Criminal Justice Standards and Training Commission
Florida Department of Law Enforcement

Breath Test Instructor
A Specialized Instructor Training Course

40-Hour Course

Lesson Plan

_____	1110	_____
TRAINING SCHOOL	**CLASS NUMBER**	**SESSION DATES**

Course Summary

Instructional Goal: To ensure that each student can successfully present issues involving breath alcohol analysis, the maintenance associated with evidentiary breath test instruments, and the qualifications of Breath Test Operators and Agency Inspectors.

Structure of Course: 7 Units
Total Estimated Time: 40 Hours

Subject Lessons:
Lesson One: Chapter 11D-8, Florida Administrative Code
Lesson Two: Pharmacology and Physiology of Breath Alcohol Analysis
Lesson Three: Breath Test Instrumentation
Lesson Four: Breath Samples and Breath Tests
Lesson Five: Agency Inspections
Lesson Six: Courtroom Testimony
Lesson Seven: Administration of a Breath Testing Course

Instructor Note

The lesson plans provide guidance to the instructor to effectively teach the course objectives. The Instructor is responsible for effectively presenting the objectives and is free to adapt, or supplement the course materials with his/her own materials to meet the needs of the students.

Student Competency Requirements

Each student must attend all lessons of the course and satisfy the following components in order to successfully complete this course:

Proficiency. Each student must achieve a "pass" grade on each of the following:
1. Properly perform a breath test using an Intoxilyzer 8000 and Form 38 – Breath Test Affidavit.
2. Properly perform an agency inspection using an Intoxilyzer 8000.
3. Properly complete all applicable forms.

Final Written Examination. Each student must achieve a minimum score of 85% on the final written examination.

Final Presentation. Each student will conduct a minimum of 10-minute period of instruction from a lesson within this course. Each student must receive a "pass" grade for the final presentation.

Special Note

This course must be conducted by members of the Florida Department of Law Enforcement Alcohol Testing Program at a Criminal Justice Standards and Training Commission-approved Training School in order for students to successfully complete the course.

Breath Test Instructor Course

Lesson One
Chapter 11D-8, Florida Administrative Code

Introduction
During this lesson, the student will learn about the administrative rules governing evidentiary breath alcohol analysis.

Objectives
Each student will be supplied with a copy of the current Chapter 11D-8, Florida Administrative Code.

1.1 Identify the administrative rules governing breath alcohol testing.
- Evidential breath alcohol testing in the State of Florida is governed by Chapter 11D-8, FAC.
- The rules are administered and enforced by the Florida Department of Law Enforcement Alcohol Testing Program (FDLE/ATP), as authorized by the Florida legislature.

1.2 Identify the definitions of breath testing terms.
- Breath testing terms are set out in rule 11D-8.002 in alphabetical order. Important terms include Acceptable Range, Agency, Agency Inspection, Agency Inspector, Alcohol Reference Solution, Approved Breath Alcohol Test, Authorized Repair Facility, Breath Alcohol Level, Breath Test Instructor, Breath Test Operator, Dry Gas Standard, Evidentiary Breath Test Instrument, Permit, Permit Cycle, and Reference Sample Device.

1.3 Identify the FDLE breath test instrumentation approval process.
- FDLE/ATP is authorized by statute to approve breath test instrumentation for evidentiary use in Florida. Approval evaluations are conducted in accordance with FDLE/ATP Form 34 – Instrument Evaluation Procedures.
- Software is NOT approved. It is EVALUATED. Evaluated new software does not disapprove previous versions of software.

1.4 Identify the purpose of instrumentation approval.
- The approval process seeks to ensure the accuracy and reliability of breath test results, and is prescribed by rule 11D-8.003.
- FDLE approves instrumentation and methods of analysis, as opposed to individual instruments or component parts.

1.5 Identify FDLE approved breath test instrumentation.
- Rule 11D-8.003(2) identifies breath test instrumentation approved for evidentiary use in Florida. The CMI, Inc. Intoxilyzer 8000 is the only approved evidentiary breath test instrument currently in use in Florida.

1.6 Identify how approved instrumentation can be validated.
- A Department Inspection validates the approval, accuracy and reliability of an evidentiary breath test instrument.
- Regardless of minor modifications or repairs, the Department Inspection process confirms that it remains an approved instrument.

1.7 Identify the approval process for Alcohol Reference Solution and Dry Gas Standards sources.
- FDLE/ATP is authorized by statute to approve Alcohol Reference Solution and Dry Gas Standards sources for use in evidentiary breath test instrumentation.
- Only Alcohol Reference Solution and Dry Gas Standards manufactured by a source approved by the Department may be used in evidentiary breath test instrumentation.
- Alcohol Reference Solution and the source are approved in accordance with rule 11D-8.0035.
- The Dry Gas Standards source is approved in accordance with rule 11D-8.0036.

1.8 Identify the Alcohol Reference Solution and Dry Gas Standards alcohol concentrations.

- Alcohol Reference Solution lots used in Florida are produced at the following alcohol concentrations: 0.05 g/210L, 0.08 g/210L, 0.20 g/210L.
- Dry Gas Standards lots used in Florida are produced at the following alcohol concentration: 0.08 g/210L.

1.9 Identify the applicable documentation.

- Information about approved Alcohol Reference Solution (ARS) lots is provided in Form 32 – Certificate of Assurance.
- Dry Gas Standard lots are accompanied by certificates of analysis from the approved source documenting their content and alcohol concentration.
- FDLE analyzes and approves ARS lots.
- Dry Gas Standard lots need only be certified by the manufacturer.

1.10 Identify the periods during which Alcohol Reference Solution lots and Dry Gas Standards lots may be used.

- Alcohol Reference Solution lots must be used within two years of the date of manufacture.
- Dry Gas Standard lots must not be used beyond the expiration date.

1.11 Identify the Department Inspection and instrument registration processes.

- Department Inspections and registrations of evidentiary instruments are required by rule 11D-8.004, which also prescribes the process for Department Inspections and instrument registrations.
- Emphasize that while only registered instruments can be used for evidentiary testing, training instruments are not registered.
- Department Inspections are performed in accordance with Form 36 – Department Inspection Procedures - Intoxilyzer 8000. Department Inspection results are reported on Form 41 – Department Inspection Report - Intoxilyzer 8000.
- Evidentiary instrument registrations are recorded in Form 12 – Registration of Breath Test Instrument.

1.12 Identify when Department Inspections are required.

- Department Inspections are required prior to an instrument being initially placed into evidentiary use.
- In addition, each registered instrument must be inspected by the Department at least once each calendar year and when returned from an authorized repair facility.

1.13 Identify the purpose of Department Inspections and instrument registrations.

- A Department Inspection validates an instrument's approval status for evidentiary use. An instrument's registration represents that it is an approved evidentiary instrument.

1.14 Identify the role and authority of Department Inspectors.

- Department Inspectors are FDLE employees authorized to perform Department Inspections and other instrument maintenance, to inspect related equipment and facilities, to monitor training classes, and to enforce the provisions of Chapter 11D-8, F.A.C.
- Evidentiary breath test instruments, facilities and related materials and documentation must be made available to Department Inspectors upon request.

1.15 Identify the Agency Inspection process.

- Agency Inspections of evidentiary instruments are required by rule 11D-8.006, which also prescribes the process for Agency Inspections.
- Agency Inspections are performed in accordance with Form 39 – Agency Inspection Procedures – Intoxilyzer 8000.
- Agency Inspection results are reported on Form 40 – Agency Inspection Report - Intoxilyzer 8000.

1.16 Identify when Agency Inspections are required.

- Agency Inspections are required at least once each calendar month.
- Agency Inspections are also required prior to taking any instrument out of evidentiary use and prior to returning any instrument to evidentiary use.
- Agency Inspections are not required prior to relocating an Intoxilyzer 8000 instrument.

1.17 Identify the duties and responsibilities of Agency Inspectors.

- Agency Inspectors are issued permits by FDLE authorizing them to perform Agency Inspections.
- Agency Inspectors are responsible for compliance with the rules governing custody and care of evidentiary breath test instruments and related documentation as required by rule 11D-8.007.
- The Agency Inspector is also responsible for custody of instrumentation records and materials, and for completing electronic transmissions.

1.18 Identify requirements for operation, care, and security of evidentiary breath test instrumentation.

- Evidentiary breath test instruments must be located in a secured environment and kept clean and dry, and access must be limited to permit holders or persons authorized by a permit holder.
- Only authorized repair facilities and the Department are authorized to remove the top cover of an Intoxilyzer 8000 evidentiary breath test instrument.
- Instruments MUST be removed from evidentiary use prior to shipping via common carrier and prior to servicing by an authorized repair facility.

1.19 Identify breath test instrumentation operational procedures.

- Evidentiary breath alcohol tests must be conducted as prescribed by rule 11D-8.007, including reasonably ensuring that the subject did not take anything by mouth or regurgitate for at least twenty minutes prior to the breath test.
- Operation of Intoxilyzer 8000 breath test instruments shall be in accordance with Form 37 – Operational Procedures – Intoxilyzer 8000, and the results shall be reported on Form 38 – Breath Alcohol Test Affidavit – Intoxilyzer 8000.

1.20 Identify required instrumentation records and retention periods.

- Agency Inspection Reports and instrument repair records shall be retained by the agency for at least three years from the last entry date.
- Breath test instrument registrations shall be retained by the agency for at least three years after an instrument is removed from evidentiary use.
- Dry gas standards certificates of analysis shall be retained by the agency for at least three years after receipt.
- All breath tests conducted on Intoxilyzer 8000 evidentiary instruments shall be electronically transmitted to FDLE at least once each calendar month.

1.21 Identify requirements to obtain a breath test operator or an agency inspector permit.

- Qualifications for obtaining breath testing permits, the application process, and continuing education requirements are prescribed in rule 11D-8.008.
- Qualified applicants for breath testing permits may submit applications no later than ninety days after successful completion of the applicable breath test course using Form 8 – Breath testing Permit Application.
- Applicants are not authorized to perform any duties associated with a permit until such permit has been issued by FDLE.
- It is critical that students understand that completing the class does not entitle them to conduct breath tests or perform agency inspections. They must be issued permits prior to performing such duties.

1.22 Identify continuing education requirements for Breath Test Operators and Agency Inspectors.

- In order to maintain a valid permit, Breath Test Operators and Agency Inspectors must successfully complete the Commission-approved Renewal Course by June 30 following the fourth permit anniversary date, and during each subsequent four-year cycle.

- Failure to successfully complete the renewal on time renders their permit inactive. If no Commission-approved renewal course is taken within the six months prior to December 31, their permits will expire. No evidentiary duties may be performed with either inactive or expired permits.
- If a renewal course is failed or if a permit expires, no duties governed by the permit can be performed until they successfully complete the full basic course.
- Successful completion of a Commission-approved breath test instructor certification course or breath test instructor certification renewal course also satisfies the continuing education requirements for Agency Inspector permits and Breath Test Operator permits.

1.23 Identify requirements to conduct breath test courses.

- Only persons who hold a valid Breath Test Instructor Certification issued by the Commission are authorized to conduct breath test courses. Commission certification of instructors is governed by Chapter 11B-20, F.A.C. Breath Test Instructors are required to successfully complete the Commission-approved certification renewal course sometime during their four-year cycle, pursuant with Rule 11B-20.0017, unless exempted by the Commission.
- Breath Test Instructors must also successfully complete all Department breath test instructor update courses.
- Breath Test Instructors must adhere to and comply with approved breath test curricula and related forms.

1.24 Identify consequences of administrative rule violations.

- Rule 11D-8.015 authorizes the Department to take administrative action for a violation of, or abetting a violation of, Chapter 11D-8, F.A.C. Such action includes requiring additional training or education, permit suspension, permit revocation, and invalidation of an instrument's registration.
- There is an appeals process for permit denials, suspensions, and revocations as provided in rule 11D-8.016.
- While a suspension is temporary, a revocation is open-ended requiring a new application which may be denied.

Breath Test Instructor Course

Lesson Two
Pharmacology and Physiology of Breath Alcohol Analysis

Introduction

During this lesson, the student will learn about the characteristics of alcohol, the pharmacology of alcohol and the physiology associated with breath alcohol analysis.

Objectives

ALCOHOL

2.1 State all alcohols contain a hydroxyl functional group [-OH].

2.2 Describe the physical properties of alcohols as having high boiling points and high solubility in water.

2.3 Describe the differences and uses for the following alcohols: methanol, ethanol, propanol, and butanol.

2.4 State the alcohol referred to in breath testing courses and administrative rule is ethanol or ethyl alcohol.

2.5 State ethyl alcohol is the "alcohol" in alcoholic beverages.

PHARMACOLOGY

2.6 Define pharmacology as it relates to alcohol as the science concerned with alcohol, its sources, appearance, chemistry, actions and uses.

