

# PREPARATION FOR THE SES QUALIFIED SOURCE TESTING INDIVIDUAL (QSTI) EXAM WORKSHOP

**- AT YOUR LOCATION -**

## Course Overview

**Overview:** Walter S. Smith, the co-author of EPA Reference Methods 1-8, will lead the instruction of this hands-on workshop. The object of this 5-day seminar is to prepare the student for the **Source Evaluation Society's Qualified Source Testing Individual (QSTI) Exam I, II and III**. This workshop is very intense. The workshop concentrates on the written method details but not necessarily the "why" they are written that way (although some of the "why" will be discussed). Participants will receive comprehensive quizzes and other preparations for the exams. The purpose of the SES Exams is to find out if you know the methods in details. The workshop will center on how to find the answers in the CFR (and in the process, hopefully, you will learn the details). The QSTI Exams are open book with some tricky questions, so the details are important. The workshop devotes about 1/3 of the time on each exam. If you are interested in becoming a QSTI from SES, you must pass Group I and either II or III

**The prerequisite** for this Workshop is to have read all the EPA methods written in the CFR. No manual is given for this workshop since the CFR is your manual. However, a comprehensive methods book will be given to the students. If you are going to take the exams (that are given at the end of the workshop), and have read the methods in the CFR thoroughly, this workshop will improve your score. At the completion of the workshop, Exams I, II and III of the Source Evaluation Society's **Qualified Source Testing Individual** will be administered by ETA.

If you sponsor a **Preparation for the SES Qualified Source Testing Individual (QSTI) Exam Workshop** the cost to you is \$1199 per student for the first 12 students (with a minimum of 12 students) plus travel expenses (usually about \$1000). The cost to you for any additional students above the first 12 is \$1000 per student. You provide the training room and projection screen and coffee etc. A non-refundable deposit of \$6,000 of this reg-

istration fee must be provided 60 days in advance, with the remainder due on the first day of the workshop.

If you do not have 12 students and are interested in including outside students, I may be able to find some outside students (I have a waiting list). I also will email about 5000 potential students. By including outside students, you may be able to offset the cost for your students. You can charge what you want.

The workshop cost does not include hotel accommodations **or the cost of the SES examinations**. At the completion of the workshop, Exams I, II and III of the Source Evaluation Society's **Qualified Source Testing Individual** will be administered by ETA. The costs of the SES exams are separate. See <http://www.instack.com/prices.htm>. For answers to specific questions about the course material, call Walter Smith at **919-772-7843**. See our web site at <http://www.waltersmith.com>

## Provided by the client

### Classroom

The classroom must have a minimum 400 sq. ft. (for 12 students). The classroom must have chairs and tables (4 sq. ft./student) for the students and an extra table for the instructor. A projector screen is also necessary.

### Lunch and coffee

If you provide lunch, the course goes smoother, but it is not necessary, but coffee is necessary.

### Student Equipment

Each student needs to bring a pencil, calculator and scratch paper, highlighters and stick on tabs. Students may want to bring their own CFRs, but will need Parts 51, 60, 61, 63 and 75. But the method manual will cover all of the methods of the exams.

# PREPARATION FOR THE SES QUALIFIED SOURCE TESTING INDIVIDUAL (QSTI) EXAM WORKSHOP

**- WORKSHOP IN RALEIGH, NC -**

Sponsored By \_\_\_\_\_

Date \_\_\_\_\_

Presented by **Walter Smith & Associates**

## Overview

Walter S. Smith, the co-author of EPA Reference Methods 1-8, will lead the instruction of this hands-on workshop. The object of this 5-day seminar is to prepare the student for the **Source Evaluation Society's Qualified Source Testing Individual (QSTI) Exam I, II and III**. This workshop is very intense. The workshop concentrates on the written method details but not necessarily the "why" they are written that way (although some of the "why" will be discussed). The purpose of the SES Exams is to find out if you know the methods in details. The workshop will center on how to find the answers in the CFR (and in the process, hopefully, you will learn the details). The QSTI Exams are open book with some tricky questions, so the details are important. The workshop devotes about 1/3 of the time on each exam. If you are interested in becoming a QSTI from SES, you must pass Group I and either II or III. See Course Agenda (below).

