





Medical Gas Training ASSE 6010 Installer & ASSE 6020 Inspector Courses Available

Certified Medical Gas Services and Green Mountain Medical Gas Services are offering the required 32-hour, NITC accredited **ASSE 6010 Medical Gas Systems Installer Course** and the 24-hour **ASSE 6020 Medical Gas Systems Inspector Course** in partnership with UMass Memorial Medical Center at their facility in Worcester, MA. The purpose of this session is to provide individuals who qualify with the minimum requirements of the standard with the proper certifications to perform the work outlined in the ASSE 6000 Series Professional Qualifications Standards for Medical Gas Systems Personnel. These courses will be held at:



306 Belmont Street Worcester, MA 01605

These courses will take place over a four-day period and will be conducted from **Tuesday**, **May 17 through Friday**, **May 20**, **2011**. The training sessions will start at 08:00 AM and end at 05:00 PM each day. On Thursday, the training session will start at 08:00 AM and conclude after the attendees complete the written and practical exams (If required) administered by the assigned NITC proctor.

The cost of the ASSE 6010 Medical Gas Installer course is **\$900.00** per person. The cost of the ASSE 6020 Medical Gas Inspector course is **\$850.00** per person.

Certified Medical Gas Services and Green Mountain Medical Gas Services are both independent companies focused on medical gas services, training, and consulting. Mr. Jonathan Willard and Mr. Doug Ostraat, who are both ASSE 6050 Certified Medical Gas Systems Instructors, will team-teach the class.

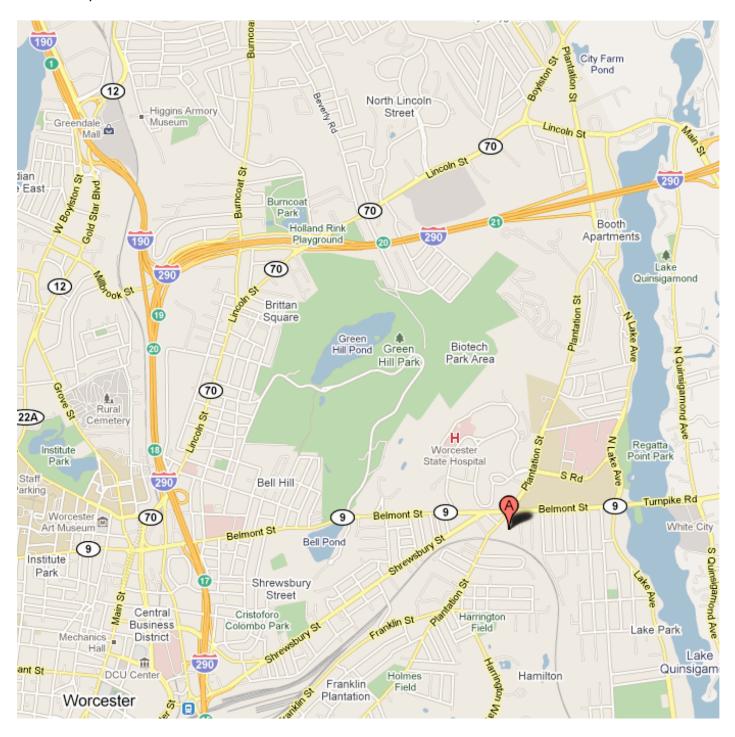
Mr. Willard has worked in the medical gas and construction industry for over 16 years and is a principal member of the Technical Committee on Medical Gas and Vacuum Piping Systems (NFPA 99, Health Care Facilities) and a principal member of the Technical Committee on Industrial and Medical Gases (NFPA 51, 51A, & 55). He currently serves on the Medical Gas Professional Healthcare Organization (MGPHO) Board of Directors as Vice President of Legal and is also a LEED AP (Accredited Professional), a certified Project Management Professional (PMP), and a Certified Healthcare Constructor (CHC) with a Master of Science degree in Business Education (MBE).

Mr. Ostraat has 40+ years of medical gas and vacuum system experience as a Respiratory Therapist, Sales and Service Representative, and Medical Gas Systems Installer, Verifier, and Instructor.

If interested in attending the session, please complete the attached application and return by mail with the **\$250.00** non-refundable deposit to the address listed above. You can also fax or email completed applications to hold your place and send deposit in the mail.

