

Draft Environmental Assessment

Emergency Operations Center, Jackson County, KY

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Emergency Operations Center
Chemical Stockpile Emergency Preparedness Program (CSEPP)
Draft Environmental Assessment
Jackson County, Kentucky

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LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|-------------|---|
| ACHP | Advisory Council on Historic Preservation |
| BMP | Best Management Practices |
| CAA | Clean Air Act |
| CERCLA | Comprehensive Environmental Resource Compensation and Liability Act |
| CFR | Code of Federal Regulations |
| CMA | Chemical Materials Agency |
| CSEPP | Chemical Stockpile Emergency Preparedness Program |
| CWA | Clean Water Act |
| dB | Decibels |
| EA | Environmental Assessment |
| EIS | Environmental Impact Statement |
| EMA | Emergency Management Agency |
| EO | Executive Order |
| EOC | Emergency Operations Center |
| EPA | Environmental Protection Agency |
| ESA | Endangered Species Act |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Map |
| FONSI | Finding of No Significant Impact |
| FWS | U. S. Fish and Wildlife Service |
| HUD | Department of Housing and Urban Development |
| KDFWR | Kentucky Department of Fish and Wildlife Resources |
| KHC | Kentucky Heritage Council |
| MOA | Memorandum of Agreement |
| MOU | Memorandum of Understanding |
| NEPA | National Environmental Policy Act |
| NHPA | National Historic Protection Act |
| NPDES | National Pollutant Discharge Elimination System |
| OSHA | Occupational Safety and Health Administration |
| PM 2.5 | Particulate Matter less than 2.5 microns |
| PM10 | Particulate Matter less than 10 microns |
| RCRA | Resource Conservation and Recovery Act |
| Section 106 | National Historic Preservation Act Section requiring Federal Consultation |
| Section 404 | Clean Water Act Section requiring Dredge or Fill Permits |

| | |
|-----------|---|
| Section 7 | Endangered Species Act Section requiring Federal Consultation |
| USACE | U.S. Army Corps of Engineers |
| USDA | United States Department of Agriculture |
| USFWS | United States Fish and Wildlife Service |
| USGS | U.S. Geological Service |

SECTION 1: INTRODUCTION

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) prepared this Draft Environmental Assessment (EA) for the proposed construction and operation of an Emergency Operations Center (EOC) in McKee, Jackson County, Kentucky. Funding would be provided by DHS/FEMA, through the Chemical Stockpile Emergency Preparedness Program (CSEPP). CSEPP is a partnership between FEMA and the U.S. Department of the Army that provides emergency preparedness assistance and resources to communities surrounding the Army's chemical warfare agent stockpiles. CSEPP is designed to improve the emergency response capabilities of these communities. Jackson County is adjacent to Madison County, home of the U.S. Army Bluegrass Chemical Depot, where such a chemical stockpile exists.

CSEPP is a wide-ranging activity in support of a national initiative involving the U.S. Army Chemical Materials Agency (CMA), the Federal Emergency Management Agency (FEMA), nine states, and 37 counties. Established in 1988, CSEPP enhances emergency planning for the unlikely event of a release of hazardous chemical weapons agent from one of the Army's chemical weapons storage installations. These obsolete weapons are scheduled to be destroyed; meanwhile, however, they pose a threat to installation workers and residents of the surrounding communities. CSEPP's mission is to *“enhance existing local, installation, tribal, State, and Federal capabilities to protect the health and safety of the public, work force, and environment from the effects of a chemical accident or incident involving the U.S. Army chemical stockpile.”* The Department of Defense, United States Department of the Army has a Memorandum of Understanding (MOU) with FEMA to manage and direct the off-post aspects of the CSEPP effort while the Army retains the responsibility for the on-post aspects of the program. Both parties supported legislation that granted FEMA the necessary authority to take on this expanded role with respect to CSEPP.

This Draft EA has been prepared on behalf of the Applicant, the Jackson County Fiscal Court, to analyze the potential consequences to the natural and human environment associated with the Preferred Alternative, the No Action Alternative, and other potential alternatives per the National Environmental Policy Act (NEPA) (42 United States Code [USC] 55 parts 4321 et seq., 2000), the President's Council on Environmental Quality (CEQ) implementing regulations (40 Code of Federal Regulations [CFR] 30 parts 1500 et seq., 2004), and 44 CFR Emergency Management and Assistance Ch. I Part 10. This Draft EA is designed to meet FEMA's responsibilities under NEPA and to determine whether to prepare a Finding of No Significant Impact (FONSI) or a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the proposed project.

SECTION 2: PURPOSE AND NEED

Purpose

The proposed project's purpose is to provide Jackson County Fiscal Court a centralized operations facility adequate to safely, continuously, and cost-effectively prepare and protect the

residents of Jackson County before and during chemical weapons decommissioning, and to meet Jackson County's emergency service needs.

