

Draft Environmental Assessment

Powell County Hinkle Communication Tower

Powell County CSEPP

ARRA-AFG/SCG Grant #: EMA-2010-CA-5250 and
12-KYDES-00486 County Construction/Improvements

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FEMA

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Federal Emergency Management Agency Region IV
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Atlanta, GA 30341-4112

Proposed Hinkle Communication Tower
Chemical Stockpile Emergency Preparedness Program (CSEPP)

Draft Environmental Assessment

Powell County, Kentucky

Prepared For:

Powell County Fiscal Court

Powell County Judge Executive Judith Potts

County Courthouse

525 Washington Street, Stanton, Kentucky 40380

Prepared By:

Palmer Engineering

400 Shoppers Drive

Winchester, KY 40392-0747

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	PURPOSE AND NEED	4
3.0	ALTERNATIVES ANALYSIS	5
3.1	No-Action Alternative	5
3.2	Proposed Action	5
4.0	AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS	8
4.1	Physical Resources	11
4.1.1	Geology and Soils	11
4.1.2	Air quality	13
4.2	Water Resources	14
4.2.1	Water Quality	14
4.2.2	Wetlands	15
4.2.3	Floodplains.....	15
4.3	Biological Resources	16
4.3.1	Vegetation	16
4.3.2	Threatened and Endangered Species and Critical Habitat	16
4.3.3	Migratory Birds.....	18
4.4	Cultural Resources	19
4.4.1	Archaeological Resources.....	19
4.4.2	Cultural Historic Resources	19
4.4.3	Native American Consultation.....	20
4.5	Socioeconomics	21
4.5.1	Environmental Justice.....	21
4.5.2	Noise	22
4.5.3	Traffic and Transportation	23
4.5.4	Public Service and Utilities.....	24
4.5.5	Public Health and Safety.....	24
5.0	CUMULATIVE IMPACTS	26
6.0	PUBLIC INVOLVEMENT	27
7.0	AGENCY COORDINATION AND PERMITS	28
8.0	REFERENCES	29
9.0	LIST OF PREPARERS	30

LIST OF TABLES

Table 1: Summary of Environmental Impacts	8
Table 2: 2010 U.S. Census Data for Minority and Low-Income Populations	21

LIST OF FIGURES

Figure 1: Chemical Stockpile Emergency Preparedness Program Zones	3
Figure 2: Proposed Hinkle Communication Tower Location	6
Figure 2A: Proposed Hinkle Communication Tower Location Close-up	7

APPENDICES

APPENDIX A	Soils Information and Photo Log
APPENDIX B	Correspondence
APPENDIX C	Designs, Maps

ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADT	Average Daily Traffic Count
APE	Area of Potential Effect
BMPs	Best Management Practices
CEQ	Council on Environmental Quality
CSEPP	Chemical Stockpile Emergency Preparedness Program
CT	Census Tract
dB	Decibels
dBA	Decibels on the A-weighted scale
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EOC	Emergency Operations Center
ESA	Endangered Species Act
ESC	Emergency Services Center
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
HMP	Habitat Mitigation Plan
HUC	Hydrologic Unit Code
IRZ	Immediate Response Zone
KDFWR	Kentucky Department of Fish and Wildlife Resources
KHC	Kentucky Heritage Council
KPDES	Kentucky Pollutant Discharge Elimination System
KSNPC	Kentucky State Nature Preserves Commission
LOS	Level of Service
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollution Discharge Elimination System
NRCS	National Resources Conservation Service

NRHP	National Register of Historic Places
NWI	National Wetland Inventory
OSHA	Occupational Safety and Health Administration
PAZ	Protective Action Zone
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Office
SR	State Route
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
UA	Urbanized Area
UPS	Uninterruptible Power Supply
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOUS	Waters of the United States

1.0 INTRODUCTION

This Draft Environmental Assessment (EA) has been prepared on behalf of the Powell County Fiscal Court for the proposed construction and operation of the Hinkle Communication Tower in Stanton, Powell County, Kentucky. This communication tower is for the purpose of serving the existing Powell and Estill Counties Emergency Operations Centers (EOCs). On January 18, 2012, the Federal Emergency Management Agency (FEMA), in partnership with the U.S. Department of the Army, provided funding for the Powell County EOC by means of a grant (EMA-2012-CA-5250) through the Chemical Stockpile Emergency Preparedness Program (CSEPP). CSEPP for this project is administered through the Commonwealth of Kentucky under a cooperative agreement (12-KY-DES-00486) dated March 29, 2012.

CSEPP was created in 1985 when the U.S. Congress passed a law directing the Army to dispose of its aging chemical weapons inventory with the maximum protection of the public and environment as its primary consideration. Since its inception, the primary goal of CSEPP has been to educate and provide emergency preparedness assistance and resources to communities surrounding the Army's chemical warfare agent stockpiles. The last remaining stockpile in Kentucky is located at the Bluegrass Army Depot in Madison County.

Ten counties in Kentucky have been determined to be in the immediate potential impact area of the chemical stockpile at Bluegrass Army Depot. Madison County is considered CSEPP Immediate Response Zone (IRZ). Clark, Powell, Estill, Jackson, Rockcastle, and Garrard counties make up the Protective Action Zone (PAZ). Fayette, Jessamine, and Laurel counties are considered Host counties, in which citizens of the IRZ or PAZ may be deployed if a major event occurred at the depot (CSEPP.ky.gov).

