Draft Environmental Assessment City of Salyersville Section 531 Water Plant Improvement Project Magoffin County, Kentucky



U.S. Army Corps of Engineers Huntington District Huntington, West Virginia

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DRAFT FINDING OF NO SIGNIFICANT IMPACT CITY OF SALYERSVILLE SECTION 531 WATER PLANT IMPROVEMENT PROJECT MAGOFFIN COUNTY, KENTUCKY

1. Members of my staff have conducted an Environmental Assessment (EA), in the overall public interest, concerning the implementation of the Salyersville Water Plant Improvement Section 531 Project. The purpose of this project is to update a failing water treatment plant to adequately serve Salyersville, Kentucky and the surrounding area. This action will improve water quality and the health and safety of the community for years to come. The proposed project is authorized under Section 531 of the Water Resources Development Act (WRDA) of 1996 (PL 104-303).

2. The possible consequences of the project have been studied for environmental, cultural and social well-being impacts. Another factor bearing on the investigation was the capacity of the action to meet the needs of the public for whom it was proposed.

3. The Proposed Action Alternative (PAA) and the No Action Alternative (NAA) were the only alternatives carried forward for detailed evaluation. The PAA would be to upgrade the existing water treatment plant, including improvements to the interior of select rooms, updates to the supervisory control and data acquisition (SCADA) system, installation of a new rapid mixer, installation of new mixers for the flocculation basins, replacement of the filter media and backwashing system, and replacement of new electronic actuators and flow meters in the pipe gallery. The PAA is the most cost effective and is both environmentally and socially acceptable. The NAA would not be in the public's best interest and would have continued negative impact on the natural resources of the area.

4. An evaluation of the PAA and the NAA produced the following pertinent conclusions:

a. <u>Environmental Considerations</u>. The Huntington District (District) has taken reasonable measures to assemble and present the known or foreseeable environmental impacts of the project in the EA. All adverse effects of the project implementation are considered insignificant and should last only a few months longer than the construction period.

b. <u>Social Well-Being Considerations</u>. The proposed project will ensure safe treatment of water for the city of Salyersville and the surrounding area. No significant economic or social well-being impacts that are both adverse and/or unavoidable are foreseen as a result of the proposed action. The project will not have any impact on sites of known significant archeological or historic importance. Hazardous, Toxic, and Radioactive Waste (HTRW) are not present within the construction limits of the PAA.

c. <u>Coordination with Resource Agencies</u>. Pursuant to the Fish and Wildlife Coordination Act (FWCA) of 1958, coordination with the U.S. Fish and Wildlife Service (USFWS), Natural Resource Conservation Service (NRCS), the Kentucky Heritage Council (KHC), and the Kentucky Department of Fish and Wildlife Resources (KDFWR) has been maintained throughout the study. Appropriate measures and best management practices will be

identified and incorporated into the PAA. Also, in accordance with the Endangered Species Act, as amended, the recommended plan should not impact listed species.

d. <u>Other Pertinent Compliance</u>. No prime or unique farmland under the Farmland Protection Policy Act (FPPA) will be involved. The PAA is also in compliance with the National Historic Preservation Act (NHPA Section 106, 36 CFR 800), Executive Order (EO) 11988 (Floodplain Management), EO 11990 (Protection of Wetlands), and Section 7 of Endangered Species Act. A KPDES (Kentucky Pollutant Discharge Elimination System) construction storm water permit will be obtained prior to any construction activity.

e. <u>Other Public Interest Considerations</u>. There has been no significant opposition to the PAA. Comments received during the public review period will be included with the final EA.

f. <u>Section 176(c) Clean Air Act.</u> The PAA has been analyzed for conformity and applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act (CAA). The PAA will not exceed *de minimis* levels or direct emissions of a criteria pollutant or its precursors and is exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the District's continuing program responsibility and generally cannot be practicably controlled by the District. For these reasons a conformity determination is not required for the action.

5. I find the Salyersville Section 531 Water Plant Improvement Project has been planned in accordance with current authorization as described in the EA. The PAA is consistent with national policy, statutes and administrative directives. This determination is based on thorough analysis and evaluation of the PAA and alternative courses of action. In conclusion, I find the proposed Salyersville Section 531 Water Plant Improvement Project will have No Significant Adverse Impact on the quality of the human environment.

Date

Steven T. McGugan Colonel, Corps of Engineers District Engineer



CITY OF SALYERSVILLE SECTION 531 WATER PLANT IMPROVEMENT PROJECT MAGOFFIN COUNTY, KENTUCKY

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The brief and concise nature of this document is consistent with the 40 CFR requirements of the National Environmental Policy Act (NEPA) to reduce paperwork and delay by eliminating duplication with existing environmental documentation, incorporating pertinent material by reference and by emphasizing interagency cooperation. The majority of data collection analyzed in this document was performed by Summit Engineering, Inc. in conjunction with the U.S. Army Corps of Engineers (USACE).

Summary

The proposed water treatment plant Project Area is in the Salyersville area of Magoffin County, Kentucky. Information gathered for the preparation of the draft Environmental Assessment (EA) was derived from federal, state, and local agencies and databases. Areas of concern, including aquatic and terrestrial ecosystems, wetlands, socioeconomic conditions, Hazardous, Toxic, and Radioactive Waste (HTRW), and underground storage tanks (USTs), were evaluated for potential adverse impacts. Impacts associated with the Project Area are anticipated to be minimal due to the installation locations occurring within a previously disturbed area. Minimal and temporary negative impacts may be realized throughout the Project Area as a result of construction of the proposed Water Plant Improvement Project.

