquerque was 53.7 °F. The coldest months are January and December, with a mean temperature of 36.4 °F, and the warmest month is July, with a mean temperature of 78.3 °F. The coldest recorded temperature was -17 °F in January 1971 and the highest recorded temperature was 107 °F in June 1994. The annual mean precipitation is 9.45 inches, and the annual mean snowfall is 9.6 inches (NCCI 2010).

2.2.3 Soils

The soils underlying the KCNSC NMO campus locations are Bluepoint-Kokan association loamy fine sand to gravelly loamy coarse sand, with 5% to 15% slopes. This loamy sand is characterized by deep, gently sloping, well-drained soil on concave to flat formations. Permeability is fast and surface runoff is low. Natural fertility and available water capacity are low. Organic matter content and shrink-swell potential are low (Hacker 1977).

2.2.4 Groundwater Hydrology

The Rio Grande aquifer system underlies a south-central portion of southern Colorado, the central portions of New Mexico, and far western portions of Texas. The aquifer system consists of a network of hydraulically interconnected aquifers in basin-fill deposits of Quaternary and Tertiary age located along the Rio Grande Valley and other nearby valleys. The aquifers are present in intermountain basins between discontinuous mountain ranges and tablelands in New Mexico. High mountains border the aquifers in Colorado. The mountains and tableland edges slope steeply toward the basins. The thickness of the basin ranges from 2,000 feet to an estimated 30,000 feet deep.

Much of the streamflow for the Rio Grande aquifer system in the northern mountainous region is derived from snowmelt or rainfall runoff. Streamflow in the southern portion of the system is derived from groundwater discharge and stormwater runoff. Dissolved-solid concentrations range from 300 to 3,000 milligrams per liter in the freshwater zone. A transition zone separates this freshwater zone from a deeper saline zone where concentrations exceed 3,000 milligrams per liter. Freshwater is withdrawn from the Rio Grande aquifer system for potable use, averaging 410 milligrams per liter beneath Albuquerque (USGS, 1995).

2.2.5 Surface Water Hydrology

The KCNSC NMO is located within the Albuquerque or Middle Rio Grande Watershed. Site runoff flows into city stormwater drains. The city stormwater flows into the North Diversion Channel which discharges the untreated runoff into the Rio Grande River. The KCNSC NMO campuses lie within the 100-year floodplain.

2.2.6 Flora and Fauna

The KCNSC NMO is located within the Rio Grande Floodplain and the Albuquerque Basin Level IV Ecoregions. The Rio Grande Floodplain ecoregion is characterized by bosques of cottonwood and willow with understories of coyote willow, New Mexico olive, false indigo, and seepwillow. The Albuquerque Basin ecoregion is characterized by sand scrub and desert grassland comprised of grama and dropseed grasses, galleta, sand sage, alkali sacaton, and threeawns.

Five federally listed species are found for Bernalillo County, New Mexico by the U.S. Fish and Wildlife Services: the New Mexico meadow jumping mouse (endangered), the Mexican spotted owl (threatened), the southwestern willow flycatcher (endangered), the yellow-billed cuckoo (threatened), and the Rio Grande silvery minnow (endangered). In addition, there are thirteen New Mexico state listed species: the spotted bat (threatened), the broad-billed hummingbird (threatened), the white-eared hummingbird (threatened), the least tern (endangered), the neotropic cormorant (threatened), the brown pelican (endangered), the bald eagle (threatened), the common black hawk (threatened), the Aplomado falcon (endangered), the peregrine falcon (threatened), the Bell's vireo (threatened), the gray vireo (threatened), and the Baird's sparrow (threatened). No records of species or habitats of federal or state conservation concern exist within one mile of the site.

2.2.7 Historical or Cultural Resources

The KCNSC NMO campuses are leased facilities. Prior to previous construction and consolidation projects, the New Mexico State Historic Preservation Office conducted an assessment. No archeological sites, historically designated properties, or cultural sites were identified within one mile of any of the campuses. No items of archeological significance have been found during past construction activities.

2.2.8 Socioeconomic Environment

Population

Albuquerque, New Mexico, the largest metropolitan city in New Mexico, is situated in the central portion of the state on the Rio Grande River. The population of the City of Albuquerque (from the 2020 census) was 564,559. The Albuquerque Metropolitan Statistical Area (#0200) consists of four counties (Bernalillo, Sandoval, Torrance, and Valencia) which reflected a 2022 estimated population of 919,543. Albuquerque is the 61st largest metropolitan area in the nation.

Environmental Justice

Executive Order No. 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, directs federal agencies to identify disproportionately high and adverse human health or environmental effects of their actions on minority or low-income populations. Based upon 2010 census data, 66,455 people live within a three-mile radius of the KCNSC NMO. 45% identified itself as minority and 22.8% as living below the poverty level. For comparison, 890,160 people lived in the City of Albuquerque, with a minority population of 30.4%, and 20.4% living below the poverty level.