2.7 State pharmacology is divided into two processes called pharmacokinetics and pharmacodynamics.

2.8 Define pharmacokinetics as the process by which the body absorbs, distributes, and eliminates alcohol.

2.9 Define absorption of alcohol as the process by which alcohol enters the blood stream.

2.10 State approximately 25% of a dose of alcohol is absorbed by the stomach and approximately 75% of a dose of alcohol is absorbed by the small intestines.

2.11 Define distribution of alcohol as the process by which alcohol is spread to all the watery parts of the body via the bloodstream.

2.12 Define elimination of alcohol as the process by which alcohol is removed from the body.

2.13 State elimination is divided into two processes called metabolism and excretion.

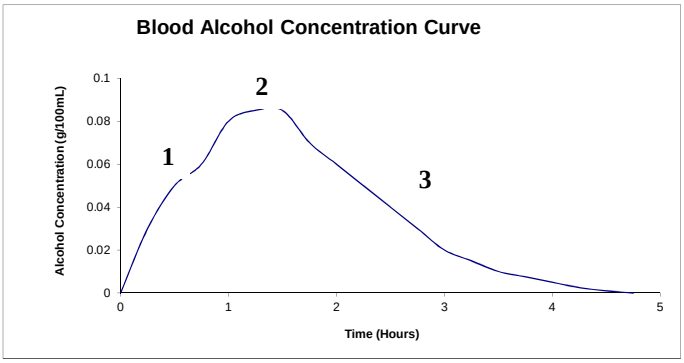
2.14 Define metabolism of alcohol as the process by which alcohol is broken down mainly by the enzyme alcohol dehydrogenase into carbon dioxide and water.

2.15 Define excretion as the process by which alcohol is removed from the body unchanged or not broken down into other substances.

2.16 State approximately 95% of a dose of alcohol is metabolized by the liver and approximately 5% of a dose of alcohol is excreted unchanged in the breath, sweat, tears, and urine.

2.17 State the blood alcohol concentration curve is a representation of alcohol concentration in the body over time.

2.18 Know, understand and identify the pharmacokinetic parameters absorption, distribution and elimination on the blood alcohol concentration curve.



1=Absorption
2=Distribution
3=Elimination

2.19 Define the pharmacodynamics of alcohol as the study of the biochemical and physiologic effects of alcohol and its mechanisms of action.

2.20 Describe the general effects that would be exhibited by a person at certain alcohol concentrations.

PHYSIOLOGY

2.21 State the physiological system involved in breath alcohol analysis is the respiratory system.

2.22 State the major function of the respiratory system is to supply the body with oxygen and dispose of carbon dioxide and other waste.

2.23 Define the processes that collectively called respiration as pulmonary ventilation, external respiration, transport of respiratory gases and internal respiration.

- Pulmonary ventilation: movement of air into and out of the lungs so that gases in the alveoli are continuously changed and refreshed. This air movement is commonly called ventilation or breathing.
- External respiration – gas exchange (oxygen loading and carbon dioxide unloading) between the blood and the air filled chambers of the lungs.
- Transport of respiratory gases – transport of oxygen and carbon dioxide between the lungs and tissue cells of the body. Blood is the transporting fluid.
- Internal respiration – gas exchanges (oxygen unloading and carbon dioxide loading) between the blood and tissue cells.

2.24 Describe the flow of blood through the circulatory system.

2.25 Describe the role of blood in the respiratory system processes.

2.26 Identify the major organs of the respiratory system as the nose and nasal cavity, the pharynx, the larynx, the trachea, the bronchi and their smaller branches called bronchioles, and the lungs which contain the terminal air sacs called alveoli.

2.27 Define the function of each major organ of the respiratory system.

- Nose and Nasal Cavity – provides an airway for respiration; moistens and warms entering air; filters inspired air and cleanses it of foreign matter; serves as a resonating chamber for speech; and houses the smell receptors.
- Pharynx – Commonly called the throat and is the passage way for air and food. It connects the nasal cavity to the larynx and the oral cavity to the esophagus.
- Larynx – Provides an open airway and to act as a switching mechanism to route air and food into the proper channels; responsible for voice production.
- Trachea – airway passage that cleans and moistens incoming air. It is lined with mucosa and cilia to clean the air.
- Bronchi and their smaller branches – airway passage that connects the trachea with the alveoli. It cleanses warms and moistens incoming air.
- Lungs – House respiratory passages smaller than the primary bronchi.
- Alveoli – Main site of gas exchange. Located inside the lungs.

2.28 Define and describe the two zones that the make up the respiratory system as the respiratory zone and the conducting zone.

- Respiratory zone – the actual site of gas exchange. It is comprised of the bronchioles, alveolar ducts and alveoli.
- Conducting zone – respiratory passageways which provide a fairly rigid conduit for air to reach the sites of gas exchange. The conducting zone organs consist of the nose and nasal cavity, the pharynx, the larynx, the trachea, and the bronchi. These organs are primarily responsible for cleansing, humidifying and warming the incoming air. The diaphragm may also be included in the conducting zone.

2.29 Define and describe the two phases of pulmonary ventilation as inspiration and expiration.

- Breathing or pulmonary ventilation consists of two phases:
    - Inspiration – the period when air flows into the lungs; and
    - Expiration – the period when gases exit the lungs.

2.30 Describe in detail how pulmonary ventilation occurs.

- Pulmonary ventilation is a mechanical process that depends on volume changes occurring in the chest cavity.
- Volume changes lead to pressure changes which lead to the flow of gases to equalize the pressure.
- Inspiration: Inspiratory muscles contract > Chest cavity volume increases > Lungs stretch and intrapulmonary volume increases > Intrapulmonary pressure drops > Air gases flow into lungs until pressure reaches equilibrium.
- Expiration: Inspiratory muscles relax > Chest cavity volume decreases > Lungs recoil passively and intrapulmonary volume decreases > Intrapulmonary pressure rises > Air gases flow out of lungs until pressure reaches equilibrium.

2.31 Define and describe respiratory volumes – tidal volume, inspiratory reserve volume, expiratory reserve volume and residual volume.

- Tidal volume – amount of air inhaled or exhaled with each breath under resting conditions (~500 mL)
- Inspiratory reserve volume – amount of air that can be forcefully inhaled after a normal tidal volume of inhalation.
- Expiratory reserve volume – amount of air that can be forcefully exhaled after a normal tidal volume exhalation
- Residual volume – amount of air remaining in the lungs after a forced exhalation (~1100 mL)

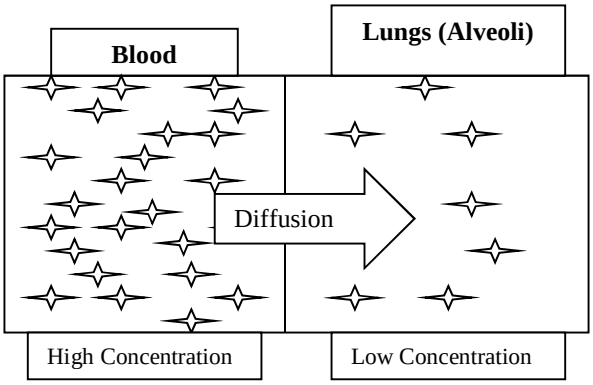
2.32 Define and describe respiratory capacities – inspiratory capacity, functional residual capacity, vital capacity and total lung capacity.

- Total lung capacity – maximum amount of air contained in the lungs after a maximum inspiratory effort.
- Vital capacity – maximum amount of air that can be expired after a maximum inspiratory effort (~3100 – 4800 mL)
- Inspiratory capacity – maximum amount of air that can be inspired after a normal expiration.
- Functional residual capacity – volume of air remaining in the lungs after a normal tidal volume expiration.

2.33 Describe how pulmonary ventilation, respiratory volumes and respiratory capacities relate to breath alcohol analysis.

2.34 Describe how alcohol circulating in the body is excreted unchanged by the lungs.

- The transfer of alcohol and other volatile substances from the blood to the breath occurs in the alveoli of the lungs.
- Alveoli are the thin-walled sacs that fill the lungs and allow for gas and volatile substances to pass from the blood into the lungs and from the lungs into the blood. Blood vessels are in direct contact with the alveoli.
- Alcohol readily passes from the blood into the alveoli by a process called diffusion (automatic movement of a substance from an area of high concentration (blood) to an area of low concentration (lungs)) because alcohol is a low weight molecule and is volatile.



Breath Test Instructor Course

Lesson Three
Breath Test Instrumentation

Introduction

During this lesson, the student will learn about the instrumentation used for evidentiary breath testing including the theory and operation of the instrumentation.

Objectives

METHOD OF ANALYSIS

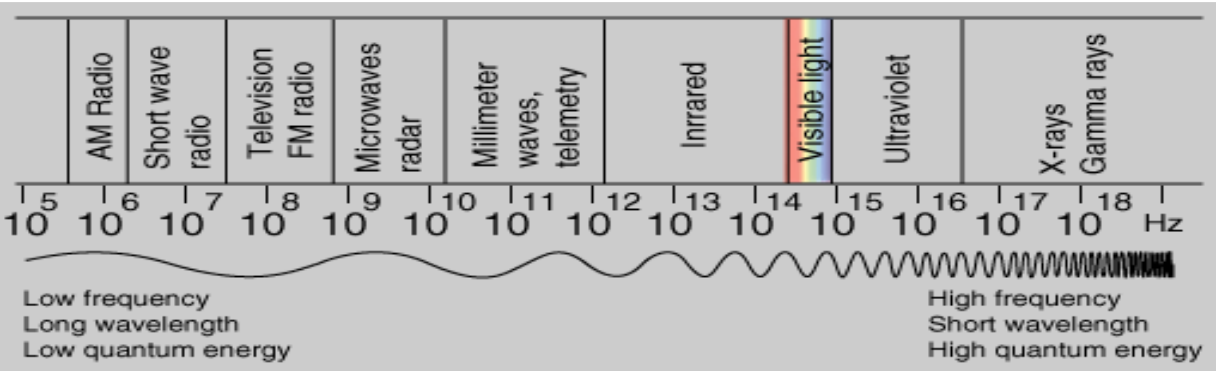
3.1 State the approved method for evidentiary breath testing is infrared light absorption. Define and understand what a method is.

- A method is a type of alcohol analysis approved by the Department to conduct chemical or physical tests of blood or breath.
- The Intoxilyzer 8000 use the method infrared light absorption.

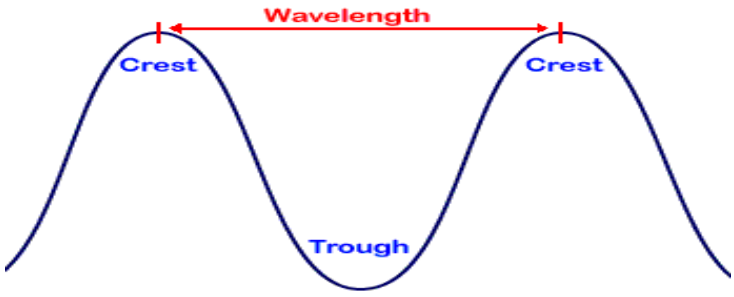
3.2 Define and describe infrared light.

- Infrared light is not visible to the human eye
- Electromagnetic radiation or energy in the form of waves, relating to the range of invisible radiation wavelengths from about 0.75 micrometers, just longer than red in the visible spectrum, to 1 millimeter, on the border of the microwave region.
- The wavelengths of light the Intoxilyzer 8000 uses fall within the Infrared region of the electromagnetic spectrum.

ELECTROMAGNETIC SPECTRUM

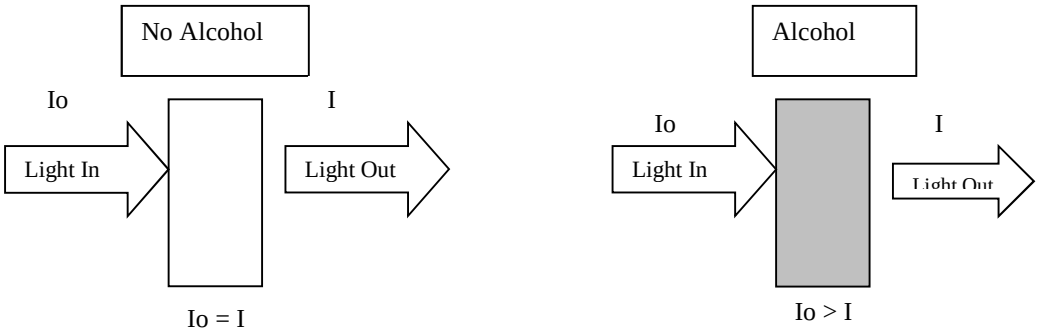


- A wavelength is the distance between one location of a wave of light such as a crest or peak and the next corresponding location.