1.0 PROJECT DESCRIPTION

1.1 Project Background

This draft EA examines the potential environmental impacts of the Salyersville Water Plant Improvement Project. The purpose of the draft EA is to analyze the potential environmental impacts of the proposed project, and to determine whether to prepare an Environmental Impact Statement (EIS), leading to a Record of Decision (ROD), or a Finding of No Significant Impact (FONSI).



Figure 1 – Location of Magoffin County, Kentucky





Figure 2 – Locations of Salyersville, Kentucky and the existing Water Treatment Plant in reference to the Licking River

The Project Area is located near the conjunction of State Route 7 and the Mountain Parkway in Magoffin County, Kentucky (Figure 1). The Licking River begins in the southern portion of Magoffin County, Kentucky and flows northwest where it is impounded to form Cave Run Lake, eventually flowing into the Ohio River near Covington, Kentucky. The community most affected by this portion of the Licking River near the Project Area is Salyersville, Kentucky (Figure 2). See Appendix A for all maps of the area.



1.2 Purpose, Need and Authorization

The City of Salyersville plans to upgrade and replace portions of their existing water treatment plant. The purpose of this project is to provide improved water treatment to residents of Salyersville and the surrounding area. The need for an updated water treatment facility is to bring the existing facility into compliance with current Kentucky Department of Environmental Protection (KYDEP) Division of Water (DOW) requirements. Currently, the water treatment plant is failing and out of compliance with KYDEP DOW requirements.

Studies for this project were authorized under Section 531 of the Water Resources Development Act of 1996 (Public Law No. 104-303), which provides authority for the Secretary of the Army to establish a program to provide environmental assistance to non-Federal interests in southern and eastern Kentucky. This law provides assistance for design and construction of water-related environmental infrastructure and resource protection and development projects in southern and eastern Kentucky, including projects for wastewater treatment and related facilities; water supply and related facilities, and surface water resource protection and development. No other cooperating federal agencies are involved on this project funding. As established under Section 531, the project costs shall be shared 75% Federal and 25% Non-Federal (State and Local).

This draft EA is prepared pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1517), and USACE implementing regulation, ER 200-2-2, 1988.

2.0 PROPOSED ACTIONS AND ALTERNATIVES

2.1 Proposed Action Alternative (PAA)

The PAA would be to provide Federal funding toward the upgrade the existing water treatment plant, including improvements to the interior of select rooms, updates to the supervisory control and data acquisition (SCADA) system, installation of a new rapid mixer, installation of new mixers for the flocculation basins, replacement of the filter media and backwashing system, and replacement of new electronic actuators and flow meters in the pipe gallery. No alterations will be made between the existing Water Treatment Plant and waterlines serving Salyersville, KY and the surrounding area. The PAA would bring the failing water treatment plant into compliance with KYDEP-DOW requirements.

2.2 No Action Alternative (NAA)

The NAA would be to deny Federal funding for the project through the Section 531 program. The lack of Federal funding would result in no implementation of the Water Plant Improvement Project.



3.0 ENVIRONMENTAL SETTING AND CONSEQUENCES

3.1 Location

The Project Area is located in Salyersville, Kentucky, which is the county seat of Magoffin County. The overall project area may be classified as rural, which consists of residential and small commercial properties. Terrain in the project area consists of moderate to steep slopes dominated by forested hills and highly dissected V-shaped valleys.

3.2 Terrestrial Habitat

The Project Area is located in the Eastern Kentucky Coal Field province in Magoffin County, Kentucky which is part of the Cumberland Plateau. According to the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) soils classified as Gilpin-Latham-Marrowbone complex and Shelocta-Helechawa-Hazleton complex exist within the project area. The soils in the area are typically composed of sandstone, silt, shale, coal, and quaternary alluvium consisting of clay, silt, sand, and sandy gravel. The majority of the Project Area land is residential in nature with some commercial businesses.

The construction of the PAA involves upgrades to the existing water treatment plant which will not result in new terrestrial disturbances. The PAA and NAA would have no impact on terrestrial habitat or land use.

Fish and Wildlife Coordination Act (FWCA) requires federal agencies to take action to prevent loss or damage to wildlife resources, and provide for the measures taken to mitigate such impacts. Wildlife and wildlife resources are defined by the FWCA to include: birds, fish, mammals and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent. Construction of the PAA will occur entirely within the existing water treatment plant; therefore in accordance with the provisions of the FWCA no land use changes are anticipated with the PAA that would negatively affect wildlife resources. No effects to wildlife resources are anticipated with the NAA.

3.3 Aquatic Habitat

The Federal Water Pollution Control Amendments of 1972 and the Clean Water Act of 1977 collectively set regulatory standards on the discharge of various pollutants into surface water resources. Currently, this section of the Licking River is listed on Kentucky's 2010 Section 303(d) list of impaired waters for warm water aquatic habitat and sedimentation/siltation. Implementation of the PAA will not result in any new discharges of a pollutant or increase of discharge of a pollutant into the Licking River.