3.0 ENVIRONMENTAL PROGRAM SUMMARIES

3.1 Clean Air Act (CAA)

3.1.1 KCNSC

The CAA provides for ambient air quality standards for criteria pollutants, control technology standards for hazardous air pollutants and new sources, construction permitting rules, stratospheric ozone protection regulations, emergency release rules, and operating permit requirements. Under the CAA, states or local governments may administer and enforce CAA provisions by obtaining EPA approval of a State Implementation Plan. The MDNR has CAA enforcement authority and as such, issues and enforces permits and associated terms and conditions. Table 3-1 summarizes the CAA regulations applicable to KCNSC manufacturing operations.

The KCNSC combined installation consists of production emission units owned by DOE NNSA, operated by FM&T and support emission units constructed by the GSA, transferred to CenterPoint Zimmer (CPZ). The production and support activities have separate installation IDs, 095-2442 (DOE) and 095-2450 (CPZ), respectively. However, the installations are considered as one for permit applicability. NNSA manufactures non-nuclear

components of nuclear weapons whereas CPZ provides HVAC, hot water, and emergency power to NNSA.

Emissions of volatile organic compounds (VOCs) associated with cleaning and painting operations comprise the majority of air emissions associated with NNSA manufacturing operations. The combined installation is a conditioned de minimis source and is not required to have an operating permit. The combined installation relocated from the Bannister Federal Complex in 2014.

Table 3-2 summarizes the New Source Review permits that have been issued to the combined installation.

Table 3-1 CAA Regulations

City of Kansas City Air Quality Ordinances
Section 8-8(c) Control of emissions of VOCs from industrial surface coating.
Section 8-8(a) Restriction of emission of VOCs from solvent metal cleaning
MDNR Division 10 Air Conservation Commission Regulations
10 CSR 10-2.205 Control of Emissions from Aerospace Manufacture and Rework Facilities
10 CSR 10-2.210 Control of Emissions from Solvent Metal Cleaning
10 CSR 10-2.215 Control of Emissions from Solvent Cleanup Operations
10 CSR 10-2.230 Control of Emissions from Industrial Surface Coating Operations
10 CSR 10-6.045 Open Burning Requirements
10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions
10 CSR 10-6.060 Construction Permits Required
10 CSR 10-6.065 Operating Permits
10 CSR 10-6.110 Submission of Data, Emission Fees, and Process Information
10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential
10 CSR 10-6.165 Restriction of Emissions of Odors
10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin
10 CSR 10-6.220 Restriction of Emissions of Visible Air Contaminants
Federal Rules
40 CFR 60 Subpart VVV Standards of Performance for Polymeric Coating of Supporting Substrates Facilities
40 CFR 61 Subpart H National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities
40 CFR 63 Subpart OOOOO National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources
40 CFR 63 Subpart WWWW National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations
40 CFR 82 Protection of Stratospheric Ozone

Table 3-2 Permit History NNSA, ID 095-2442

PERMIT NUMBER	DESCRIPTION
1227	New installation/relocation, issued by Kansas City Health Department
1227a	Amendment to update recordkeeping
1227B	Amendment to true-up as built
032014-010	Surface coating
032014-010A	Replace PM _{2.5} with PM ₁₀ limit
042017-004	Surface coating
032018-001	Special Case De Minimis
032018-001A	Amendment to add gasoline/diesel combustion
032018-001B	Amendment to adjust NOx limit portions
032018-001C	Amendment to adjust emission factor source for gasoline/diesel combustion

The DOE and CPZ permits have always contained emission limits for Particulate Matter (PM₁₀ or PM_{2.5}), VOCs, Nitrogen Oxides (NOx), and Hazardous Air Pollutants (HAPs). The limits are portioned such that the combined KCNSC installation is de minimis (see Table 3-3). NNSA and CPZ most commonly install emission units with moderate potential emissions and low actual emissions. Historically, permits or amendments were required prior to beginning construction in order to keep the evolving installation de minimis. These permits and amendments were considered resource and time consuming, thus DOE requested the issuance of a special case de minimis permit to reduce the burden. A special case de minimis permit is described in Missouri regulations found at 10 CSR 10-6.060 Construction Permits Required (5)(C): "In order to eliminate the necessity for a large number of de minimis permit applications from a single installation, a special case de minimis permit may be developed for those batch-type production processes which frequently change products and component source operations. Operating in violation of the conditions of a special case de minimis permit shall be a violation of this rule."

Table 3-3 Combined Installation Permit Limits (Tons per year)

Pollutant	De-minimis Level	NNSA ACP 032018-001 Permit Limit	CenterPoint Zimmer 022018-007 Permit limit
PM ₁₀	15.0	<5.0	<10.0
NOx	40.0	<10.0	<30.0
VOCs	40.0	<39.0	<1.0
Combined HAPS	25.0	25.0 ¹	25.0 ¹
Individual HAP	<10.0/SMAL	1,2	1,2

¹GSA and NNSA shall share the installation-wide individual HAP / SMAL (screening model action level) limit and combined HAP 25.0 tpy limit.

²Emission of individual HAPs are limited to the respective SMAL as established by 10 CSR 10-6.060(12)(J).

