# Policies and Procedures Gas Technician/Oil Burner Technician Certification

(under Ontario Regulation 215/01, Technical Standards & Safety Act, 2000)



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Quality & Standards, Technical Standards & Safety Authority

(TSSA)

www.tssa.org

# Policies and Procedures Gas Technician/Oil Burner Technician Certification

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# Policies and Procedures Gas Technician/Oil Burner Technician Programs

#### Introduction:

The Policies and Procedures were collectively developed by the Technical Standards & Safety Authority (TSSA) and the Fuels Industry Training and Certification Advisory Board (TCAB) operating under the authority of the Director under the *Technical Standards* & *Safety Act, 2000*. The Policies and Procedures have been adopted by Quality and Standards, TSSA.

The Policies and Procedures pertaining to Gas Technician and Oil Burner Technician programs and the method of their application and administration are set out in the following pages. The intent is to provide a set of reference points and guidelines for Training Providers, examination bodies and/or administrators involved in the training and certification process and for the Fuels Industry in general.

The Policies and Procedures must be followed by all Training Providers who wish to have their programs recognized/accredited by the Technical Standards and Safety Authority (O. Regulation 215/01, Sect 5).

The Policies and Procedures are subject to enhancement and revision as required.

Administrators shall not alter any of the Policies and Procedures set out in this document without the knowledge and prior **written** approval of the Technical Standards and Safety Authority (TSSA).

#### Curriculum:

- 1. The Gas Technician and Oil Burner Technician Training Curriculum as developed by the joint TSSA and industry training and certification task forces (1996, updated 2002) have been adopted as the **minimum standard** for the training and certification of the said occupations in the Province of Ontario.
- The estimated times for each individual certificate program are contained in the curriculum developed for both the Gas Technician program and the Oil Burner Technician program. The hours shown serve as <u>guidelines only</u> and may vary accordingly depending on the candidate(s) prior learning and other related trade certificates. Requests for variations to the hours <u>must</u> be outlined & submitted to Quality and Standards, TSSA for approval.
- 3. All accredited Training Providers and organizations will use only the curriculum approved by the Technical Standards and Safety Authority as amended.
- 4. The approved curriculum forms the basis for the development of all lesson plans and testing standards and criteria.
- 5. Providers of training for Gas Technician and Oil Burner Technician programs must be accredited by and registered with the Technical Standards and Safety Authority. All training programs must be accredited by the Technical Standards and Safety Authority (TSSA).
- 6. Applications for a certificate of qualification received from Training Providers not accredited by the Technical Standards and Safety Authority (TSSA) will not be processed.

#### **Examination/Evaluation:**

- 1. Examination of knowledge and evaluation of practical skills is applied throughout the programs with each module of training. Program participants will be required to complete a written/theoretical examination at the conclusion of each module or at the conclusion of a grouping of modules.
- 2. The candidate will be evaluated on the practical skills demonstrated throughout their training (if applicable). Practical evaluation may be applied through either hands-on, written and/or combination of a written and oral examination as agreed to by the Training Provider and the Technical Standards and Safety Authority.
- 3. The candidate will be required to achieve a passing grade on the TSSA certification examination and demonstrate a level of practical skills acceptable to the TSSA for each applicable module of training. Failure to complete any of the modules in the manner prescribed will result in a failing grade. The candidate will be required to rewrite the tests or be re-evaluated on those modules not meeting the standard.
- 4. The passing grade for each module (or grouping) examination is 75%.
- The passing grade on an examination and practical skills demonstration will be 75%. Appeals may be made if the mark attained falls within 2%. Automatic waivers will not be allowed.
- Candidates are not permitted to use translators during the course of an examination.
- 7. Candidates are required to produce photo identification to exam invigilator on the day of the certification examination in order to be permitted to write.
- Exam invigilators must be someone other than the program instructor for certification programs.
- Training Providers who administer examinations are required to submit the applications with the grades. Failing grades <u>must</u> also be included with the submissions.