Section 404 of the Clean Water Act (CWA) regulates discharges into special aquatic sites including wetlands, and Executive Order 11990 requires federal agencies to take action to minimize the destruction, loss, or degradation of wetlands, and to preserve, enhance the natural and beneficial values of wetlands in carrying out their respective responsibilities. The National



Wetlands Inventory (NWI) Maps were reviewed for the Project Area and site assessments and reconnaissance were conducted by Summit Engineering, Inc to determine the validity of the NWI Maps. The site reconnaissance determined that no wetlands will be impacted by the construction of the PAA; therefore no impacts to wetlands are anticipated to occur from the PAA or NAA.

A KPDES (Kentucky Pollutant Discharge Elimination System) construction storm water permit and a Drinking Water Permit will be obtained from the KYDEP prior to any construction activity. Contents of the storm water permit include a sediment and erosion control plan, along with associated details regarding the plan.

3.4 Wild and Scenic River

No designated State Wild or Scenic Rivers are present within the Project Area. Since no State Wild or Scenic Rivers are located within the Project Area, no impacts to these resources are anticipated from the PAA or NAA.

3.5 Floodplain

Executive Order 11988 requires federal agencies to consider the potential effects of their proposed actions to floodplains. In order to determine the PAA's potential floodplain impact, the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) was reviewed for the project area. The Huntington District determined that the water treatment plant is located at elevation 981 feet which is above the floodplain elevation of 860 feet; therefore no impacts to floodplains are anticipated to occur from neither the PAA nor the NAA. Project site exhibits can be found in Appendix A.

3.6 Prime and Unique Farmland

The Farmland Protection Policy Act (FPPA) requires federal agencies to minimize the conversion of prime and unique farmland to non-agricultural uses. The PAA will not result in any new ground disturbance; therefore, neither the PAA nor NAA would result in impacts to prime or unique farmlands.

3.7 Hazardous, Toxic, and Radioactive Waste (HTRW)

A Phase I HTRW Environmental Site Assessment was conducted in March of 2012 by Summit Engineering, Inc for the Salyersville Water Plant Improvement Project, to identify environmental conditions and to identify the potential presence of HTRW contamination located in the project's construction work limits. This investigation included a Federal and state environmental database search, site reconnaissance, review of historical aerial and topographic mapping and interviews. The investigation was performed in accordance with ASTM E-1527-05 and 1528-06 Standards, USACE HTRW policies and Corps of Engineers Huntington District ISO 9001 requirements. This assessment has identified no potential areas of HTRW concern. However caution must be



exercised during construction of the PAA to prevent breakage and contact with water, gas, or electric lines.

The NAA would not result in ground disturbing activities, and would not disturb areas of HTRW contamination.

3.8 Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects federal undertakings will have on districts, sites, buildings, structures, or objects listed in or eligible for inclusion in the National Register of Historic Places. The construction of the Salyersville, KY Water Treatment Plant was completed in 1984. The PAA involves construction activity on the internal components of the existing Water Treatment Plant; due to the recent age of the structure no impact to standing structures are anticipated. The Kentucky Heritage Council has determined that an archaeological survey is not necessary for the PAA. No impacts to cultural resources or historic properties are anticipated to occur from the PAA or NAA.

3.9 Threatened and Endangered Species

The Endangered Species Act of 1973 requires Federal agencies to consider the effects of actions on Federally listed endangered, threatened, and/or candidate species. The USFWS published list of endangered and threatened species in Kentucky was reviewed for this project. Magoffin County, Kentucky has the potential to have suitable habitat for the endangered Indiana Bat (*Myotis sodalis*). The USFWS was contacted regarding rare, threatened and endangered species. No caves, rock shelters, or underground mines have been recorded within the nearby vicinities of the existing water treatment plant. The PAA does not involve any tree removal activity that would potentially disturb any roosting Indiana Bats. The USFWS determined that construction of the PAA will not result in significant impacts to any federally listed endangered or threatened species.

No impacts to threatened or endangered species are anticipated to occur from the NAA.

3.10 Air Quality

The Clean Air Act (CAA) allows the U.S. Environmental Protection Agency (USEPA) to set air quality standards for pollutants considered harmful to public health and welfare. The National Ambient Air Quality Standards (NAAQS) set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. These standards have been established for six criteria pollutants including Carbon monoxide (CO), Lead (Pb), Nitrogen dioxide (NO₂), Ozone (O₃), Particulate matter (PM10 and PM2.5), and Sulfur dioxide (SO₂), and each state is required to develop implementation plans for each pollutant. Areas are generally in "attainment" of the standards for the pollutants listed above or in "nonattainment". Nonattainment areas are required by the CAA to comply with the NAAQS standards through the evaluation and development of a maintenance plan. The USEPA makes a conformity



determination to assure that the actions within the maintenance plan conform to the respective state's implementation plan for each nonattainment pollutant.

According to KYDEP Division for Air Quality, Magoffin County is classified as in "attainment" for NAAQS pollutants. The operation of the PAA would not result in significant impacts to air quality; however, construction of the PAA would have the potential to cause localized and temporary, nuisance air quality impacts. Potential sources of these impacts include emissions from heavy equipment operation which include diesel fuel fumes and exhaust. The PAA would not require around the clock construction; therefore, equipment downtime would allow for dispersion of the nuisance fumes generated during operation. The proposed action is therefore exempt from making a conformity determination, since estimated emissions from construction equipment would be far below the *de minimis* standards of 100 tons/year, which are the minimum threshold for which a conformity determination must be performed.