With the help of FEMA and the Army, these communities are expanding emergency plans and capabilities to meet the slight, but real threat of a chemical agent emergency. The communities have plans and procedures in place to deal with a chemical stockpile accident. These counties also received the grant funding to update their facilities to the required level of the CSEPP (see Figure 1).

This Draft EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, President's Council on Environmental Quality (CEQ) NEPA regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508), and FEMA NEPA regulations (44 CFR Part 10). FEMA must evaluate potential environmental impacts before funding or approving actions and projects. FEMA will use this EA's findings to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

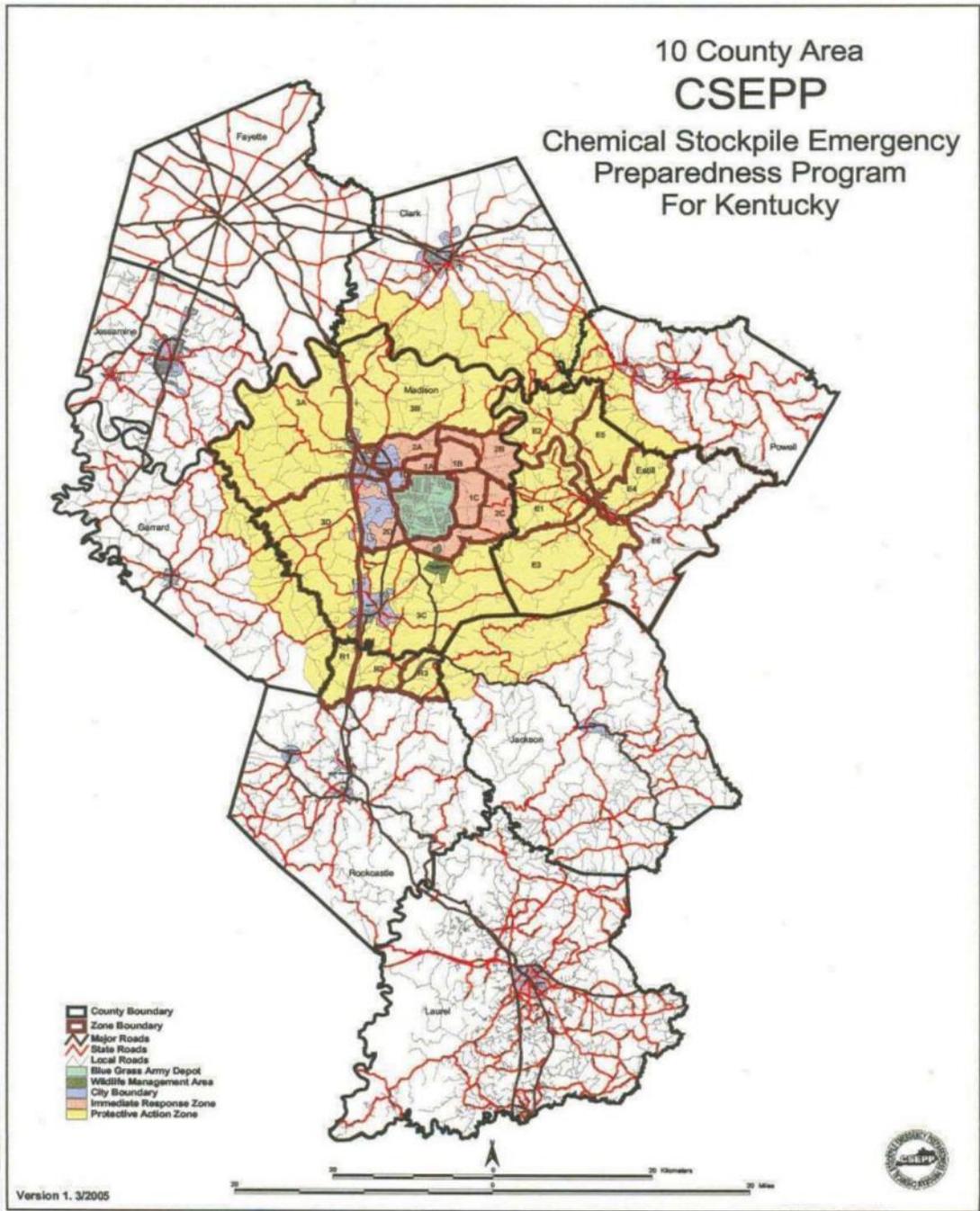


Figure 1: Chemical Stockpile Emergency Preparedness Program Zones

2.0 PURPOSE AND NEED

CSEPP was created in 1985 when the U.S. Congress passed a law directing the Army to dispose of its aging chemical weapons inventory with maximum protection of the public and environment as its primary consideration.

Since its inception, CSEPP's primary goal has been to educate and enhance emergency preparedness in communities surrounding the Bluegrass Army Depot's chemical stockpile. Until the entire chemical stockpile is safely destroyed, CSEPP will continue to support efforts to ensure communities' preparedness and safety in the unlikely event of a chemical agent accident (CSEPP.ky.gov).

Presently, there are two EOCs established in Powell and Estill counties in Kentucky. The existing EOC facilities are adequate to protect and prepare the two counties before and during chemical weapons decommissioning, and to support efforts to ensure the community's preparedness and safety in the unlikely event of a chemical agent accident; however, the communications infrastructure is inadequate. There is a need for a communications tower to improve public safety services and interoperable communications among first responders throughout southern Powell and northeastern Estill counties. Currently, there are no communications towers that are able to pick up signals in this area of Powell and Estill counties. The purpose of the communications tower is to adequately equip the EOCs for emergency communications.