3.3 Explain the method Infrared Light Absorption as it relates to breath alcohol analysis.

- Type of absorption methodology that uses the infrared light to identify and quantify alcohol.
- Alcohol molecules absorb infrared light in a unique and consistent manner.
- The wavelengths of infrared light that are absorbed depend on the different structural groups present on the molecule.
- When an alcohol molecule is exposed to infrared light, it will absorb specific wavelengths of the infrared light.
- The amount of infrared light absorbed is directly proportional to the concentration of the alcohol present in the breath. This relationship between the amount of infrared light absorbed and the amount of alcohol in the breath is a constant and will occur in the same proportions each and every time.
- When infrared light passes through the sample chamber, some of the light may be absorbed and the remainder transmitted through the sample. Absorbance can be defined as the logarithmic ratio of the amount of light detected when no alcohol is present in the sample chamber (Io) versus the amount of light detected when alcohol is present in the sample chamber (I) (Where I = intensity of light measured).
- $A = \log \frac{Io}{I}$



- The more alcohol molecules there are in the sample, the more light will be absorbed by these molecules, the less light will reach the detector, and the higher the alcohol result will be.

3.4 State the scientific principle upon which the method infrared light absorption is based as the Beer-Lambert Law. Define the Beer-Lambert Law. Apply the Beer-Lambert Law to the agency inspection and breath testing processes.

- The Beer-Lambert Law is defined as the linear relationship between the absorbance of infrared light by alcohol and the concentration of alcohol in the sample.
- The relationship is linear. As the alcohol concentration rises, the more infrared light will be absorbed.
- The absorbance of light by alcohol at a given wavelength is proportional to the absorptivity of the alcohol (e), the sample chamber path length (b), and the concentration of the alcohol (c).
- A = c x b x e
    - e = molar absorptivity constant (a constant for alcohol)
    - b = sample chamber path length (a constant in the instrumentation)
    - c = concentration of alcohol (can be calculated based on the amount of light absorbed)
- In breath or control testing, the absorbance (A) is measured by the instrument and the concentration (c) is then calculated giving the breath or control test result.

3.5 State another scientific principle that is used in the Intoxilyzer 8000 is Charles' Law. Define Charles' Law.

- The volume of a gas or vapor changes with temperature and pressure. A gas or vapor expands by the same fraction of its original volume with each degree that the temperature rises.
- This Law explains how a breath or control sample will expand to the entire volume of the sample chamber as long as the pressure and temperature remain constant.

INSTRUMENTATION

3.6 List the approved breath test instrumentation for evidentiary breath testing. Define evidentiary breath test instrument.

- Evidentiary Breath Test Instrument – a breath test instrument approved by the Department under Rule 11D-8.003, F.A.C., and used primarily to conduct alcohol breath tests pursuant to Florida law.
  - The approved evidentiary breath test instrument that is currently in use in Florida is the:
    - CMI, Inc. Intoxilyzer 8000

3.7 List and describe the major components of the Intoxilyzer 8000 that are used in obtaining and analyzing a breath or control sample.

Component/ Purpose	Intoxilyzer 8000
Breath Tube Delivers breath sample into the instrument	Thermostatically controlled at a nominal temperature of 45C to prevent condensation of the breath sample
Sample Chamber Where a sample is analyzed	Thermostatically controlled at a nominal temperature of 47C to prevent condensation of the breath sample
Light Source Produces light	Spiral filament. Emits only infrared light. Directly connected to one end of the sample chamber. Pulses light into sample chamber
Filters Filter infrared light at specific wavelengths. Used to identify alcohol	Two filters are directly connected to the sample chamber opposite the light source. Filters: 3 μM and 9 μM. 3 μM filter: used to detect the presence of interferents 9 μM filter: used to detect the presence of alcohol.
Detector Detects the light not absorbed by the alcohol in the sample	Two pyroelectric detectors. Each detector is directly connected to a filter. Determines the amount of light not absorbed by the alcohol in the sample and converts this response into an electrical response.
Microprocessor Calculates the amount of alcohol in a sample based on the electrical response received from the detector	Calculates the result in g/210L based on the electrical response from the 3 μM filter and the 9 μM filter. These results are compared to each other to ensure interferents are not present. The result from the 9 μM filter is displayed and printed as the result.

3.8 Identify and define the hardware of the Intoxilyzer 8000.

Component	Intoxilyzer 8000
Mouthpiece	The disposable, plastic trap that fits on the end of the breath tube through which the subject provides the breath sample.
Display	The screen on the front of the instrument which contains a two line (twenty characters per line) florescent display that is used to visually communicate messages and instructions to the user.
Start Test Button	The green push pad on the front of the instrument that is used to initiate a breath test sequence and to bring the instrument from STANDBY MODE to READY MODE.
Power Switch	The black rocker switch on the back of the instrument used to turn the instrument on and off when plugged into a wall outlet.
Keyboard	Used to provide a direct user interface with the instrument.
Printer Paper Door	The removable door on top of the instrument which covers the thermal printer and paper.
External Printer Port	The printer port on the back of the instrument where the external printer is attached.
Calibration Inlet	The female connection fitting on the right side of the instrument where the external dry gas standard cylinder tubing is connected.

Gas Power/ Interface Connector	The female connector on the lower back of the instrument where the dry gas standard cylinder regulator wiring connects.
Paper Feed Button	The black push pad on the front of the instrument used to advance the paper in the internal printer.
Dry Gas Standard Cylinder Carrier	The metal and plastic bracket that attaches to the bottom of the instrument that secures the cylinder and protects the regulator.
Regulator Valve	The valve that attaches to the top of the dry gas cylinder and indicates the pressure in the cylinder.
Internal Printer	Thermal printer located inside the top of the instrument. The instrument will automatically sense the absence of an external printer and default printing to the internal printer.
DC Power-In Socket	The round threaded connector located on the upper left rear of the instrument used to connect the DC power plug.
AC Power In-Socket	Socket on the rear of the instrument where the power cord is plugged in.
Fuse Holder	The round fuse holder on the rear of the instrument that holds the 5mm 250V/6.3 amp circuit protection fuse.
Modem Line Connector	The standard telephone jack located on the rear of the instrument used to connect the internal modem to an analog telephone jack.
Internal Modem	The device used to transmit information to and from the instrument to a host computer.

3.9 State the Intoxilyzer 8000 visually communicate by displaying messages and by sounding three distinct tones. Describe and understand these tones.

- When a message is displayed, the user is expected to perform the action being requested or take action based on the message displayed.
- The three distinct tones are:
  - Beep – a beep sounds after the completion of each operation.
  - Continuous Tone – a continuous tone sounds while a subject blows into the instrument with sufficient pressure.
  - Low/High Tone – a low/high tone sounds in the event of an exception, incorrect operational procedure, or unfulfilled test requirement.

3.10 Describe and understand the different ways to power, initialize warm up and access READY MODE for the Intoxilyzer 8000.

	Intoxilyzer 8000
Power	110 volt AC (a wall outlet) and 12 volt DC (a car or boat cigarette lighter)
Initialize Warm Up	Push the power button on the back of the instrument if the instrument is plugged into a wall outlet. If the instrument is being powered by 12 volt DC it will automatically turn on. Push the green start test button to initialize warm up. It will take approximately twenty (20) minutes for the instrument to warm up. The instrument will display NOT READY. During the last five (5) minutes of the warm up phase, the instrument will begin a countdown of the time remaining for warm up to complete. The instrument will conduct diagnostic checks after warming up and before going into READY MODE.
READY MODE	The instrument is ready for use when "READY MODE" and the message to push the start test button displays on the instrument. Push the green start test button to begin a breath test.
STANDY BY MODE	If the start test button is not pushed within approximately thirty (30) minutes after coming into READY MODE, the instrument will go into STANDBY MODE. To bring the instrument to READY MODE, push the start test button. After approximately one (1) minute, the instrument will perform diagnostic checks before to returning to READY MODE.

3.11 State a diagnostic check will occur on an Intoxilyzer 8000 before the instrument comes out of NOT READY MODE. Explain the Diagnostic Checks that are performed on each instrument. Explain DIAGNOSTIC OK and the actions the operator must take when a failure occurs during a diagnostic check.

Intoxilyzer 8000
• Internal Printer Check – Checks for paper, proper power, empty data buffer, and mechanism movement. • RTC Test – Real Time Clock Test. Checks for valid date and time. This is not necessarily the correct date and time. • DSP Test – Digital Signal Processor Test. Verifies IR source function, source signals within limits, inter-processor communication, and proper processor voltage/current. • Analytical Test – Verifies stability and range of filters • EEPROM Test – (EEPROM stands for Electronically Erasable Programmable Read Only Memory) Tests for proper checksums of all contents for validity (calibration, settings, location, and serial number) • Volt/Current Test – Tests for proper voltage and current at all source levels. Also checks flow sensor and barometric pressure sensor. • RAM Test – Checks operating system RAM status. • Internal Modem Test – Tests internal modem for proper operation. • Temperature Regulation Test – Checks for proper temperatures and thermistor operation. When DIAGNOSTIC OK is displayed, the instrument's analytical components and operational standards are working properly. The instrument will enter READY MODE. • If a diagnostic check fails, the instrument will display DIAGNOSTIC FAIL. The user should address the failure and begin another test or inspection. If the same failure occurs again, contact the department inspector.

3.12 Describe and understand how to access and use the breath test operator and agency inspector menus of the Intoxilyzer 8000 and how to upload breath tests and agency inspections.

- The three level menu is used to allow features and functions to be changed or initiated. Enter User last name and first name and middle initial when prompted. Only the first level, for breath test operators, is <u>not</u> password protected. Unique passwords are required for the other two levels. The levels are 1 – breath test operator; 2 – agency inspector; and 3 – department inspector.
- The instrument uses the detachable keyboard for a direct user interface in selecting functions and modes.
- Press ESC, ESC. This will access the Breath Test Operator menu. The breath test operator menu consists of the following:
  - ✓ R – Recall Test
    - To recall a breath test, the operator must PAGE UP or PAGE DOWN to the record date. The instrument will show the number of records for that date. The operator must then scroll through the list by subject last name and retrieve the record they would like to print by pressing the enter key. The RIGHT ARROW will show the subject's first name. An external printer must be attached. The Breath Alcohol Test Affidavit – Form 38 will automatically print to the external printer.
  - ✓ S – Gas Cylinder Change
    - After changing the dry gas standard cylinder, the operator must enter the Cylinder Lot # and press enter; and then must enter the Expiration Date and press enter. (Changing the dry gas cylinder lot # during a breath test does NOT update the information stored by the instrument.)
- Then press 2 to access the agency inspector menu.
  - When access to the agency inspector menu is requested, the agency inspector will be asked to enter a password.
  - The agency inspector can move through the agency inspector menu by moving the cursor under the desired letter and pressing ENTER.
  - If there is no activity via the keyboard after a function has completed within two (2) minutes, the instrument will return to Ready Mode and the password must be re-entered.
  - The agency inspector menu consists of the following:

- ✓ E – Set Date and Time
  - Date must be entered MM/DD/YYYY
  - Time must be entered HH:MM:SS
- ✓ D – Diagnostic
  - Auto Run of Diagnostic and prints results
  - Initiates a diagnostic routine which checks or tests the following and prints the results:
    - ✓ Internal Printer, Real Time Clock, Digital Signal Processor, Analytical Check, EEPROM, Volt/Current, RAM, Internal Modem and Temperature.
- ✓ G – Tank Monitor
  - Shows the pressure remaining in the dry gas standard cylinder
- ✓ S – Gas Cylinder Change
  - Used for changing the dry gas standard cylinder and allow input of the cylinder's lot number and expiration date.
  - After changing the dry gas standard cylinder, the agency inspector must enter the Cylinder Lot # and press enter, and then must enter the Expiration Date and press enter.
- ✓ I – Inspection Test
  - Auto-Routine of Agency Inspection
  - Sets instrument into agency inspection mode and automatically prompts the agency inspector to follow a required series of steps.
- ✓ R – Recall Test
  - To recall an agency inspection, the agency inspector must PAGE UP or PAGE DOWN to the record date of the agency inspection. The agency inspector must then scroll through the list by date until the correct date appears. The agency inspector can print the Agency Inspection Report – Intoxilyzer 8000 by pressing the enter key when the correct date is highlighted. An external printer must be attached in order to print the report.
- ✓ C = Comms Transfer
  - Used to upload all breath tests, any agency inspection(s), and other information that is not uploaded at the time of the agency inspection.
  - Move the cursor under C and press ENTER. Ensure the instrument is connected to an analog phone line.
  - Enter or verify the telephone number to the database in Tallahassee and press ENTER.
  - All information will automatically be uploaded to the database in Tallahassee. The instrument will notify the agency inspector if the data was successfully uploaded.
- ✓ T – Control Testing
  - Control Testing. Press enter for Submenu
    - ✓ D – Dry Control Test. Sets the instrument to analyze the dry gas standard. Auto Run of single dry gas standard test and prints results.
    - ✓ W – Wet Control Test. Sets the instrument to analyze a simulator. Auto Run of single reference sample device (simulator) test and prints results.
    - ✓ I – Internal Control Test. Auto Run of ITP Check at 0.08 g/210L and prints results.
    - ✓ S – Stability Test. Sets the instrument to do the user selected number of control tests. Select Cal (D/W/I), press enter, enter the number of checks to run and press enter. The instrument will perform the requested number of tests and print the results.
- ✓ Z = Change Password
  - Move cursor under Z and press ENTER. "Enter Password" will be displayed. The agency inspector will enter their password and press ENTER. The instrument will save the password.