The NAA would not generate construction related air emissions.

3.11 Noise

3.11.1 Background

Noise is measured as Day Night average noise levels (DNL) in "A-weighted" decibels that the human ear is most sensitive to (dBA). There is no Federal standard for allowable noise levels; however, the USACE and other Federal agencies have provided guidance for evaluating noise level impacts.

The USACE Safety and Health Requirements Manual (September 2008) provides criteria for permissible noise exposure levels, as well as thresholds for the consideration of hearing protection and/or the implementation of sound reduction controls. Table 1 presents the minimum duration and noise level thresholds outlined in the USACE Safety and Health Requirements Manual.

Duration/day	Noise level	
(hours)	(dBA)	
8	90	
6	92	
4	95	
3	97	
2	100	
1.5	102	
1	105	

 Table 1

 Permissible Non-Department of Defense Noise Exposures

Source: USACE Safety and Health Requirements Manual, 2008



The Department of Housing and Urban Development (HUD) Guidelines denote DNLs below 65 dBA as normally acceptable levels of exterior noise in residential areas. Several other agencies, including the Federal Energy Regulatory Commission (FERC), use a DNL criterion of 55 dBA as the threshold for defining noise impacts in sparse suburban and rural residential areas (Schomer et al 2001). According to Dr. Paul Schomer in his 2001 Whitepaper, "while there are numerous thresholds for acceptable noise in residential areas, research suggests that an area's current noise environment, which has experienced noise in the past, may reasonably expect to tolerate a level of noise about 5 dBA higher than the general guidelines." Down and Stock (1978) conducted a study to determine the human reaction to progressive sound increases. The results of the study indicate that increases in ambient noise levels below 5 dB go unnoticed while every 5 dB increase above that level becomes increasing noticeable and increases over 20 dB are intolerable (Table 2).

Increase in Sound Pressure (dB)	Human Reaction	
Under 5	Unnoticed to tolerable	
5 - 10	Intrusive	
10 - 15	Very noticeable	
15 - 20	Objectionable	
Over 20	Very objectionable to intolerable	

Table 2	
Human Reaction to Increases in Sound Pressure Lev	e l

Source: Down and Stocks, 1978

3.11.2 Analysis

Construction noise would be similar to that of farm equipment and other small machinery used throughout the local area. A backhoe and hand tools are the equipment to be used during installation of the PAA. A backhoe emits noise levels around 80 dBA at 50 feet. Construction will take place approximately ten hours each day, generating noise during the daytime (7am-6pm) when many residents are at work. Therefore, a reasonable exposure time of two hours would be expected during times which residents may be home during the day. While the construction noise generated would be considered unacceptable according to HUD standards, these limited exposures and time intervals are still within allowable Corps safety levels (USACE 2003). Further, they are similar to typical neighborhood noise generated by gas powered lawnmowers in the local area, which could range from 90-95 dBA at three feet and 70-75 dBA at 100 feet. There could be an increase in noise levels during the construction period of the PAA. However, the impact would be localized, temporary and should not approach nuisance levels. Due to daytime construction and the short and limited duration of elevated noise levels associated with the PAA, impacts from noise should be minor and temporary.

No impacts to noise would are anticipated to occur from the NAA.



3.12 Socioeconomic Conditions

Under Executive Order 12898 "Federal Action to Address Environmental Justice in Minority Populations and Low Income Populations," Federal agencies are directed to identify, address, and avoid disproportionately high and adverse human health or environmental effects on minority and low income populations.

According to the U.S. Census Bureau, the 2011 population estimate for Magoffin County, Kentucky was 13,216. The 2011 census indicates that Magoffin County is 98.8% Caucasian and has a median family income of \$22,779 compared with \$41,576 for the state of Kentucky. Individuals residing in Magoffin County below the poverty level were estimated to be 29.8% compared to the 17.7% statewide.

Water service provided by the Salyersville Water Plant Improvement Project will be readily available to all of the homes and commercial buildings in the Project Area. The most immediate environmental impact would be an increase in the standard of living for residents in the Project Area with improved water treatment service. Over time, the positive effects of the project would spread into surrounding communities. No homes or buildings would be impacted by the proposed project. The proposed Salyersville Water Plant Improvement Project would equally serve all residents within the water collection system. Further, project cost via user rates would be spread evenly to all customers of the system. Therefore, the project meets the directive of EO 12898 by avoiding any disproportionately high adverse human health or environmental effects on minority or low income populations.

No impacts to minority and low income populations are anticipated to occur from the NAA.

3.13 Aesthetics

The PAA will be constructed within the existing water treatment plant boundary with no new ground disturbances. Disturbance of the local aesthetics is not anticipated during construction of the PAA. No impacts to aesthetics would occur from the NAA.

