



November 9, 2020

**Robin Wright, Safety Manager**  
**LFUCG - Division of Water Quality**  
**125 Lisle Industrial Avenue**  
**Suite 180**  
**Lexington, KY 40511**

**Task Order Request/Scope of Work**  
**Electrical Safety Program Compliance & Improvement**  
**July 1, 2020**

Projected Cost Summary:  
Electrical Safety Program Plan Phase IV (See Attached e-Hazard Detailed Scope)  
For:  
Lexington Fayette Urban County Government (LFUCG)  
Division of Water Quality-West Hickman and Town Branch WWTPs  
Task Order #8: Budgeting Information and Summary of Project Deliverables

Task Order #8 – July 1, 2020 through June 30, 2021

e-Hazards Electrical Safety Services: Completion of Phase IV Work (scope and specific costs and timeframes are attached as previously scoped and budgeted).

e-Hazards Phase IV Work Tasks:

Town Branch/West Hickman: Provisions for consulting, review and updating of policies, programs and procedures: \$19,990.00

West Hickman – NFPA-70E Training, High Voltage Training, HV Demonstration of Skills and Arc Flash Engineering Study Review & Update

Total West Hickman: \$39,375.00

Town Branch Scope: NFPA-70E Training, High Voltage Training, HV Demonstration of Skills and Arc Flash Engineering Study Review & Update

Total Town Branch: \$39,375.00

ALL4, LLC 15% administrative mark-up: \$14,811.00

**TOTAL BUDGET TASK ORDER 8 (Electrical): \$113,551.00**

Prepared By:

Kevin M. Chaplin

Senior Project Manager/Industrial Hygienist

Q:\CLIENTS - ACTIVE PROJECTS\LFUCG\2020-6836.(TASK 5C AND 7EHAZ)\2021 BUDGETING TASK 5D\2021 TASK 8 EHAZ.ALL4.REVIS.BUDGETING.PLAN.SCOPE.DOCX

Attachment: e-Hazard Program Plan, Phase IV

cc: Mr. Charles H. Martin, P.E. Director, Division of Water Quality

# PROGRAM PLAN

## PHASE IV

### Introduction

This program proposes the continuation of work from Phase III of the electrical safety program at LFUCG. As workers are appointed as electrically qualified persons, annual supervisory work practice audits will be conducted, relevant procedures updated, and supporting documentation provided. This phase of the project provides for the NFPA 70E refresher training. Provision is also made for the updating of the West Hickman and Town arc flash engineering studies to capture the recent upgrades and plant changes.

### Project Deliverables

The project deliverables are grouped into three parts. Although most of the deliverables occur centrally, site specific tasks are categorized per West Hickman or Town Branch plants.

#### **A** Global Program

1. Annual updates and review of LFUCG WWTP Procedure, Policy, and Training Development
  - a. Provision for updating the Electrical Safety Policy
  - b. Provision for updating the Electrical Hazard Identification and Risk Assessment Program
  - c. Provision for updating of the PPE Specification
  - d. Provision for the updating of the Auditing Program

#### **B** West Hickman WWTP

1. Annual Low Voltage Training
  - a. Refresher low voltage classroom training
  - b. Annual supervisory work audit - Low voltage hands on demonstration of skills for electricians
2. Annual High Voltage Training
  - a. High voltage refresher classroom training
  - b. Annual supervisory work audit – High voltage hands on demonstration of skills for electricians
3. Annual West Hickman Arc Flash Engineering Study Update
  - a. Review of plant changes since the last arc flash engineering study. Required as per NFPA 70E – 2018 130.5(G).
    - i. Data Collection at West Hickman
    - ii. Arc Flash Model using software
    - iii. Labeling of equipment
    - iv. Provision of reporting and associated files
4. Annual West Hickman Site Audit
  - a. NFPA 70E – 2018 and OSHA Electrical Safety audit

**C Town Branch WWTP**

1. Annual Low Voltage Training
  - a. Refresher low voltage classroom training
  - b. Low voltage hands on demonstration of skills – Maintenance Team Annual supervisory work audit - Low voltage hands on demonstration of skills for electricians
  
2. Annual High Voltage Training
  - a. High voltage refresher classroom training
  - b. Annual supervisory work audit – High voltage hands on demonstration of skills for electricians
  
3. Annual Town Branch Site Audit
  - a. NFPA 70E – 2018 and OSHA Electrical Safety audit
  
4. Annual Town Branch Arc Flash Engineering Study Update
  - a. Review of plant changes since the last arc flash engineering study. Required as per NFPA 70E – 2018 130.5(G).
    - i. Data Collection at Town Branch
    - ii. Arc Flash Model using software
    - iii. Labeling of equipment
    - iv. Provision of reporting and associated files

Project Execution

<b>A. Electrical Program and Policies Review</b>			
Item	Task Description	Task Reference	Total Cost
1	Provisions for review and updating of policies, programs, and procedures.	A.1.(a)-(d)	\$19,990.00
<b>B. West Hickman Scope</b>			
1	LV Refresher Training for Electricians	B.1.(a)	\$4,950.00
2	HV Refresher Training for Electricians	B.2.(a)	\$4,950.00
3	HV and LV Demonstration of Skills	B.2.(b)	\$4,775.00
4	West Hickman AFS updates	B.3.(a)	\$19,750.00
5	Site Electrical Safety Audit	B.4.(a)	\$4,950.00
<b>C. Town Branch Scope</b>			
1	LV Refresher Training for Electricians	C.1.(a)	\$4,950.00
2	HV Refresher Training for Electricians	C.2.(a)	\$4,950.00
3	HV and LV Demonstration of Skills	C.2.(b)	\$4,775.00
4	Site Electrical Safety Audit	C.3.(a)	\$4,950.00
5	Town Branch Arc Flash Engineering Study review and update	C.4.(a)	\$19,750.00
<b>Total</b>			<b>\$98,740.00</b>