#### **Certificate Requirements:**

- 1. In order to obtain a certificate from the Technical Standards and Safety Authority (TSSA) as outlined in O. Regulation 215/01, the candidate will be required to:
  - Successfully complete a training program delivered through a Training Provider that is registered with, and accredited by the Technical Standards and Safety Authority;
  - b) Score an overall average of 75% or greater on the TSSA examination(s);
  - c) Receive an average score of 75% or higher on the practical evaluation in the applicable modules within the training program;
  - d) Maintain an 80% attendance record throughout the program training. Note: this is meant as a suggested guideline. Training Providers should use this percentage with discretion.
- Conditions prescribed in Item #1 a through c above must be achieved in order to receive the required certificate(s). Failure to meet any of the requirements may necessitate the candidate to re-write the appropriate examination(s) or have their practical skills re-evaluated.
- 3. A candidate for a G.1 certificate must have, as prerequisites:
  - a) A valid G.2 certificate of qualification;
  - b) Written confirmation of work experience detailing two years (4000 hours) of field experience as a G.2, of which at least 500 hours must be on systems with a firing rate in excess of 400,000 Btuh under direct supervision by a supervising certificate holder;
  - c) Successfully completion of the required modules of training and the examinations:

Challenging the examination(s) is an option, however, *only if* the applicant holds the G.2 and has the required experience which may be acquired as training and accumulated experience in another recognized trade related to gas, e.g. Plumbers/Steam Fitters, Sheetmetal Workers, Refrigeration Mechanic, Electrician.

- 4. A candidate for a Class 1 Oil Burner Technician must have as prerequisites:
  - a) A valid Oil Burner Technician 2 certificate of qualification;
  - b) Written confirmation of work experience detailing two years or 4000 hours of field experience on systems with a firing rate in excess of 7 US Gallons per



- hour, of which at least 500 hours must be on systems in excess of 7 U.S. g.p.h under direct supervision by a supervising certificate holder;
- c) Successfully completing the required modules of training and the examination(s).

Challenging the examination(s) is an option, however, only if the applicant holds the Oil Burner Technician 2 and has the required experience which may be acquired as training and accumulated experience in another recognized trade related to fuel oil, e.g. Plumbers/Steam Fitters, Sheetmetal Workers, Electrician.

- A candidate for an Oil Burner Technician 2 must have a valid Oil Burner Technician 3 certificate.
- 6. Candidates for a Domestic Appliance (DA) Technician, Gas Piping Fitter (GP), and G.2 must have completed the G.3 program and be in possession of a valid G.3 certificate.
- 7. Candidates for a Recreational Vehicle 1 (RV.1) certificate must have hold an RV.2 certificate and have documented proof of experience as outlined in Regulation 215/01.
- 8. Candidates for certification as an Industrial Maintenance Technician (IMT, IMT-E or IMT-M) must complete a TSSA registered customized training program as outlined in the *IMT Certification Policies & Procedures document*.
- 9. Certificates will be issued by the Technical Standards and Safety Authority upon receipt of:
  - a) the prescribed fee of \$70.00;
  - a signed declaration/application completed by the training organization stating that the candidate has met all of the certification requirements;
  - a data sheet which contains information pertaining to the candidate as required by the Technical Standards and Safety Authority;
  - a signed confirmation of work experience detailing the required field experience as applicable for the Gas Technician 1 and Oil Burner Technician 1 certificates.

#### **Challenge Examinations:**

A candidate for certification may opt to seek exemption from attending programmed modules of training by challenging the examination(s) for each particular module or by challenging the full level. Challenge examinations will be based **upon theoretical and practical knowledge**. The questions for challenge examinations will be drawn from a weighted database and shall also include a practical skills assessment conducted by a TSSA Fuels Safety Inspector.

Challenge examinations are set by Quality and Standards, TSSA. All other requests for a challenge examination will be directed to an accredited Training Provider or an accredited examination centre. The Inspector will arrange a practical skills assessment utilizing the assessment technique developed by Quality and Standards. The assessment is based on the standards for practical skills identified in the approved curriculum. Candidates may complete the theory or practical portion in any order of preference. Both components must be successfully completed in order for a certificate of qualification to be issued.