3.14 Transportation and Traffic

Existing traffic patterns in the Project Area consist of residential access to homes and businesses and through traffic associated with State Routes 7 and several small streets and access roads. The PAA will be constructed entirely within the walls of the existing water treatment plant with no road closures or delays anticipated. The local street immediately adjacent to the water treatment plant ends in a dead end where no through traffic occurs. A few homes occur along this dead end street; however, construction of the PAA will not impede traffic flow along this road. No impacts to transportation and traffic are anticipated to occur from the PAA or NAA.



3.15 Health and Safety

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of the nation's drinking water. Under the SDWA, the USEPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The KYDEP DOW is required to submit an annual report of public water system violations of the SDWA to the USEPA. The Salyersville water treatment plant is currently not in compliance with DOW requirements. The 2011 Annual Public Water System Detailed Compliance Report listed two compliance violations for the Salyersville water treatment plant, total trihalomethanes (TTHM) and total haloacetic acids (HAA5).

The use of chlorine to disinfect water for the purpose of drinking produces low levels of various disinfection by-products with TTHM and HAA5 being the most common. TTHM are a group of four chemicals that are formed along with other disinfection byproducts when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. The trihalomethanes are chloroform, bromodichloromethane, dibromochloromethane, and bromoform. HAA5 are a group of chemicals that are formed along with other disinfection byproducts when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. The trihalomethanes are chloroform other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. The regulated HAA5 chemicals are monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid (Pereira, 2000). Some people who drink water containing TTHM and HAA in excess of the maximum contaminant level (MCL) over many years may have an increased risk of developing cancer (USEPA, 2012). The PAA has been designed to bring the Salyersville water treatment plant into compliance with SDWA and DOW regulations.

Under the NAA, current improperly treated water would continue in the project area, causing health and safety concerns associated with levels of TTHM and HAA5 exceeding USEPA standards.

3.16 Cumulative Effects

The USACE must consider the cumulative effects of the proposed project on the environment as stipulated in the National Environmental Policy Act (NEPA). Cumulative effects are "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 actions". Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR Part 1508.7 Council on Environmental Quality [CEQ] Regulations).

The cumulative effects analysis is based on the potential effects of the proposed project when added to similar impacts from other projects in the region. An inherent part of the cumulative effects analysis is the uncertainty surrounding actions that have not yet been fully developed. The CEQ regulations provide for the inclusion of uncertainties in the analysis and states that "when an agency is evaluating reasonably foreseeable significant adverse effects on the human



environment. ...and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking" (40 CFR 1502.22).

Temporal and geographical limits for this project must be established in order to frame the analysis. These limits can vary by the resources that are affected. The upgrade of the water treatment plant will have temporary and insignificant impacts to the environment. The only resource that would show long term effects would be water quality. The temporal limits for assessment of this impact would initiate in 1974 with the passage of the SDWA, which is the environmental statute driving the need for the PAA, and end in 2018 or five years after completion of this project. The geographical extent would be approximately two square miles including Salyersville and the surrounding area.

Analysis of the potential impacts, both direct and indirect associated with the NAA and PAA, has been performed for resources within the Project Area. As the PAA is intended to minimize the probability of incurring risks associated with the NAA, this would result in overall beneficial effects. As described previously, resources which would likely be adversely affected by the NAA would include the health and safety of the human environment. The availability of Federal funds through programs, such as the 531 Program, to assist communities with installation and construction of water-related environmental infrastructure and resource protection and development projects in Kentucky, is an additional benefit. The significance of this action on water quality and health and safety will be positive. Given the current programs that are in place for the foreseeable future and the overall beneficial effect implementation of the PAA, there is expected to be a positive cumulative effect on water quality to past, present, and reasonably foreseeable actions.

4.0 REQUIRED COORDINATION

4.1 Public Involvement

This draft EA along with the draft Finding of No Significant Impact (FONSI) will be circulated to the local community and local, state and Federal governmental agencies with jurisdiction by law or special expertise for a 30-day review/comment period. A copy will be made available at the local Magoffin County Public Library and a notice published in the *Salyersville Independent*, located in Salyersville, Kentucky. A mailing list of parties that received notice of this draft EA has been included in Appendix C.

4.2 Required Agency Coordination

Coordination with Federal, state, county, and local agencies has been conducted throughout the preparation of this report. All correspondence letters can be found in Appendix B. The USFWS, KYDEP, NRCS and Kentucky Heritage Council (SHPO) have all been asked to review the project for potential negative resource impacts prior to issuance of the draft EA. This draft EA will be sent to interested agencies for review and comment for additional review and comment.



5.0 CONCLUSION

No significant adverse impacts have been identified with implementation and operation of the proposed Salyersville Water Plant Improvement Project. The construction of the PAA would take place entirely within the existing water plant facility. Health and safety as well as water quality benefits, would be realized immediately and cumulatively with project implementation.

Short term impacts associated with construction of the Salyersville Water Plant Improvement Project would be localized and minor. Possible temporary negative impacts on the human environment could include increased noise during construction. However, these impacts would be temporary and insignificant when compared to the positive permanent impact the project would have on the local community's increased standard of living.

REFERENCES

USEPA. Basic Information about Disinfection Byproducts in Drinking Water: Total Trihalomethanes, Haloacetic Acids, Bromate, and Chlorite. March 2012.

Pereira, Michael A. (USEPA) Final Report: Health Risk of the Trihalomethanes Found in Drinking Water Carcinogenic Activity and Interactions. 2000.