3.0 ALTERNATIVES ANALYSIS

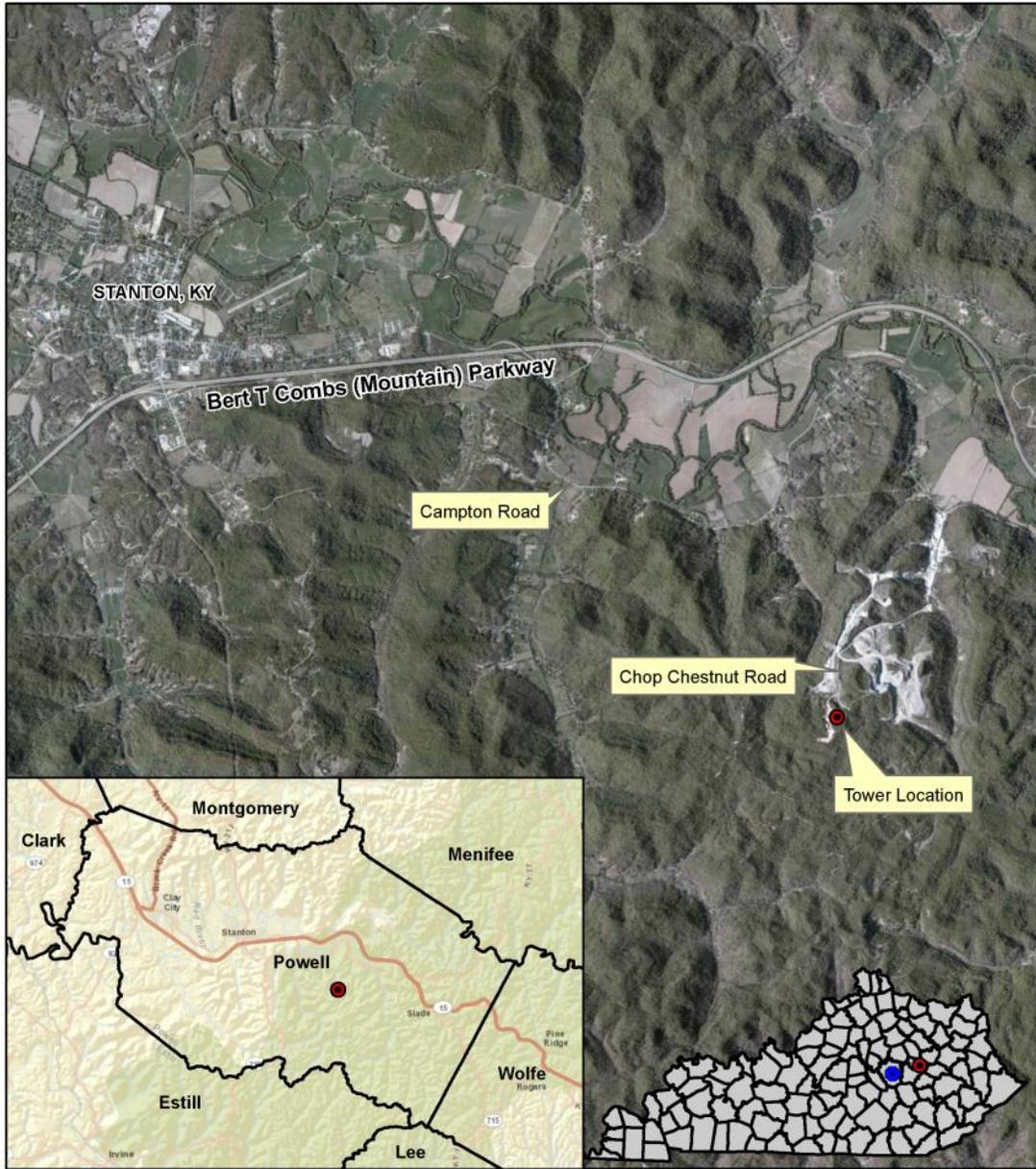
3.1 No-Action Alternative

Under the No-Action Alternative, a new communication tower would not be constructed. This action would continue to hinder communications, the ability to prepare and protect the public before and during chemical weapons decommissioning, and the overall level of public safety. In addition, Powell County's emergency preparedness plan would not be in compliance with the goals and objectives for counties within the CSEPP program area.

3.2 Proposed Action

The proposed project would involve the construction of a 300-foot self-supporting communications tower within the Natural Bridge Stone Rock Quarry (37°48'33.0" N, 83°46'48.7" W), see Figures 2 and 2A for location maps. In addition to the communications tower, the following would also be constructed/installed at the site: a generator (120/240-volt 1PH 200-amp), an 11-foot x 16-foot precast concrete shelter, a free-standing ice bridge, and a 1000-gallon propane tank. The parcel will be surrounded by an 8-foot-high chain link fence (with 3 rows of deterrent wiring on top), with two 12-foot entry gates, and a 4-foot man gate along the east fence line. There are no existing structures currently at the Hinkle Communication Tower site. The tower loadings are provided in Appendix C.

Thelen Associates, Inc. provided the geo-technical report for this site, which is located in Appendix A.



Legend

- Tower Location
- Blue Grass Army Depot



Figure 2

**Powell County Emergency
Communication Tower
Location**

**7245 Campton Road
Stanton, KY 40380**

Figure 2: Proposed Hinkle Communication Tower Location



Legend

 Tower Location



250 125 0 250 500



1"=500'

Figure 2A
**Powell County Emergency
Communication Tower
Location**

7245 Campton Road
Stanton, KY 40380

Figure 2A: Proposed Hinkle Communication Tower Location Close-up

4.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

Powell County was founded in 1852. Powell County is 180.14 square miles (466.6 km²) and is located in the Eastern Coal Field region of Kentucky. Land elevation in Powell County ranges from 570 to 1,450 feet above sea level. According to the 2010 United States Census Bureau, the county population had a population of 12,613 which averages to about 70 people per square mile. The county seat of Powell County is Stanton.