The regulation does not detail what a special case de minimis permit should contain. Therefore, KCFO, in coordination with MDNR, designed the Permit to include features from typical de minimis permits and Plantwide Applicability Limit permits. This permit (032018-001) issued March 2, 2018, contains portioned de minimis limits for PM₁₀, NO_x, VOCs, and HAPs. HAPs are also limited to respective Screening Model Action Levels (SMALs). The permit limits do not expire but do require reevaluation at the end of the permit effective period. This permit preapproves the addition of many types of future emission units without the application for and issuance of a construction permit specific to that project. The de minimis emission limits can remain in effect for the changing installation, something that a typical de minimis permit does not accomplish. This permit requires annual reporting. A similarly formatted special case de minimis permit was prepared for CPZ.

Table 3-4 identifies the reports that were completed in calendar year 2022.

Table 3-4 Clean Air Act Reports

Report	Submittal due date(s)	Submittal Agency	Next Submittal	Frequency
NESHAP Compliance Report (40 CFR 60, OOOOOO, WWWWWW)	January 2022	Internal files	January 2023	Annual
NESHAP Compliance Report (40 CFR 60 VVV),	January 31, 2022, and July 31 2022	Internal files	January 31, 2023	Semi-Annual
NESHAP Compliance Report CFR 61 H	June 30, 2022	EPA Region VII. EPA Headquarters	June 30, 2023	Annual
Emission Inventory Questionnaire	May 1, 2022	KCMO Air Quality Section MDNR Air Pollution Control Program	May 1, 2023	Annual

Ground level ozone levels can be increased due to emissions of NO_x, CO, and VOCs. These chemicals are considered “ozone precursors.” The Kansas City area (Clay, Jackson and Platte Counties in Missouri and Johnson and Wyandotte Counties in Kansas) was designated nonattainment with respect to the 1-hour ozone standard in 1978. Ground level ozone is problematic because of its health effects and as a significant factor in the formation of smog. The MDNR established more stringent VOCs emission regulations in 1987 for solvent metal cleaning and surface coating operations. This was part of the state implementation plan designed to reduce ozone levels in the Kansas City area. In 1991, the area was able to demonstrate that it had attained the standard and EPA redesignated the area to attainment in 1992. This plan demonstrated how the area would maintain the ozone standard for the next ten years, i.e., through 2002. During 2001, MDNR implemented additional rules to control VOCs emissions from Aerospace Manufacturing and other miscellaneous solvent usage. A

Kansas City Ozone Maintenance Plan is currently implemented by MDNR to ensure ongoing compliance with the 1-hour ozone standard. The KCNSC reviews incoming equipment to ensure conformance with design features required by MDNR regulations and record keeping requirements.

3.1.2 KCNSC NMO

Air pollution emissions are mainly the result of small quantity chemical use and Large and Small Paint Booth operations. Emissions are primarily VOCs and HAPs. KCNSC NMO CY2022 VOCs and HAPs emissions were estimated to be 0.72 tons-per-year (tpy) and 0.18 tpy, respectively.

Table 3-5 NM Source Registrations (SRs)

Source Registration	Expiration Date	SR #	Regulating Agency
Craddock Facility: Truck & Trailer Paint and Body/Van Conversion Plant	None	2068-RV1	Albuquerque Environmental Health Dept. Air Quality Program

No regulatory inspections regarding air quality occurred in CY22. KCNSC NMO pays an annual emissions fee for this Source Registration to the City of Albuquerque.

3.2 Clean Water Act (CWA)

3.2.1 Stormwater

Surface water was not used during facility construction and is not used during routine site operations. Site construction activities were regulated under Missouri State Operating Permit, Land Disturbance General Permit # MO-R10A000. This permit required development of a Storm Water Pollution Prevention Plan (SWPPP) to control runoff and erosion associated with site construction activities.

The KCNSC is required to comply with Section 438 of the Energy Independence and Security Act of 2007, Pub. L. No. 110-140, which was enacted on December 19, 2007. Section 438 of the Act requires that the developer of the proposed facility use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow. The KCNSC includes stormwater mitigation and control features such as detention basins, extended detention basins, and constructed wetlands that satisfy the above criteria.

Stormwater flows generally run from west to east across the KCNSC. There are two stormwater discharge points from the KCNSC. Stormwater discharges from the KCNSC are regulated in the form of a stormwater No Exposure Certification. State regulations at 10 CSR 20-6.200 (1)(B)16 exclude industrial facilities that meet the requirements of 10 CSR 20-6.200 (1)(B)16.A.(I) through B.(III) from requirements that would otherwise require the

facility to obtain a NPDES permit. The KCNSC has been designed and built to comply with the above MDNR requirements which parallel associated EPA No Exposure Certification requirements. All manufacturing related activities are housed in buildings. Support activities located in yard (outdoor) areas of the facility pose the greatest potential for exposure of materials that could become entrained in stormwater discharges. Material storage areas are provided with appropriate control features to prevent inadvertent discharges and spills to the storm sewer system. The KCNSC's SWPPP provides additional information on material storage and spill prevention measures that have been incorporated into the facility (DOE 2020).

In order to ensure activities at the KCNSC are in continuous compliance with the above requirements a SWPPP has been developed to ensure activities at the KCNSC do not impact storm water discharges associated with KCNSC operations. The objectives of the SWPPP Plan are:

- Document requirements that will ensure ongoing compliance with a No Exposure operating envelope,
- Facilitate planning and organization in support of the SWPPP,
- Identify routine actions to prevent the release of pollutants to receiving streams, and
- Periodically evaluate and facilitate revision of operating practices to prevent the release of pollutants to receiving streams.

