

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**EPA METHOD 303 COKE OVEN BATTERY INSPECTIONS
CLEVELAND CLIFFS MONESSEN COKE LLC, MONESSEN, PENNSYLVANIA**

I. SCOPE OF WORK:

The Department of Environmental Protection (DEP), Bureau of Air Quality, is soliciting bids from qualified contractors to conduct daily performance testing of coke oven batteries at a facility owned by Cleveland Cliffs Monessen Coke LLC, located in Monessen, Pennsylvania. The results of these daily observations of visual emissions will provide the DEP with the data required to determine the continuous compliance status of these coke oven batteries with 40 CFR, Part 63, Subpart L, the National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries (the coke oven battery NESHAP). In addition to observing visual emissions from the batteries, there are requirements for recording the data and reporting the results in electronic spreadsheets and electronically reporting the results to both the owner/operator of the coke oven batteries and to the DEP.

The inspection contract which is the subject of this Invitation for Bid (IFB) will commence on May 1, 2023 or upon Purchase Order execution and remain in effect for three (3) years with the option to renew for two (2) additional annual terms. The individuals performing the testing must be EPA Method 303-certified to perform coke oven battery inspections, PRIOR to commencement of the contract. Prior to receiving Method 303 training, candidates must first complete a minimum of twelve (12) hours of field observations relevant to Method 303 at an operating coke oven battery. More detail is provided in **Appendix A** of the NESHAP in the section on Method 303.

Information pertaining to the EPA Method 303 certification training may be obtained by contacting Crowder Environmental Associates, Inc., telephone: 731-589-0911, email: jerry@cea303.com. Additional information pertaining to the Cleveland Cliffs facility is presented in **Appendix A** of the Specifications. Questions regarding the contracting or bidding procedures should be directed to Brady Fries at 717-783-8381 (email: bfries@pa.gov). Any technical questions should be directed to Brian Morgan at 717-772-3364 (email: briamorgan@pa.gov).

II. GENERAL SPECIFICATIONS AND REQUIREMENTS:

The contract involves the conducting of daily fugitive emissions observations and measurements in addition to the calculation and reporting of these results as required by §63.309 of Subpart L of 40 CFR Part 63 (the coke oven battery NESHAP), and Method 303 found in **Appendix A** of that subpart.

NOTE: METHOD 303 HAS BEEN REVISED SINCE ITS ORIGINAL PROMULGATION – be certain that the revised procedures are followed.

In order to perform the inspections, the **Method 303-certified observers must receive their initial training and certification prior to the effective date of the contract, and thereafter continue to be recertified so that they maintain their EPA Method 303 inspection certification.** Proof of certification and continuing recertification must be provided to the DEP, upon request.

III. DETAILED TASK SPECIFICATIONS AND REQUIREMENTS:

A. Coke Oven Battery Inspections:

All inspections are to be conducted by a Method 303-certified observer. According to a determination made by the U.S. Environmental Protection Agency, the two batteries at the Cleveland Cliffs coke plant are considered as a single source for conducting the set of five daily charging observations required by Subpart L. This determination does not apply to the measurements of fugitive emissions from doors, lids and offtakes for compliance required by Subpart L. These measurements must be made separately for each battery.

1. Frequency of Inspections and Estimated Time:

The inspections are to be conducted seven days per week, for both coke oven batteries, except as provided in §63.309 of Subpart L and in Method 303. Observations will not be performed when weather conditions make visual observations impossible.

The amount of time to perform inspections in the coke oven battery NESHAP was estimated to be approximately four hours per day. During the past year, the inspections and associated administrative work averaged about 3.75 hours per day. However, this time can vary greatly depending on conditions at the coke plant on a particular day. Weather, charge cycle duration, mechanical breakdowns and maintenance can cause the amount of time to perform the inspections to vary significantly from the range estimated above.

2. Scheduling:

All daily inspections will be unscheduled. The time of day at which the inspections are conducted must vary to ensure representative conditions of operation. Inspections will be limited to daylight hours as it is not anticipated there will be adequate lighting at the Cleveland Cliffs facility to perform night inspections.