There are two main highways in Powell County: Bert T Combs Parkway (Mountain Parkway) and KY Routes 11/15 (Stanton and Compton Roads). Both of these highways travel east/west through Stanton and the county. The rest of the county is crossed by various state and county routes. KY Route 213 (Cow Creek and Furnace Roads) is the major north/south route through Stanton and the county.

The proposed project site is located on the Natural Bridge Stone Rock Quarry located at 7245 Campton Road (KY 11), Stanton, Kentucky (37°48'33.0" N, 83°46'48.7" W). This quarry is owned by the Hinkle Construction Company of Paris, Kentucky. The site is bordered by Chop Chestnut Road to the east, Daniel Boone National Forest to the south, and the stone quarry to the west and north. The proposed site parcel has been graded flat and covered with crushed stone. Table 1 provides a summary of environmental impacts for the proposed project.

Table 1: Summary of Environmental Impacts

Resource	No Significant Impact	Significant Impact	Impact/Mitigation/ Best Management Practices
Geology and Soils	X		Minor, temporary soil disturbance. BMPs of wetting exposed soil, covering dirt piles, wetting exposed soil, silt fences, and hay bales would be used at the project and staging sites to control soil erosion.

Resource	No Significant Impact	Significant Impact	Impact/Mitigation/ Best Management Practices
Air Quality	X		BMPs, including proper maintenance of vehicles and equipment, not limited to heavy and earthmoving, watering exposed soil, and covering dirt piles, would be implemented at the project site and staging sites. The contractors will keep the road clear of soil and debris.
Water Quality	X		BMPs, including installation of wetting exposed soil, covering dirt piles, silt fences, and hay bales would be implemented to reduce soil erosion and off-site sediment transport.
Wetlands	X		None. Soil erosion and sedimentation control BMPs would be used.
Floodplains	X		None.
Vegetation	X		No native grass species are on site. The site was previously graded for the tower and storage facility. No trees will be removed.
Threatened and Endangered Species and Critical Habitat	X		None. Although consultation with KSNPC indicates there are endangered species occurring within 10 miles of the project site – gray bat (<i>Myotis grisescens</i>); Indiana bat (<i>M. sodalis</i>); Virginia big-eared bat (<i>Corynorhinus townsendii virginianus</i>); and one state species of special concern, big sandy crayfish (<i>Cambarus veteranus</i>) – occurring within one mile of the project, the required habitat for these species is not present on or near the project site. Therefore, this project would have no direct effect on any of these species. USFWS concurrence FWS 2013-B-0197 dated July 22, 2013 indicated, “no significant adverse impacts to wetlands or federally listed endangered or threatened species are anticipated.”

Resource	No Significant Impact	Significant Impact	Impact/Mitigation/ Best Management Practices
Migratory Birds	X		Moderate. Tower would be 300 feet tall above ground level, would not require guy wires, and is not located near any known rookeries, nesting sites, and/or migratory bird flyways. The tower would be constructed without platforms to discourage roosting. No trees would be cut down for this project. A February 8, 2013 technical assistance letter from USFWS provided lighting recommendations that will be followed to minimize impacts to the birds protected under MBTA.
Historic and Archaeological Resources	X		According to correspondence with the KHC, the Proposed Action would have no effect on cultural resources or archaeological resources. The site is part of the Hinkle Quarry and it is private property. However, if any historic or archeological resources are inadvertently discovered, all work must immediately cease and FEMA, the KHC, and the United Keetoowah Band of Cherokee Indians in Oklahoma must be contacted within 24 hours.
Environmental Justice	X		None. The Proposed Action would benefit all populations in both Powell and Estill Counties.
Noise	X		All construction activities would take place during normal business hours (between 7 a.m. and 5 p.m. local time). Vehicles and equipment would meet all local, State, and Federal noise regulations. Noise from operating the generator would be not need to be mitigated due to the remote quarry site location.

Resource	No Significant Impact	Significant Impact	Impact/Mitigation/ Best Management Practices
Traffic	X		Temporary increases in traffic volumes or brief traffic disruptions during construction would only take place during normal business hours (between 7 a.m. and 5 p.m. local). This site has traffic from load bearing equipment during these hours.
Public Service and Utilities	X		None
Public Health and Safety	X		Construction activities onsite will be fenced and appropriate signage will be placed to protect people. The site is private property with limited public access.

4.1 Physical Resources

4.1.1 Geology and Soils

Existing Conditions

The proposed project site is located on a flattened ridge top near the Chop Chestnut Ridge line. Based on the Natural Resources Conservation Service (NRCS) Soil Survey for Powell and Wolfe counties, Powell County’s elevation ranges from 570 to 1,450 feet above sea level; the project site is located on a plateau at roughly 1,316 feet. Soils within the proposed project site consist entirely of Alticrest-Ramsey-Rock outcrop complex (ArF) with 20 to 65% slopes. This complex is located on mountain tops and consists of a well-drained soil; it is therefore non-hydric. This complex is also not considered prime farmland. The Alticrest soil profile is: 0 – 38 inches, sandy loam and 38 – 42 inches, unweathered rock. The Ramsey soil profile is: 0 – 3 inches, fine sandy loam; 3 – 18 inches, gravelly sandy loam; and 18 – 22 inches, unweathered rock. Since the project location has already been prepared for construction by land grading and tree removal, the above-mentioned soil profiles have already been altered. The geo-technical report provided by Thelen Associates, Inc. is located in Appendix A. There are no unstable soils at the project site as indicated in the report. No further review prior to construction of the tower is recommended by Thelen.