Site operations that pose the greatest potential for spills or leaks are addressed within the SWPPP. The greatest potential for possibly impacting the storm sewer is associated with movement of materials that are not properly protected or an accident that involves damage to a container.

In addition, Spill Prevention Control and Countermeasures (SPCC) Plans have been developed to satisfy requirements associated with 40 CFR 112, Oil Pollution Prevention, by both the NNSA (DOE 2021b) and CPZ (Terracon 2012). The NNSA Spill Control Plan (DOE 2021b) satisfies SPCC Plan requirements. This plan provides a comprehensive description of prevention systems and response actions taken to protect personnel and minimize impact to the environment.

Locations within the facility where oil-filled equipment or containers with an oil storage capacity of 55 gallons or greater are addressed in each respective plan. The NNSA plan addresses, in large part, hydraulic oil in reservoirs, oil-based machine coolant reservoirs in manufacturing equipment, and drums containing 55 gallons of oil or greater. Most equipment is located inside the building. Manufacturing areas of the building have been constructed without floor drains. Drums containing 55 gallons of oil are stored at the Ware Yard (secondary containment provided) or transported inside the building and located near the point of use.

CPZ operates and maintains certain functions at the facility which are also regulated under 40 CFR 112. Due to the separate nature of CPZ and NNSA operations, separate SPCC Plans have been developed that address the requirements of 40 CFR 112 for the KCNSC. A separate standalone SPCC Plan has been developed and implemented by CPZ that addresses

equipment under their control (Terracon 2012). CPZ's SPCC Plan addresses the two 8,000-gallon fuel oil storage tanks located at the Central Utility Plant, a fuel cell associated with the emergency generator, a fuel cell associated with the backup diesel fire pump, elevator hydraulic systems, oil filled electrical transformers and other locations / equipment where oil is stored in quantities greater than or equal to 55 gallons.

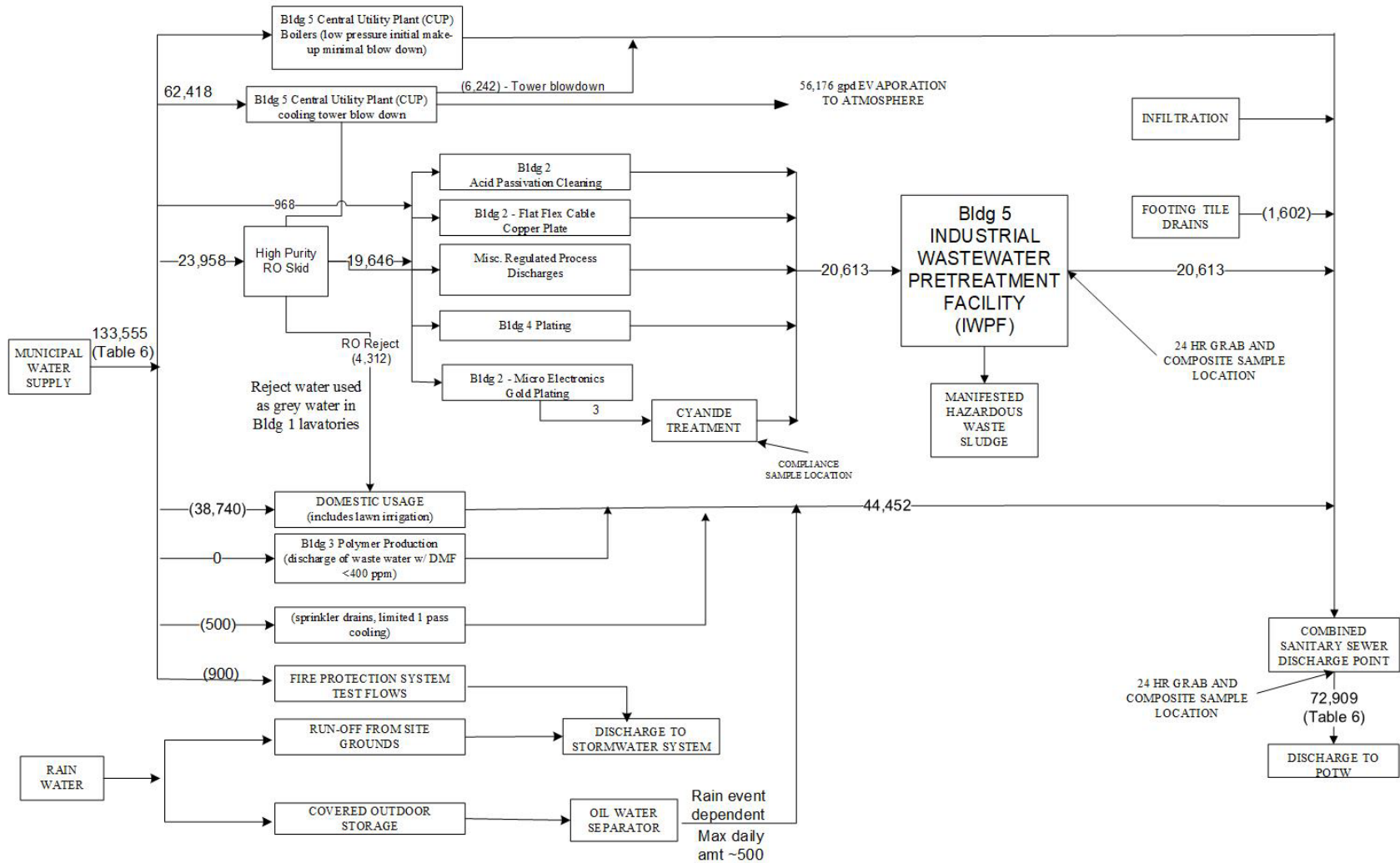
In the event of a significant spill associated with CPZ operations, incident command is facilitated through the KCNSC's Emergency Management Plan (DOE 2021a). FM&T's on-site spill response team will serve as the first responders for any spill event at the KCNSC. If the spill is associated with a CPZ activity, once the spill is stabilized, CPZ's spill response contractor will assume responsibility for spill response, reporting, and cleanup activities.