3. Methods Used for Inspections:

Each performance test is to be conducted according to the procedures and requirements in §63.309 of Subpart L, and in Method 303 (included in “Part 63, **Appendix A** - Test Methods”).

- a. **Charging, Topside and Door Leak Fugitive Emissions Observations:** Visible emissions (VE) are determined from the following coke oven battery sources: charging systems during charging (VE timing measurements); doors, topside port lids and offtake systems on operating coke ovens (percentage of leaking doors, lids, and offtakes).
- b. **Collecting Main Pressure Check:** After each day’s observations, the certified observer must check and record the collecting main pressure according to the procedure detailed in Section 11.4 of Method 303. These measurements must be included in the compliance demonstration record that the owner and/or operator is required to retain, as specified in Subpart L. There is no requirement to report this particular measurement to the DEP.

B. Recording, Calculation and Reporting Requirements:

Reports, including inspection sheets and daily and monthly inspection reports, must be prepared and furnished as described in this Section. The inspection sheets and reports provided to the coke oven battery owner and/or operator will be included in the compliance demonstration record that the owner and/or operator is required to retain for five years, as part of the record-keeping requirements of this regulation.

All requested data shall be submitted separately for each battery, unless otherwise noted. The sample forms in **Appendices B** and **C** display the observation results and information that must be transmitted to the DEP, on a daily and monthly basis, as required by federal regulation. The actual format of the forms provided by the contractor is not required to be identical to the forms in **Appendices B and C**, provided all required data is presented in a clear and accessible format.

1. Method 303 Daily Inspection Sheets:

The contractor will develop coke oven battery daily inspection sheets in order to tabulate the duration of visible coke charging emissions, plus the number of lids, offtakes and doors with visible emissions. The completed inspection sheets will contain the raw data required for the Method 303 calculations used to determine compliance, such as specific notations of the actual timed, or otherwise noted, visible emissions (including identification of the specific emission points); identification of ovens not operating; doors, lids, offtakes not observed, etc. Section 17.0 of Method 303 includes three sample inspection sheets that identify (as column headings) notations and data that must be recorded on the daily inspection sheets. Additionally, these sheets will include the results of the collecting main pressure check, and the total time required for the inspections performed on that day. A copy of each day's inspection sheets will be provided by the inspector to the coke oven battery owner and/or operator before leaving the battery site after completion of that day's inspections.

2. Method 303 Daily Inspection Report:

The daily inspection report includes the calculated results for that day's inspection for each of the column headings listed in the "Daily Method 303 Coke Oven Battery Monitoring Report" form in **Appendix B**. The daily report will include the percentage of leaking offtakes, lids and doors for that day, in addition to the calculated 30-day rolling averages for those emission points. Also included will be the 30-day rolling average of the log of the seconds of VE for the five consecutive charges measured each day, the sum of the seconds of VE measured during the first four of those charges, and the hours required to perform the Method 303 inspection on that day. Formulas for performing the required calculations are provided in Method 303 found in **Appendix A** of Subpart L of 40 CFR Part 63.

As shown in **Appendix B**, the results from each battery may be entered into the same reporting form, a separate line for each battery. A copy of each day's inspection report will be provided by the inspector to the coke oven battery owner and/or operator, before the inspector leaves the battery site after that day's inspections. The company shall report to DEP within 24 hours any exceedances noted.

3. Monthly Monitoring Report:

The monthly inspection is essentially a compilation of the daily inspection reports for each day of a given month. The column headings are essentially the same – see Monthly Method 303 Coke Oven Battery Monitoring Report - **Appendix C**. A separate reporting form will be used for each of the two batteries. The data in the monthly report includes the percentage of leaking offtakes, lids and doors for each day of the month, in addition to the 30-day rolling averages calculated each day, for those emission points. Also included will be the 30-day rolling average of the log of the seconds of VE for five consecutive charges as measured each day, plus the sum of the seconds of VE measured during the first four of those charges, plus the hours required to perform the Method 303 inspection for each day of that month. Formulas for performing the required calculations are provided in Method 303, found in **Appendix A** of Subpart L of 40 CFR Part 63.