INTOXILYZER 8000 MAINTENANCE

3.13 State and describe the type of maintenance that can be performed on an Intoxilyzer 8000.

- Any maintenance performed by someone other than a Department Inspector or Authorized repair facility of an Intoxilyzer 8000 can be performed without opening the top cover of the instrument.
- The breath test operator can change the dry gas cylinder and replace the internal printer paper.
- In addition to the above maintenance a breath test operator can perform, the agency inspector can also:
  - ✓ Visually inspect the exterior of the instrument – The agency inspector should clean with damp cloth if necessary.
  - ✓ Check the power cord and the electrical outlet - the agency inspector should check power cord(s) for tears, frayed or exposed wiring, broken or loose prongs and replace if necessary. The agency inspector should also check the wall outlet for power.
  - ✓ Check and replace the external circuit protection fuse – If the instrument's power light will not come on, the agency inspector should check and/or replace the external circuit protection fuse. If the fuse is blown, replace it with the proper fuse. If the fuse immediately blows again, contact a Department Inspector.
    - Prior to checking or replacing the fuse, turn the instrument power switch off and disconnect the power cord from the source of power.
    - To remove the fuse, insert a small screwdriver in the slot located in the fuse cap and carefully turn counterclockwise. It should take approximately 2.5 turns to unseat the cap.
    - Pull the fuse from the cap and verify it is indeed blown. If the fuse is not blown, the problem lies elsewhere in the instrument or power supply the instrument is plugged into.
    - Insert a new fuse of the proper rating (5mm, 250V 6.3A) into the cap, insert cap/fuse assembly into the fuse socket, and carefully turn clockwise until seated.
  - ✓ Check external breath tube – The agency inspector should check the external breath tube for tears, loose connector plug and ensure it is warm to the touch.
  - ✓ Update date and time.
  - ✓ Check the instrument display and case for cracks – The agency inspector should check the instrument case and display window for cracks and other damage.
  - ✓ Check the keyboard and its connections - the agency inspector should check the keyboard cable and plug for tears or frays and snug connection. Also check the keyboard for damage and loose or missing keys. If damage is found to the keyboard or cable, remove and/or replace with another mini keyboard. A full size PS/2 keyboard can be used in lieu of the mini keyboard.
  - ✓ Check the dry gas standard cylinder connections - the agency inspector should check the dry gas standard cylinder carrier connections.
    - If loose, tighten the mounting screws with a #2 Phillips screw driver.
    - The agency inspector should check the dry gas standard cylinder control valve for damage.
    - The agency inspector should check the electrical connector for the dry gas standard cylinder control valve to the instrument for snugness and damage. The valve and connector is one unit.

3.14 Describe the procedure to replace internal printer paper or clear internal printer jams.

- Replacing or clearing the paper from the internal printer does not require menu access.
  - Remove printer paper door by lifting from the top of the instrument.
  - Pull green lever forward until it locks. Remove remaining paper.
  - Holding the new roll of paper with the paper spooling from the bottom, slip the leading edge of the paper underneath the rear of the black rubber roller downwards until the leading edge slides under the black roller and out the front. Place the paper roll into the paper roll holder.
  - Push the green lever up and backwards until it points straight up.
  - Feed the paper through the slot on the printer paper door.
  - Place the printer cover on the instrument and depress the black knob until it locks into place.

3.15 Describe how and when to replace the dry gas standard cylinder. The reasons for changing or removing the dry gas standard cylinder include: (1) the cylinder is below minimum pressure; (2) the cylinder is beyond its expiration date; and (3) shipment of the instrument. Breath Test Operators and Agency Inspectors may change the dry gas standard cylinder.

- The instrument will alert the operator to a low pressure/volume dry gas standard cylinder condition. This alert will occur when the dry gas standard cylinder pressure volume reaches approximately 50 psi (pounds per square inch). This pressure volume is sufficient to allow five (5) more complete breath tests to be conducted. The cylinder must be replaced as soon as possible. No tests can be conducted if the cylinder tank pressure is below 25 psi.
- The cylinder disconnects from the valve assembly by being turned counterclockwise, and reconnects by being turned clockwise.
- When seating the cylinder, it must be manually tightened to prevent leaks.
- Once the cylinder is changed, the lot number and expiration date must immediately be updated by accessing the breath test operator or agency inspector menu.

3.16 State when using an Intoxilyzer 8000, an incorrect operational procedure or condition will cause the instrument to display and print a message associated with the incorrect operational procedure or condition. Define the messages and understand the action that must be taken when each message is displayed and printed. Describe how to document all occurrences on the agency inspection report or the affidavit.

Message	Description	Action
INTERFERENT DETECT	An interfering substance was detected in the breath or control sample OR the calculated result obtained from the detection of light from each filter did not agree. The instrument will display INTERFERENT DETECT, abort the test, print INT* in the results section of the report, and print *INTERFERENT DETECT at the bottom of the results section of the report.	AGENCY INSPECTION: This is the appropriate response for the Interferent Test. If this response is obtained during other tests, restart the affected procedure of the agency inspection. BREATH TEST: Restart the breath test. If INTERFERENT DETECT is again obtained, the subject may need medical attention.
IMPROPER SAMPLE	The sample was introduced at the wrong time. The instrument will display IMPROPER SAMPLE, abort the test, print IPS* in the results section of the report, and print *IMPROPER SAMPLE at the bottom of the results section of the report.	AGENCY INSPECTION: Restart the affected procedure of the agency inspection and ensure the sample is delivered at the appropriate time. BREATH TEST: Restart the breath test and ensure that the subject provides a breath sample only when the instrument displays PROVIDE SAMPLE NOW.
AMBIENT FAIL	The instrument was not able to clear the sample chamber during the air blank prior to a diagnostic check, breath sample or control sample. The instrument will display AMBIENT FAIL, abort the test, print AMB* in the results section of the report, and print *AMBIENT FAIL at the bottom of the results section of the report.	AGENCY INSPECTION: Clear the immediate area of possible contaminants and restart the affected procedure of the agency inspection. BREATH TEST: The operator must clear the immediate area of possible contaminants and restart the breath test. If AMBIENT FAIL is again obtained, contact the department inspector for further information.
PURGE FAIL	During the air blank after a breath or control sample, the instrument was not able to successfully clear the sample chamber of a breath or control test sample. The instrument will display PURGE FAIL, abort the test, print PUR* in the results section of the report, and print	AGENCY INSPECTION: Clear the immediate area of possible contaminants and restart the affected procedure of the agency inspection. BREATH TEST:

	*PURGE FAIL at the bottom of the results section of the report.	The operator must clear the immediate area of possible contaminants and restart the breath test. If PURGE FAIL is again obtained, contact the department inspector for further information.
TEST REFUSED	The operator pressed the "R" key on the keyboard when the instrument displayed PROVIDE SAMPLE NOW. The instrument will display SUBJECT TEST REFUSED, abort the test, print REF* in the results section of the report, and print *SUBJECT TEST REFUSED at the bottom of the results section of the report.	BREATH TEST: A law enforcement officer or correctional officer must complete the applicable refusal affidavit.
NO SAMPLE PROVIDED	The subject did not provide a breath sample into the instrument within the three (3) minute time period allowed for each breath sampling process OR the subject did not provide a breath sample for at least one (1) second. The instrument will display NO SAMPLE PROVIDED, print NSP* in the results section of the report, and print *NO SAMPLE PROVIDED at the bottom of the results section of the report.	BREATH TEST: • If NO SAMPLE PROVIDED is obtained on the first breath sample, the instrument will continue to request two more samples. If the subsequent samples are valid, the breath test is complete. • If NO SAMPLE PROVIDED is obtained on the second breath sample, the instrument will continue to request a third breath sample. If the first and third breath samples are valid, the breath test is complete. • If NO SAMPLE PROVIDED is obtained on the first and second breath samples, the instrument will discontinue the breath test. • If the subject is not going to provide samples, the breath test is complete.
SLOPE NOT MET	The sample provided did not meet the slope requirements of a minimum acceptable breath sample and there was a negative slope (the alcohol concentration from the subject sample decreased). The instrument will display SLOPE NOT MET, abort the test, print SNM* in the results section of the report, and print *SLOPE NOT MET at the bottom of the results section of the report.	AGENCY INSPECTION: This is the appropriate response for the Mouth Alcohol Test. If this response is obtained during other tests, restart the affected portion of the agency inspection. BREATH TEST: Perform another twenty-minute observation period and restart the test.
RFI DETECT	The instrument detected radio frequency interference of a sufficient strength and frequency to interfere with the breath test or control test. The instrument will display RFI DETECT, abort the test, print RFI* in the results section of the report, and print *RFI DETECT at the bottom of the results section of the report.	AGENCY INSPECTION and BREATH TEST: Clear the room and immediate area of any radio frequency interference (such as radios or cell phones) and restart the affected procedure of the agency inspection or the breath test.
SEQUENCE ABORTED	The "Start Test" button was pressed during an operational function. The instrument will display SEQUENCE ABORTED, abort the test, print ABT* in the results section of the report, and print *SEQUENCE ABORTED at the bottom of the results section of the report.	AGENCY INSPECTION: Restart the entire agency inspection. Maintain the results of the first agency inspection and document occurrence. BREATH TEST: Restart the breath test (if this action was accidental).

RANGE EXCEEDED	The value of the breath sample provided exceeded the reporting range of the instrument (0.600 g/210L). The instrument will display RANGE EXCEEDED, abort the test, print RGE* in the results section of the report, and print RANGE EXCEEDED at the bottom of the results section of the report.	AGENCY INSPECTION: This response may be obtained during the Mouth Alcohol Test due to not waiting a few seconds before providing the sample after rinsing mouth with mouth alcohol solution. If obtained, restart the affected procedure of the agency inspection. BREATH TEST: Restart the breath test. If RANGE EXCEEDED is again obtained, the subject may need medical attention.
CONTROL OUTSIDE TOLERANCE	The alcohol reference solution or dry gas standard control test value(s) were out of range. On the breath test, the instrument will display CONTROL OUTSIDE TOLERANCE, abort the test, print an * by the control test result in the results section of the report, and print *CONTROL OUTSIDE TOLERANCE at the bottom of the results section of the report.	AGENCY INSPECTION: Check the simulator temperature, seal and connections, the proper concentration of alcohol reference solution is in the simulator or that the dry gas standard is connected, check dry gas standard cylinder connection O-rings and restart the affected procedure of the agency inspection. BREATH TEST: Ensure the dry gas standard is connected to the instrument. Additional Recommendations: Remove the subject from the testing area and allow the area to "air out" before beginning another test. Keep the subject away from the breath tube when samples are not being obtained. If CONTROL OUTSIDE TOLERANCE is again obtained, the operator should contact their department inspector for further instructions.
DIAGNOSTIC FAIL	One or more of the diagnostic tests failed. The instrument will display DIAGNOSTIC FAIL, abort the test, print FAIL* in the results section of the report and print *DIAGNOSTIC FAIL at the bottom of the results section of the report.	AGENCY INSPECTION: Restart the agency inspection. If DIAGNOSTIC FAIL for the same failure is again obtained, contact the department inspector. BREATH TEST: Restart the test. If DIAGNOSTIC FAIL for the same failure is again obtained, contact the department inspector.
VOLUME NOT MET	The breath sample provided did not meet the minimum breath sample requirement of 1.1 Liter. The instrument will display VOLUME NOT MET, print VNM* in the results section of the report, and print *VOLUME NOT MET (0.XXX Breath Sample Not Reliable for Quantitative Breath Alcohol Level) at the bottom of the results section of the report.	BREATH TEST: • If VOLUME NOT MET is obtained on the first breath sample, the instrument will continue to request two more samples. If the subsequent samples are valid, the breath test is complete. • If VOLUME NOT MET is obtained on the second breath sample, the instrument will continue to request a third breath sample. If the first and third breath samples are valid, the breath test is complete. • If VOLUME NOT MET is obtained on the first and second breath samples, the instrument will discontinue the breath test.