Need

Jackson County and the Jackson County Emergency Management Agency (JCEMA) need a larger facility to effectively serve County residents' emergency services needs and to support first responders' activities. JCEMA currently occupies a one-story building and includes the County's 911 operations. The current facility is not a hardened structure and is not designed to operate under the most adverse conditions (i.e., as the County's last operational building), and does not have enough redundancy to ensure continuity of operations in the event of equipment failure or during maintenance periods.

The EOC is also used as a conference and training room for EOC staff, local police, fire, and EMS agencies. It contains an integrated communication space but has no room for future growth. The 911 facility provides for two existing workstations and one stand-alone supervisor space, which are crowded into a single room. The 911 equipment is located in a small room directly adjacent to the 911 space. The configuration of the current facility adversely affects the staff's ability to communicate and function efficiently, and would not support the required level of response in the event of a chemical release event.

The current facility has a short parking lot in front which empties directly onto McCammon Ridge Road. Parking lots abut the building on all sides. The building's location directly on McCammon Ridge Road poses a concern since there are no site barriers to protect the facility from a vehicle that exits the roadway either accidentally or with malice. The adjacent day care facility prevents the current EOC from maintaining a secure perimeter. During a disaster the congestion caused by parents and guardians going to the day care center would hinder and delay personnel responding to the EOC to coordinate disaster response for the community.

No analysis has been done of the structural systems; however, it does not appear as if the facility would meet current mission critical facility standards. The current facility does not have room to comply with FEMA's recommended setback distance of 82' from parking areas and roadways. JCEMA needs to occupy a structure that will provide for all daily emergency communications as well as for protection against biological, chemical, or physical hazards. The current facility does not meet the standards as set forth by the following:

- Most recent local and Commonwealth Building Code
- National Fire Protection Agency (NFPA) 1211 – Standard for Installation, Maintenance, and Use of Emergency Services Communications Systems, 201
- Federal Emergency Management Agency (FEMA) 361- Design and Construction Guidance for Community Shelters
- FEMA 452 –A How-To Guide to Mitigate Potential Terrorist Attacks Against Buildings, January 2005
- Unified Facilities Criteria (UFC) 4-010-01- Department of Defense (DoD) Minimum Antiterrorism Standards for Buildings

- Unified Facilities Criteria (UFC) 4-141-04- Department of Defense (DoD) Emergency Operations Center Planning and Design (described above)
- National Institute for Occupational Safety and Health (NIOSH) – Guidance for Protecting Building Environments from Airborne Chemical, Biological, or Radiological Attacks
- TIA 942 Telecommunications Infrastructure Standards for Data Centers
- NENA 04-502 E9-1-1 PSAP CPE Site Characteristics Technical Information Document
- NENA Generic E9-1-1 Requirements Technical Information Document

SECTION 3: ALTERNATIVES

3.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, the proposed EOC would not be built. JCEMA would continue to operate out of its current location, adversely affecting EOC staff’s ability to communicate, function efficiently, and to adequately meet citizens’ needs in post-disaster environments. This would reduce the County’s ability to prepare and protect the public before and during chemical weapons decommissioning, and would reduce the overall level of public safety.

3.2 PREFERRED ALTERNATIVE

The Jackson County Fiscal Court proposes to build a 5,000-sq. ft. EOC on McCammon Ridge Road, to the east of the Jackson County Detention Center, on County-owned property.

The facility would be designed to house the CSEPP responders, County Emergency Communications (911 dispatchers), and County EOC with a large training room and administrative staff offices. It would be designed to operate under the most adverse conditions (i.e., as the County’s last operational building), and would include enough redundancy to ensure continuity of operations in case of equipment failure or during maintenance periods. Backup power would provide enough power for mission critical spaces and equipment for extended time periods.

The proposed site will have adequate exterior buffer zones around the hardened portion of the site to prevent vehicular intrusion in proximity to the facility. Sufficient setback will be available on the site to accommodate this specific need. In addition, the site will allow appropriate buffering from adjacent sites.

A communications tower, access road, and parking area would also be built. The 120-foot free-standing, self-supporting, lattice-style, pad-and-pier communications tower would be built at the building site’s northeast corner (Appendix C). An external, climate-controlled communications shelter would be constructed adjacent to the tower to house all radio equipment. An 8-foot by 30-foot chain link fence with 10-foot wide gate would surround the tower, shelter, and exterior generator for the building. The doors at the proposed EOC would have access card readers to limit access to authorized personnel, and a security camera system would be installed to provide

coverage of the exterior doors and parking areas. A chain link perimeter fence with gates will be erected around the property as a future project when funds are available.

3.3 ALTERNATIVES CONSIDERED AND DISMISSED

The first alternative considered and dismissed was to expand the existing Jackson County EOC. Due to the building configuration, it is not feasible to expand it to efficiently conduct operations. At the current location, there is no room to install site security fencing, barriers and other landscaping elements to reduce the vehicular threat to the facility.