6.0 ACRONYM GLOSSARY

CAA – Clean Air Act
CEQ – Council on Environmental Quality
CWA – Clean Water Act
dB – Decibel
dBA – "A-weighted" decibel
DNL – Day Night average noise Levels
DOW – Department of Water
EA – Environmental Assessment
EIS – Environmental Impact Statement
EO – Executive Order
FEMA – Federal Emergency Management
Agency
FIRM – Flood Insurance Rate Map
FONSI – Finding Of No Significant Impact
FPPA – Farmland Protection Policy Act
FWCA – Fish and Wildlife Coordination
Act
HAA5 – Haloacetic Acids
HTRW – Hazardous, Toxic and Radioactive
Waste
KHC – Kentucky Heritage Council
KDFWR – Kentucky Department of Fish
and Wildlife Resources
KYDEP – Kentucky Department of
Environmental Protection
KYPDES – Kentucky Pollutant Discharge
Elimination System
MCL – Maximum Contaminant Level
NAA – No Action Alternative

NAAQS - National Ambient Air Quality **Standards** NEPA – National Environmental Policy Act NHPA – National Historic Preservation Act NRCS - Natural Resource Conservation Service NRHP - National Register of Historic Places NWI – National Wetlands Inventory PAA – Proposed Action Alternative ROD – Record of Decision SCADA – Supervisory Control and Data Acquisition SDWA – Safe Drinking Water Act SHPO - State Historic Preservation Office TTHM – Total Trihalomethanes USACE – United States Army Corps of Engineers USDA – United States Department of Agriculture USEPA – United States Environmental **Protection Agency** USFWS - United States Fish and Wildlife Service WRDA – Water Resources Development Act

Appendix A Exhibits





State & County QuickFacts

Magoffin County, Kentucky

	Magoffin	
People QuickFacts	County	Kentucky
Population, 2011 estimate	NA	4,369,356
Population, 2010	13,333	4,339,367
Population, percent change, 2000 to 2010	0.0%	7.4%
Population, 2000	13,332	4,041,769
Persons under 5 years, percent, 2010	6.0%	6.5%
Persons under 18 years, percent, 2010	24.0%	23.6%
Persons 65 years and over, percent, 2010	12.9%	13.3%
Female persons, percent, 2010	49.9%	50.8%
White persons, percent, 2010 (a)	98.6%	87.8%
Black persons, percent, 2010 (a)	0.1%	7.8%
American Indian and Alaska Native persons, percent, 2010 (a)	0.3%	0.2%
Asian persons, percent, 2010 (a)	0.1%	1.1%
Native Hawaiian and Other Pacific Islander, percent, 2010		
(a)	0.0%	0.1%
Persons reporting two or more races, percent, 2010	0.7%	1.7%
Persons of Hispanic or Latino origin, percent, 2010 (b)	0.7%	3.1%
White persons not Hispanic, percent, 2010	98.3%	86.3%
Living in same house 1 year & over, 2006-2010	92.3%	84.0%
Foreign born persons, percent, 2006-2010	0.0%	3.1%
Language other than English spoken at home, pct age 5+, 2006-2010	0.5%	4.6%
High school graduates, percent of persons age 25+, 2006-2010	65.5%	81.0%
Bachelor's degree or higher, pct of persons age 25+, 2006-2010	10.5%	20.3%
Veterans, 2006-2010	506	331,344
Mean travel time to work (minutes), workers age 16+,		
2006-2010	30.3	22.5
Housing units, 2010	5,950	1,927,164
Homeownership rate, 2006-2010	78.2%	69.9%
Housing units in multi-unit structures, percent, 2006-2010	3.9%	17.7%
Median value of owner-occupied housing units, 2006-2010	\$46,200	\$116,800
Households, 2006-2010	4,671	1,676,708
Persons per household, 2006-2010	2.83	2.48
2006-2010 2006-2010 2006 Per capital money income in past 12 months (2010 dollars)	\$13,849	\$22,515
Median household income 2006-2010	\$22,779	\$41,576
Persons below poverty level, percent, 2006-2010	29.8%	17.7%
	Magoffin	
Business QuickFacts	County	Kentucky
Private nonfarm establishments, 2009	172	90,661 ²
Private nonfarm employment, 2009	1,587	1,486,545 ²

1 of 2





User Remarks:







Electric Actuators in Pipe Gallery



Plant Effluent Flow Meter in Pipe Gallery



Rapid Mix Motor



Filter Basin #1



Filter Basin #2



Flocculation Basin #3



Chlorine Gas Tanks for Water Disinfectant Treatment



Fluoride Feeder

Appendix B Agency Coordination since 1977

March 22, 2012

10-430

Attn: Lee Andrews, Field Supervisor U.S. Fish & Wildlife Services Kentucky Ecological Services Field Office 330 West Broadway, Room 265 Frankfort, KY 40601

Re: Salyersville Water Plant Improvements Project – Phase II (WX21153517) Environmental Assessment

Dear Mr. Andrews:

The City of Salyersville has acquired funding for the design and construction of the Salyersville Water Plant Improvements Project – Phase II located in central Magoffin County, Kentucky. This project plans to repair, replace, and improve existing equipment and processes that are imperative in the safety and effectiveness of producing water for the City of Salyersville and the surrounding area.