3.2.2 Sanitary Wastewater

Sanitary wastewater discharges from the KCNSC are regulated under a permit issued by the city of Kansas City, Missouri, Regulatory Compliance Division. An initial permit application was submitted by the NNSA in February 2012. The corresponding permit was issued November 7, 2012. This permit was modified effective September 20, 2018, to revise and incorporate minor changes. Sanitary wastewater discharges from the KCNSC are comprised of treated industrial wastewater, domestic discharges, cooling tower and boiler blowdown, fire protection system test flows, and limited discharges associated with storage areas. Figure 3-1 and Figure 3-2 provide the latest water balance for the KCNSC included in semi-annual reports submitted to the city of Kansas City.

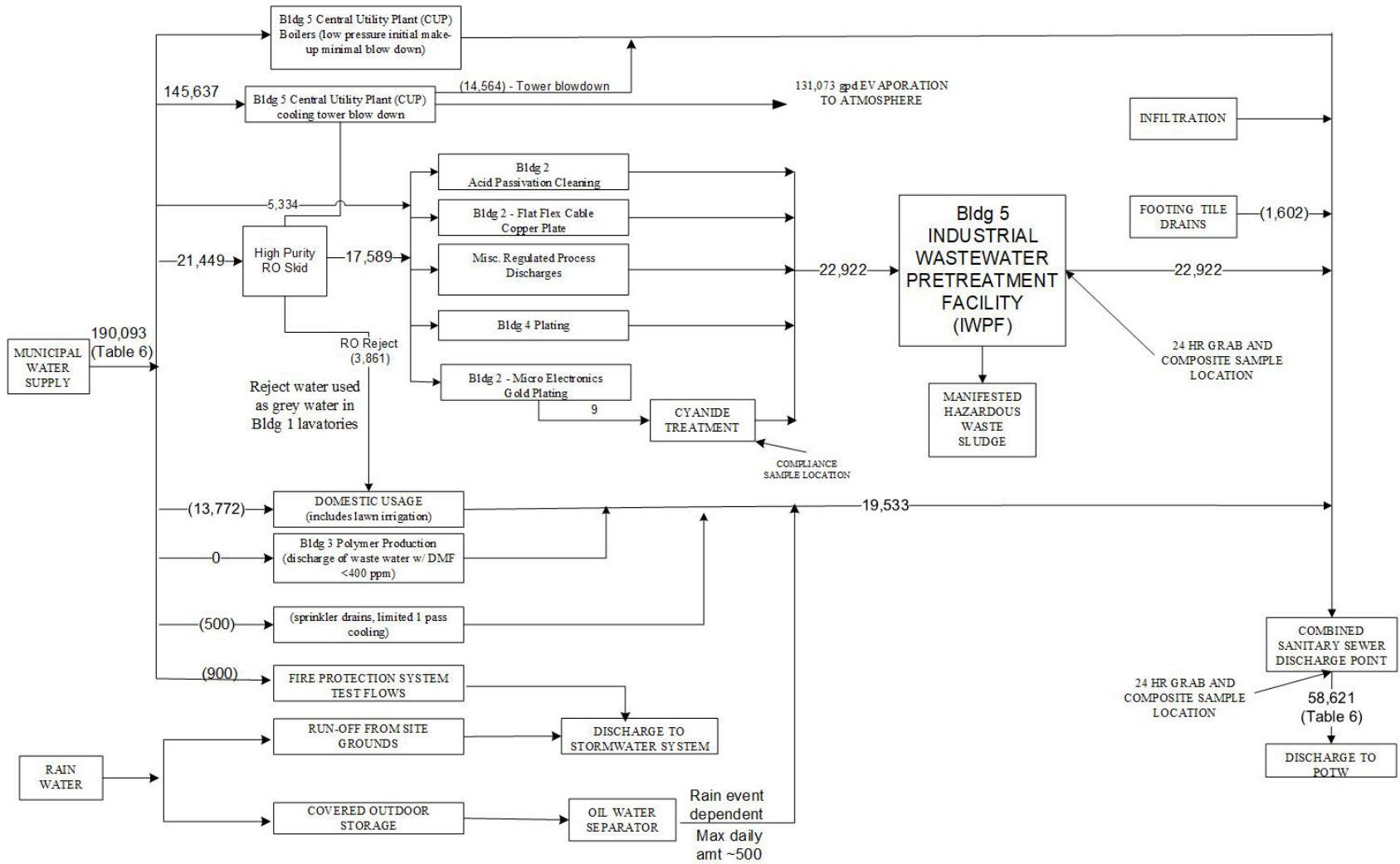
Water use at the KCNSC trended slightly upward during 2022. Potable water use during 2021 averaged 150,999 gallons per day (gpd) as compared to 161,824 gpd of use during 2022. Cooling tower operations are the biggest consumer of potable water (66% of total potable water use). Approximately 90% of potable water use in cooling tower operations is evaporated to the atmosphere with the remaining discharged to the sanitary sewer as blow down. The average daily volume of wastewater discharged to the sanitary sewer system from the KCNSC during 2022 was approximately 65,765 gpd.