An individual wishing to obtain certification via the challenge process may be first required to obtain the pre-requisite certificates in order to proceed. In order to challenge the examination(s) for any of the certificates of qualifications issued under *Regulation 215/01* of the *Technical Standards & Safety Act, 2000*, the following is required:

- If an individual has allowed their certificate to expire, but has remained actively working as a Gas Technician or an Oil Burner Technician, the individual must:
  - a) provide detailed documentation providing proof of continuous work experience, including letters from the employer(s) since the certificate expired, the equipment/appliances specifications, the nature of the work (i.e. installation, service, maintenance, engineering...etc), copies of certificates from completed training programs, a client reference list that includes names and addresses. This information must be submitted directly to the Training Provider for review and must be included with the application for certification submitted to TSSA for processing.
  - b) challenge the theory portion of the Gas Technician 3 (G.3) or the Oil Burner Technician 3 (OBT.3).
  - c) arrange for the district TSSA Fuels Safety Inspector to complete a practical skills assessment.

Upon successfully passing the Gas Technician 3 or Oil Burner Technician 3 examination and practical skills assessment, the individual may immediately challenge any of the permanent certificates of qualification requiring a Gas Technician 3/Oil Burner Technician 3 as a prerequisite, i.e. Domestic Appliance Technician, Gas Technician 2, or Oil Burner Technician 2.



- 2. If an individual is not certified in any category or has never possessed a certificate of qualification, the individual may:
  - a) challenge the Gas Technician 3 and/or the Oil Burner Technician 3 examination **only**.
  - b) arrange with the district Fuels Safety Inspector to have a practical skills assessment conducted (Level 3 **only**).

An individual in this category may not proceed to the next level of challenge examinations until 4000 hours of supervised, certified field time has been accumulated and documented.

- 3. An individual holding a Gas Technician 3 or an Oil Burner Technician 3 may challenge any of the higher level, permanent certificates of qualification without the pre-requisite training programs only if:
  - a) 4000 hours of work experience has been accumulated as a Gas Technician 3 or Oil Burner Technician 3 from the date the certificate was issued. Prior, uncertified field experience time will not be recognized or considered valid towards certification requirements.
  - b) work experience referred to above is fully documented and verified by the supervising certificate holder and the employer.
- 4. A person may attempt to challenge the Gas Technician 1 or the Oil Burner Technician 1 examinations only if:
  - a) the individual holds a valid Gas Technician 2 or Oil Burner Technician 2 respectively.
  - b) the individual can provide documentation detailing 4000 hours of accumulated experience as a Gas Technician 2 or an Oil Burner Technician 2, of which a minimum of 500 hours are on systems larger than 400,000 Btuh or 7 U.S. gallons per hour respectively under **direct** supervision. The name, certificate number and signature of the supervising certificate holder must be provided.

#### **Upgrades:**

Certificate holders will be able to upgrade their certificates from one category to another if the following conditions have been met:

- a) The additional required training modules for the certificate being applied for have been successfully completed;
- b) A passing grade of 75% was achieved on the theoretical training. The applicant may wish to challenge the examination(s) for the applicable modules;
- c) The evaluation of practical skills was achieved for each applicable module;
- d) The required practical field experience has been accumulated as required for the Gas Technician 1 and the Oil Burner Technician 1.
- e) The applicant submits a completed application, transcripts, signed declarations, a copy of their current certificate, and the appropriate fee to TSSA

#### **Distance Learning:**

- 1. Educators and trainers generally agree that there is no satisfactory substitute for classroom instruction. There are, however, circumstances where it is impossible for the student to attend the regular classes and a distance learning arrangement becomes the only option. These circumstances should be limited as follows:
  - a) when temporary out-of-town employment does not allow attendance at the classes discretion should be used to determine what constitutes employment;
  - b) when the location of the domicile is such that a student(s) cannot reasonably be expected to attend the classes;
  - c) when the number of students in an area away from the location of the training facility is too small to warrant a classroom program.
- Training programs developed for distance learning (i.e. Self-study correspondence, CD-ROM) should be constructed by accredited training providers in such a manner as to be equivalent in hours to classroom/workshop programs;
- Training programs developed for distance learning should be structured to include practical, hands-on training with an instructor in a workshop setting or through an industry partner. The industry partner must be identified and the distance learning materials submitted to Quality and Standards, TSSA prior to acceptance;
- 4. Distance Learning program students have the same certification requirements as those attending classes, with the exception of the attendance factor of 80%.