The second alternative that was considered and dismissed for the proposed EOC facility was a site at the northwest side of the Jackson County Detention Center along McCammon Ridge Road. The site has an access drive connecting McCammon Ridge Road with a County property behind which reduces the amount of land available for the new EOC and its required infrastructure. The northwest part of the site is currently wooded and is bound on the west by a residential property. The southeast part of the site is cleared and appears to have served as staging area for the construction of the recently completed jail. This part of the site is bound by the county jail on the southeast side and by a relatively steep grade to a small ravine on the northeast side. The grade drop effectively limits the available site area.

SECTION 4: AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

The Preferred Alternative site (GPS coordinates N37°24'54.78", W83°57'47.21") is on a cleared dense forest land parcel on McCammon Ridge Road. The site is in the McKee city limits. McCammon Ridge Road has a mixture of county facilities, residential and multi-family homes along it.

As shown on aerial photographs and USGS topographic maps the site is primarily bound by tree lines with the County Detention Facility adjacent to the west (Appendix A and Appendix D).

The following table summarizes the impacts and mitigation of the two Alternatives considered in more detail.

| Table 1: Summary of Impacts | | |
|------------------------------------|------------------------------|--|
| Environmental Category | No Action Alternative | Preferred Alternative: New EOC Facility on McCammon Ridge Road |
| Geology and Soils | No Notable Impacts Expected | Minor, short-term impacts on temporarily exposed soil, from usual water and wind erosion, and possible fuel or lubricant spills. The site is located in a rural part of Jackson County. The only addition of paved surfaces would be the small parking lots at the new EOC and the short entryway from McCammon Road to the parking lots. No |

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| | | other road improvements would be created within Jackson County as a part of this project. Although there would be an increase in impervious surfaces, it would have a negligible impact on geology and soils due to the relatively undeveloped nature of the surrounding area. |
| Air Quality | No Notable Impacts Expected | Minor, short-term impacts on air quality, from usual vehicle emissions and fugitive dust during construction. |
| Climate Change | No Notable Impacts Expected | No Notable Impacts Expected. |
| Water Quality | No Notable Impacts Expected | No notable impacts expected. A Storm Water Protection Plan (SWPP) will be prepared prior to construction; this SWPP must include BMPs to minimize erosion of soils from the construction area and reduce offsite sediment transport. |
| Wetlands | No Notable Impacts Expected | No wetlands are on or near the site. |
| Floodplains | No Notable Impacts Expected | The site is not within a mapped 100- or 500-year floodplain. |
| Wild and Scenic Rivers | No Notable Impacts Expected | There are no rivers or waterways on or near the site. |
| Compatible Land Use | No Notable Impacts Expected | Jackson County does not have planning or zoning requirements. |
| Biological Resources | No Notable Impacts Expected | According to USFWS letter, the Indiana Bat (<i>Myotis sodalis</i>) and the Virginia Big-Eared Bat (<i>Corynorhinus Townsendii Virginianus</i>) have the potential to occur within the project vicinity. There would be no impacts to the Virginia Big-Eared Bat. Jackson County Fiscal Court entered into a MOA with the USFWS to mitigate any possible impacts to the Indiana Bat. No migratory birds would be impacted by this project. |
| Historic and Archaeological Resources | No Notable Impacts Expected | No known archaeological or historical resources are located on the site. However, if any human remains or funerary items are inadvertently discovered, all work must immediately cease and FEMA and the Kentucky Heritage Council (KHC) must be contacted immediately. |
| Transportation | No Notable Impacts Expected | Temporary increases in traffic volumes or brief traffic disruptions along McCammon Ridge Road may occur during construction, but only during normal business hours (between 7 am and 5 pm local), and are not anticipated to obstruct emergency vehicles. |
| Noise | No Notable Impacts | There would be minor, short-term impacts on noise |

| | | |
|--|---|---|
| | Expected | levels at the project site during construction. |
| Light Emissions and Visual Impacts | No Notable Impacts Expected | No Notable Impacts Expected. |
| Socioeconomic Impacts and Environmental Justice | No Notable Impacts Expected | The Preferred Alternative would equally benefit all County citizens. |
| Public Service and Utilities | No Notable Impacts Expected | No Notable Impacts Expected. |
| Public Health and Safety | There would be no improvement in emergency response service, deemed inadequate by CSEPP, in the event of a chemical weapon agent release. Jackson County residents and the general public would remain at current elevated risk during disaster events. | The Preferred Alternative would help to prepare and protect the residents of Jackson County before and during both natural and man-made disaster events. All construction activities would be performed using qualified personnel trained in the proper use of the appropriate equipment, including all appropriate safety precautions. Signage and barriers would be in place prior to construction activities. |
| Hazardous Materials, Pollution Prevention, and Solid Waste | No Notable Impacts Expected | No Notable Impacts Expected. |
| Cumulative Impacts | No Notable Impacts Expected | No Notable Impacts Expected. |

4.1 EARTH AND AIR RESOURCES

4.1.1 Geology and Soils

Jackson County is in the coal field area of southeastern Kentucky. It is an upland area characterized by deeply entrenched streams and cliff-lined valleys. Elevations in excess of 1000 feet prevail over most of the county. Elevations less than 1000 feet are found only along a few of the larger streams.