Training Location:

UMass Memorial Medical Center 306 Belmont Street Worcester, MA 01605





ASSE 6010 Medical Gas Systems Installer Course Candidate Application

Upon successful completion of this required 32-hour course, the attendee should be able to identify and demonstrate knowledge of the NFPA 99 Standard, system components, and the application of these components in medical gas systems. The course content will include classroom lecture covering the following material:

- NFPA 99 Requirements (2005 edition)
- Product Performance Knowledge
- Personal Safety Protection
- Terms & Definitions
- Level 1, Level 2 and Level 3 Pipeline Systems
- Medical Gas Headers, Manifolds and Cryogenic Liquid Systems
- Medical Air Systems and Associated Components
- Medical/Surgical Vacuum Systems
- Waste Anesthesia Gas Disposal Systems
- Instrument Air Systems
- Medical Pipeline Valves
- Medical Pipeline Outlets
- · Medical Pipeline Warning Systems
- Medical Pipeline Installation Requirements
- System Testing & Verification
- ASME IX Brazing Procedures and Qualifications

Applicants wishing to attend this session must have a minimum of at least four (4) years of practical experience in the installation of piping systems along with a photo ID before they are allowed to take their final examinations. A non-refundable deposit of \$250.00 must be delivered to Certified Medical Gas Services no later than one week before the beginning date of the course. Checks for the non-refundable deposit and final balance must be made out to Certified Medical Gas Services. Final balance is due prior to start of training program.

May 17-20, 2011 / UMass Memorial Medical Center, Worcester, MA:

Name:		
Address:		
City:	State:	_ Zip:
Phone No.:	S.S. No. (last six digits only):	
Email Address:		
Company / Facility Name:		







ASSE 6010 Medical Gas Systems Installer Course Training Outline

Summary

The main focus of the ASSE 6010 Medical Gas Installer Course is to provide individuals, who are responsible for the proper installation of medical gas systems, with the requirements necessary to install medical gas systems in level 1, 2, & 3 healthcare facilities. The 2005 edition of NFPA 99C is used to provide all code requirements discussed within this course. Attendees will also be given a basic understanding of the application, operation, and code requirements of all materials, components, and equipment that is used in medical gas systems. This is a National ITC Certified Program. This course is divided into both classroom and hands-on sections. The classroom portion provides details on the materials, components, and equipment utilized in medical gas systems. The hands-on portion provides guidance on brazing techniques used in medical gas piping installations. There will be a written examination to cover the classroom portion and a brazing examination to cover the hands-on portion.

Prerequisites

Candidates for this course must have a minimum of four (4) years of documented practical experience in the installation of piping systems.

Day 1 - 05/17/11 (8:00AM - 4:30PM):

- A. Introduction
 - 1.) Instructor & Class Attendees
 - 2.) Purpose and Syllabus
- B. NFPA 99 Standard Review
 - 1.) Healthcare Facility Level Requirements
 - 2.) Medical Gas System Requirements
- C. Personal Safety
 - 1.) Eye Protection
 - 2.) Ear Protection
 - 3.) Chemical and Electrical Gloves
 - 4.) Protective Footwear
 - 5.) Lockout Devices
- D. Medical Gas Headers, Manifolds, & Bulk Systems
 - 1.) Application
 - 2.) Basic Operation
 - 3.) NFPA 99 Requirements
- E. Medical Air Compressor Systems
 - 1.) Application
 - 2.) Basic Technologies and Operations
 - 3.) NFPA 99 Requirements
- F. Instrument Air Systems
 - 1.) Application
 - 2.) Basic Technologies and Operations
 - 3.) NFPA 99 Requirements

Day 2 - 06/18/11 (8:00AM - 4:30PM):