No Action Alternative

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

Proposed Action

As ArF soils are not classified as prime or unique farmland soils, there would be no impacts on prime or unique farmland soils, and no mitigation measures would be required. Soil removal may occur at the site where the location of the precast concrete shelter and for tower and fence footer locations. If soil is removed, BMPs, including wetting exposed soil, covering dirt piles, silt fences, and hay bales, would be implemented as needed to reduce soil erosion and off-site sediment transport.

Thelen Associates Inc. provided the following specific recommendations:

- If conditions are encountered in the field during construction which vary from the facts of the geo-tech report prepared by Thelen Associates Inc.; the contractor will contact Thelen Associates Inc. immediately to review the changed conditions in the field and request appropriate recommendations.
- The project will not require new pavements for the proposed communications tower facility. It is also expected that no cutting or filling will be necessary for site development.
- All utility trench excavations required for the proposed installation will be backfilled with compacted and tested fill as per the geotech survey.
- Recommendation will be made to the contractor that the tower be supported on end-bearing drilled shafts or deepened foundations in the Lee Formation sandstone, and augmented as needed with shaft bells or with anchors to assist in obtaining the required tension capacity.
- Straw bales and/or silt fences will be staked across areas of concentrated runoff to minimize soil erosion. Scarified areas will be seeded and strawed and protected from erosion as soon as possible after disturbance.

4.1.2 Air quality

Existing Conditions

The Clean Air Act (CAA) requires states to adopt ambient air quality standards – standards to protect the public from potentially harmful amounts of pollutants. Under the CAA, the U.S. Environmental Protection Agency (USEPA) establishes primary and secondary air quality standards. Primary air quality standards protect 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 ecosystem health and preventing decreased visibility and damage to crops and buildings. The USEPA set National Ambient Air Quality Standards (NAAQS) for the following five major pollutants: carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and particulate matter (EPA.gov).

Powell County has been designated by the USEPA as being in attainment with respect to the NAAQS for the designated criteria pollutants of carbon monoxide, 8-hour ozone, nitrogen dioxide, sulfur dioxide, lead, particulate matter with a diameter of 2.5 microns, and particulate matter with a diameter of 10 microns.

No Action Alternative

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

Proposed Action

The proposed tower site would have minor, temporary impacts on air quality. Construction, grading, and adding fill material would temporarily leave soils exposed, creating dust; typical equipment and vehicles would emit exhaust. To reduce these air quality impacts, contractors would apply BMPs, including proper maintenance of equipment and machinery, watering down exposed soil (dirt), and covering soil piles if needed. Thus, the proposed project is expected to not have significant negative impacts on the air quality of Powell County or the Bluegrass Intrastate Air Quality Control Region. No long-term air quality impacts are expected to occur.

4.2 Water Resources

4.2.1 Water Quality

Existing Conditions

The Clean Water Act (CWA) regulates pollutant discharges into surface water resources. The Clean Water Act (CWA), as amended in 1977, established the basic framework for regulating discharges of pollutants into surface water resources. According to the U.S. Geological Survey (USGS) Stanton (1966), the elevation of the project site is 1,316 feet above sea level.

No, ponds, streams or other “waters of the United States” (WOUS) exist at the project site. The project site is located in Hall Branch watershed (HUC14 05100204-120-390) part of the Upper Kentucky River (HUC8 05100204).

No Action Alternative

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

Proposed Action

The proposed Hinkle Communication Tower construction would not significantly impact water resources. Since no WOUS are located on the project site, no correspondence with the U.S. Army Corps of Engineers (USACE) was warranted. Because the area to be disturbed during renovation is less than one acre, a Storm Water Management Plan (SWMP) will not be prepared and a Storm Water Pollution Prevention Plan (SWPPP) would not be required from the Kentucky Division of Water (KDOW).

The Applicant will be required to obtain a Kentucky Pollutant Discharge Elimination System (KPDES) permit from the KDOW for the proposed construction activities. KPDES Form NOI-SWCA, associated with Construction Activity under the KPDES General Permit, avoids impacts to wetlands, surface waters, and groundwater. Associated BMPs would consist of erosion control in the form of silt fences, hay bales, etc., to prevent surface runoff sediment from entering storm drains.

4.2.2 Wetlands

Existing Conditions

The USACE regulates the discharge of dredged and fill material into WOUS, including wetlands, pursuant to Section 404 of the CWA. Presidential Executive Order (EO) 11990 (Protection of Wetlands) requires Federal agencies to avoid, to the extent possible, adverse impacts to wetlands. According to the National Wetlands Inventory (NWI) maps, no wetlands are located within the project site (FWS.gov). A site visit conducted by Palmer Engineering in January 2013 confirmed that no wetlands are located within the 3,750-square-foot project site.

No Action Alternative

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

Proposed Action

Under the proposed action planned for the communication tower, no impacts to WOUS, including wetlands, are anticipated because none exist on the project site.

4.2.3 Floodplains

Existing Conditions

EO 11988 (Floodplain Management) requires Federal agencies to avoid to the extent possible the short- and long-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. Per EO 11988, Flood Insurance Rate Maps (FIRMs) were examined during the preparation of this EA. The entire project site is located in Zone X, outside of the 100-year and 500-year floodplains (FEMA.gov FIRM Number 211197C0175D; Dated February 17, 2010).