**The prerequisite** for this Workshop is to have read all the EPA methods written in the CFR. Bring your own 40CFR part 60 appendix and a Highlighter. No manual is given for this workshop since the CFR is your manual. However, a comprehensive methods book will be given to the students. If you are going to take the exams (that are given at the end of the workshop), and have read the methods in the CFR thoroughly, this workshop will improve your score.

At the completion of the workshop, Exams I, II and III of the Source Evaluation Society's **Qualified Source Testing Individual** will be administrated by ETA.

## Cost

Participants will receive comprehensive quizzes and other preparations for the exams. The cost of the Preparation for the SES QSTI Exams Workshop is \$1,199us. This amount covers the tuition; it does not include hotel accommodations **or the cost of the SES examinations**.

At the completion of the workshop, Exams I, II and III of the Source Evaluation Society's **Qualified Source Testing Individual** will be administrated by ETA. The costs of the SES exams are separate. For answers to specific questions about the course material, call Walter Smith at **919-772-7843**. See our web site at



<http://www.waltersmith.com>

## Registration

Complete the registration form in this brochure to register for this workshop. Payment may be made by check, VISA, MasterCard or American Express. All registrants must be paid in full before being admitted into the workshop. Classes fill to capacity quickly so we urge you to pre-register no later than two weeks before the workshop start date. See **Registration Form (below)**.

## Hotel Information

The workshop will be held at the Holiday Inn - Brownstone Hotel in Raleigh, North Carolina. This hotel is adjacent to North Carolina State University, five minutes from downtown business and state government centers, and fifteen minutes from RDU International Airport. Make your reservations directly with the hotel by calling 919-828-0811 or [sglover@brownstonehotel.com](mailto:sglover@brownstonehotel.com). Be sure to identify yourself as a Walter Smith Workshop participant to receive our group discount and breakfast.

# **COURSE AGENDA**

## **Preparation For The SES Qualified Source Testing Individual (QSTI) Exams**

### **Monday**

9:00 Introduction

#### **Group One:**

#### **Basic Knowledge & Manual Particulate Sampling**

10:00 EPA Method 1 & 1A  
(Sampling Location)

12:00 Lunch-On-Your-Own

1:00 EPA Method 2 & 2A-2H  
(Gas Flow Rate)

4:00 EPA Method 3 & 3B  
(Molecular Weight & Diluent)

5:00 Adjourn

### **Tuesday**

9:00 EPA Method 4  
(Moisture)

10:00 EPA Method 5 & 5A-F & 17  
(Particulate)

12:00 Lunch-On-Your-Own

1:00 EPA Method 5 & 5A-F & 17  
(Particulate Continued)

5:00 Adjourn

### **Wednesday**

#### **Group Two:**

#### **Manual Gas Source Sampling Methods**

9:00 Manual Methods 33B, 6, 6A, 6B, 7, 7C, & 8  
(O<sub>2</sub>, CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub>, SO<sub>3</sub>)

10:00 Manual Methods 11, 13A, 15A & 16A  
(H<sub>2</sub>S, HF, TRS)

12:00 Lunch-On-Your-Own

1:00 Other Manual Methods 26, 26A & 202  
(HCl & Condensibles)

#### **Group Three:**

#### **Instrumental Methods**

4:00 Method 3A, 6C & 7E  
(CO<sub>2</sub> O<sub>2</sub> SO<sub>2</sub> NO<sub>x</sub>)

5:00 Adjourn

### **Thursday**

9:00 Instrumental Methods 10, 10A, 10B, & 20  
(CO, TRS Gas & Turbines)

12:00 Lunch-On-Your-Own

1:00 Performance Specifications PS2

3:30 **Group One Exam:**  
Basic Knowledge & Manual  
Particulate Sampling

5:00 Adjourn

### **Friday**

9:00 **Group Two Exam:**  
Manual Gas Source Sampling Methods

10:30 Performance Specifications PS2-7

12:00 Lunch-On-Your-Own

1:00 Performance Specifications  
(40CFR75 RATA Procedures)

3:00 **Group Three Exam:**  
Instrumental Methods (NO<sub>x</sub>, CO, SO<sub>2</sub>, etc)

5:00 Adjourn

## Registration Form

### Preparation for the SES Qualified Source Testing Individual (QSTI) Exams

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Extension: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Please select method of payment (No purchase orders, please) (Check one):

Check Enclosed

VISA

MasterCard

American Express

Card Number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

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

Print Name: \_\_\_\_\_

Payment of \$1199 must be received in our office within two weeks after sending this registration form to hold a seat.

