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Source Emissions Testing

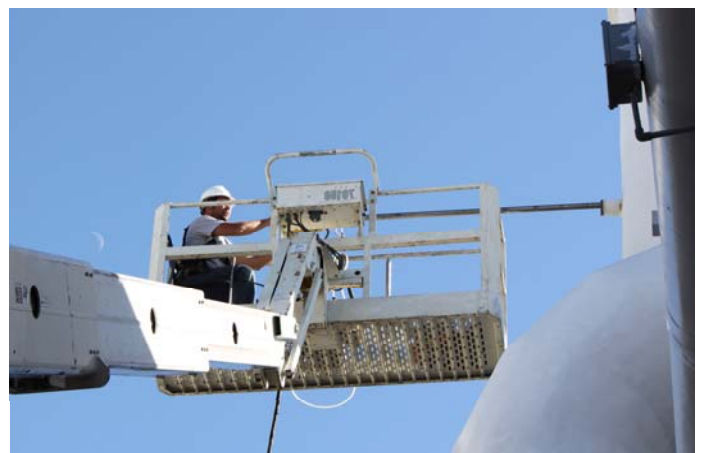
JBR Environmental Consultants, Inc. offers a full complement of source monitoring services to meet a client's individual testing needs. Whether a client needs Reference Method compliance testing, detailed engineering tests, or CEM certifications, JBR's versatile staff can design and execute even the most complex testing programs. JBR's source testing services include:

- Initial Performance and Compliance Testing
- Wet Test Methods, including dioxin/furans
- Continuous Emissions Monitoring
- CEM Relative Accuracy Test Audits (RATA)
- Cylinder Gas Audits
- Destruction Efficiency Testing
- Visible Opacity Observations
- Parametric Monitoring Studies
- Research and Design Testing



JBR employs Qualified Source Testing Individuals (QSTI certification by the Source Evaluation Society) who are experienced in implementing multiple site, multiple source, and multiple method testing programs. JBR is equipped to conduct simultaneous testing on several stacks, or to perform concurrent inlet and outlet testing. Industry testing experience includes:

- Agriculture
- Cement and Lime Kilns
- Chemical Manufacturing
- Food Processing
- Incinerators
- Metals and Mining
- Oil and Gas
- Power Plants
- Semiconductor Fabrication



JBR personnel have worked directly with regulatory agencies in Arizona, California, Colorado, Idaho, Kentucky, Nebraska, Nevada, New Mexico, Ohio, Oregon, Texas, Utah, Virginia, and Washington. When necessary, JBR can act as an intermediary between the client and the regulatory agency.

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Elko, NV - 775.738.8766
Reno, NV - 775.747.5777

Medford, OR - 541.770.6977
St. George, UT - 435.652.8301
Seattle, WA - 425.977.4994

Capabilities

JBR utilizes proven source monitoring equipment integrated with automated data collection and computer technology to allow fast efficient testing while ensuring accurate, dependable results. On-site computer software allows for the calculation of stack flow data within minutes of each sample run, while data from continuous monitors are collected with a datalogger and downloaded to a personal computer for immediate data processing. This allows JBR to provide wet test stack flow data and results from continuous emissions monitors (including relative accuracy test audit data) at the end of each run. These automated data collection capabilities allow JBR to complete quality assurance procedures and issue a testing report in a short period of time.



Method Development

JBR employs EPA reference methods (40 CFR Part 60) or other approved state and local test methodologies in conducting testing programs. Occasionally, these test methodologies are not suitable to meet the specific testing needs for individual sources. JBR's experienced, professional staff can modify existing methodologies or develop new methodologies to meet these unique challenges. If modified methods are required to demonstrate compliance, JBR will work with the client and the appropriate regulatory agency in the design of a testing program that will satisfy regulatory requirements.



Support Services

In addition to the complete range of source monitoring services, JBR's experience with source emissions testing, CEM equipment, permitting, and data analysis allows JBR to offer a unique blend of support services. These services include:

- CEM System Design, Specification and Procurement Assistance
- Emissions Test Data Statistical Analysis
- Establishment of Potential Emission Limits or Caps
- CEM Data Quality Assurance and Reporting
- CEM and Regulatory Requirement Training



Testing Methods

In addition to regulatory agency promulgated source test methods, JBR offers custom methods and equipment to suit special needs. The following table shows some of the most common source test methods we perform:

Continuous Emissions Monitoring	EPA Method
NO _x , SO ₂ , THC, CO, CO ₂ , O ₂	3A, 3B, 6C, 7E, 10, 20
VOC	25A
Relative Accuracy Test Audit	40 CRF, Part 60, Appendix B Performance Spec. 1 through 7 and Part 75
Non-Continuous Emissions Monitoring	EPA Method
Particulates	5, 17, 202
SO ₄ , SO ₃ , SO ₂	6, 8
NO _x	7
HCl, HF, HNO ₃ , H ₃ PO ₄ , Acids	26
Hydrogen Sulfide	11
SO ₃	Controlled Condensation
Particulate Sizing	201, 201A
Multiple Metals	29
Ethylene Oxide (on-site GC)	
Benzene	110
Total Reduced Sulfur	15,16
PAHs	
PCDDs, PCDFs, PCBs	23
Phenols	TO Methods
Total and Hexavalent Chromium	306
Halogenated Organics	18
Vinyl Chloride	106
Butadiene (on-site GC)	
Ethanol	
Ammonia	
VOST	0030
Semi-Volatiles	0010
VOC	204
Cyanide	
Formaldehyde and Acetaldehyde	