Summit Engineering, Inc. is preparing an Environmental Assessment for this project. The project will take place within the limits of the existing security fence and within the limit of the existing control building. With the exception of minor excavation (in previously disturbed area) there are no earth disturbing activities. Essentially 98 percent of this project is replacement of aging electro and mechanical facilities within walls of existing control building. Please find enclosed a 1'' = 1,000' scale map of the project area.

Please review the area of impact and respond as appropriate. I will assume, if I have not received a response from you within 30 days of this letter, that your office does not anticipate any negative environmental impacts from this project in your areas of responsibility.

Thank you for your time and assistance.

Sincerely, SUMMIT ENGINEERING, INC.

James Nyquist, EIT Project Engineer

cc: File

120 Prosperous Place, Suite 101, Lexington, Kentucky 40509 🔺 859-264-9860



since 1977

2012-B-0416

RECEIVED

MAR 2 3 2012

USFWS KYFO

10-430

March 22, 2012

Attn: Lee Andrews, Field Supervisor U.S. Fish & Wildlife Services Kentucky Ecological Services Field Office 330 West Broadway, Room 265 Frankfort, KY 40601

or federally listed endangered or threatened species are anticipated from this proposal.

No significant adverse impacts to wetlands

Fleid Supervisor Date U. S. Fish and Wildlife Service Frankfort, KY 40601

Re: Salyersville Water Plant Improvements Project – Phase II (WX21153517) Environmental Assessment

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James Nyquist, EIT Project Engineer

cc: File

120 Prosperous Place, Suite 101, Lexington, Kentucky 40509 859-264-9860



ning Engineering Architecture

vil Engineering Surveying avironmental GIS Services SUMMIT ENGINEERING INC.

since 1977

March 22, 2012

10-430

Attn: Marty McCleese USDA – Natural Resources Conservation Service 955 Prestonsburg Highway, Suite 2 West Liberty, KY 41472

Re: Salyersville Water Plant Improvements Project – Phase II (WX21153517) Environmental Assessment

Dear Mr. McCleese:

The City of Salyersville has acquired funding for the design and construction of the Salyersville Water Plant Improvements Project – Phase II located in central Magoffin County, Kentucky. This project plans to repair, replace, and improve existing equipment and processes that are imperative in the safety and effectiveness of producing water for the City of Salyersville and the surrounding area.

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James Nyquist, EIT *Project Engineer* cc: File

120 Prosperous Place, Suite 101, Lexington, Kentucky 40509 + 859-264-9860

SUMMIT ENGINEERING INC.

since 1977

March 22, 2012

10-430

Attn: Dan Bailey, PM-PD-S U.S. Army Corps of Engineers Huntington District 502 Eighth St. Huntington, WV 25701-2070

Re: Salyersville Water Plant Improvements Project – Phase II (WX21153517) Environmental Assessment

Dear Mr. Bailey:

The City of Salyersville has acquired funding for the design and construction of the Salyersville Water Plant Improvements Project – Phase II located in central Magoffin County, Kentucky. This project plans to repair, replace, and improve existing equipment and processes that are imperative in the safety and effectiveness of producing water for the City of Salyersville and the surrounding area.

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Sincerely, SUMMIT ENGINEERING, INC.

James Nyquist, EIT Project Engineer

cc: File

120 Prosperous Place, Suite 101, Lexington, Kentucky 40509 + 859-264-9860

SUMMIT ENGINEERING INC.

since 1977

March 22, 2012

10-430

Attn: Lindy Casebier State Historic Preservation Officer Kentucky Heritage Council 300 Washington Street Frankfort, KY 40601

Re: Salyersville Water Plant Improvements Project – Phase II (WX21153517) Environmental Assessment

Dear Mr. Casebier:

The City of Salyersville has acquired funding for the design and construction of the Salyersville Water Plant Improvements Project – Phase II located in central Magoffin County, Kentucky. This project plans to repair, replace, and improve existing equipment and processes that are imperative in the safety and effectiveness of producing water for the City of Salyersville and the surrounding area.

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James Nyquist, EIT Project Engineer

cc: File

120 Prosperous Place, Suite 101, Lexington, Kentucky 40509 * 859-264-9860



STEVEN L. BESHEAR GOVERNOR

TOURISM, ARTS AND HERITAGE CABINET KENTUCKY HERITAGE COUNCIL

THE STATE HISTORIC PRESERVATION OFFICE

300 WASHINGTON STREET FRANKFORT, KENTUCKY 40601 PHONE (502) 564-7005 FAX (502) 564-5820 www.heritage.ky.gov MARCHETA SPARROW SECRETARY

LINDY CASEBIER ACTING EXECUTIVE DIRECTOR AND STATE HISTORIC PRESERVATION OFFICER

April 3, 2012

Mr. James Nyquist, EIT Project Engineer Summit Engineering, Inc. 120 Prosperous Place, Suite 101 Lexington, Kentucky 40509

RE: Salyersville Water Plant Improvements Project – Phase II (WX21153517)

Dear Mr. Nyquist:

Thank you for your letter concerning the above referenced project. A review of our files indicates that the proposed project should not require an archaeological survey. Therefore, we have no further comments and your responsibility to consult with the Kentucky State Historic Preservation Officer under the Section 106 review process for this project is fulfilled.