NO .020 AGREEMENT	There was not 0.020 g/210L agreement between any two of the three samples of breath obtained. The instrument will display NO .020 AGREEMENT, print a * by the breath sample results, and print *NO .020 AGREEMENT at the bottom of the results section of the report.	BREATH TEST: Restart the breath test.
SLOPE NOT LEVEL	The sample provided did not meet the slope requirements of a minimum acceptable breath sample and the slope of the breath sample being provided is still rising and did not level off. The instrument will display SLOPE NOT LEVEL, print SNL* in the results section of the report, and print *SLOPE NOT LEVEL (0.XXX Breath Sample Not Reliable for Quantitative Breath Alcohol Level) at the bottom of the results section of the report.	BREATH TEST: • If SLOPE NOT LEVEL is obtained on the first breath sample, the instrument will continue to request two more samples. If the subsequent samples are valid, the breath test is complete. • If SLOPE NOT LEVEL is obtained on the second breath sample, the instrument will continue to request a third breath sample. If the first and third breath samples are valid, the breath test is complete. • If SLOPE NOT LEVEL is obtained on the first and second breath samples, the instrument will discontinue the breath test. The operator must restart the breath test.
TANK BELOW MIN	The gas pressure of the dry gas standard cylinder is under 25 psi. The instrument cannot be used until the dry gas standard cylinder is changed.	The operator or Agency Inspector will need to change the dry gas standard cylinder and record the new lot number and expiration date. An agency inspection or breath test can then be conducted.
DISABLED MODE	The agency inspector did not upload the agency inspection OR there are 150 breath tests that need to be uploaded OR an agency inspection needs to be completed	The agency inspector or department inspector must upload the stored agency inspection and/or breath tests OR an agency inspection needs to be conducted before the instrument may be used.

Breath Test Instructor Course

Lesson Four
Breath Samples and Breath Tests

Introduction

During this lesson, the student will learn how to obtain a reliable breath sample and how to conduct an evidentiary breath test in accordance with Chapter 11D-8, FAC.

Objectives

THE BREATH SAMPLE

4.1 State that deep lung air is the type of breath sample which will render the most accurate breath alcohol level representing the alcohol concentration circulating in the subject's body. Define deep lung air.

- Deep lung air is the breath that is coming from the deepest part of the lungs (near the alveoli) that can be obtained without collapsing the lungs. It can be best obtained by having the subject normally inhale and provide a continuous, sustained breath sample for as long as they possibly can.
- A breath sample obtained from the upper portions of the respiratory tract (mouth, trachea, bronchi) is diluted with room air and will not provide an accurate representation of the alcohol concentration circulating in the subject's body.

4.2 State how to obtain deep lung air from a subject providing a breath sample.

- Instruct the subject to inhale normally and provide a continuous, sustained breath sample until they are told to stop.
- The breath test operator shall tell the subject to stop blowing when the subject appears to have expelled all of the air out of his/her lungs during a single breath.
- Providing a breath sample as long as possible = deep lung air = best breath sample.

4.3 Define and discuss a minimum acceptable breath sample for the Intoxilyzer 8000.

- A minimum acceptable breath sample is defined as a breath sample that has met the minimum criteria of the instrument's analysis to ensure the breath sample is reliable.

Intoxilyzer 8000	
Time	The subject must provide a continuous breath sample of sufficient flow for at least one (1) second.
Volume	The subject must provide a continuous breath sample of at least 1.1 liters of breath.
Slope	The subject must provide a breath sample in which the concentration of the sample consistently rises and then levels off.

- State when PROVIDE SAMPLE NOW is displayed, the subject will have three (3) minutes to provide a minimum acceptable breath sample.
- Failure to provide a breath sample into the instrument or to provide a breath sample for less than one (1) second will result in a "NO SAMPLE PROVIDED" message.
- Failure to provide a breath sample of at least 1.1 liters into the instrument will result in a "VOLUME NOT MET" message.
- Failure to satisfy Slope will result in either a "SLOPE NOT LEVEL" or a "SLOPE NOT MET" message
- If PROVIDE SAMPLE NOW flashes on the display and a single beep sounds every four seconds, the subject is not providing a proper sample to be analyzed. The subject must continue to provide a breath sample until a proper sample is obtained.

4.4 State the purpose for obtaining a minimum of two samples of breath within fifteen minutes of each other producing results within 0.020 g/210L.

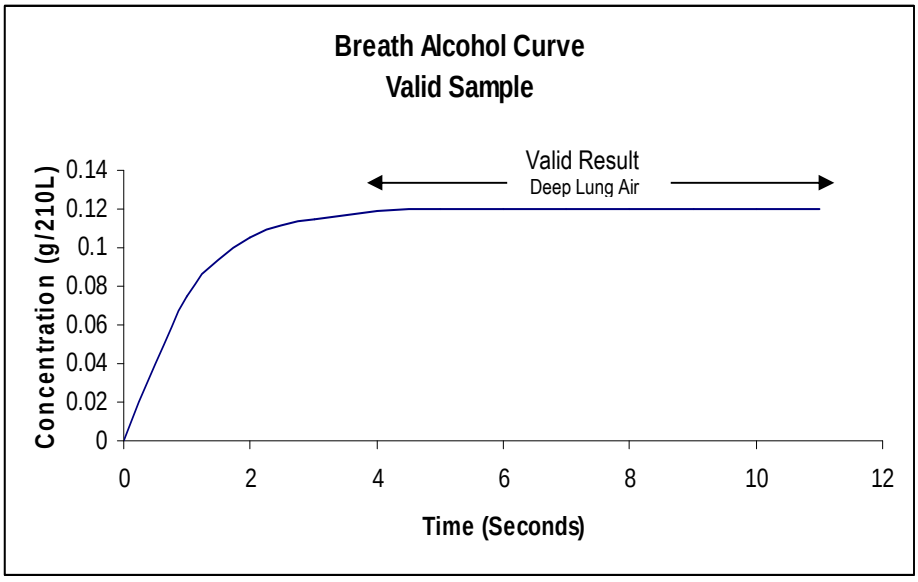
- The result of the second sample confirms the result of the first sample.
- It shows that the two breath samples are as similar as possible to each other.
- It shows that there are no interferents, mouth alcohol, and radio frequency interference affecting the results obtained from the breath samples.

4.5 Define Interferent, Mouth Alcohol and Radio Frequency Interference.

- Interferent – A substance that appears in sufficient non-lethal quantities in the human breath and is capable of being detected by the instrument at these non-lethal quantities.
    - Acetone is an example of an interferent. It could possibly appear on the breath of a person who is in diabetic shock or fasting (ketogenesis).
- Mouth Alcohol – residual alcohol that remains in the mouth. It could be present if a person consumes an alcoholic beverage just prior to taking a breath test.
- Radio Frequency Interference (RFI) – Radio waves transmitted in proximity to a breath testing instrument that can possibly affect the analysis of breath samples if they are in sufficient strength and wavelength. The Intoxilyzer 8000 contains an RFI detector to indicate that RFI is in sufficient strength to affect the instrumentation.

4.6 Define and understand the breath alcohol curve.

- The breath alcohol curve is a graph of the alcohol concentration of a breath sample that occurs over time.
- In order for a breath sample to be reliable, the concentration of the alcohol in the breath sample must rapidly rise and level off in the breath alcohol curve.



TWENTY MINUTE OBSERVATION PERIOD

4.7 State a twenty (20) minute observation period is required to ensure that the breath sample provided by the subject does not contain residual mouth alcohol. Describe the purpose of the twenty minute observation period.

- An observation period of at least 20 minutes reasonably ensures that any alcohol present in a subject's mouth has dissipated.
- Residual mouth alcohol is alcohol remaining in the mouth after a person has consumed an alcoholic beverage.
- Alcohol in the oral cavity is rapidly eliminated and is no longer present after twenty minutes.

4.8 State the breath test operator, agency inspector, arresting officer, or person designated by the permit holder shall reasonably ensure that the subject has not taken anything by mouth or has not regurgitated for at least twenty (20) minutes before administering the test. This provision shall not be construed to otherwise require an additional twenty (20) minute observation period before the administering of a subsequent sample.

- The twenty (20) minute observation period must be a continuous twenty (20) minutes. (It does not need to necessarily be face to face contact. Check with your state attorney's office to find out what the case law is in your area)
- A permit holder can designate another person to perform the observation period. The breath test operator should record the additional observer's name on the print card.
- As defined in Webster's Dictionary, regurgitation is the bringing the contents of the stomach back into the mouth.
- Regurgitation can bring the alcohol that may be present in the stomach up into the mouth and can possibly affect the administration of the breath test.
- Burping and belching are not signs of regurgitation and do not warrant an additional twenty-minute observation period if they occur.
  - Burping and belching usually do not affect a breath test due to the rapid removal of the small quantity of alcohol from the mouth. It may affect the breath test if it occurs immediately before or during the breath test.

4.9 State the subject shall not have any foreign objects in their mouth during the twenty minute observation period and the breath test. Define foreign object.

- Ask the subject if they have anything in their mouth.
- A foreign object is any item that is not a fixed part of the mouth. Examples of foreign objects include, but are not limited to: coins, tobacco, candy, chewing gum, fingers, hair, food, rubber bands, razor blades and paper clips. Exceptions to foreign objects would include, but not be limited to: braces, dentures, partials, dental plates, fillings, crowns and tongue piercing.

What If…?	Response
What if the subject regurgitates?	Have the subject rinse their mouth with water and begin another twenty (20) minute observation period. Document all times associated with the repeat observation.
What if the subject comes in with a foreign object in their mouth?	If the foreign object is found before the twenty (20) minute observation period, have the subject remove the foreign object from their mouth. The breath test operator may have the subject rinse their mouth with water. Begin the twenty (20) minute observation period after removal of the foreign object. Document all occurrences and times. If the foreign object is found after the twenty (20) minute observation period has begun, the breath test operator must have the subject remove the foreign object from their mouth. The breath test operator may have the subject rinse their mouth with water and the operator must then begin another twenty (20) minute observation period. Document all occurrences and times.
What if the breath test operator is presented with a subject that insists on using the restroom?	The breath test operator or a person designated by the breath test operator may take the subject to the restroom, continuing the observation to ensure the subject does not put anything in their mouth or regurgitate while using the restroom. Document the occurrence and/or person who was designated to perform this task.

APPROVED BREATH ALCOHOL TEST

4.10 Define Approved Breath Alcohol Test.

- Approved Breath Alcohol Test – a minimum of two samples of breath collected within fifteen minutes of each other, analyzed using an approved breath test instrument, producing two results within 0.020 g/210L, and reported as the breath alcohol level. If the results of the first and second samples are more than 0.020 g/210L apart, a third sample shall be analyzed. Refusal or failure to provide the required number of valid breath samples constitutes a refusal to submit to the breath test. Notwithstanding the foregoing sentence, the result(s) obtained, if proved to be reliable, shall be acceptable as a valid breath alcohol level.
    - Two breath test samples collected within 15 minutes of each other producing two results within 0.020 g/210L ensures that the results are accurate and reliable. A breath test operator who obtains two breath samples that are within 0.020 g/210L shows that mouth alcohol, interferents and radio frequency interference are <u>not</u> a factor.
    - Why two samples of breath? The second breath sample result confirms the accuracy and reliability of the first breath sample result.

4.11 State the breath test operator must verify that an agency inspection of the evidentiary breath test instrument has been conducted.

- An Agency Inspection is the periodic testing of the calibration and operation of a breath test instrument, including all required preventive maintenance, in accordance with Rule 11D-8.006, F.A.C., and performed by a person authorized by the Department. It must be conducted at least once each calendar month.
    - An agency inspection ensures the instrument is working properly and is providing accurate and reliable results.

Intoxilyzer 8000
Automatically stored in the instrument. The instrument will go into DISABLED MODE if an agency inspection has not been conducted within a calendar month. The instrument cannot be used when in DISABLED MODE. Notify the agency inspector.

ACCESS

4.12 State that Rule 11D-8.007(1), Florida Administrative Code requires that evidentiary breath test instruments shall only be accessible to a person issued a valid permit by the Department and to persons authorized by a permit holder.

- The purpose of this rule is to ensure that an evidentiary breath test instrument is not misused or damaged.

THE BREATH TEST - INTOXILYZER 8000

4.13 State when using an Intoxilyzer 8000, the breath test shall be administered in accordance with FDLE/ATP Form 37 – Operational Procedures – Intoxilyzer 8000. Describe and understand each procedure. Describe how to properly complete FDLE/ATP Form 38 Breath Alcohol Test Affidavit.

FDLE/ATP Form 37 Operational Procedures – Intoxilyzer 8000		
Step	**Procedure**	**Explanation**
1	All results are reported to three decimal places in g/210L.	