- A. Medical Surgical Vacuum Systems
 - 1.) Application
 - 2.) Basic Technologies and Operations
 - 3.) NFPA 99 Requirements
- B. Waste Anesthesia Gas Disposal (WAGD) Systems
 - 1.) Application
 - 2.) Basic Technologies and Operations
 - 3.) NFPA 99 Requirements
- C. Valves
 - 1.) Application
 - a.) Source Valves
 - b.) Mainline Valves
 - c.) Emergency Oxygen Supply Connection (EOSC) Valves
 - d.) Riser Valves
 - e.) Zone Valves
 - f.) Service Valves
 - g.) In-Line Valves
 - h.) Future Use Valves
 - 2.) Operational Theory
 - 3.) NFPA Requirements
- D. Outlets
 - 1.) Application
 - a.) D.I.S.S. (Diameter Index)
 - b.) Chemetron Style (Latch Type)
 - c.) Diamond Style (Pin Index)
 - d.) Puritan Bennett Style (Geometric)
 - e.) Schrader (Quick Disconnect)
 - 2.) Operational Theory
 - 3.) NFPA 99 Requirements
- E. Manufactured Assemblies
 - 1.) Application
 - 2.) NFPA Requirements
- F. Surface Mounted Medical Rails
 - 1.) Application
 - 2.) NFPA Requirements
- G. Alarms
 - 1.) Application
 - a.) Master Alarms
 - b.) Area Alarms
 - c.) Local Alarms
 - 2.) Operational Theory
 - 3.) NFPA Requirements

Day 3 - 05/19/11 (8:00AM - 4:30PM):

- A. Level 1 Medical Gas Distribution
 - 1.) Medical Gas Piping Material Requirements
 - 2.) Medical Surgical Vacuum Piping Material Requirements
 - 3.) Fittings
 - 4.) Threaded Joints
 - 5.) Brazed Joints
 - 6.) Installation of Piping & Equipment

- B. Labeling and Identification
 - 1.) Pipe Labeling
 - 2.) Shutoff Valves
 - 3.) Alarm Panels
- C. Performance Criteria and Testing
 - 1.) Installer Performed Tests
 - 2.) System Verification
- D. Level 2 Medical Gas Distribution
- E. Level 3 Medical Gas Distribution
- F. Brazing Practice
 - 1.) Technique
 - 2.) Hands-on Practice

Day 4 - 05/20/11 (8:00AM - 4:00PM):

- A. Written Examination
- B. Practical Examination

Final Course Wrap-up and Class Dismissal

Other Courses offered:

ASSE 6005 Medical Gas Systems Specialist ASSE 6020 Medical Gas Systems Inspector ASSE 6040 Medical Gas Systems Maintenance Personnel

Please contact us should you be interested in additional information regarding these courses.

Sincerely,

Jonathan Willard

President

Certified Medical Gas Services 532 Bedford Road New Boston, NH 03070 Phone: (603) 487-3800

Fax: (603) 218-6262

Email: jwillard@certifiedmedgas.com

Sincerely,

Doug Ostraat

Doug Ostraat President

Green Mountain Medical Gas Services 4 Williston Road Salem, NH 03079-4039

Phone: (800) 248-2327 Fax: (800) 989-1411

Email: doug@gmmgs.com



ASSE 6020 Medical Gas Systems Inspector Course Candidate Application

Upon successful completion of this required 24-hour course, the attendee should be able to identify and demonstrate knowledge of the NFPA 99 Standard, system components, and the application of these components in medical gas systems. The course content will include classroom lecture covering the following material:

- NFPA 99 Requirements (2005 edition)
- Product Performance Knowledge
- Terms & Definitions
- Level 1, Level 2 and Level 3 Pipeline Systems
- Medical Gas Headers, Manifolds and Cryogenic Liquid Systems
- Medical Air Systems and Associated Components
- Medical/Surgical Vacuum Systems
- Waste Anesthesia Gas Disposal Systems
- Instrument Air Systems
- Medical Pipeline Valves
- Medical Pipeline Outlets / Inlets
- Medical Pipeline Warning Systems
- Medical Pipeline Installation Requirements
- System Testing & Verification
- ASME IX Brazing Procedures and Qualifications
- Documentation & Recording

Applicants wishing to attend this session must have two (2) years of documented practical experience and proof of employment by a government unit as an inspector or administrator of such inspectors, or be employed by a firm that is regularly involved in the design, inspection, or verification of medical gas systems along with a photo ID before they are allowed to take their final examinations. A non-refundable deposit of \$250.00 must be delivered to Certified Medical Gas Services no later than one week before the beginning date of the course. Checks for the non-refundable deposit and final balance must be made out to Certified Medical Gas Services. Final balance is due prior to start of training program.