In the event that human remains are encountered during project activities, all work should be immediately stopped in the area and the area cordoned off, and in accordance with KRS 72.020 the county coroner and local law enforcement must be contacted immediately. Upon confirmation that the human remains are not of forensic interest, the unanticipated discovery must be reported to the Kentucky Heritage Council.

Should you have any questions, please contact Nick Laracuente of my staff at (502) 564-7005 ext 151.

Contr Sincerely

Lindy Casebier, Acting Executive Director Kentucky Heritage Council and State Historic Preservation Officer

LC:nrl



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DEPARTMENT OF THE ARMY U.S. ARMY ENGINEER DISTRICT, LOUISVILLE EASTERN KENTUCKY REGULATORY OFFICE 845 Sassafras Creek Road Sassafras, Kentucky 41759-8806

April 12, 2012

Operations Division Regulatory Branch (South) ID No. LRL-2012-306

James Nyquist Summit Engineering, Inc. 120 Prosperous Place Suite 101 Lexington, KY 40509

Dear Mr. Nyquist:

This is in regard to your March 22, 2012 letter on behalf of the City of Salyersville, concerning a proposal for the City of Salyersville Water Plant Improvement Project - Phase II (WX21153517). Please refer to File No. LRL-2012-306 in any future correspondence with us concerning this project.

The proposed project was reviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act of 1899 requires that a DA permit be obtained for certain structures or work in or affecting navigable waters of the United States (U.S.), prior to conducting the work (33 U.S.C. 403). Section 404 of the Clean Water Act requires that a DA permit be obtained for the placement or discharge of dredged and/or fill material into waters of the U.S., including wetlands, prior to conducting the work (33 U.S.C. 1344).

Your letter states that the project will take place within the limits of the existing security fence and within the existing control building. Therefore, it does not appear that a DA permit would be needed to proceed with these activities. If work affecting navigable waters or a discharge of dredged or fill materials into waters of the U.S. would be necessary for this project, a DA permit application should be submitted to this office before the work is done. The Corps of Engineers is available to participate in any onsite inspections of the proposed site and/or attend preapplication meetings to discuss aquatic resource impact avoidance and minimization.

If we can be of any further assistance, please contact us by writing to the above address, ATTN: CELRL-OP-FS, or call me at 606-642-3404. Any correspondence on this matter should refer to our ID Number LRL-2012-306.

Sincerely,

David Baldridge Team Leader Regulatory Branch Appendix C

Mailing List

Section 531 Salyersville Water Plant Improvement Project Environmental Assessment Mailing List

Federal Agencies and Officials

Honorable Mitch McConnell United States Senator 771 Corporate Drive, Suite 108 Lexington, Kentucky 40503

Honorable Rand Paul United States Senator 771 Corporate Drive, Suite 105 Lexington, Kentucky 40503

Honorable Harold Rogers Representative In Congress 110 Resource Court, Suite A Prestonsburg, Kentucky 41653

U.S. Environmental Protection Agency Region IV, Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW Atlanta, Georgia 30303

USDA Natural Resources Conservation Service West Liberty Service Center 955 Prestonsburg St. West Liberty, Kentucky 41472

Mr. Virgil Lee Andrews, Field Supervisor United States Fish and Wildlife Service Kentucky Ecological Services Field Office 330 West Broadway, Suite 265 Frankfort, Kentucky 40601

State Agencies and Officials

Honorable Steve Beshear Governor of Kentucky 700 Capitol Avenue, Suite 100 Frankfort, Kentucky 40601 Lindy Casebier, Acting Director State Historic Preservation Office Kentucky Heritage Council 300 Washington Street Frankfort, Kentucky 40601

Kentucky Department of Environmental Protection Division of Water 200 Fair Oaks Lane, Fourth Floor Frankfort, Kentucky 40601

Dr. Jonathon W. Gassett, Commissioner Kentucky Department of Fish and Wildlife Resources #1 Sportsman's Lane Frankfort, Kentucky 40601

County Agencies and Officials

Magoffin County Public Library 141 Church Street Salyersville, Kentucky 41465

Municipal Agencies and Officers

Honorable Stanley Howard Mayor of Salyersville 315 East Maple Street Salyersville, Kentucky 41465

Civil and Environmental Engineering Consultants

James Nyquist, E.I.T Summit Engineering, Inc. 120 Prosperous Place, Suite 101 Lexington, Kentucky 40509

Appendix D

Hazardous, Toxic, and Radioactive Waste (HTRW) Memorandum

CELRH-EC-CE (1110)

18 October 2012 Wolfe 5327

MEMORANDUM FOR CELRH-PM-PD-S (Attention: Dan Bailey)

SUBJECT: Acceptance of the October 15, 2012 Addendum to the March 22, 2012 Limited Phase I Hazardous, Toxic, Radioactive Waste (HTRW) Investigation Report, Salyersville Water Treatment Plant Improvements Project – Phase II, Salyersville, KY 41465.

1. The October 15, 2012 addendum to the above referenced report was reviewed by EC-CE and was determined to be acceptable. This completes the HTRW investigation of the above referenced project. No further HTRW investigation is necessary at this time.

2. If you have any questions or further comments, please contact Janet Wolfe at x5327.

H. KMEN

Chief, Environmental & Remediation Section