The monthly report will be in the form the DEP approves, which will be sent by e-mail to the DEP (both the regional and central offices) and to the owner and/or operator of the coke oven battery, by the fifth day of the month following the month during which the observations were made. The contractor will attach a copy of all the daily inspection reports to the monthly monitoring report submittal. A Certification of Truth, Accuracy and Completeness of the reported results of that month's inspections, must also be attached and be signed by the Project Manager or other Responsible Officer of the contractor and formatted as a.pdf file. The Certification must attest to the fact that the information is based on the actual inspection data and is true, accurate and complete.

C. Additional Requirements for Observers:

The certified observer shall complete any reasonable safety training program provided by the owner and/or operator prior to conducting any performance test at a coke oven battery. In addition, the certified observer shall comply with all safety rules for the coke oven facility and any applicable federal standards and requirements.

All Occupational Safety and Health Administration (OSHA) safety standards regarding protective clothing and equipment, training, record-keeping and required respiratory protection will be observed. All Method 303 inspectors will be given annual OSHA Coke Oven Physical Exams.

IV. CONTRACT TERM:

The contract shall commence May 1, 2023 or upon Purchase Order execution and terminate April 30, 2026. The initial contract term will be for a duration of three (3) years. Upon mutual agreement, the parties may agree to renew the contract up to two (2) additional one-year annual terms beginning on May 1, 2026 with a final termination date of April 30, 2028 upon the same terms and conditions set forth in the contract. If the contract is to be renewed, the contractor may increase the unit price currently in effect by an amount not to exceed three (3) percent.

The Contractor shall inform the DEP in writing, within 90 days prior to renewal, if the Contractor does not wish to renew the contract.

V. CONTRACTOR QUALIFICATIONS AND EXPERIENCE:

After bid opening and prior to award of the contract, the following information shall be submitted to the DEP:

- A. **Personnel.** Include the number and names of management, inspection, and support staff, etc., who will be responsible for any aspects of the inspection, both in performance of the actual inspections and recordkeeping and reporting portions of the contract. Describe where these personnel will be physically located. Indicate personnel responsibilities and amount of time each has been employed by your company. Also include a contingency plan for obtaining backup staff to perform inspections, when necessary.
- B. **Prior Experience.** For all staff, provide resumes detailing education; experience in Method 303 inspections and similar source observation and inspection tasks; experience in environmental project management; prior experience with coke manufacturing facilities; recordkeeping and reporting requirements pertaining to environmental compliance assessment and project management. DEP reserves the right to require written summations by the contractor regarding quality control and personnel to be utilized, general product standards, etc.
- C. **EPA Method 303 Certification/Recertification History.** Indicate how you will guarantee that personnel performing inspections will have the EPA Method 303 certification by the contract effective date. Upon DEP request, provide a record of EPA Method 303 certification and recertification that includes the dates and locations of this training for personnel performing inspections and describe how this certification status will be maintained.
- D. **Conflict of Interest.** Include the names of anyone, including you or of any subsidiary, parent or other company to which your company is directly or indirectly related, who has performed work during the last three years for Cleveland Cliffs Monessen Coke LLC, or its parent company, or any other subsidiaries of that parent company. Describe the nature of any such work and where the work was performed. State whether, in your opinion, the performance of the work required by this contract will present any conflict of interest and the reasons for your opinion. If it will present a conflict of interest please state how it will be addressed.

DEP reserves the right to require written summations by the contractor regarding quality control, personnel to be utilized, general product standards, etc.

VI. BID AWARD:

The contract shall be awarded on the three-year total of the unit price bid. The bid amount, which shall include all of Contractor's costs, fees and profit (e.g., labor, travel and subsistence, consultant costs, material and supplies, general overhead costs, fee or profit, etc.), shall be provided as a total cost for the three initial years of the contract. That sum will be divided by the number of days encompassed by that three-year period, which includes a leap year day in the year 2024, so will include $(365 \times 3) + 1$ days, for a total of 1096 days. See **Attachment A**.