The highest elevations are in the northwestern part of the county where several ridges and hills attain elevations of 1600 feet or more. The highest point, 1633 feet, is on a ridge near the Jackson-Rockcastle County line about 1 1/4 miles south of Morrill. Maximum local reliefs in this part of the county may exceed 600 feet. A few sinkholes are found in the bottoms of deeper valleys in this part of the county, modifying the normal valley profiles and drainage patterns.

Elevations decrease and the terrain is more subdued in the southeastern part of the county. Ridgetop elevations rarely exceed 1200 to 1300 feet, maximum local reliefs of 300 feet are common, and cliffs are less abundant. The elevation of the site is 1384 feet.

Geologic information was obtained from review of the Jackson County Soil Survey Map (1989 *Jackson & Owsley Counties Kentucky Soil Survey*), published by the U.S. Department of Agriculture - Soil Conservation Office (1977 photography) and a 1973 USGS Geology of the McKee Quadrangle map. The geologic map shows the site to be underlain by Pennsylvanian-aged deposits of the middle to lower part of the Breathitt Formation, or more recently named Grundy Formation. The Breathitt Formation is comprised of shale, siltstone, sandstone, coal and underclay. The shale is described as commonly clayey to silty, slight to very carbonaceous and medium to dark gray in color. The siltstone of the formation is typically grayish brown to medium gray and clayey to sandy. The sandstone is described as light brown to gray in color and mostly fine grained but ranges from very fine to medium grained.

According to USDA Soil Survey data for Jackson County (2012) provided by the USDA Soil Conservation Service, *Custom Soil Resource Report*, the subject property is characterized by the Gilpin-Rayne Silt Loams (2 to 6 percent slopes) and Shelocta-Gilpin Channery Silt Loams (Steep) series soil classification (Appendix B).

A geotechnical study was done by American Engineers, Inc. on the proposed site in March 2014. Seven soil test borings were performed at the site. The borings were drilled within the approximate limits of the proposed building footprint, proposed pavement areas, and the communication tower and shelter (Appendix E).

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to geology or soils.

Preferred Action Alternative – Under the Preferred Alternative, construction of the proposed building would have minor, temporary impacts to the soil during the period of construction. Trenching activities associated with the installation of utilities and drainage would not typically exceed 3 feet below grade. As a result, construction activities are not anticipated to be deep enough to impact underlying geologic resources.

To minimize erosion, appropriate Best Management Practices (BMPs) would be implemented throughout the project site. BMPs would include installation of silt fences and revegetation of disturbed soils with Kentucky native grasses to minimize potential erosion. Excavated soil and waste materials would be managed and disposed of in accordance with applicable local, State, and Federal regulations. If contaminated materials were discovered during the construction activities, the work would cease until the appropriate permits could be obtained and clean-up procedures implemented.

The applicant would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit from the Kentucky Natural Resources and Environmental Protection Cabinet

(KNREPC). The Applicant and their contractors would be required to comply with all permit conditions.

4.1.2 Air Quality

The Clean Air Act (CAA) of 1970 requires that States adopt ambient air quality standards. The standards have been established in order to protect the public from potentially harmful amounts of pollutants. Under the CAA, the EPA establishes primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of “sensitive populations, such as people with asthma, children, and older adults.” Secondary air quality standards protect public welfare by promoting ecosystems health, and preventing decreased visibility and damage to crops and buildings. EPA has set National Ambient Air Quality Standards (NAAQS) for the following six criteria pollutants: ozone (O₃), particulate matter (PM_{2.5}, PM₁₀), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), and lead (Pb).

Jackson County is in attainment or meets ambient air quality standards of EPA and the Kentucky Division of Air Quality. There are no currently permitted stationary air releases from the site or adjacent areas.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to air quality.

Preferred Action Alternative – Under the Preferred Action Alternative, no long-term impacts to air quality would occur. Minor, short-term impacts to air quality may occur during construction of the facility. To reduce temporary impacts to air quality, the construction contractors would be required to water down construction areas when dusty conditions exist. Emissions from fuel-burning internal combustion engines (e.g., heavy equipment and earthmoving machinery) could temporarily increase the levels of some of the pollutants. To reduce the emission of pollutants, fuel-burning equipment running times would be kept to a minimum and engines would be properly maintained. The increased emissions would effectively cease upon completion of construction and no long term air quality degradation is anticipated. There are no known topographical or meteorological conditions present in the project area that are expected to hinder the dispersal of these emissions.