1	The instrument must display READY MODE prior to beginning the breath test.	The instrument may be in STANDY BY MODE. Push the Start Test Button to initiate an approximate one (1) minute countdown which will be followed by a diagnostics check. Upon successful completion of the diagnostics check, the instrument will enter READY MODE. The instrument may display the days remaining for the upload of the agency inspection. The agency inspector or department inspector can perform this upload. Breath tests can still be conducted as long as the number of days has not expired. If the upload of the agency inspection has not occurred by the time the number of days has expired, the instrument will display DISABLED MODE and will not allow breath tests to be conducted on it.
1	Push the START TEST button to begin the breath test.	If the Dry Gas Standard Cylinder has a pressure/volume below 25 psi, no breath tests can be conducted. Replace the cylinder, record the new lot # and expiration date in the instrument, and then proceed with the breath test.
1	Enter Breath Test Operator last name, first name and middle initial at USER prompts.	Type the Last Name of the USER. Press Enter. Type the First Name of the USER. Press Enter. Type the Middle Initial of the USER (if applicable). Press Enter. At the Operator Agency prompt, enter the unique four (4) digit code for the Operator Agency or press the up or down arrows to scroll through the agency list. Press Enter. The Operator Agency will display. Press Enter. If the agency is not correct, enter the four digit code or scroll through the agency list again.
1	DATE/TIME. Verify the displayed date and time. Change if necessary, Press ENTER.	The breath test operator must verify the correct time and date on the display. If the time and/or date are incorrect, the operator should change it. • During this step, the screen will show the time and date for approximately ten seconds and will ask if the time and date need to be changed with the prompt “N” for No. If the displayed date and time are correct press ENTER. To change the time and date: Enter “Y” and press enter. ▪ The instrument will automatically display the date. ▪ Adjust the date by entering the correct numbers (MM/DD/YYYY) and press enter. ▪ The instrument will automatically display the time. ▪ Adjust the time by entering the correct numbers (HH:MM) using 24 hour time and press enter. ▪ The instrument will display “Please wait, Saving Settings”. ▪ The instrument will automatically continue on to the next question.
1	LAST AGENCY INSPECTION DATE. Verify the agency inspection date displayed. Press ENTER.	The most recent agency inspection date is automatically saved in the instrument when the agency inspector completes the agency inspection.

1	CYLINDER LOT #. Verify the dry gas standard cylinder lot number. Change if necessary. Press ENTER.	If the dry gas standard cylinder lot number is correct, press enter. If the dry gas standard cylinder lot number needs to be corrected, type in the correct lot number and press enter. Encourage students to physically get up and look at the cylinder to confirm lot number and expiration date.
1	EXPIRATION DATE. Verify the dry gas standard cylinder expiration date. Change if necessary. Press ENTER.	If the dry gas standard cylinder expiration date is correct, press enter. If the dry gas standard cylinder expiration date needs to be corrected, type in the correct expiration date and press enter.
1	OBSERVATION PERIOD BEGAN. Enter the time the observation period began (at least 20 minutes).	Enter using 24 hour clock. The operator or their designee shall perform an additional twenty minute observation period if the subject takes anything by mouth or regurgitates during the twenty minute observation period or during the breath test.
1	SWIPE DL OR PRESS ENTER. Either swipe the subject's driver license or identification card or press ENTER. Enter applicable information as prompted.	When the driver's license is swiped and the data is accepted by the magnetic card reader, three beeps will be heard indicating the data was accepted. SUBJECT LAST NAME. Type the subject's last name. If the driver license or ID card was swiped, this will automatically be entered. Press enter. SUBJECT FIRST NAME. Type the subject's first name. If the driver license or ID card was swiped, this will automatically be entered. Press enter. SUBJECT MIDDLE INITIAL. Type the subject's middle initial. If the driver license or ID card was swiped, this will automatically be entered. Press enter. If the subject does not have a middle initial, press the space bar and then ENTER. DRIVER LICENSE NUMBER. Type the subject's driver license number. If the driver license was swiped, this will automatically be entered. Press enter. STATE. Type the state that issued the driver license. If the driver license or ID card was swiped, this will automatically be entered. Press enter. DATE OF BIRTH. Type the subject's date of birth. If the driver license or ID card was swiped, this will automatically be entered. Press enter. SEX (M/F): Type the sex of the subject. If the driver license or ID card was swiped, this will automatically be entered. Press enter. ARREST OFFICER LAST. Type the arresting officer's last name. Press enter. ARREST OFFICER FIRST. Type the arresting officer's first name. Press enter. ARREST TIME. Type the time of arrest (in military time). Press enter. ARREST AGENCY. Enter the employing agency of the arresting officer. The operator will need to enter the unique four (4) digit code of the arrest agency or use the up and down arrows to scroll through the agency list. Press enter.

		VIOLATION CODE. Enter the violation code. Press enter. The operator must scroll through the codes using the up and down arrow keys. The codes are as follows: DUI – Driving Under the Influence; BUI – Boating Under the Influence; ZERO TOL – 0.02 Enforcement; COMM VEH – Commercial Motor Vehicle; PROB/PAROLE – Probation or Parole ordered test; COURT – Court Ordered; ADMINISTRATIVE – Internal agency test; OTHER – Any type of test other than the ones listed above or a system check; SYS CHECK – Agency Inspector test or check of the breath test sequence and/or instrument operation. REVIEW DATA (Y/N). Press Y to review all of the above information or press N to continue. Double check that all automatically entered data is correct. After data entry, the instrument will indicate that the twenty minute observation is OK or it will countdown the remaining time left to complete the twenty minute observation. The instrument will also display the number of breath tests that have been conducted. For example, the instrument will display test 047 of 150. Note that the instrument must have tests uploaded when there are 150 tests stored in the instrument. The agency inspector or department inspector must perform this upload.
	DIAGNOSTICS CHECK. The result must be OK.	The diagnostics check is a functionality check of the internal components to ensure the instrument is working properly.
	AIR BLANK. The result must be 0.000.	During the air blank, the instrument is circulating ambient air, or room air, through the instrument to clear the sample chamber of alcohol and any other substances that might be present. • The instrument is analyzing the room air in the sample chamber by filtering the light and detecting the response when only room air is present in the sample chamber. • This electrical response indicates the result when only ambient, or room air, is present in the sample chamber. The air blank will occur for up to 60 seconds. • If the instrument cannot clear the sample chamber during an air blank before a breath or control sample is analyzed, the instrument will display AMBIENT FAIL. The instrument will abort the test and print TEST ABORTED – AMBIENT FAIL. • If the instrument cannot clear the sample chamber during an air blank after a breath or control sample is analyzed, the instrument will display PURGE FAIL. The instrument will abort the test and print TEST ABORTED – PURGE FAIL.

		After the air blank and before requesting the breath sample, the instrument will establish a zero reference by determining the electrical response from filtered light when only ambient air is in the sample chamber. • The instrument uses the electrical response from light filtered at both 3 μM and 9 μM when only ambient air is present in the sample chamber. When the row of boxes is displayed, the instrument is establishing a zero reference. The boxes displayed also verify the display segments are working properly.
	CONTROL TEST. The result must be between 0.075 and 0.085 g/210L, inclusive.	A control test is the analysis of dry gas standard to verify the calibration of the instrument to show that it is providing accurate and reliable results at the time of the breath test. Dry Gas Standard – a standard consisting of a mixture of alcohol and gas which produces a known alcohol vapor concentration used to verify the calibration of a breath test instrument.
1	AIR BLANK. The result must be 0.000.	
1	PROVIDE SAMPLE NOW. Have the subject provide a breath sample into the instrument.	• When "Provide Sample Now" is displayed, the operator will have approximately three (3) minutes to have the subject provide a minimum acceptable breath sample. • When a continuous tone sounds during the breath test, the subject is providing proper breath flow. • The operator shall tell the subject to stop blowing when the subject has provided a deep lung breath sample and has expelled all of the air out of their lungs during a single breath. • If "Provide Sample Now" is displayed while the subject is providing a sample, the subject is not providing a proper sample to be analyzed. The subject must continue to provide a breath sample until a result is obtained. • To record a refusal and to have the refusal information print on the affidavit, the breath test operator must push the "R" key on the keyboard when the instrument displays "Provide Sample Now". • Once a sample is introduced into the sample chamber, the instrument compares the value of the electrical response received from both filters to each other and to the zero reference value. o If the electrical responses from the two filters are in the correct ratio and are the same as the response for the zero reference value, a 0.000 g/210L result is reported, indicating no alcohol was found in the sample. o If the electrical responses from the two filters are in the correct ratio but are a different response than the zero reference value, then the difference between the electrical responses from the filter that measures alcohol and the zero reference value is calculated and an alcohol result is reported.

		o If the electrical responses from the two filters are not in the correct ratio, the instrument will signal the operator that an interferent has been detected. The instrument will display INTERFERENT DETECT, abort the test and print TEST ABORTED – INTERFERENT DETECT.
1	AIR BLANK. The result must be 0.000.	
1	PLEASE WAIT. The instrument will countdown the time remaining for the wait period.	
1	AIR BLANK. The result must be 0.000.	
1	PROVIDE SAMPLE NOW. Have the subject provide a breath sample into the instrument.	
1	AIR BLANK. The result must be 0.000.	
1	Note: If there is no 0.020 g/210L agreement between first and second breath samples, the instrument will automatically request a third breath sample as follows:	
1	PLEASE WAIT. The instrument will countdown the time remaining for the wait period.	
1	AIR BLANK. The result must be 0.000.	
1	PROVIDE SAMPLE NOW. Have the subject provide a breath sample into the instrument.	
1	AIR BLANK. The result must be 0.000.	
1	CONTROL TEST. The result must be between 0.075 and 0.085 g/210L, inclusive.	
1	AIR BLANK. The result must be 0.000.	
1	DIAGNOSTICS CHECK. The result must be OK.	
2	If an external printer is used, FDLE/ATP Form 38 – Breath Alcohol Test Affidavit – Intoxilyzer 8000 will be automatically printed containing all the results. If no external printer is used, a printout slip containing all the results will be automatically printed.	If a printout slip is obtained, attach it to the affidavit (Form 38) once the affidavit is printed. The printout slip is not evidential. A Breath Test Affidavit – Form 38 MUST be printed.
3	Complete FDLE/ATP Form 38 – Breath Alcohol Test Affidavit – Intoxilyzer 8000	The operator must affirm the information recorded on FDLE/ATP Form 38 in the presence of a notary public. The operator and the notary must complete the information on the bottom of FDLE/ATP Form 38. The operator must sign their name on the appropriate space provided in the presence of the notary public. The notary public must complete the county of the affirmation, the date, sign their name, print or provide their stamp and document the identification (personally known or produced identification) used to notarize the affidavit.

REFUSAL TO SUBMIT TO A BREATH TEST

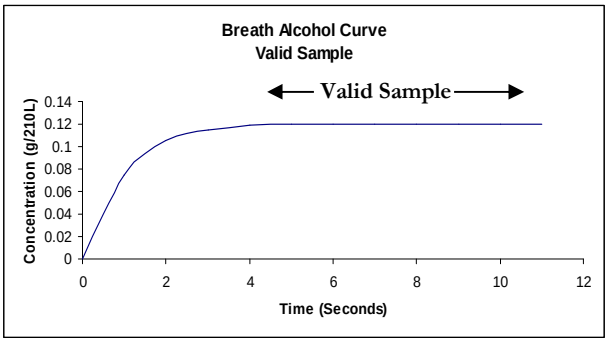
4.14 State "Refusal or failure to provide the required number of valid breath samples constitutes a refusal to submit to the breath test." (Chapter 11D-8, FAC)

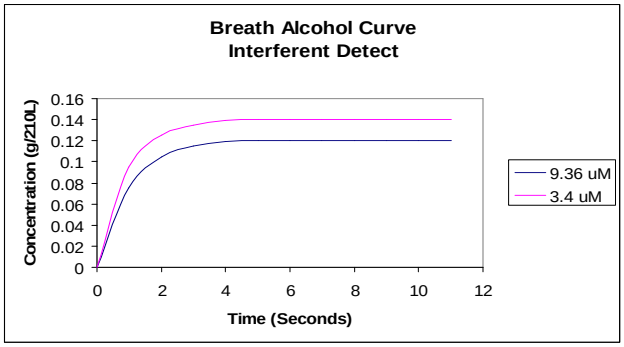
- A refusal may be the subject verbally refuses to submit to the breath test or when the subject is not providing valid breath sample(s) when requested to do so.
- A person placed under lawful arrest for driving or boating under the influence and who refuses the requested test must be read the appropriate Implied Consent Warnings to inform the person of the administrative consequences of such refusal.
- A law enforcement officer or correctional officer must complete the appropriate refusal affidavit (the DHSMV Refusal Affidavit for driving under the influence and the FWC refusal affidavit for boating under the influence).

