



**Jackson Municipal Utilities  
Jackson, Missouri**

Engineering Services for  
Emissions Compliance Test

Submitted by:  
**BHM Engineers, Inc.**

February 10, 2022



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Mr. Chuck Reed  
Jackson Municipal Utilities  
420 Florence Street  
Jackson, MO 63755

Ref: **NESHAP Stack Testing  
Letter of Proposal**

Dear Mr. Reed:

We are pleased to submit our proposal to perform emissions testing on the six electric generating engines located at the Jackson's City Power Plant.

**BHMG Proposed Scope of Work:**

BHMG will prepare a test protocol to be submitted to the Missouri Department of Natural Resources Air Pollution Control Program (APCP) that will describe the testing procedures. The protocol will detail the procedures to be performed that will meet the testing requirements of the APCP and the United States Environmental Protection Agency (USEPA).

BHMG and its subcontractor, RMC Environmental, will provide the labor, equipment, and technical expertise required to conduct an air emissions test project to determine the destruction efficiency of each of the six engines. The testing will be in accordance with the methods required by the APCP and USEPA to demonstrate compliance with the required 70% reduction in carbon monoxide (CO). The concentrations of CO and oxygen will be measured in the inlet and outlet of the catalytic converters on each of the engines in accordance with USEPA Method 10 per 40 CFR 60 Subpart ZZZZ, "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines"

Each engine will be tested while combusting diesel fuel. The City of Jackson will be responsible for running each engine at the City's desired generating rate during the duration of emission tests for each engine. On a schedule that is mutually agreed upon by the City and BHMG, the engines will be tested, two per day on three consecutive days. One will be tested each morning and one each afternoon, unless the City requests that the schedule be modified.

At the conclusion of the testing, BHMG will prepare a draft test report for review by the City. The report will describe the testing procedures, the plant operating conditions during the test and the test results. Upon receipt of the City's comments on the draft report, BHMG will prepare a final report that will be ready for submission to APCP.

The City of Jackson will be responsible for providing electrical service, two 20 amp electrical circuits, near the engines to be tested. The City of Jackson will also be responsible for providing safe personnel and equipment access to the ports upstream and downstream of the catalytic convertors.

**Test Report:**

BHMG will provide one (1) bound copy and an electronic copy of the final report for your records. BHMG will submit an electronic copy of the report to MDNR-APCP on behalf of Jackson Municipal Utilities if you desire.

**Schedule:**

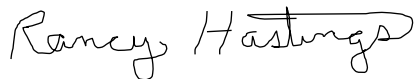
BHMG, upon award of the project will coordinate a test schedule with the City of Jackson. We anticipate arriving at the site during the latter portion of Day 1, at which time the testing trailer will be set up and electrical equipment will be connected to avoid delays on the first testing day. Testing will be performed on each of the following 2-3 days. The test schedule will be dependent upon City of Jackson scheduling production such that the engines will be operated for the required duration of the testing, approximately 3 ½ hours for each test. If the City of Jackson desires, the two engines will be test simultaneously, in which case there will be two days of testing.

**BHMG proposes to complete the NESHAP Stack Testing on fixed fee basis at a price of \$21,600.**

BHMG appreciates this opportunity to provide this proposal to provide services to the City of Jackson. Should any questions arise, please contact me at your convenience.

Sincerely:

**BHMG Engineers, Inc.**



Rancy Hastings, P.E.  
Project Manager

Enclosures: Terms and Conditions, Memorandum of Agreement

## **QUALIFICATIONS**

### **1.1 Overview**

#### **A. MISSION STATEMENT**

BHMG's mission statement of "Powering long standing relationships through successful projects", is not just a statement, but is how we look at every client and every project. Our teams take ownership of every project, and help make the best decisions, not always the easiest decisions for the utility.

#### **B. COMPANY INFORMATION**

BHMG Engineers, Inc. was established in 1972 to provide comprehensive engineering services to local, state, federal and private entities. Today BHMG is a leading provider of utility engineering and consulting services for public power, electric cooperatives and investor-owned utilities, with focus on T&D Substation Design, T&D Line Design, Rate Study, Utility Consulting and Environmental Compliance.

#### **C. ORGANIZATION SIZE**

BHMG has currently approximately 50 professionals and support personnel. Among them are fourteen registered professional engineers, including electrical, mechanical and civil/structural engineers.

#### **D. FACILITIES / EQUIPMENT**

BHMG utilizes the most current project management and design software. We utilize AutoDesk AutoCAD, Bentley Microstation, Microsoft Project, Power Line Systems PLS-CADD, ESRI Arc Map, WinIGS, Visio, Aspen and ETAP Power System Analysis.

#### **E. OFFICES**

BHMG has offices in Arnold, Missouri, and Collinsville, Illinois. The corporate home is located in the Arnold office, which is located at 630 Jeffco Blvd, Arnold, MO 63010.

#### **F. PROFESSIONAL LICENSE**

BHMG has a Certificate of Authority to provide professional engineering services in the State of Illinois, license number 184004266-0002.

#### **G. COMPANY LEGAL INFORMATION**

BHMG is a Missouri corporation headquartered in Arnold. The legal company name is BHMG Engineers, inc. The company ownership is held by six active engineers at the company. The firm has been in business for 49 years.