4.1.3 Climate Change

The President’s CEQ released guidance on how Federal agencies should consider climate change in their action decision-making. The suggested threshold whereby quantitative analysis should be done in NEPA documents is for an action to release over 25,000 metric tons of greenhouse gases per year (CEQ 2010). Industries that typically release over 25,000 metric tons of greenhouse gases per year include pulp and paper and petroleum and natural gas facilities, refineries, and power plants.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to climate change.

Preferred Action Alternative – Under the Preferred Action Alternative, construction and operation of the new EOC could produce small amounts of greenhouse gases that could contribute to climate change. Construction would involve temporary use of vehicles and equipment that release greenhouse gases. The everyday vehicles on site would belong to the County EMA Director and the 4-5 personnel who would work in the EOC, but no vehicles would remain running. The EOC would have a small diesel generator that would be tested monthly for 10 minutes. Given the small scale of the preferred alternative, no detailed analysis was conducted because, as evidenced in the past by projects of this size, greenhouse gases released from the facility would be far below the threshold amount.

4.2 WATER RESOURCES

4.2.1 Water Quality

The Clean Water Act (CWA) Section 401 provides the statutory authority for state water quality standards programs. The regulatory requirements governing these programs are published in 40 CFR 131. States are responsible for reviewing, establishing, and revising water quality standards. The Kentucky Division of Water's Water Quality Branch (WQB) is responsible for monitoring and assessing the quality of water in the state's streams, lakes and wetlands. The WQB revises water quality standards and criteria, classifies surface waters for designated uses (e.g., cold or warm water aquatic habitat, outstanding state resource waters, swimming [primary contact recreation] and domestic water supply) and interprets standards for Kentucky Pollutant Discharge Elimination System permit decisions.

There are no identifiable ponds, water bodies or streams on or adjacent to the property.

No Action Alternative – Under the No Action Alternative, no construction would occur, and there would be no impacts to water quality.

Preferred Action Alternative – Under the Preferred Action Alternative, no adverse impacts to the water quality are anticipated. A Storm Water Protection Plan (SWPP) will be prepared prior to construction; this SWPP must include BMPs to minimize erosion of soils from the construction area and reduce offsite sediment transport.

4.2.2 Wetlands

EO 11990 (Protection of Wetlands) requires Federal agencies to avoid, to the extent possible, adverse impact to wetlands. There are no water bodies, waterways, or regulated wetlands on or adjacent to the site according to U.S. Dept. of the Interior, Fish and Wildlife Service, National Wetlands Inventory Map (Appendix A).

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to wetlands.

Preferred Action Alternative – Under the Preferred Action Alternative, according to the National Wetlands Inventory Map there are no wetlands or streams on or adjacent to the site.

4.2.3 Floodplains

Executive Order (EO) 11988 (Floodplain Management) requires Federal agencies to avoid supporting development where short- and long-term adverse impacts associated with floodplain occupancy and modification wherever there is a practicable alternative. FEMA Flood Insurance Rate Maps (FIRMs) to identify Special Flood Hazard Areas. Per 44 CFR Part 9, EOCs are considered critical actions and evaluated against the 500-year floodplain. The proposed site is in an un-shaded Zone X, outside the 100 or 500-year floodplains per the FIRM (Appendix A).

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to the floodplain.

Preferred Action Alternative – Under the Preferred Action Alternative, no adverse impacts to the floodplain are expected because the proposed project site is outside the 100- and 500-year floodplains and stormwater discharges from this site would be negligible.

4.3 BIOLOGICAL RESOURCES

4.3.1 Endangered, Threatened or Candidate Species

The Endangered Species Act of 1973 requires Federal agencies to determine the effects of their Proposed Actions on threatened and endangered species of fish, wildlife, and plants, and their habitats, and to take steps to conserve and protect these species.

The US Fish and Wildlife Service (USFWS) lists the following federally endangered (E), threatened (T), proposed (P) and candidate (C) species for Jackson County, Kentucky (USFWS 2013).

| Common Name | Scientific Name | Status |
|-------------------------------|--|--------|
| Virginia Big-eared Bat | <i>Corynorhinus townsendii virginianus</i> | E |
| Indiana Bat | <i>Myotis sodalis</i> | E |
| Northern Long-eared Bat | <i>Myotis Septentrionalis</i> | P |
| Cumberland Bean Pearly Mussel | <i>Vilosa trabilis</i> | E |
| Cumberland Elktoe | <i>Alasmidonta stropurpurea</i> | E |
| Cumberlandian Combshell | <i>Eploblasma brevidens</i> | E |
| Fluted Kidneyshell | <i>Ptychobranthus subtentum</i> | C |
| Littlewing Pearlymussell | <i>Pegias fibula</i> | E |
| Kentucky Arrow Darter | <i>Eetheostoma Spilotum</i> | C |
| Running Buffalo Clover | <i>Trifolium Stoloniferum</i> | E |

According to the USFWS Response Letter dated June 21, 2012, “The following federally listed species have the potential to occur within the project vicinity: Indiana Bat/*Myotis Sodalis* and the Virginia Big-eared Bat/*Corynorhinus Townsendii Virginianus*.”