Figure 3-1 Water Balance November 2021 - April 2022



NOTES:
 - Average daily values in gpd provided unless otherwise noted.
 - Values in parenthesis are estimated.

Figure 3-2 Water Balance May 2022 - October 2022



NOTES:
 - Average daily values in gpd provided unless otherwise noted.
 - Values in parenthesis are estimated.

3.2.3 Industrial Wastewater

Manufacturing-related process wastewater (industrial wastewater) generated by manufacturing operations at the KCNSC is regulated under 40 CFR 433 Metal Finishing Pretreatment Categorical Standards. Pretreatment discharge standards are included in the KCNSC’s sanitary sewer discharge permit. Periodic monitoring and reporting are required by the permit. Industrial wastewater is routed to an onsite skid-mounted microfiltration-based treatment unit. Prior to treatment, process wastewater is stored in onsite tanks with secondary containment to prevent accidental release to stormwater systems. The treated water is discharged to the sanitary sewer system. All sanitary and treated industrial wastewater from the facility is discharged to the Little Blue Valley Sewer District Atherton Publicly Owned Treatment Works (POTW). During CY2022, industrial wastewater flow rates averaged 21,768 gpd.

The KCNSC Sanitary / Industrial wastewater discharge permit contains discharge limits for the IWPF, a cyanide pre-treatment system and the total facility sanitary sewer discharge. All permit discharge limits were met during 2022. Building support operations must comply with the Kansas City, Missouri sewer use ordinance limits.

Regulatory Inspections

On May 23-24, 2022, representatives from the Kansas City, Missouri, Industrial Waste Control Division conducted a Compliance Sampling Event at the KCNSC. Split samples were collected by both KCMO Water representatives and FM&T’s third-party lab. Analytical results for the permitted discharges were compliant with permit limits and there were no findings.

On June 9, 2022, representatives from Kansas City, Missouri, Wastewater Permit Compliance conducted an inspection of the facility to ensure compliance with permit terms and conditions. The KCMO inspector reviewed the wastewater discharge permit, then inspected the treatment area of the IWPF and the RCRA 90-day storage area. There were no findings as a result of the inspection.

Table 3-6 Clean Water Act Reports

Report	Submittal due date(s)	Submittal Agency	Next Submittal	Frequency
Semi-Annual Significant Industrial Users Report	January 1, 2022, and July 1, 2022	KCMO Pollution Control Department, Division of Industrial Waste Control	January 2023	Semi-Annual

Analytical Laboratory Quality Assurance

The KCNSC utilizes the services of a subcontract laboratory to perform analysis on wastewater samples collected to demonstrate compliance with limits in the above wastewater permits. The subcontract laboratory is required to certify under the National Environmental Laboratory Accreditation Program (NELAP). NELAP auditors conduct comprehensive laboratory audits on a bi-annual basis. In addition, NELAP performance evaluation samples are submitted on a semi-annual basis and the laboratory’s

performance is assessed to determine their ability to identify type and quantity of constituents present in the samples.

KCNSC NMO

KCNSC NMO has only batch discharge of industrial wastewater from any of its facilities. KCNSC NMO is not required by the Albuquerque/Bernalillo County Water Utility Authority (A/BCWUA) to obtain a wastewater discharge permit. A/BCWUA is the authority having jurisdiction over the local POTW, sanitary sewer system and potable water system that serves the City of Albuquerque and urbanized areas of Bernalillo County.

A No Exposure Certification for Exclusion from NPDES Storm Water Permitting has been submitted to EPA Region VI for the Craddock campus facilities. The Air Park Facility is not subject to stormwater regulations. The Mobile Electronic Maintenance Facility and Depot Facility located at KAFB fall under KAFB's stormwater permit. There were no stormwater-related regulatory inspections performed at the Alamo or Craddock campus facilities by the City of Albuquerque in CY2022.