#### **Training Credits:**

- 1. To facilitate mobility across the province, promote continuity in training standards and uphold the validity of a standardized curriculum, students will be able to transport credits for successfully completed training modules from one accredited training organization to another.
- Credits for successfully completed modules within one certificate category may be applied towards a higher certificate (i.e. an upgrade from a Gas Piping Fitter or Domestic Appliance Technician to a Gas Technician 2) or towards an alternate fuel (i.e. certain modules that apply towards one of either the Oil Burner Technician or the Gas Technician).

#### **Proof of Experience/Declaration:**

A written confirmation of work experience, provided by the applicant, will be required in a number of instances:

- a) applicants applying for a Gas Technician 1 or Oil Burner Technician 1 certificate;
- b) holders of certificates that have not renewed and have had their certification status suspended or cancelled.

#### **Exemption**:

An individual holding a certificate of qualification as a Class 1, 2 or 3 Operating Engineer would not be required to attend the training program(s) for the Gas Technician 3 nor be required to challenge the Gas Technician 3 examination in order to be able to proceed to the next level of permanent certification (i.e. G.2, OBT.2, DA, GP).

This exemption, however, does not mean that the Class 1, 2 or 3 Operating Engineer will receive a Gas Technician 3 (G.3) certificate of qualification or that they may perform functions within the scope of a G.3. The exemption is solely from the requirement to undergo the training modules at the G.3 level so that the person may either immediately enter the G.2 training program or proceed directly to the challenge exam process.

**O. Regulation 215/01, Sect 55(4):** allows an exemption for Operating Engineers that only applies to work that is within the scope of the person's certificate as an OE on equipment that is located at a registered plant at which the person is employed.

#### Renewals:

Renewal periods are two years as prescribed in the Regulation. Policies pertaining to renewals are as follows:

- a) a certificate holder (any class) that fails to renew their certificate on time will have their certificate placed in suspension for a period of twelve months or until the requirements have been met. Suspended certificates will be cancelled after the twelve months have lapsed;
- b) Certificate holders who have not renewed their certificate or who have failed to meet the information requirements for a period <u>longer than twelve months</u>, and are requesting a re-instatement, will be considered as **new applicants**, and will be subject to the same certification requirements of a new applicant, i.e. re-training, qualifying examination(s), practical skills evaluation.
- c) Renewal notices and suspension letters will be mailed to the address on file with TSSA. Notification of change of address must be submitted to TSSA within 30 days (O. Regulation 215/01 Sect 19(1)) to ensure renewal notices are received.

#### **Out-of-Province:**

Out-of-Province applicants who have completed recognized training programs in their home jurisdiction are to be referred to Quality and Standards, where:

- a) the training programs in the home jurisdiction will be evaluated. The applicant will be required to submit a request in writing, enclose official transcripts and proof of successful completion and/or certificates from their home jurisdiction and include a Confirmation of Qualification from the certifying body in their home jurisdiction;
- b) experience requirements will be evaluated. The applicant will be required to submit letters from past and/or present employers detailing the length and type of experience and skills that have been accumulated.

Based on the results of the evaluation of the material and documents submitted, Out-of-Province applicants may:

- a) be required to complete and submit a confirmation of work experience/skills passport;
   and/or;
- b) be required to successfully challenge an approved Provincial examination for the class of certificate being applied for, or;
- be deemed to hold the equivalent training and having met the experience requirements for the applicable class of certificate, Quality and Standards will issue the equivalent Ontario endorsement.



#### **Scope of Certification:**

All technicians are required to work within the scope of the certificate/endorsement class they hold. For the specific wording and details relating to the scope of the various certificates of qualification and Records of Training please refer to the *Fuels Industry Certificates and Authorizations Regulation 215/01* under the *Technical Standards and Safety Act* 2000.

## Record of Training (ROT) Expiry Dates and Renewal Procedures

All Training Providers issuing ROTs must be accredited by and meet the standards for accreditation as set out by TSSA. Accreditation can be obtained by either submitting a program and training proposal directly to TSSA for review or by attending a TSSA accredited train-the-trainer program and conducting programs on behalf of and under agreement with the *Parent Trainer*. The accreditation procedures also apply to Employers delivering ROT training programs on site for their own staff.