No Action Alternative – Under the No Action Alternative, there would be no impacts to biological resources, including federally protected species.

Preferred Action Alternative – According to the USFWS Response Letter dated June 21, 2012, “The following federally listed species have the potential to occur within the project vicinity: Indiana Bat/*Myotis Sodalis* and the Virginia Big-eared Bat/*Corynorhinus Townsendii Virginianus*.” Additionally, a Kentucky Department of Fish & Wildlife Resources (KDFWR) letter dated December 19, 2013, also stated, “The KY Department of Fish and Wildlife Information System indicates that no federally or state-listed species are known to occur within close proximity to the project site. However, this project does occur within known Indiana bat habitat according to the US Fish and Wildlife Service Kentucky Field Office.” On February 21, 2013, the Jackson County Fiscal Court entered into an Indiana Bat Conservation Memorandum of Agreement (MOA) with the US Fish and Wildlife Service (Appendix B) to clear 3.52 acres of potential Indiana bat habitat. To avoid potential impacts to the Indiana bat, the project site was cleared between March 6 and 28, 2013 to avoid swarming season, as stipulated in the MOA.

According to correspondence with the US Fish and Wildlife Service dated July 21, 2014, “Based on site assessments of the proposed project area, the Service concurs that the proposed project would not likely adversely affect the Virginia big-eared bat because no suitable Virginia big-eared bat roosting habitat (i.e. caves, rock shelters, cliff lines, abandoned mines) occurs in the proposed project area. (Appendix B)

4.3.2 Migratory Birds

The Migratory Bird Treaty Act (16. U.S.C. 703-711) protects migratory birds. The proposed site is in close proximity to woodlands to the North, West and East which could provide habitats for migrating birds. There are no riparian zones located near the site.

No Action Alternative – Under the No Action Alternative, there would be no impacts to migratory birds.

Preferred Action Alternative – Under the Preferred Action Alternative, it would not be necessary to clear any additional trees at the site. Tower construction techniques will be used which do not require guy wires, as these components are thought to be a primary cause of tower-related bird mortality. Alternative construction techniques including using a lattice structure or a monopole will be utilized to minimize the impacts to migratory birds. Because the tower is below 200’ it is not required to have lights per KDFWR letter dated December 19, 2013 (Appendix A).

4.4 CULTURAL RESOURCES

4.4.1 Historic Properties

Section 106 of the National Historic Protection Act (NHPA), as amended, and implemented by 36 CFR Part 800, requires Federal agencies to consider the effects of their actions on historic properties and provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on Federal projects prior to implementation. Historic properties are defined as archaeological sites, standing structures, or other historic resources listed in or eligible for listing in the National Register of Historic Places (NRHP).

No Action Alternative – Under the No Action Alternative, there would be no impacts to historic properties or historic resources.

Preferred Action Alternative – Under the Preferred Action Alternative, there would be no impacts to historic properties or resources. The proposed site was previously forestland that was cleared in 2013. According to the KHC letter dated January 30, 2014 and amended May 9, 2014 which included review of the proposed communication tower, “It is our assessment there will be no historic properties affected by the proposed undertaking” (Appendix B).

If any human remains or archaeological artifacts are found, all work in the area of the discovery must immediately stop, and all reasonable measures must be taken to avoid or minimize harm to the finds. The Applicant’s contractor must immediately notify the Applicant of all finds. The Applicant must ensure that finds are secured in place, access to the find area is restricted, and all reasonable measures are taken to avoid further disturbance of the find. The Applicant must notify FEMA through KYEM and KHC within 24 hours of the find. Work in the find area may resume after FEMA has completed any further required action with KHC, Tribes, and other consulting parties.

4.4.2 American Indian/Native Hawaiian/Native Alaskan Cultural/Religious Sites

No Action Alternative – Under the No Action Alternative, there would be no impacts to American Indian Cultural/Religious Sites.

Preferred Action Alternative – Under the Preferred Action Alternative, no American Indian Cultural/Religious Sites will be adversely impacted. Tribal consultation letters were sent on May 28, 2014 to the Tribal Historic Preservation Officers (THPOs) for the following tribes: Absentee Shawnee Tribe of Oklahoma, Cherokee Nation of Oklahoma, Eastern Band of Cherokee Indians, Eastern Shawnee Tribe, Miami Tribe, Peoria Tribe of Oklahoma, Shawnee Tribe, and the United Keetoowah Band of Cherokee Indians. A 45-day comment period was provided, and ended on July 12, 2014. Concurrence on the proposed action has been received from the Peoria Tribe of Oklahoma, Shawnee Tribe, and United Keetoowah Band of Cherokee Indians.