3.3 Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) / Superfund Amendments and Reauthorization Act (SARA)

The KCNSC maintained compliance with SARA by completing the Emergency Planning and Community Right-to-Know (EPCRA) Sections 311, 312 inventory reports, and the Toxic Release Inventory Section 313 report. Also, the KCNSC maintains compliance with the spill reporting requirements of SARA through the use of the KCNSC Spill Control Plan (DOE 2021b) which is written in compliance with the requirements of 40 CFR 112 for spill prevention, control, and countermeasures plans and the KCNSC Contingency Plan as stipulated by 40 CFR 264 Subpart D.

Extremely Hazardous Substance annual Tier II and Toxic Release Inventory (TRI) reports have been submitted as indicated in Table 3-7. Monthly reviews of chemicals stored on-site assure required notifications and Tier II modifications are completed in a timely manner throughout the reporting year.

Roles and Responsibilities:

The KCNSC has a unique owner/operator relationship where the owner is responsible for chemical procurement, storage and use requirements (including EPCRA reporting) associated with the operation and maintenance of buildings, grounds, and the Central Utility Plant. The NNSA and FM&T are responsible for chemical procurement, storage and use requirements, and EPCRA reporting for operational processes in support of the DOE mission and the on-site IWPF.

KCNSC NMO

KCNSC NMO maintained compliance with SARA by completing Emergency Planning and Community Right-to-Know, SARA Sections 311 & 312 Tier II inventory reports for lead-acid batteries, as summarized in Table 3-7. Spills that occurred at the KCNSC NMO were very minor in nature and did not trigger any reporting thresholds.

Table 3-7 CERCLA/SARA Reports

Report	Submittal due date(s)	Submittal Agency	Next Submittal	Frequency
KCNSC Section 311, 312 Inventory /Storage – Tier II	March 1, 2022	Missouri Emergency Response Commission, Mid-America LEPC, and KCMO Fire Department	March 1, 2023	Annual
KCNSC Section 313 Toxic Release Inventory	July 1, 2022	EPA EPCRA Reporting Center	July 1, 2023	Annual
KCNSC NMO Section 311 Inventory	March 1, 2022	New Mexico Department of Homeland Security & Emergency Management (DHSEM) who disseminates to Albuquerque/Bernalillo County Local Emergency Planning Committee (A/BCLEPC), and the Albuquerque Fire & Rescue Department	March 1, 2023	Annual
KCNSC NMO Section 312 Storage	March 1, 2022	NM DSHEM who disseminates to A/BCLEPC and the Albuquerque Fire & Rescue Department	March 1, 2023	Annual

3.4 Resource Conservation and Recovery Act (RCRA)

3.4.1 Waste Management

The KCNSC is regulated by State and Federal hazardous waste regulations and is subject to RCRA inspections by the EPA and the MDNR. Reporting requirements are summarized in Table 3-8 and have been met. The varied operations of the KCNSC generate hazardous wastes as defined by 40 CFR 261 from processes such as surface coating, etching, electronic assembly, metals and plastics machining and forming, and wastewater treatment.

RCRA wastes are stored on-site less than 90 days in compliance with RCRA requirements for large quantity generators of hazardous waste. These wastes are then transported off-site by licensed transporters or are transferred to the on-site CWA-permitted IWPf. Recycling, treatment, or disposal occurs at Honeywell-reviewed facilities currently in compliance with state and/or federal hazardous waste regulations. Operations that constitute the major contributors of hazardous waste include wastewater treatment, plating, and etching processes.

Table 3-8 RCRA Reports

Report	Submittal due date(s)	Submittal Agency	Next Submittal	Frequency
Generators Hazardous Waste Summary Report	August 12, 2022	MDNR	August 15, 2023	Annual
EPA Biennial Hazardous Waste Report	March 1, 2022	MDNR	March 1, 2024	Biennial
Hazardous Waste Fee Report	August 1, 2022	New Mexico Environment Department	August 1, 2023	Annual

3.4.2 Waste Minimization / Pollution Prevention (Wmin/P2) Program

This program is primarily driven by the following:

- Pollution Prevention Act (PPA)
- Resource Conservation and Recovery Act (RCRA)

Pollution Prevention (P2) is an integral part of the KCNSC’s Environmental Management system. It is an ongoing effort to systematically reduce material releases to all environmental media as well as conserve energy and water. The overall program focus is the reduction and eventual elimination of significant environmental impacts. The first choice is the elimination of the sources of waste. When this is not feasible, options for recycling or reusing the waste are considered. Treatment and disposal are only considered when source reduction or recycling options are not feasible or cost effective. The program also emphasizes the procurement of environmentally preferable products containing recycled materials.

During CY22, the KCNSC generated 421,512 pounds of hazardous waste. Non-hazardous waste associated with production operations generated by the KCNSC during CY22 totaled 692,104 pounds.

During CY22, the KCNSC recycled 1,874,522 pounds of material including recyclable wastewater sludge and precious metals. Table 3-9 provides other general categories and volumes of materials recycled.

Wood and scrap metal are not captured as non-hazardous waste but are captured only under the heading of recycled material.

Current Issues

An EPA inspection was conducted in 2022 and no issues were identified or currently exist.