May 17-20, 2011 / UMass Memorial Medical Center, Worcester, MA:

Name:			
Address:			
City:		_ Zip:	
Phone No.:	S.S. No. (last six digits only):	<u></u>	
Email Address:			
Employer Name			







ASSE 6020 Medical Gas Systems Inspector Course Training Outline

Summary

The main focus of the 24-hour ASSE 6020 Medical Gas Systems Inspector Course is to provide individuals, who are responsible for the inspection of medical gas systems, with the requirements necessary to inspect medical gas systems in level 1, 2, & 3 healthcare facilities. The 2005 edition of NFPA 99C is used to provide all code requirements discussed within this course. Attendees will also be given a basic understanding of the application, operation, and code requirements of all materials, components, and equipment that is used in medical gas systems. This is a National ITC Certified Program. Individuals who successfully complete this course will be able to inspect medical gas systems for proper installation and ensure compliance with applicable standards. There will be a written examination on the final day of the course.

Prerequisites

Candidates for this course must be employed by a governmental unit as a plumbing and/or mechanical inspector, or as an administrator of such inspectors OR be a person regularly involved in the design or inspection of medical gas systems. Candidates must have a minimum of two (2) years of documented practical experience.

Day 1 - 05/17/11 (8:00AM - 5:00PM):

- A. Introduction
 - 1.) Instructor & Class Attendees
 - 2.) Purpose and Syllabus
- B. NFPA 99 Standard Review
 - 1.) Healthcare Facility Level Requirements
 - 2.) Medical Gas System Requirements
- C. Medical Gas Headers, Manifolds, & Bulk Systems
 - 1.) Application
 - 2.) Basic Operation
 - 3.) NFPA 99 Requirements
- D. Medical Air Compressor Systems
 - 1.) Application
 - 2.) Basic Technologies and Operations
 - 3.) NFPA 99 Requirements
- E. Instrument Air Systems
 - 1.) Application
 - 2.) Basic Technologies and Operations
 - 3.) NFPA 99 Requirements

Day 2 - 05/18/11 (8:00AM - 5:00PM):

- A. Medical Surgical Vacuum Systems
 - 1.) Application
 - 2.) Basic Technologies and Operations
 - 3.) NFPA 99 Requirements
- B. Waste Anesthesia Gas Disposal (WAGD) Systems
 - 1.) Application
 - 2.) Basic Technologies and Operations
 - 3.) NFPA 99 Requirements

- C. Valves
 - 1.) Application
 - a.) Source Valves
 - b.) Mainline Valves
 - c.) Emergency Oxygen Supply Connection (EOSC) Valves
 - d.) Riser Valves
 - e.) Zone Valves
 - f.) Service Valves
 - g.) In-Line Valves
 - h.) Future Use Valves
 - 2.) Operational Theory
 - 3.) NFPA Requirements
- D. Outlets
 - 1.) Application
 - a.) D.I.S.S. (Diameter Index)
 - b.) Chemetron Style (Latch Type)
 - c.) Diamond Style (Pin Index)
 - d.) Puritan Bennett Style (Geometric)
 - e.) Schrader (Quick Disconnect)
 - 2.) Operational Theory
 - 3.) NFPA 99 Requirements
- E. Manufactured Assemblies
 - 1.) Application
 - 2.) NFPA Requirements
- F. Surface Mounted Medical Rails
 - 1.) Application
 - 2.) NFPA Requirements
- G. Alarms
 - 1.) Application
 - a.) Master Alarms
 - b.) Area Alarms
 - c.) Local Alarms
 - 2.) Operational Theory
 - 3.) NFPA Requirements

Day 3 - 05/19/11 (8:00AM - 5:00PM):

- A. Level 1 Medical Gas Distribution
 - 1.) Medical Gas Piping Material Requirements
 - 2.) Medical Surgical Vacuum Piping Material Requirements
 - 3.) Fittings
 - 4.) Threaded Joints
 - 5.) Brazed Joints
 - 6.) Installation of Piping & Equipment
- B. Labeling and Identification
 - 1.) Pipe Labeling
 - 2.) Shutoff Valves
 - 3.) Alarm Panels
- C. Performance Criteria and Testing
 - 1.) Installer Performed Tests
 - 2.) System Verification
- D. Level 2 Medical Gas Distribution
- E. Level 3 Medical Gas Distribution

Day 4 - 05/20/11 (8:00AM):

A. Final Written Examination

Course Wrap-up and Class Dismissal

Other Courses offered:

ASSE 6005 Medical Gas Systems Specialist ASSE 6010 Medical Gas Systems Installer ASSE 6040 Medical Gas Systems Maintenance Personnel

Please contact us should you be interested in additional information regarding these courses.

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