<i>Workshop Date</i>			<i>\$ Enclosed</i>

**Please return the completed registration form with payment to:**

Phone/FAX 919-772-7843

Or

[Walt@waltersmith.com](mailto:Walt@waltersmith.com)

[www.waltersmith.com](http://www.waltersmith.com)

# **Walter S. Smith, PE, DEE**

**6225 SPLITROCK TRAIL  
APEX, NC 27502  
PHONE/FAX (919) 772-7843  
<http://www.waltersmith.com>  
[walt@waltersmith.com](mailto:walt@waltersmith.com)**

## **Areas of Expertise**

**Air Pollution, Air Pollution Measurement, Stack Testing, Source Sampling, Sampling Methodology, Combustion, Combustion Emissions, Odor evaluations and Nomographs**

## **Relevant Experience**

Mr. Smith is the founder and President of Walter Smith & Associates, Inc. since 1993. Mr. Smith was the co-founder and President of Entropy, Inc., that was the largest source sampling company in the country from 1972 to 1993. He is nationally recognized in the field of emission measurement methodology and has over 40 years of air pollution control and testing experience. Mr. Smith served as the Chief of Source Sampling Unit of the Division of Air Pollution in the Public Health Service before the creation of the Environmental Protection Agency (EPA). Mr. Smith was largely responsible for the development of both the testing methodology and equipment that subsequently became EPA Methods 1 through 8. These methods were refined in field applications under Mr. Smith's direction. Mr. Smith was also one of the three principal authors of Methods 1-8 and was active in EPA efforts to win their final approval. Additionally, during his 11 year association with the Public Health Service and EPA, Mr. Smith developed and directed the source sampling courses for the Air Pollution Training Institute (including the 450 course), authored or co-authored numerous papers for presentation or publication (~45); assisted state and local agencies in the development of air resource management programs; and performed research studies on air emissions from all types of sources.

Since Mr. Smith left the EPA in 1972, he has assisted in the improvement of EPA Methods 1-7, 10, 13, 16, 17, 18, 202, VOST, PM<sub>10</sub>, MM5, and co-authored the F-factors. He has also developed methods such as the 3 dimensional determinations of gas flows, enforcement of fugitive emissions, instrumental techniques, and calibration and quality assurance methods. He is responsible for training thousands of people how to do stack sampling.

Mr. Smith spends most of his time consulting, overseeing stack sampling, providing expert testimony or teaching stack sampling courses through Walter Smith & Associates, Inc.

## **Education**

BS., 1961 Chemical Engineering, Bucknell University, Lewisburg, PA

## **Certification**

Professional Engineer, NC 8459 and NJ 37943  
Diplomate, Academy of Environmental Engineering

## **Honors, Responsibilities, and Memberships**

Walter Smith & Associates, Inc., co-founder and President since 1993  
Who's Who, America 1990-1997, World 1994-1997, and Various 1977, 1980-1984  
Source Evaluation Society since 1977, Founder, President 1979  
Stack Sampling Hall Of Fame (First inductee), Source Evaluation Society 1986  
American Academy of Environmental Engineers since 1984  
Air & Waste Management Association since 1963 (Fellow 1995)  
Carolina Air Pollution Control Association since 1973  
National Association of Environmental Professionals since 1984  
Stack Sampling News, Co-founder, Editor 1974-1982  
Entropy, Inc., Co-founder, President 1972-1992, COB 1990-1992, Board 1972-1999  
Entropy Engineers, PC, President and Chairman of the Board 1993-1999  
Entropy Reality, Inc., President and Chairman of the Board 1990-1999  
Housing Corporation of the South, President 1977-1981  
Umstead Development Corporation, Vice President 1977-1980  
Nutech Corporation, Vice President 1974-1976