Table 3-9 Recycled Material - CY2022

Total Quantity (Pounds)	Generated	Recycled	Landfill/ Incineration
Baling Steel	392,500	392,500	-
Fuelblend	197,421	197,421	-
Water Treatment	231,525	231,525	-
E-Scrap	68,938	68,938	-
Scrap Metal	323,844	323,844	-
Precious Metal	107,172	107,172	-
Batteries	17,091	17,091	-
Solid Waste	968,144	535,044	433,100 ¹
RCRA (Hazardous)	10,585	-	10,585 ²
	19,296	-	19,296 ³
TOTALS	2,336,516	1,873,535	462,981

¹ Municipal Landfill

² Hazardous Waste Landfill

³ Incineration

3.5 Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

The Federal Insecticide, Fungicide, and Rodenticide Act restricts the application of pesticides and herbicides through a state-administered certification program. CPZ is responsible for application of pesticides at the facility. Application of chemicals regulated under FIFRA is subcontracted to certified pest control firms, thus maintaining compliance with FIFRA.

KCNCS NMO contracts out all applications of pesticides to certified pest control firms, thus maintaining compliance with FIFRA.

3.6 Toxic Substances Control Act (TSCA)

The Toxic Substances Control Act of 1976 provides EPA with authority to require testing of chemical substances, both new and old, entering the environment and to regulate them where necessary. In the past, the facility has manufactured chemicals subject to TSCA Pre-Manufacture Notification (PMN) requirements. The necessary PMNs have been filed for manufacture of the subject chemicals. In addition, the KCNCS will, from time to time, conduct research activities that are subject to the Research and Development requirements under TSCA.

3.7 Federal Facilities Compliance Act (FFCA)

The Federal Facility Compliance Act (FFCA) was signed into law on October 6, 1992. This Act, which amends the Solid Waste Disposal Act (as amended by RCRA), made major changes to RCRA as they apply to Federal facilities and added provisions that specifically addressed waste issues germane to the DOE. The most significant and far-

reaching provision of the FFCA was the statute's waiver of the Federal government's sovereign immunity. This waiver provided the EPA and the various States authorized to implement the RCRA program the authority to require "...each department, agency, and instrumentality of the United States..." to comply with all relevant substantive and procedural requirements of RCRA. This provision essentially placed all Federal facilities on the same compliance footing as private industry. In addition to the sovereign immunity waiver, other important issues addressed by the FFCA included provisions addressing radioactive mixed wastes.

The NNSA and the state of Missouri have a contingency agreement in the event mixed waste is generated which cannot be managed within the regulatory storage limits. During 2022, manufacturing operations at the KCNSC that could potentially generate mixed waste did not occur.

3.8 National Environmental Policy Act (NEPA)

Honeywell submits requests for NEPA determination and notification to the KCFO NEPA Compliance Officer as outlined in the *HS&E Management System Description and Worker Safety & Health Program* document. To further transparency and openness in its implementation of NEPA, Records of Categorical Exclusion Determinations (CX) and Environmental Assessments (EAs) are posted to the KCNSC website. This is required as part of the *Online Posting of Certain DOE Categorical Exclusion Determination Policy Statement* effective November 2, 2009.

3.9 Quality Assurance (QA)

Quality Assurance (QA) measures were incorporated into all the monitoring activities described in this report. An independent laboratory performs water sampling and analysis. This laboratory is selected only after successful performance is achieved on standard samples prepared by another independent subcontractor. Additional QA measures include duplicate or spiked sample analysis on 10% of all samples analyzed. The laboratory must maintain an internal quality assurance program, which meets or exceeds EPA guidelines set forth in "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans."

3.10 Environmental Management System (EMS)

The EMS ensures ongoing compliance with applicable environmental regulations and requires the implementation of environmental improvement initiatives such as:

- Pollution prevention efforts,
- Significant Aspects Objectives and Targets,
- Management of change actions,
- Action item implementation effectiveness, and
- Green efforts (procurement, building, electronics stewardship)

FM&T/KC's EMS is certified to the ISO 1400:2015 standard and has been certified since May 1997. The certification was most recently extended in July 2021. Maintenance

of this certification involves annual audits by a third-party registrar with a certification extension audit every three years. The ISO 14001-2015 standard is internationally recognized and serves as the foundation of the EMS.

The KCNSC's EMS has a sustained record of environmental compliance and is striving to make continuous improvements beyond that required by regulation. FM&T has an active media relations program that provides the community with positive environmental information and responds to public concerns. Press releases are issued, as appropriate, on both positive happenings and areas of concern. FM&T communicates to employees on environmental targets, issues, and improvement actions so they are made aware.

3.11 Awards / Recognition

- The KCNSC is certified as an LEED Gold facility.
- KCNSC KC / NM ISO 14001-2015 Certification Extension - Valid until 2024.
- Missouri Water Environment Association 2022 Pretreatment Gold Award.

4.0 NATIONAL SECURITY CAMPUS POINTS OF CONTACT

Copies of Reports and/or Documents referenced in this Summary may be obtained from:

National Nuclear Security Administration Kansas City Field Office Sybil Chandler Environmental Health & Safety Manager Office of Operations 14520 Botts Road Kansas City, Missouri 64147	or	Honeywell Inc. Federal Manufacturing & Technologies Brad Gilbert Communications Specialist 22.4.C04 14520 Botts Road Kansas City, Missouri 64147
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