The project site is within the Hall Branch watershed and is not located within a 500-year floodplain, according to FEMA's FIRM (FEMA 2010) (Appendix C). The elevation at the project site is roughly 450 feet higher than and 2,200 feet from the nearest stream.

No Action Alternative

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

Proposed Action

The project site is located in Zone X, which is outside the 100-year and 500-year floodplains; thus, the proposed project would have no impact to the floodplain.

4.3 Biological Resources

4.3.1 Vegetation

Since the project site has previously been cleared for the proposed tower construction, natural vegetative habitat is not present on the site. Forest immediately surrounds the area, with a small cemetery to the east across Chop Chestnut Road. Forest vegetation surrounding the area consists of northern red oak, Virginia pine, sugar maple, and chestnut oak, which are common trees for this area of the state.

No Action Alternative

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

Proposed Action

The project site had already been cleared for future development. Only minimal amounts of vegetation were removed to construct the existing utility line. This site was chosen for the tower construction due to the recent utility line clearing. As a result, no impacts to vegetation would occur.

4.3.2 Threatened and Endangered Species and Critical Habitat

Existing Conditions

The Endangered Species Act (ESA) requires Federal agencies to determine the impacts of their actions on federally-listed threatened or endangered species and their designated critical habitat. In a non-concurrence letter dated February 8, 2013, the USFWS stated the Indiana bat, Virginia big-eared bat, and gray bat are all known to occur in the area surrounding the project site. USFWS also indicated the project proximity to Indiana bat

hibernacula and how the bats use this swarming area during crucial times of their life cycle. In winter prior to hibernation, Indiana bats utilize the forest habitat around the hibernacula, where they feed and roost until temperatures drop to a point that forces them into hibernation. The same area is used during the spring to acquire additional fat reserves before leaving for summer ranges. There is also a portion of the Indiana bat population that remains in the area year-round. The USFWS also indicated the project's proximity to several documented occurrences of the endangered Virginia big-eared bat and that the project is in an area that is potential habitat for the gray bat. Virginia big-eared bats and gray bats live in caves year-round. Because the project site is primarily forested and occurs within a known karst region, the USFWS has reason to believe that suitable summer roosting and winter hibernacula habitat for these two bats could occur in the area (Appendix B).

No Action Alternative

Under the No Action Alternative, no construction would occur and there would be no impacts to federally-listed threatened or endangered species.

Proposed Action

Although the proposed project site is located in an area of known or potential occurrences of listed bat species, no tree removal would be required for the proposed project and all project activities would occur on the previously cleared site. Based on this information, the proposed project would not impact any habitat required for the bat species listed above. The USFWS concurred that the proposed project is not likely to adversely affect the Indiana bat, the Virginia big-eared bat, or the gray bat, in a letter dated July 22, 2013. The USFWS also stated that the requirements of Section 7 of the Endangered Species Act have been fulfilled for this project. Obligations under Section 7 must be reconsidered, however, if: (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation (such as tree removal), or (3) new species are listed or critical habitat designated.

4.3.3 Migratory Birds

Since the project site has previously been cleared of all trees and vegetation, wildlife habitat is non-existent. Terrestrial wildlife species adapted to living near human-occupied structures may occur (e.g., squirrels, raccoons). No aquatic resources are present on site for fish. Migratory birds may be present near the project site. There is no feature or aspect of habitats present on the site that would indicate that the project area would attract migratory birds to any greater degree than the neighboring forest. There is no portion of the site that would provide critical nesting or foraging cover for migratory birds.

No Action Alternative

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

Proposed Action

Construction of the proposed communications tower would not require the removal of trees or other vegetation. The proposed tower would not be expected to pose a hazard to migratory birds based on the USFWS Migratory Bird Program, construction of communication towers guidelines (USFWS 2000). The tower would be 300 feet tall, and the construction methods that would be used do not require guy wires. Per USFWS correspondence dated July 22, 2013, the tower will be lit with white strobe lights so as not to attract migratory birds in the area.

The 300-foot-tall communications tower would be installed on site and it will be a free-standing, self-supporting, lattice-style, pad-and-pier tower, with white strobe lighting. In a letter dated January 28, 2013, the KDFWR requested that the tower not be lit due to the fact that night-migrating birds can be attracted to and disoriented by light on towers, resulting in collision with the tower and oftentimes death. If lights are necessary, the KDFWR and USFWS recommend that white strobe lights be used with the maximum permissible “off” interval and solid or pulsating red warning lights to be avoided. Upon further discussion with USFWS, and per phone conversation and a subsequent letter dated July 22, 2013, the lighting of the tower will follow recommended guidelines. Construction activities will not have direct impacts to migratory bird nests during the nesting season due to lack of mature trees on the site.

4.4 Cultural Resources

Existing Conditions

The National Historic Preservation Act (NHPA) of 1966, (PL 89-665; 16 USC 470 *et se.*) as amended, outlines Federal policy to protect historic properties and promote historic preservation in cooperation with states, tribal governments, local governments, and other consulting parties. The NHPA established the National Register of Historic Places (NRHP) and designated the State Historic Preservation Office (SHPO) as the entity responsible for administering state-level programs. The Kentucky Heritage Council (KHC) is the SHPO in Kentucky. The NHPA also created the Advisory Council on Historic Preservation (ACHP), the Federal agency responsible for overseeing the implementation of Section 106 process and providing commentary on Federal activities, programs, and policies that affect historic properties.