If any human remains or archaeological artifacts are found, all work in the area of the discovery must immediately stop, and all reasonable measures must be taken to avoid or minimize harm to the finds. The Applicant’s contractor must immediately notify the Applicant of all finds. The Applicant must ensure that finds are secured in place, access to the find area is restricted, and all reasonable measures are taken to avoid further disturbance of the find. The Applicant must

notify FEMA through KYEM and KHC within 24 hours of the find. Work in the find area may resume after FEMA has completed any further required action with KHC, Tribes, and other consulting parties.

4.5 SOCIOECONOMIC CONCERNS

4.5.1 Environmental Justice

EO 12898 (Environmental Justice) mandates that Federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations.

According to the 2010 Bureau of Census, Jackson County has a population of 13,494 individuals with 33.8% of individuals living below the poverty level. The 2012 median income for Jackson County was \$22,213.

Minorities represented 1.08% of the Jackson County's population and 12.2%, of the Commonwealth of Kentucky's population

No Action Alternative – Under the No Action Alternative, construction would not occur and all populations in the county would remain at risk during future disaster events. There would be no disproportionately high or adverse impact on minority or low-income portions of the population—all populations would continue to be at risk.

Preferred Action Alternative – The Preferred Action Alternative would benefit all county populations by providing a safe, permanent location for the EOC, decreasing response times, and increasing efficiency in coordinating disaster response efforts. There would be no disproportionately high or adverse impact on minority or low-income portions of the population—all populations would benefit from the proposed project. The site is located approximately ¼ mile southeast of the nearest residential neighborhood and 2 miles southeast of the City of McKee Urban Center. The facility will house the County EMA Director and 4-5 personnel who will work at the EOC. The County owns the current facility and has not yet determined how it will be repurposed.

4.5.2 Noise

Noise is generally defined as unwanted sound. Sound is most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds audible to the human ear. The Day-Night Average Sound Level (DNL) is an average measure of sound. The DNL descriptor is accepted by Federal agencies as a standard for estimating sound impacts and establishing guidelines for compatible land uses. EPA guidelines, and those of many other Federal agencies, state that outdoor sound levels in excess of 55 dB DNL are “normally unacceptable” for noise-sensitive land uses such as residences, schools, or hospitals. The proposed project site is located in a mainly residential/farmland area. There are few residential structures surrounding the project site.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to noise levels.

Preferred Action Alternative – Under the Preferred Action Alternative, temporary short-term increases in noise levels are anticipated during the construction period. To reduce noise levels during that period, construction activities would take place during normal business hours. Equipment and machinery installed at the proposed project site would meet all local, State, and Federal noise regulations.

4.5.3 Traffic

The proposed project site is located on McCammon Ridge Road, inside the city limits of McKee. McCammon Ridge Road is comprised of multiple facility types ranging from several County facilities to single family homes to multi-family homes.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to transportation.

Preferred Action Alternative – Under the Preferred Action Alternative, during construction, there would be a minor temporary increase in traffic volume near the proposed project site that could potentially slow traffic flow. To mitigate potential delays, construction vehicles and equipment would be stored on-site during project construction, and appropriate signage would be posted on affected roadways.

No long-term transportation impacts are anticipated as the result of the proposed project.

4.5.4 Public Service and Utilities

The City of McKee provides water and sanitary sewer service to the site. Overhead power is provided along McCammon Ridge Road. There is no gas line available on this site. Fiber optic lines run underground along both sides of McCammon Ridge Road.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to public service and utilities.

Preferred Action Alternative – Under the Preferred Action Alternative, county communications and emergency services would improve, and thus reduce public risks and improve public safety for County residents and their improved property. The current infrastructure is adequate to support the preferred alternative. The use of LED lighting in the new EOC would reduce electricity demands as compared to usage in the current EOC. The use of more efficient water conservation plumbing fixtures in the new EOC, including new 1.6 gallon toilets instead of 3.0 gallon toilets, would lower water usage.

4.5.5 Public Health and Safety

Safety and security issues considered in this EA include the health and safety of the area residents and the public-at-large, and the protection of personnel involved in activities related to the proposed construction of the EOC.

No Action Alternative – Under the No Action Alternative, there would be no construction and potential direct impacts on the safety of the population would not occur. In the event of a major disaster, all residents of the County would remain at risk.

Preferred Action Alternative – Under the Preferred Action Alternative, the new EOC facility would help to prepare and protect the residents of Jackson County before and during both natural and man-made disaster events.

To minimize risks to safety and human health, all construction activities would be performed using qualified personnel trained in the proper use of the appropriate equipment, including all appropriate safety precautions. Additionally, all activities would be conducted in a safe manner in accordance with the standards specified in the OSHA regulations. The appropriate signage and barriers would be in place prior to construction activities to alert pedestrians and motorists of project activities. There would be no disproportionate health and safety risks to children.

4.6 HAZARDOUS MATERIALS, POLLUTION PREVENTION AND SOLID WASTE

Hazardous substances are defined as any solid, liquid, contained gaseous or semisolid waste, or any combination of wastes that pose a substantial present or potential hazard to human health and the environment. Hazardous substances are primarily generated by industry, hospitals, research facilities, and the government. Improper management and disposal of hazardous substances can lead to pollution of groundwater or other drinking water supplies, and the contamination of surface water and soil. The primary Federal regulations for the management and disposal of hazardous substances are the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA).