## 1.2 Staffing

### A. ORGANIZATION STRUCTURE

BHMG has design teams consisting of project engineers, engineers, designers, drafters, and project coordinators. These teams are led by a project manager, the project managers are not restricted to a single team.

### B. PROJECT TEAM

This project will be staffed with the following team, which has specific experience on environmental compliance testing projects and RMC Environmental. Below is the list of the team members.

- a. Project Manager – Rancy Hastings
- b. Engineer – Rita Buechter

# MEMORANDUM OF AGREEMENT

## PROJECT DATA

Date: 02/10/2022

Project Name: NESHAP Stack Testing

Owner's Project Number: \_\_\_\_\_

BHMG Project Number: \_\_\_\_\_

Description of Service: Provide Environmental Engineering Services to conduct emission testing for compliance with NESHAP as described in the letter of February 10, 2022.

## AGREEMENT DATA

Name: Jackson Municipal Utilities – City Power Plant

Address: 420 Florence Street

City: Jackson, Missouri 63755

Phone: 573-243-3536

Status:         Estimate  
               Quotation  
               Revision to Original

Fee Basis:     Cost Multiplier  
                  Lump Sum  
                  Not to Exceed

Dates: Start Upon Authorization

Complete \_\_\_\_\_

The effective date of this agreement and all services and obligations shall be the date of this agreement. The terms and conditions under which we are providing these services are set out on the reverse side of this page and incorporated herein by reference.

## BILLING DATA

Monthly 30 days net

Other (upon submission of test report - 30 days net)

The above is intended as a summary of our agreement for the performance of the work described. Please examine it carefully and, if accurate, indicate your approval and acceptance in the space provided below.

### **BHMG Engineers, Inc.**

By: *Rancy Hastings*  
Rancy J. Hastings, Engineer

## ACCEPTED

The undersigned hereby states that they represent the owner(s) of the above-described project and that the terms and conditions stated above are understood by them and herewith agreed to and accepted. You are hereby authorized and directed to proceed with the work outlined above.

Date \_\_\_\_\_

Signature: \_\_\_\_\_

\_\_\_\_\_  
(Print Name & Title)

**TERMS AND CONDITIONS**  
**BHMG Engineers, Inc.**

To assure an understanding of matters related to our mutual responsibilities, these terms and conditions for services are made a part of this agreement for our services:

**AMENDMENTS**

This agreement may be amended in writing providing both the Owner and Company agree to such modifications.

**COMPENSATION FOR SERVICES**

The basis for compensation will be as identified in the agreement.

When "Lump Sum" or "fixed fee" payment is utilized, it shall include all labor and expenses (for the scope of work as defined in the agreement) incurred by the Company and shall not exceed the fixed payment amount without prior authorization of the Owner.

When a "Payroll Costs" payment is utilized it shall be computed by a multiplier factor times payroll cost plus reimbursable expenses.

The "Payroll Costs" means the salaries and wages paid to all personnel engaged directly on the work plus the cost of customary and statutory benefits including social security contributions, unemployment, health, sick leave, vacation, workmans compensation, incentive and holiday pay applicable thereto.

"Reimbursable Expenses" means the actual expenses incurred directly or indirectly in connection with the work including but not limited to the following: Transportation and subsistence, toll telephone calls, telegrams, reproduction or printing, and computer time. The cost for outside consultants will be increased by five percent to facilitate administrative overheads.

The "Multiplier" is a factor for general direct overhead, indirect costs, profit and other costs. The Multiplier factor rate shall be identified in the agreement.

When an "Hourly" charge is utilized it shall mean the standard flat hourly employee rate as published at least annually by the Company.

**TIME OF PAYMENT**

The Company may submit monthly statements for services and expenses based upon the proportion of the actual work completed at the time of billing. Unless provided for otherwise, payments for engineering services will be due and payable thirty (30) calendar days from the issuance of the Company's statement.

**LATE PAYMENT**

If the Owner fails to make any payment due the Company for services and expenses within the time period specified, a service charge of 1-1/2% per month will be added to the Owners account. This is an annual rate of 18%.

**LIMITATION OF LIABILITY**

The Owner agrees to limit the Company's liability to the Owner and to all construction contractors, subcontractors and others where applicable, on this work, for damages to them due to the Company's negligent acts, errors or omissions, such that the total aggregate liability of the Company to all those named shall not exceed \$50,000 or the Company's total fee for services rendered on this work, whichever is greater.

**TERMINATION**

This agreement may be terminated by either party upon written notice. Any termination shall only be for good cause such as for legal, unavailability of adequate financing or major changes in the work. In the event of any termination the Company will be paid for all services and expenses rendered to the date of termination.

**REUSE OF DOCUMENTS**

All documents including drawings and specifications furnished by Company pursuant to this Agreement are instruments of his services in respect of the work. They are not intended or represented to be suitable for reuse by Owner or others on extensions of this work, or on any other work. Any reuse without specific written verification or adaptation by Company will be at Owner's sole risk, and without liability of Company, and Owner shall indemnify and hold harmless Company from all claims, damages, losses and expenses including attorneys fees arising out of or resulting therefrom. Any such verification or adaptation will entitle Company to further compensation at rates to be agreed upon by Owner and Company.