

## PROJECT EXPERIENCE SECTION OF THE QSTI APPLICATION

### - EXAMPLE -

For those persons who have taken the exam (or plan to) and are preparing their applications for submittal to the QSTI Review Committee, the project experience section may prove a little open-ended. What are “they” looking for? How much information should I include? Do “they” want a copy of a test report?

First, definitely do **not** send in any test reports. The committee is not equipped to handle such confidential business information. What the committee does need is information about your experience and knowledge sufficient to demonstrate that you can conduct a test project successfully and produce reliable results. As a guideline for completing this element of the application, the QSTI Review Committee has provided two examples for your use. The components of these examples coincide with those outlined in the SES application form.

## **Group II Application (example 1)**

### **Project One**

EPA Method 7

I led a project to measure NO<sub>x</sub> emissions at a flare inlet at the XXX facility during the week of \_\_\_\_\_ . The test was performed to prove compliance for the facility's State air quality operating permit emissions limit. Other test methods were performed for this project, but none of the others fall under Group II covered methods.

I was involved in most phases of the project from pre-award bidding to final report review.

### **Test Method**

I was involved in choosing and performing the test method performed. The method was chosen based on review of the permit and considerations of the source environment.

### **Calibration/Preparation/Packing**

I was the Team Leader for the project and was responsible for a team of two Field Technicians. I conducted a site visit, coordinated testing dates with the client, reviewed and completed a packing checklist, and verified that all equipment used on the project would receive the appropriate pre and post test calibrations. The equipment preparations included calibrations of pitots, thermocouples, and meter boxes, and instrument interference checks.

### **Set-up at Test Site**

I was responsible for and actively involved in all set-up of equipment on the day of testing. The set-up included parking of the mobile test vans, powering of the vans, mobilization of gear to the appropriate platforms, hanging of the monorails, and verifying the safety and security of all gear and personnel.

### **Sample Analysis**

I did not perform NO<sub>x</sub> sample analysis, but I was responsible for the chain of custody and sample handling from the job site to laboratory delivery.

### **Procedure Compliance**

I made sure that the test team followed all of the company's internal quality standards as well as all compliance procedures in the test methods to the best of my ability.

### **Data Reduction (Calculations, Data Validation, and Interpretation)**

As the technicians completed the runs, I collected data sheets and verified completeness. I processed flow and temperature data. At the conclusion of the project, I verified the data for consistency and performed hand sample calculations for comparison to spreadsheet generated results. Data was interpreted and compared to the emission limits outlined in the client's permits.

### **Equipment Operations/Data Recording**

I was responsible for operating EPA Method 7 according to the procedures found in section 811 for sample collection, leak checks, integrity of the sample delivery system, purging, etc. I kept data sheets for the method and checked for completeness before filing them.

### Plant/Process Operation Coordination

I coordinated plant and process coordination via radio during the test following procedures developed during a pre test meeting with the process personnel. The plant personnel collected all normally recorded operating parameters throughout the test. I collected all of the control and process data at the conclusion of the tests.

### Sample Recovery/Handling/Quality Control

Sample recovery, handling and quality control were my responsibility. I recovered and handled the Method 7 flasks. I made sure they were placed in a secure location until they could be delivered to the lab. I tracked the chain of custody for all samples and coordinated pickup with the lab. I also collected all data sheets and put them in the company's fire proof cabinet. I downloaded all electronic data for safe storage on the company's server.

### Reporting

I did not write the report for this project, but I did debrief the report writer and performed a final report review. I certified the report by giving my signature that the methods and practices outlined in the report were true to the best of my knowledge.

### Safety Training

The test team went through the plan's pre-test safety orientations. Normal PPE-like hard hats, safety glasses, ear protection, and steel toes were required. The test team had a "tailgate" safety meeting during breakfast.

### Test Planning

I reviewed the test plan and helped the person drafting it make revisions before final submittal to the agency. I reviewed the test plan thoroughly with all of the test team members prior to mobilization.

### Troubleshooting

I had never done this method so I did some troubleshooting at the office before arriving at the testing location. I became familiar with Method 7 and some of its intricacies through in-house training before the field testing.

### Training

In addition to periodic in-house and external technical refresher training, we use every field test job as a training opportunity. I take an active part in sharing my experiences with team members as well as learning from their experiences immediately following each field test project.

## **Group 1 (example 2)**

### **Qualified Source Emissions Tester**

Project Sheet One (attach up to two additional pages if needed)

Date Project Was Started:

Type of Project: EPA Methods 1, 2, 3A, 4, 5, and 9

Type of facility: plastics pyrolyzer with a baghouse

Project Supervisor: me

Provide a clear and concise explanation of your involvement (do not submit copies of your reports)

Detail the final outcome of the project:

I performed a project in Gonetolunch, CA on June 15-17, 2004. The project goal was to demonstrate compliance with particulate and opacity limits of the facility's air quality operating permit. The source was a plastics pyrolyzer with a baghouse.

I was involved in most phases of the project from pre-award bidding to final report review. During the bidding phase I reviewed the operating permit, selected the test methods and developed a cost proposal. After Client approval, I developed the test protocol. Because I had not previously worked in this region, I contacted the Air Quality Agency to understand their expectations and ask for specific guidance to ensure that I was aware of any specific requirements regarding the tests. Working with both the Client and the AQA, I finalized and submitted the test plan which was subsequently approved by AQA.

Because of the remote location of the job, extra care went into planning and logistics. Preliminary particulate results were required on-site because of the high cost of mobilizing to the facility. I packed a scale, tared beakers, filter and beaker tare weight documentation and other nonroutine items. I packed the equipment into a crate that was shipped by air freight to the site.

I selected test team members with appropriate skills and experience to assist me at the site. Upon arrival we received a site safety orientation. Site-specific PPE requirements and emergency procedures were reviewed. I then inspected the process, the CEM system, the baghouse and the stack. I verified Method 1 criteria. I evaluated access to the sampling locations, staging areas for equipment and determined how to place gear. I then met with the plant operator and reviewed the test plan. I explained what production and control parameters were required for the test, explained my time requirements and how testing normally proceeded. We set up radios so that we could communicate during testing. I asked the operator to immediately inform me of any process upsets or shutdowns during sample collection.

The team and I then set up the test gear. I set up a sample conditioner, placed a probe in the stack, hung a Teflon line, and calibrated my instruments, performed a leak check and bias check, and programmed a data logger. After coordinating with the plant operator, I went to the sampling location and began testing. In between runs I performed M5 train leak checks, M3A bias checks and other QA procedures. I read opacity and did M5 sample recoveries between each run.

At the end of the 3rd run I transferred the acetone samples into tared beakers and left them in a fume hood overnight. I entered field data into spreadsheets on my laptop computer and calculated test results to verify isokinetics were within spec. I weighed filters and beakers the next morning and calculated preliminary grain loading and mass rates for the tests.

After verifying all the field results were valid, I returned to our offices where I placed electronic files on our secure server, provided a written summary to the report writer, put field data in a fireproof cabinet and worked with technicians on post-test calibrations. After the report was completed, I did a final review, spot checked calculations and verified all supporting documentation was in place. I submitted the report to the Client, and it was subsequently approved by AQA.