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to hazardous materials or waste.

Preferred Action Alternative – Under the Preferred Action Alternative, no hazardous materials or waste impacts are anticipated. Construction debris, as well as any potentially hazardous materials encountered during construction, will be properly handled and disposed of in accordance with applicable local, State, and Federal regulations.

4.7 LIGHT EMISSIONS AND VISUAL IMPACTS

Light emission impacts consider the extent to which any lighting associated with an action will create an annoyance among people in the vicinity or interfere with their normal activities. Visual or aesthetic impacts deal with the extent that the project contrasts with the existing environment. The site is located approximately ¼-mile southeast of the nearest residential neighborhood and approximately ½ mile northwest of the nearest farm. The lighting for the parking lot area would

be 320-watt metal-halide fixtures mounted on 25-foot poles for a level of 2 footcandles. Flagpoles will be illuminated with ground mounted 150-watt metal-halide flood lights. Entry signage will be illuminated with ground mounted 50 watt metal-halide flood lights. Areas adjacent to the building are required to be illuminated to a level of 4 footcandles with building mounted 250-watt metal-halide adjustable flood lights.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts.

Preferred Action Alternative – Under the Preferred Action Alternative, the site is immediately surrounded by the Jackson County Detention Center and woodlands, which will not be affected by the lighting from the proposed EOC. The architectural design of the building will provide for increased aesthetic quality relative to other buildings in the area. Additionally, as previously stated, the proposed land use is consistent with surrounding land use. The communications tower would be 120’ and would not have lights.

4.8 CUMULATIVE IMPACTS

According to CEQ regulations, cumulative impacts represent the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).” In accordance with NEPA and to the extent reasonable and practical, this EA considered the combined effect of the Preferred Action Alternative and other actions occurring or proposed in the vicinity of the proposed project site.

The proposed project site is located within Jackson County on McCammon Ridge Road. McCammon Ridge Road is comprised of multiple facility types ranging from several County facilities to single family homes to multi-family homes. The City of McKee and Jackson County do not have planning and zoning regulations. Three acres of land were cleared at the preferred EOC site. There are no current construction activities and the County currently knows of no development plans for the area. The improvement in emergency services would have a negligible effect on population growth within the County.

If additional construction occurred within the vicinity of the EOC, these projects and the Preferred Action may have cumulative temporary impacts on air quality by increasing criteria pollutants during construction activities and traffic. No other cumulative impacts are anticipated. Because the land in the project area has been used as farmland and is now cleared, no cumulative impacts to biological or cultural resources are anticipated.

SECTION 5: AGENCY COORDINATION, PUBLIC INVOLVEMENT, PERMITS

5.1 AGENCY COORDINATION

Kentucky State Clearinghouse

*Kentucky Heritage Council
Kentucky Natural Resources Cabinet
Cumberland Valley Area Development District
Kentucky Department of Fish & Wildlife
Kentucky Department of Transportation
Kentucky Department of Housing, Buildings and Construction
Kentucky Labor Cabinet*

U.S. Fish & Wildlife Service
Kentucky Department of Fish & Wildlife
U.S. Army Corps of Engineers
U.S. Natural Resources and Soil Conservation
Kentucky Geological Survey
Tribal Historic Preservation Officers (THPOs)

5.2 PUBLIC INVOLVEMENT

FEMA is the lead Federal agency for conducting the NEPA compliance process. It is the goal of the lead agency to expedite the preparation and review of NEPA documents and to be responsive to the needs of the community and the purpose and need of the Preferred Action while meeting the intent of NEPA and complying with all NEPA provisions. The Jackson County Fiscal Court will notify the public of the availability of the draft EA through publication of a public notice in the *Jackson County Times*.

5.3 PERMITS

KY Division of Code Appliance Building Permit
NPDES

SECTION 6: LIST OF PREPARERS

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SECTION 7: APPENDICES

Appendix A – Project Maps

- Aerial Photograph
- US Geological Survey Topographic Map
- FEMA Flood Insurance Rate Map
- National Wetlands Inventory
- Site Geology

Appendix B – Agency Correspondence

- Kentucky State Clearinghouse
- US Fish & Wildlife Service
- US Fish & Wildlife Memorandum of Agreement
- Kentucky Fish & Wildlife Service
- US Army Corps of Engineers
- US Department of Agriculture, Natural Resources Conservation Services
- Kentucky Heritage Council/State Historic Preservation Officer

Appendix C – Schematic Design

- Site Plan
- Utility Plan
- Grading & Drainage Plan
- Site Survey

Appendix D – Photographs of Site

Appendix E – Geotechnical

- Report of Geotechnical Exploration

SECTION 8: REFERENCES

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