Industry issued *Record of Training (ROT)* certificates are valid for a three (3) year timeframe from the date of issue. Expiry dates, Training Provider name and TSSA accreditation number, must be printed on the ROT Card along with the cardholder name.

TSSA accredited Training Providers are responsible for ensuring that recipients of ROTs (whether as an initial issue or as a renewal) have been assessed and found to be competent to perform the functions covered by their respective category of certification. When renewing an ROT at the three year expiry, procedures to ensure candidates have retained the knowledge base they held at completion of the initial training should be implemented. This assessment could be conducted as an interview, a theoretical examination, a practical skills demonstration or any combination including refresher training. It is imperative that Training Providers maintain a level of comfort in the skills of the candidates they certify and ensure they are competent and can operate in a safe manner.

Should a candidate not be able to ensure competency, successful completion of either a full re-training or a refresher/overview training program is necessary at the discretion of the Training Provider. Candidates who have not met the competency requirements and have completed further training must then be re-assessed by a TSSA accredited Training Provider on both their theoretical knowledge and their practical skills before performing the procedure again.

ROT cards must state what the candidate has been trained and therefore authorized to do and be fuel specific.

#### **Industrial Maintenance Technician (IMT):**

An applicant for an IMT authorization who has successfully completed a training program acceptable to the Director on the electrical and/or the control instrumentation systems as they related to the gas and fuel oil systems only, may be issued a certificate of qualification or authorization with the designation "E" - Electrical. This authorization or endorsement entitles the holder to install, purge, service, maintain, repair, remove and inspect electrical and/or control systems and equipment if the systems and equipment are fuelled by natural gas, propane or fuel oil.

An applicant for an IMT authorization who has successfully completed a training program acceptable to the Director on the mechanical and/or the mechanical control systems as they related to the gas and fuel oil systems only, may be issued a certificate of qualification or authorization with the designation "M" - Mechanical. This authorization or endorsement entitles the holder to install, purge, service, maintain, repair, remove and inspect piping systems, mechanical and/or mechanical control systems if the systems and equipment are fuelled by natural gas, propane or fuel oil.

Further details on the IMT assessment process and certification requirements are contained in the *IMT Policies & Procedures* document. All IMT Training Programs and certificate requirements must be approved in advance by Quality and Standards, TSSA.

#### **Accreditation of Training Providers/Organizations:**

- 1. Training Providers/Organizations will be required to meet specific standards and conditions in order to be accredited and registered with TSSA as authorized under O. Regulation 215/01 of the Technical Standards & Safety Act, 2000 to deliver Fuel certification training program(s).
- Training Provider Status with TSSA will be cancelled if a training provider has not delivered training within the previous 2 years. Accreditation status could be reinstated through a new application process.
- 3. Applications or declarations for certification submitted on behalf of students by an organization not accredited as a Training Provider will not be accepted.
- 4. The criteria/conditions for acceptance of a Training Provider are as follows:

#### a. Instructor Qualification

The Training Provider wishing to deliver fuel certification programs will employ qualified instructors. Instructors delivering modules of training that have a technical content (e.g. electrical, flame safeguard controls, controls ... etc.) shall be certified/recognized in their occupation or trade and have a demonstrated knowledge of the subject matter(s) by submitting letters detailing their experience.

#### b. Instructor Information

The Training Provider will provide the names of their instructors and/or sub-contractors. The information will include: residential address and phone number, photocopy of trade/ occupational certificates; training delivery experience, fuel industry experience and any other information deemed pertinent to the delivery of the program.

#### c. Teacher/Student Ratio

It is *recommended* that there be no more than 20 students per training session.

#### d. Classroom - Theory Training

Theory instruction is an integral part of each program and should be supported through a proper environment. Note that the examinations are based in large part upon the theoretical training.

Audio/visual equipment, flip charts, and other training materials and props such as parts, fittings and tools that assist in the training must be available as required for the specific training modules.