Contract shall be awarded to the lowest responsive and responsible bidder meeting all the requirements of the Specifications. All bids must be submitted electronically through the Department of General Services' (DGS) eMarketplace website. The eMarketplace website is located at <http://www.emarketplace.state.pa.us>. DEP is not responsible for the maintenance of the eMarketplace website.

DGS's Supplier Service Center ([Supplier Service Center | Department of General Services | Commonwealth of Pennsylvania](#)) is available to assist vendors with registration, bidding and account management. For questions regarding registration help, send an e-mail to RA-PSC_Supplier_Requests@pa.gov or call (877) 435-7363, choose option 1. For questions regarding bidding help, send an e-mail to srmhelp@pa.gov or call (877) 435-7363, choose option 2.

Any questions regarding technical aspects of the contract options shall be directed to Brian Morgan at 717-772-3364 (email: briamorgan@pa.gov). Questions about bidding or contracting procedures shall be directed to Brady Fries at 717-783-8381 (email: bfries@pa.gov) in PA-DEP Contracts, Procurement and Bonding Division. Email communication is preferred.

VII. PAYMENT TERMS:

The contractor will submit monthly invoices, in a format approved by the DEP, to the DEP based upon the number of days of completed Method 303 inspections during the preceding month. The fee to be paid, per day, will be determined by dividing the three-year total amount of the bid by 1096 to arrive at a cost per day for the inspections. Failure to provide any of the information required on the invoice may result in delay of payment. In addition, a copy of each invoice shall be emailed to briamorgan@pa.gov.

Estimated Quantities: Quantities herein are estimated only and may increase or decrease depending on the needs of the DEP. Contractor shall be paid at the unit price bid for actual work performed.

APPENDIX A

FACILITY INFORMATION

CLEVELAND CLIFFS MONESSEN COKE LLC, MONESSEN, PA

Coking cycle approximately 16 hours; approximately 84 ovens pushed per day.
Coking times may vary.

Battery Number *	Number of Ovens Per Battery	Number of Doors Per Battery	Number of Offtakes Per Battery	Number of Lids Per Battery	Number of Collector Mains Per Battery	Oven Height (meters)
1B	37	74	74	148	2	4
2	19	38	38	76	2	4

* These batteries are considered as a single source of conducting observations for a set of five daily charging operations for compliance with 40 CFR Part 63, Subpart L. This does not apply to measurement of fugitive emissions from doors, lids and offtakes for compliance with Subpart L.

DATE: _____

APPENDIX B

CLEVELAND CLIFFS MONESSEN COKE LLC

DAILY METHOD 303 COKE OVEN BATTERY MONITORING REPORT

Battery ID #	Hours Required for Inspection	Daily Results				30-day Rolling Averages			
		Sum of First Four Charging Emissions (secs) ¹	Offtake Leaks (%)	Lid Leaks (%)	Door Leaks (%)	Log of Daily Charging Emissions (secs) ²	Offtake Leaks (%) ³	Lid Leaks (%) ³	Door Leaks (%) ³
1B									
2									

¹ Summed duration of visible emissions for first four charges

² 30-day rolling average of the log of the seconds of visual emissions per consecutive charge

³ 30-day rolling arithmetic average

APPENDIX C

CLEVELAND CLIFFS MONESSEN COKE LLC

MONTHLY METHOD 303 COKE OVEN BATTERY MONITORING REPORT

Date	Hours Required for Inspection	Daily Results				30-Day Rolling Averages			
		Sum of First Four Charging Emissions (secs) ¹	Offtake Leaks (%)	Lid Leaks (%)	Door Leaks (%)	Log of Daily Charging Emissions (secs) ²	Offtake Leaks (%) ³	Lid Leaks (%) ³	Door Leaks (%) ³

¹ Sum of visible emissions for first four charges

² 30-day rolling average of the log of the seconds of visual emissions per consecutive charge

³ 30-day rolling arithmetic average

ATTACHMENT A

COST SHEET

<u>Description</u>		<u>Unit Price</u>		<u>Three-Year Total</u>
1096 Contract Days	x	\$_____	per day	= \$_____