The proposed project site has experienced extensive disturbance due to its use as a quarry; in addition, gas and electric lines were recently installed, which caused further ground disturbance. The area was graded when the utility lines were placed.

4.4.1 Archaeological Resources

No Action Alternative

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

Proposed Action

In their letter dated February 28, 2014, the KHC acknowledged that no archaeological survey has been recommended at this time; however, contractors installing the tower should be advised of their responsibilities in case of an inadvertent archaeological discovery.

4.4.2 Cultural Historic Resources

No Action Alternative

Under the No Action Alternative, no construction would occur and there would be no impacts to cultural historic resources.

Proposed Action

A cultural historic reconnaissance of the APE was conducted by Jayne Goddard, Historic Preservation Specialist with Palmer Engineering on January 23, 2012. Ms. Goddard is qualified under the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) in the discipline of history and architectural history.

There are no historic properties listed in or considered potentially eligible for listing in the NRHP within the ¾ mile area of potential effect (APE) for this project. The cemetery located in proximity to the project has not been evaluated, but the proposed project would not affect any qualities for which such a site might be determined eligible. In addition, the soil has been previously disturbed in this location, and no archaeological resources are anticipated to be within the APE. In conclusion, the proposed communication structure will have no adverse effect on historic properties or cultural resources. The KHC concurred with this determination in a letter dated February 28, 2014 (Appendix B).

4.4.3 Native American Consultation

No Action Alternative

Under the No Action Alternative, no construction would occur and there would be no impacts to Native American cultural resources.

Proposed Action

In letters to the Eastern Band of Cherokee Indians, the Absentee Shawnee Tribe of Oklahoma, the Cherokee Nation, the Eastern Shawnee Tribe of Oklahoma, the Miami Tribe of Oklahoma, the Shawnee Tribe, the Peoria Tribe of Oklahoma, and the United Keetoowah Band of Cherokee Indians in Oklahoma, dated July 25, 2012, FEMA requested concurrence with their finding of "no historic properties affected." The only response received was from the United Keetoowah Band of Cherokee Indians in Oklahoma on April 9, 2014, stating that the Tribe had no objection to or comments on the Proposed Action, but it is requested that if any human remains or funerary items are inadvertently discovered, all work would cease and they be contacted immediately.

4.5 Socioeconomics

4.5.1 Environmental Justice

EO 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations) requires Federal agencies and those receiving Federal funds to consider possible disproportionate and adverse environmental impacts of their actions on minorities and low-income populations. Socioeconomic and demographic data for the project area were reviewed to determine if the proposed project would have a disproportionate and negative impact on any minority or low-income populations.

The project site is located within the city limits of Stanton in Powell County, Kentucky. As of 2010, Powell County had a population of 12,613. The Census Tract Block Group has a poverty level lower than both Powell County and the Commonwealth of Kentucky (U.S. Census Bureau 2010). The Block Group also has a minority population that is slightly lower than that of the county and lower than that of the state; however, the Hispanic population in the Block Group is higher than the county. The project site is located in Census Tract (CT) 9701, Block Group 5. U.S. Census data from 2010 are the most recent data available on the percentage of minority and low-income populations at the site. Detailed demographic information is provided in Table 2.

Table 2: 2010 U.S. Census Data for Minority and Low-Income Populations

	Kentucky	Powell County	CT 9701, Block Group 5
Total population (2010)	4,285,828	12,613	1,068
Annual median household income	\$41,576	\$31,815	\$42,986
% families below poverty level	14.2	21.2	11.0
% Minority population	11.5	2.2	1.5
% Hispanic (may be of any race)	2.7	0.6	1.2
% of population over 65	13.1	12.7	12.6

Source: 2006-2010 American Community Survey 5-Year Estimates

No Action Alternative

Under the No Action Alternative, no new construction would occur and there would be no socioeconomic impact.

Proposed Action

Based on the census data, the residents within the vicinity of the project area are not likely to represent a minority or low-income population greater than the populations within Powell County. Therefore, there would be no adverse effects or disproportionate impacts related to environmental justice.

In addition, all populations would benefit equally from the increased emergency communications capability that would result from the proposed project. Although minority or low-income populations may reside in the project site's vicinity, there would be no adverse impacts expected to occur from construction of the Hinkle Communication Tower.

4.5.2 Noise

Noise is generally defined as unwanted sound. Sound pressure levels are described in the dBA unit, which is weighted to approximate the human ear's response. Because of both the nature of the human ear and the logarithmic scale, an increase or decrease of 10 dBA sounds twice or half as loud, and a change of 20 dBA sounds four times or one quarter as loud. For this project, two noise standards are used. The first is the Day-Night Average Sound Level (DNL), an average measure of sound. The DNL descriptor is accepted by Federal agencies as a standard for estimating sound impacts for compatible land uses. The USEPA and other Federal agencies' guidelines state that outdoor sound levels exceeding 55 dB DNL are "normally" unacceptable for noise sensitive land uses, including residences (USEPA 1974). The second set of noise standards relates to traffic noise impacts and is found in 23 CFR 772, which the Federal Highway Administration (FHWA) revised in July 2011. For this project, noise levels generated by traffic sources impact residences and commercial sites when sound levels approach or exceed the applicable Noise Abatement Criteria (NAC) of 67 dBA and 72 dBA, respectively.

The project site is located within the Natural Bridge Stone Rock Quarry, which in itself is a noisy business due to blasting and heavy truck traffic. The small amount of noise generated at the communication tower site would be negligible compared to noise generated by the surrounding rock quarry.