#### e. Laboratory/Workshop Requirements for Practical Training

Due to the large proportion of practical skills development included in the majority of the training modules and curriculum, it is essential that the training facility have access to the required equipment. The equipment will vary with the degree of technical expertise required to deliver the training and meet the terminal performance objectives set out for the module(s). This will require access to equipment that includes, but may not be limited to:

- i. Cylinders, tanks and components used in various applications such as regulators, valves, meters, fittings, etc.;
- A supply of the fuel(s) to activate the various appliances;
- iii. Auto propane/compressed natural gas and filling facility (if applicable);
- Tools, meters, pressure gauges, flue gas analysers as required to connect or disconnect supply systems, troubleshoot and adjust the various types of equipment;
- v. Specific operational equipment such as furnaces, water heaters, boilers, fireplaces, ranges, dryers ... etc. as required for instruction and to provide a broad range of hands on experience;
- vi. Various manual and electronic control systems as required.

The lab facility may be on-site or at a site convenient for use by the Training Provider (e.g. on the site of an industry partner, the physical plant...etc). **Each site must be preapproved for use by TSSA and will necessitate a field visit.** 

#### f. Curriculum

The Training Provider will be required to satisfactorily deliver the standardized training curriculum approved by the Technical Standards and Safety Authority and Fuels Training and Certification Advisory Board as appropriate. The established curriculum will be provided to Training Providers by TSSA. There will be no deviation from this criteria unless specifically agreed to by Quality and Standards, TSSA.

#### g. Examination standards

The Training Providers will be required to apply the examination & evaluation standards based on the approved training curriculum and standardized examination banks.

Documented security procedures and protocol will be applied to ensure the confidentiality of the question data bank and the access to the data bank. A Training Provider not observing the security and confidentiality provisions may be subject to loss of accreditation.

Dictionaries of any type are not permitted in the examination room. This includes translation dictionaries.

- 5. An inspection of the facility and interviews with the instructors may be required in order to accredit a Training Provider. This inspection will be arranged through TSSA and an inspection fee will be applied.
- 6. Training Providers will be audited by the Technical Standards and Safety Authority.

**Required Modules for Gas/Oil Technician Classifications** 

| Classification   | Module Requirements  | Suggested<br>Program<br>Hours | Total<br>Cumulative<br>Hours |
|--|--|-------------------------------|------------------------------|
| Gas Technician 3<br>(G.3)  | 1, 2, 3, 4, 5, 6, 7, 8 & 9   | 180                           | 180                          |
| Gas Pipe Fitter (GP)   | Gas Technician 3 (G.3),<br>Plus modules 10, 15, 22   | 55                            | 235                          |
| Domestic<br>Appliance (DA)<br>Technician                                 | Gas Technician 3 (G.3),<br>Plus Modules 11, 12, 13, 14, 15 and 16  | 240                           | 420                          |
| Gas Technician 2<br>(G.2)  | Gas Technician 3 (G.3), plus Modules 10, 11, 12,13,14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24  | 480                           | 660                          |
| Gas Technician I<br>(G.1)  | Gas Tech. 3 (G.3) and Gas Tech. 2 (G.2),<br>Plus Modules 26, 27, 28, 29, 30 and 31   | 140                           | 800                          |
| Liquid Propane<br>Fitter (LP)  | Must have one of the following certificates:<br>Gas Pipe Fitter (GP), Gas Tech 2 (G.2), Gas<br>Tech 1(G.1), plus Module 25   | 32                            | 32                           |
| Oil Burner<br>Technician 3<br>(OBT.3)                                    | Training Materials from TSSA/University of Guelph, Kemptville/COHA (Canadian Oil Heat Association). Train-the-Trainer completion required for delivery.  | 200                           | 200                          |
| Oil Burner<br>Technician 2<br>(OBT.2)                                    | Training Materials from TSSA/University of Guelph, Kemptville/COHA (Canadian Oil Heat Association). Train-the-Trainer completion required for delivery.  | 240                           | 440                          |
| Oil Burner<br>Technician 1<br>(OBT.1)                                    | In development   | 80                            | 520                          |
| Industrial Maintenance Technician (IMT, - E Electrical or -M Mechanical) | Industrial Maintenance Technician Certification is site specific. Training requirements & guideline hours are set after an Equipment assessment and prior learning assessment on Technicians has been conducted by TSSA. | TBD                           | TBD                          |
| Internal Combustion Alternate Fuel Technician                            | Successfully completed accredited training program, should also include components of modules 1, 3, 4, 6   | Variable                      | Variable                     |