What If…?	Potential Response
What if the subject initially refuses to submit to the breath test, but then recants the refusal (for example, changes their mind)?	The breath test operator will administer the breath test and complete the required breath test forms.
What if the subject provides one breath sample, but then refuses or declines to continue with the process of providing a second breath sample?	The subject must be read the Implied Consent Warnings. If the subject still refuses, the breath test operator should finish completing the required paperwork, and a law enforcement/correctional officer must complete the paperwork on the refusal (DHSMV Refusal Affidavit or FWC Refusal Affidavit).
What if a subject fails to give an adequate sample (low sample volume) or the proper number of samples or two samples within 0.020 g/210L agreement? What action should the breath test operator take?	If a subject fails to provide a valid breath test Chapter 11D-8, FAC deems such action as a refusal to submit to a breath test and the breath test operator should fill out the appropriate forms related to the breath test and a law enforcement/correctional officer must complete the refusal documents (DHSMV Refusal Affidavit or FWC Refusal Affidavit).

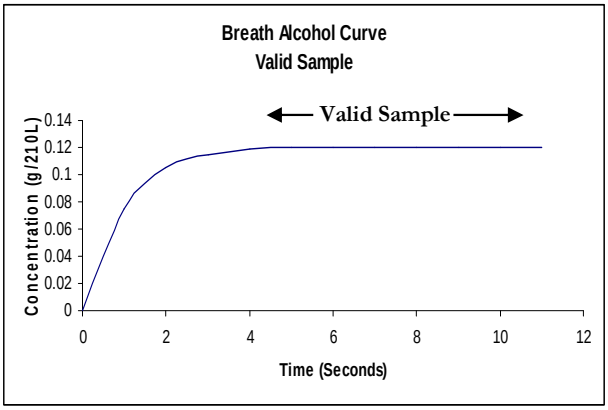
4.15 The student must be able to answer questions regarding a breath test on an Intoxilyzer 8000 with messages that occurred during the breath test - INTERFERENT DETECT, SLOPE NOT MET, SLOPE NOT LEVEL, VOLUME NOT MET, and NO SAMPLE PROVIDED.

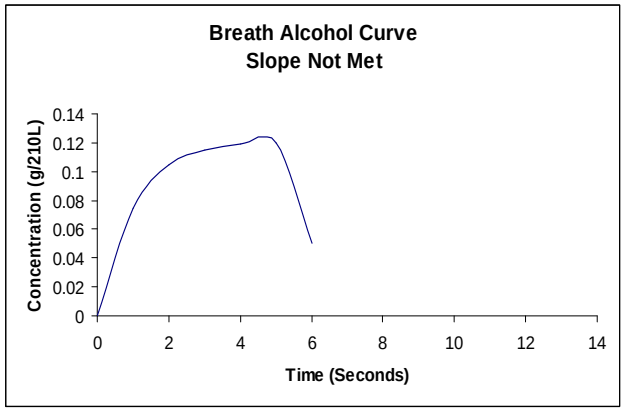
Scenario One: A breath test with INTERFERENT DETECT as a result.	
QUESTION	**SAMPLE ANSWER**
When conducting a breath test, you obtain a result of INTERFERENT DETECT on the first breath sample. The instrument aborted the test. You then restarted the breath test and obtained two valid breath samples. **QUESTION:** Why did you obtain INTERFERENT DETECT on the first sample? **QUESTION:** Are the two breath samples you subsequently obtained reliable?	ANSWER: An interfering substance was detected in the breath or control sample OR the calculated result obtained from the detection of light from each filter did not agree. ANSWER: The two subsequent breath samples are reliable because the instrument did not detect an interfering substance in the breath or control sample OR the instrument did not calculate results from the detection of light from each filter that were different from each other. There was no interferent detected in either subsequent breath sample. The two subsequent breath samples agree within 0.020 g/210L of each other which further shows that there was no interferent or problems with the subsequent samples obtained independently of each other.



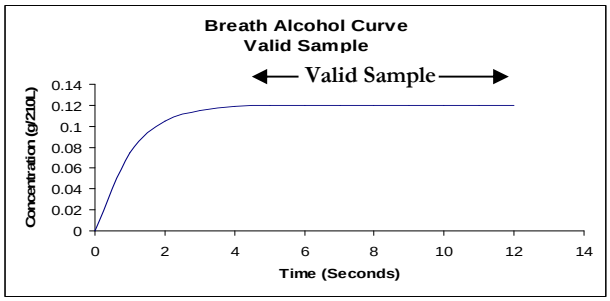


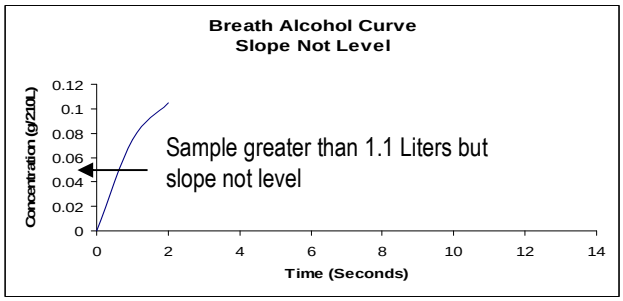
Scenario Two: A breath test with SLOPE NOT MET as a result.	
QUESTION	**SAMPLE ANSWER**
When conducting a breath test, you obtain a result of SLOPE NOT MET on the first breath sample. The instrument aborted the test. You then conducted another twenty minute observation period, restarted the breath test and obtained two valid breath samples. **QUESTION:** Why did you obtain SLOPE NOT MET on the first sample? **QUESTION:** Are the two breath samples you subsequently obtained reliable?	ANSWER: The sample provided did not meet the slope requirements of a minimum acceptable breath sample and there was a negative slope (the alcohol concentration from the subject sample decreased). ANSWER: The two subsequent breath samples are reliable because all minimum acceptable breath sample requirements including slope were met and there was no negative slope associated with either subsequent breath sample. The two subsequent breath samples agree within 0.020 g/210L of each other which further shows that there was no problem with the slope of the subsequent samples obtained independently of each other.



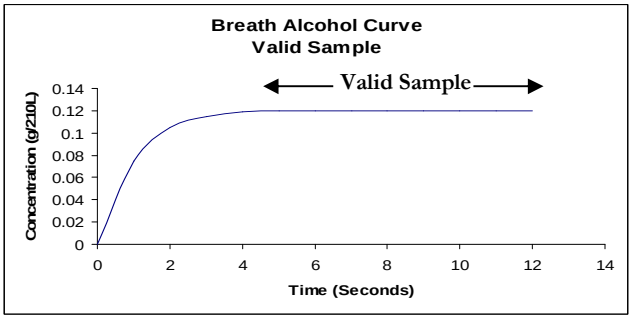


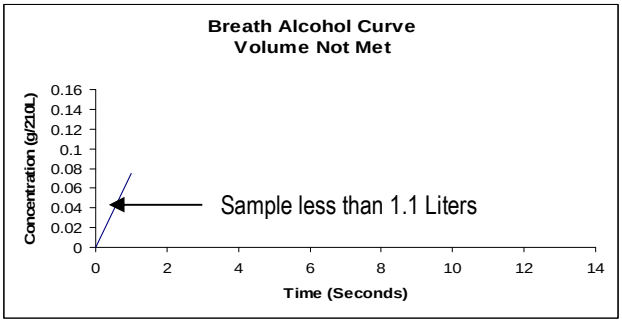
Scenario Three: A breath test with SLOPE NOT LEVEL as a result.	
QUESTION	**SAMPLE ANSWER**
When conducting a breath test, you obtain a result of SLOPE NOT LEVEL on the first breath sample. The instrument requested the second and third samples. The second and third samples were valid breath samples. The results on the Affidavit were: Sample #1 – SNL* Sample #2 – 0.112 Sample #3 – 0.115 *Slope Not Level – (0.065 – Breath sample not reliable for quantitative breath alcohol level) **QUESTION:** Why did you obtain SLOPE NOT LEVEL on the first sample? **QUESTION:** Are the two breath samples you subsequently obtained reliable? **QUESTION:** Why is the SLOPE NOT LEVEL result lower and not reliable?	ANSWER: The sample provided did not meet the slope requirements of a minimum acceptable breath sample and the slope of the breath sample being provided is still rising and did not level off. ANSWER: The two subsequent breath samples are reliable because all minimum acceptable breath sample requirements including slope were met and the slope was no longer rising and had leveled off for both subsequent breath samples. The two subsequent breath samples agree within 0.020 g/210L of each other which further shows that there was no problem with the slope of the subsequent samples obtained independently of each other. ANSWER: The SLOPE NOT LEVEL result is lower because the subject had not provided a deep lung air breath sample when he/she stopped providing their sample. The result is not reliable because the instrument has not determined that there are no interferents or mouth alcohol in the sample provided.



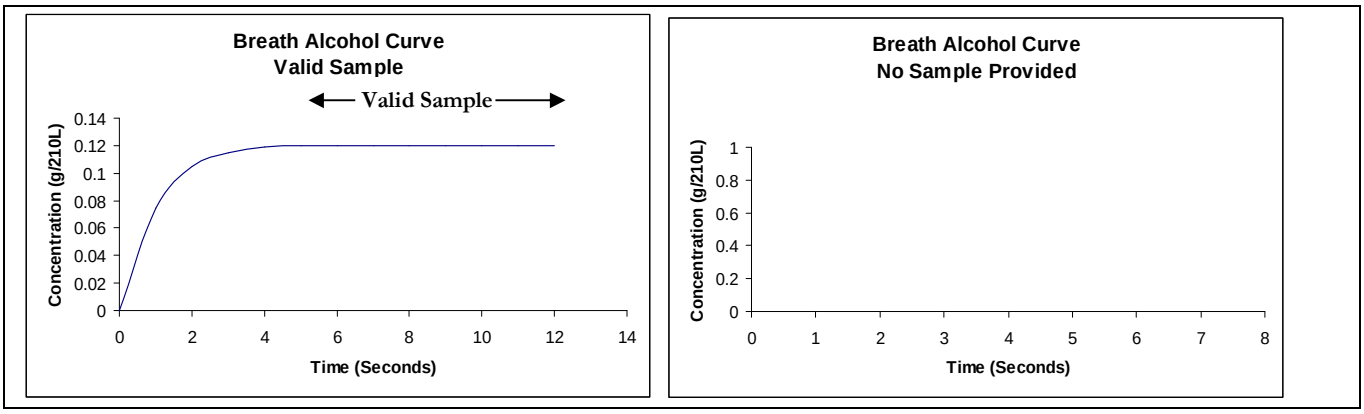


Scenario Four: A breath test with VOLUME NOT MET as a result.	
QUESTION	**SAMPLE ANSWER**
When conducting a breath test, you obtain a result of VOLUME NOT MET on the first breath sample. The instrument requested the second and third samples. The second and third samples were valid breath samples. The results on the Affidavit were: Sample #1 – VNM* Sample #2 – 0.112 Sample #3 – 0.115 *Volume Not Met – (0.065 – Breath sample not reliable for quantitative breath alcohol level) **QUESTION:** Why did you obtain VOLUME NOT MET on the first sample? **QUESTION:** Are the two breath samples you subsequently obtained reliable? **QUESTION:** Why is the VOLUME NOT MET result lower and not reliable?	ANSWER: The breath sample provided did not meet the minimum breath sample requirement of 1.1Liter. ANSWER: The two subsequent breath samples are reliable because all minimum acceptable breath sample requirements including volume were met. The two subsequent breath samples agree within 0.020 g/210L of each other which further shows that there was no problem with the slope of the subsequent samples obtained independently of each other. ANSWER: The VOLUME NOT MET result is lower because the subject had not provided a deep lung air breath sample when he/she stopped providing their sample. The result is not reliable because the instrument has not determined that there are no interferents or mouth alcohol in the sample provided.





Scenario Five: A breath test with NO SAMPLE PROVIDED as a result.	
QUESTION	**SAMPLE ANSWER**
When conducting a breath test, you obtain a result of NO SAMPLE PROVIDED on the first breath sample. The instrument requested the second and third samples. The second and third samples were valid breath samples. The results on the Affidavit were: Sample #1 – NSP* Sample #2 – 0.112 Sample #3 – 0.115 *No Sample Provided **QUESTION:** Why did you obtain NO SAMPLE PROVIDED on the first sample? **QUESTION:** Are the two breath samples you subsequently obtained reliable?	ANSWER: The subject did not provide a breath sample into the instrument within the three (3) minute time period allowed for each breath sampling process OR the subject did not provide a breath sample for at least one (1) second. It takes the instrument at least one (1) second to calculate a result therefore a result cannot be obtained if the subject provides a sample for less than one minute ANSWER: The two subsequent breath samples are reliable because the subject provided samples into the instrument and all minimum acceptable breath sample requirements including time were met. The two subsequent breath samples agree within 0.020 g/210L of each other which further shows that there was no problem with the slope of the subsequent samples obtained independently of each other.