No Action Alternative

Under the No Action Alternative, no communication tower would be constructed and there would be no noise impacts.

Proposed Action

Construction of the new communication tower would produce minor, temporary noise increases which are not expected to exceed the normal dBAs within the area. Equipment and machinery used at the project site would meet all local, State, and Federal noise regulations. No long-term increases in noise levels are anticipated as a result of the proposed project.

Operation of the communication tower would not result in significant changes in traffic volumes and therefore would not change the normal street noises currently existing at the site. Currently, impacts from traffic volumes within the project area do not exceed the NAC for residences or commercial sites. As future traffic volumes would not be impacted by the construction, any future impacts relating to traffic noise within the project area would be a result of changes in traffic volumes on existing or new roadway facilities or changes in traffic patterns.

A back-up emergency generator would provide emergency power to the communication tower during power outages and renovation. This generator would be tested periodically and would operate during power outages. Operation of this generator could result in some minor noise impacts for variable and short periods of time. The noise levels would be mitigated with standard noise shielding. Due to the infrequent use of the generator, potential noise impacts would be minor. The generator noise is not expected to exceed the existing dBAs for the area.

4.5.3 Traffic and Transportation

Existing roads in the vicinity of the project site include Campton Road (KY 11/KY15) and Chop Chestnut Road. There is no traffic data available for these local roads. Chop Chestnut Road enters the quarry and provides restricted public access to the cemetery; however, very little public traffic utilizes this road.

No Action Alternative

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

Proposed Action

Access to the proposed communication tower will be from Campton Road. Peak hours for traffic due to construction are estimated to be from 7 a.m. to 8 a.m. and from 3 p.m. to 4 p.m. local time. Campton Road should not experience any traffic impact during site construction. Operations of the new communication tower would not result in a significant increase in traffic along Campton Road.

4.5.4 Public Service and Utilities

Clark Energy Cooperative would provide a propane tank for the communication tower generator, and the electric lines are provided by Jackson Energy.

No Action Alternative

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

Proposed Action

Existing lines would be utilized to provide utility service to the communication tower. No temporary or permanent impacts are expected to public service and utilities.

4.5.5 Public Health and Safety

Human health and safety to be considered during construction of the Hinkle Communication Tower include the area of the existing business, adjacent residences, and the public-at-large, and the protection of personnel involved in activities related to the proposed construction of the tower.

No Action Alternative

Under the No Action Alternative, the lack of communications between the EOCs and the public could possibly be detrimental to the persons in the surrounding counties. Information to the public might not be received in a timely manner.

Proposed Action

By constructing the Hinkle Communication Tower, protection would be provided to county residents through enhanced communication capabilities as well as up-to-date technology that will support rapid mobilization if an emergency occurred during chemical decommissioning. During construction, all activities would be conducted in accordance to the standards specified in the Occupational Safety and Health Administration (OSHA) regulations and by trained qualified personnel. No public access will be permitted to the proposed construction site.

5.0 CUMULATIVE IMPACTS

According to the President's Council on Environmental Quality (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)."

As required by NEPA, this EA considers the combined effect of the proposed action and other actions occurring or proposed in the vicinity of the project site to evaluate reasonable and practical cumulative impacts. The project area is located within the Natural Bridge Stone Rock Quarry, surrounded by private property and Federal forest. At this time, no additional construction activities are planned for the surrounding areas. If construction of the proposed project does occur, there may be minor, temporary cumulative impacts to noise levels and air quality in the area. No other cumulative impacts are anticipated.

6.0 PUBLIC INVOLVEMENT

FEMA is the lead Federal agency for conducting the NEPA compliance process for the proposed project in Stanton, Powell County, Kentucky. 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 to the purpose and need of the proposed action, while meeting the intent of NEPA and complying with all NEPA provisions.

A public notice will be published in *The Clay City Times* notifying the public of the proposed action and that FEMA has posted the Draft EA on their website and placed copies of the Draft EA in the Powell County Library. A 30-day public comment period will begin on the date of posting.

7.0 AGENCY COORDINATION AND PERMITS

Coordination has occurred with the following agencies:

- Federal Emergency Management Agency
- Federal Communication Commission
- Powell County Fiscal Court
- Powell County Chemical Stockpile Emergency Preparedness Agency
- United States Fish and Wildlife Service
- Kentucky Department of Fish and Wildlife Resources
- Kentucky State Natural Preserves Commission
- Kentucky Heritage Council
- Kentucky State Historic Preservation Office
- Eastern Band of Cherokee Indians
- Absentee Shawnee Tribe of Oklahoma
- Cherokee Nation
- Peoria Indian Tribe of Oklahoma
- Eastern Shawnee Tribe of Oklahoma
- Miami Tribe of Oklahoma
- Shawnee Tribe
- United Keetoowah Band of Cherokee Indians in Oklahoma

There was no response from any of the above agencies regarding any issues and/or negative impacts related to this project.

Each state and locality has specific permits for building projects. The following application will be needed for the tower construction:

- Federal Communication Commission 620 Form

8.0 REFERENCES

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9.0 LIST OF PREPARERS

Lee E. Carolan, Senior Environmental Biologist, Palmer Engineering

Ralph Schuler, Jr., Biologist, Palmer Engineering

Jayne Goddard, Senior Historic Preservation Specialist, Palmer Engineering

Jon Totty, GISP, Palmer Engineering

Bobi Martin, Technical Writer, Palmer Engineering

Ashley Kurzweil, Environmental Protection Specialist-State Lead, FEMA Region IV

April Cummings, Acting Regional Environmental Officer, FEMA Region IV