## Gas Technician Certification Training Modules:

| Module# | Module  |
|---------|---|
| 01      | Protect Self and Others   |
| 02      | Fasteners, Hand Tools and Power Tools                                 |
| 03      | Properties, Characteristics, Safe Handling of Propane and Natural Gas |
| 04      | Installation Codes, Acts and Regulations                              |
| 05      | Introduction to Electricity   |
| 06      | Technical Manuals, Specifications, Schematics, Drawings and Graphs    |
| 07      | Customer Relations  |
| 80      | Introduction to Piping and Tubing Systems                             |
| 09      | Introduction to Gas Appliances  |
| 10      | Advanced Piping and Tubing Systems                                    |
| 11      | Basic Electricity   |
| 12      | Controls (Mechanical and Electronic)                                  |
| 13      | "Building as a System"  |
| 14      | Domestic and Non-Vented Appliances                                    |
| 15      | Gas Meters, Pressure Regulators and Relief Valves                     |
| 16      | Domestic Gas Fired Refrigerators                                      |
| 17      | Conversion Burner   |
| 18      | Water Heaters, Combo Systems, Potable Water Heating Systems           |
| 19      | Forced Warm Air Heating Systems                                       |
| 20      | Hydronic Heating Systems  |
| 21      | Space Heating and Decorative Appliances                               |
| 22      | Venting Practices   |
| 23      | Forced Air Add-On Devices   |
| 24      | Air Handling Systems  |
| 25      | Liquid Propane*   |
| 26      | Flame Safeguard Controls  |
| 27      | Commercial and Industrial Appliances                                  |
| 28      | Gas Fired Air Conditioning and Refrigeration                          |
| 29      | Gas Technician I - Electricity  |
| 30      | Gas Technician I - Controls   |
| 31      | Valve Train   |
| 32      | Vehicle Refuelling Appliances (VRA)                                   |

\*Module 25 for Liquid Propane (LP) requires a separate program submission and Training Provider accreditation process, it is not part of the G2 or G1 standard program.



#### **Required Modules for Oil Burner Technician Certification:**

#### Oil Burner Technician 3 (OBT.3) Training Modules:

- 1. Protect Self/Others, Safe Handling of Hand & Power Tools
- 2. Installation Codes, Acts & Regulations
- 3. Basic Electricity
- 4. Technical Manuals, Specifications, Schematics, Drawings, Graphs
- 5. Theory of Combustion
- 6. Fundamentals of Controls
- 7. Customer Relations
- 8. Piping & Tubing Systems
- 9. Fuel Oil Storage and Delivery Systems
- 10. Introduction to Water Heaters, Forced Warm-Air Heating Systems
- 11. Burner Types and Oil Burner Nozzles
- 12. Chimneys, Drafts and Combustion Efficiency
- 13. Annual Servicing

#### Oil Burner Technician 2 (OBT.2) Training Modules:

- 14. Building as a System
- 15. Venting Systems
- 16. Electricity
- 17. Conversion Burners
- 18. Water Heaters, Combo Systems, Potable Water Heating Systems
- 19. Forced Warm-Air Heating Systems
- 20. Hydronic Heating Systems
- 21. Forced-Air Add-On Devices
- 22. Air Handling System
- 23. Flame Safeguard Controls

#### Fuels Safety Certification Fee Schedule (Regulation 215/01):

#### Curriculum:

The curriculum document provides a detailed breakdown of each module of study and training required for the specific subject.

Training Profiles contain the full listing of all modules for the gas technician certification sorted by module of study but described at a higher level than the curriculum, i.e. Terminal performance objectives.

Gas Technician Curriculum (Level 1 Modules 26 to 32, 2 - Modules 10 to 24 or 3 - Modules 1 to 9) \$25 ea./\$65 set

#### **Practical Skills Assessment:**

A service generally provided for the individual who is requesting to be reinstated and wishes to challenge the qualifying examination and the practical evaluation. The practical skills assessment is conducted with the Fuel Safety Inspector.

Gas & Oil Burner Technician Practical Skills Assessment \$120/hour + GST (approximately 3 hours)

#### **Examinations:**

Fuel Safety Examinations are offered at 3300 Bloor Street West when scheduled in advance. Approximate sitting time is 3.5 hours per GT or OBT examinations.

Examination appeals or reviews are provided on request. This process provides the candidate with a breakdown of the examination by topic and indicates the number of questions drawn for each topic and the number of incorrect responses by topic.

Exam (Gas & Oil):

- · Challenge Exam: \$170 (includes \$70 certification fee)
- · Re-write \$100.00

Exam (Gas & Oil): Sitting Fee, Challenge Exam or Re-write off-site. \$120/hour + GST

Exam Reviews/Assessments: \$50.00 + GST

Examination Scoring if provided by Examination Services: \$25 per participant

Out of Province Application or Challenge Request Assessments \$120.00 + GST



### Appendix A: Certificate Conversion Tables (Regulation 348/96 as amended July 1, 1997 by Regulation 158/97 under the former Ontario *Energy Act, now TSS Act, 2000):*

| Certificates Issued Prior to:<br>September/96 |     | Conve   | ert to:   |  |
|---|-----|---|---|--|
| GAF-1 Gas Fitter 1                            |     | G.1   | Gas Technician 1  |  |
| GAF-1 (Therm-hours) Gas Fitter 1 Ter          | np. | G.1   | Gas Technician 1 with POE (otherwise reverts to Gas Tech. 2)          |  |
| GAF-2 Gas Fitter 2                            |     | G.2   | Gas Technician 2  |  |
| GAF-2 (Therm-hours) Gas Fitter 2 Ter          | np. | G.2   | Gas Technician 2 with POE (otherwise reverts to Gas Tech. 3)          |  |
| GAI-1 Installer 1                             |     | GP  | Gas Piping Fitter   |  |
| GAI-2 Installer 2                             |     | G.3   | Gas Technician 3  |  |
| GFS Service Gas Fitter                        |     | DA  | Domestic Appliance Technician   |  |
| GFM Maintenance Fitter                        |     | IMT   | Industrial Maintenance Technician                                     |  |
| PFT-1 Propane Fitter 1                        |     | G.1<br>LP                                     | Gas Technician 1<br>Liquid Propane Fitter                             |  |
| PFT-2 Propane Fitter 2                        |     | G.2<br>LP                                     | Gas Technician 2<br>Liquid Propane Fitter                             |  |
| PCH-1 Construction Heating 1                  |     | CH-01   | Certificate or Record of Training (ROT)                               |  |
| PCH-2 Construction Heating 2                  |     | CH-O2 Certificate or Record of Training (ROT) |   |  |
| PMH-1 Mobile Housing                          | G.3 | with re                                       | equirement to upgrade to:<br>Recreational Vehicle Technician          |  |
| PIV-1 Industrial/Fork Lift                    |     | ICE-IV  | Internal Combustion Alternate Fuel<br>Technician - Industrial Vehicle |  |
| PAV-2 Automotive - Installer                  |     | ICE-P   | Internal Comb. Alternate Fuel Tech-Propane                            |  |
| PAV-1 Automotive - Inspection                 |     | ICE-P   | Internal Comb. Alternate Fuel Tech-Propane                            |  |
| PAV-1/2 plus NGV-1                            |     | ICE   | Integrated Int. Comb. Alternate Fuel Tech.                            |  |
| PPO-1/2/3 Plant Operator 1, 2 & 3             |     | PPO   | -1/2/3 Certificate or Record of Training (ROT)                        |  |
| PCI-1 Cylinder Inspector                      |     | PCI   | Certificate or Record of Training (ROT)                               |  |
| PTO-1 Truck Operator                          | РТО | Certific                                      | cate or Record of Training (ROT)                                      |  |
| Oil Burner Mechanic - 2                       |     | Oil Bu  | rner Technician – 1   |  |
| Oil Burner Mechanic - 3                       |     | Oil Bu  | rner Technician – 2   |  |