Breath Alcohol Curve
Valid Sample
Valid Sample
Concentration (g/210L)
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0
2
4
6
8
10
12
14
Time (Seconds)
Breath Alcohol Curve
No Sample Provided
Concentration (g/210L)
1
0.8
0.6
0.4
0.2
0
0
1
2
3
4
5
6
7
8
Time (Seconds)

Breath Test Instructor Course

Lesson Five
Agency Inspections

Introduction

During this lesson, the student will learn about how to properly conduct an agency inspection. They will also learn about the equipment and standards necessary to conduct the inspection.

Objectives

REFERENCE SAMPLE DEVICE

5.1 Define Reference Sample Device.

- Reference Sample Device – a device, also known as a simulator, that produces a known vapor concentration by the passage of air through a liquid. It is designed to provide a temperature controlled headspace vapor sample of known concentration.
- The reference sample device, or simulator, is used during an agency inspection to conduct the alcohol free test, the alcohol free with acetone test, and to analyze the alcohol reference solutions.
- It must be operated at 34C +/- 0.2C and have an air leak resistant seal.

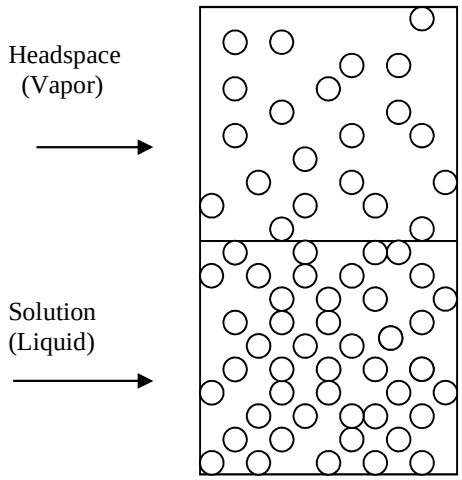
5.2 State the temperature of the reference sample device must be maintained at 34C +/- 0.2C.

- The minimum operating temperature is 33.8C and the maximum operating temperature is 34.2C.

5.3 State the reference sample device must have an air-leak resistant seal. Describe how to ensure the reference sample device has an air leak resistant seal.

- The agency inspector must also ensure that the simulator has an air-leak resistant seal. The simulator can be check for an air-leak resistant seal by performing the following steps:
    - Blow through the in-take port of the simulator. The agency inspector should notice bubbling.
    - The agency inspector should then cover the vapor exit port with their finger and the bubbling should stop.
    - The agency inspector should continue blowing after uncovering the vapor exit port to prevent the solution from escaping from the in-take port.
    - If leaks are present, the agency inspector should take measures to ensure proper seal such as re-positioning the simulator head or changing the simulator O-ring.
    - If proper seal cannot be obtained, the agency inspector should not use the simulator.

5.4 State the scientific principle upon which a reference sample device operates as Henry's Law. Define Henry's Law.



- Henry's Law is defined as the concentration in the headspace vapor above a solution is directly proportional to the concentration of that solution at a specific temperature.
- Henry's Law is applied to the reference sample device by the following:
    - The concentration of alcohol in the vapor phase located in the headspace of the simulator will be proportional to the concentration of alcohol in the liquid phase of the simulator at a specific temperature (34+/- 0.2C).
    - This partitioning of alcohol between the liquid phase and the vapor phase in the headspace will occur the same each and every time as long as the temperature remains 34 +/- 0.2C.

5.5 Identify the major parts common to all reference sample devices and their function.

- **Top housing.** The top housing contains the majority of parts. These can include:
    - Electronics - The electronics among other functions, control temperature, check for radio frequency interference (if so programmed) converts signals from analog to digital so they can be displayed.
    - Inlet port - The inlet port provides a place for air to enter the simulator, either from the surrounding area or from the return port of the breath test device.
    - Outlet port - The outlet port provides a connection to the breath test device that allows the vapors produced by the simulator to enter the breath test device.
    - Heater light - The heater light signals the operator when the heater is on (lighted) or off (unlighted)
    - Display (digital models) - The display (on so equipped models) provides a visual interface with the operator that may in clued temperature, heater operation, and error codes.
    - On/off switch - The on/off switch provides and switches off power to the simulator.
    - Fuse - The fuse protects the internal circuits and power consuming components from surges.
    - Power cord - The power cord acts as a conduit for power from the source of power to the simulator.
    - Thermometer - The thermometer allows the operator to monitor the temperature of the solution.
    - Baffle plate - The baffle plate prevents solution from splashing in and potentially being drawn into the outlet port, thus into the breath test instrument. This would interfere with accurate results.
    - Stirring paddle - The stirring paddle spins to keep the solution's temperature consistent. It is not used to keep the alcohol and water mixed together. This is not necessary because alcohol and water stay in solution naturally.
    - Temperature probe - The temperature probe senses the temperature of the solution and provides this information to the heater control circuit, allowing that circuit to turn the heater on or off as needed.
    - Heating element - The heating element is used to heat the solution as needed to stay at a consistent temperature.
    - Aerator - The aerator is connected directly to the inlet port. It allows air to be introduced and mixed into the solution, thereby creating the vapor mixture.
- **Solution container and seal:**
    - The solution container (jar) is typically at least 700 ml in volume because it has to hold at least 500 ml of solution and allow for a headspace for the resulting *vapor mixture* to collect. The volume of the headspace depends on the particular simulator and its design.
    - A *vapor mixture* is simply the volatile substance that was in solution that has changed from a liquid state to a gaseous state due to the effects of heat and pressure.
    - The seal provides an airtight barrier between the top housing and the solution container.

5.6 Describe the proper use of the reference device.

- The simulator must be clean and dry prior to its use.
- The agency inspector should check the top of the simulator jar for chips and cracks.
- The water or solution is placed into the jar of the reference sample device. Approximately 500 mL of water or solution is required to ensure the simulator does not overheat.
- After placing the water or solution into the simulator, attach the top by screwing it onto the jar. Ensure no cross threading has occurred and an air-leak resistant seal has been obtained.
- Plug the power cord into an electrical outlet. If applicable, turn on the power switch to the reference sample device.
- After turning the device on, observe the device to ensure the mixing paddle is rotating so that proper distribution of the sample and consistent temperature of the solution is maintained.
- The agency inspector must monitor the reference sample device temperature to ensure that the temperature of 34 +/- 0.2C is achieved and maintained.
- The agency inspector must be aware that some reference sample devices use a mercuric glass thermostat and/or reference thermometer. The thermostat and/or thermometer may become inoperative due to the separation of the mercury column. If this occurs, contact a repair facility capable of conducting maintenance on the particular brand of reference sample device. The thermostat and/or thermometer must be checked periodically for mercury separation.
- The agency inspector must use a thermometer that measures, at a minimum, to the tenth of a degree. It is recommended that the thermometer is traceable to the National Institute of Standards and Technology.
- After the agency inspection is complete, the agency inspector must clean and dry the reference sample device and store it in a safe, secure environment.

ALCOHOL REFERENCE SOLUTION

5.7 Define Alcohol Reference Solution. Understand the purpose of using an alcohol reference solution.

- Alcohol Reference Solution – a standard used to verify the calibration of a breath test instrument consisting of a mixture of alcohol and distilled or deionized water that will produce a known alcohol vapor concentration at a specific temperature
  - The analysis of alcohol reference solutions during an agency inspection ensures the instrument is properly calibrated and is providing accurate and reliable results.

5.8 State only alcohol reference solution lots from an approved source and approved by the Department shall be used in agency inspections within two (2) years of the date of manufacture.

- The Department will approve the source (manufacturer) of alcohol reference solutions. An agency inspector must use alcohol reference solutions that are prepared by the approved source.
- The Department will approve lots of alcohol reference solutions. An agency inspector must use lots of alcohol reference solution that have been approved by the Department. The Department will notify each agency inspector of the lots of alcohol reference solution that have been approved. A list of approved alcohol reference solution lot numbers can also be found on the Alcohol Testing Program website.
- Each bottle of alcohol reference solution is marked with an expiration date. This date is two years from the date of manufacture. The agency inspector must not use alcohol reference solution beyond the date of expiration.
- Before using alcohol reference solution, inspect the bottles prior to their use to ensure they have not been opened or tampered with. Check the lot number to ensure it is an approved lot and expiration date to ensure the solution has not expired.

5.9 State when changing solutions during an agency inspection, the agency inspector should dispose of the used solution, rinse the glass jar and thoroughly dry all components before adding new solution.

- The agency inspector must not save and/or use the same solutions from month to month.
- Fresh solutions must be used for each month's inspection.

5.10 Define the Acceptable Range for the 0.05, 0.08, and 0.20 g/210L Alcohol Reference Solution.

- 0.05 g/210L Alcohol Reference Solution: 0.045 to 0.055 g/210L.
- 0.08 g/210L Alcohol Reference Solution: 0.075 to 0.085 g/210L.
- 0.20 g/210L Alcohol Reference Solution: 0.190 to 0.210 g/210L.

5.11 Define Dry Gas Standard. Understand the purpose of using dry gas standard.

- Dry Gas Standard – a standard consisting of a mixture of alcohol and gas which produces a known alcohol vapor concentration used to verify the calibration of a breath test instrument
  - The analysis of dry gas standard during an agency inspection ensures the instrument is properly calibrated and is providing accurate and reliable results.
  - The analysis of dry gas standard during a breath test ensures that the instrument is properly calibrated and is providing accurate and reliable results at the time of each breath test.

5.12 State dry gas standard cylinders produced by the approved source must not be used beyond the expiration date.

- The Department will approve the source (manufacturer) of dry gas standards.
- The Department will not approve individual lots of dry gas standard.
- The agency inspector must use dry gas standard from an approved source, must maintain the Certificate of Analysis for the lot(s) used, and must not use the dry gas standard beyond its expiration date.

5.13 Define the acceptable range for the 0.08 g/210L dry gas standard.

- 0.08 g/210L dry gas standard: 0.075 to 0.085 g/210L

5.14 Define Acceptable Range, Accuracy, Acetone Stock Solution, Alcohol, Alcohol Free Test, Authorized Repair Facility, and Mouth Alcohol Solution.

- Acceptable Range – the results of alcohol reference solutions and dry gas standard analyses which fall within the following ranges of alcohol vapor concentration: 0.05 g/210L range is 0.045 to 0.055 g/210L; 0.08 g/210L range is 0.075 to 0.085 g/210L; 0.20 g/210L range is 0.190 to 0.210 g/210L
  - The results of alcohol reference solution and dry gas standard analyses during an agency inspection must fall within the acceptable range for that solution.
- Accuracy – the nearness of a measurement to a known concentration
  - During an agency inspection, the agency inspector is checking the accuracy and proper operation of the instrument.
- Acetone Stock Solution – A mixture of acetone and distilled or deionized water provided by the Department
- Alcohol – ethyl alcohol, also known as ethanol
  - Ethanol is the alcohol contained in alcoholic beverages.
- Alcohol Free Test – a result of 0.000 g/210L when using distilled or deionized water
- Authorized Repair Facility – The manufacturer or an entity authorized by the breath test instrument manufacturer to service and repair such breath test instrument.
- Mouth Alcohol Solution – a mixture of alcohol and distilled or deionized water provided by the Department.

5.15 State evidentiary breath test instruments shall be inspected by an agency inspector at least once each calendar month. The agency inspection shall be conducted in accordance with Agency Inspection Procedures – Intoxilyzer 8000 FDLE/ATP Form 39 for the Intoxilyzer 8000.

- When using an Intoxilyzer 8000, the breath test operator must note the date of the agency inspection when answering user questions during the administration of the breath test. The agency inspector will provide this information to the breath test operator each calendar month.
  - The agency inspection date will automatically be recorded by the instrument during the agency inspection process. The agency inspector should also post the most current agency inspection date in a location so the breath test operator can verify this date during a breath test.

5.16 State whenever an instrument is taken out of evidentiary use the agency shall conduct an agency inspection. The agency shall also conduct an agency inspection prior to returning an instrument to evidentiary use.

5.17 State evidentiary breath test instruments shall only be accessible to a person issued a valid permit by the Department and to persons authorized by a permit holder and will be kept clean and dry. This section does not prohibit agencies from sending an instrument to an authorized repair facility.

- The purpose of this rule is to ensure that an evidentiary breath test instrument is not misused or damaged.

5.18 State each agency shall maintain the following records for at least three years from the last entry date: agency inspection reports and breath test instrument repair records. The breath test instrument registration shall be retained by an agency for at least three years after the instrument is removed from evidentiary use. Dry gas standard certificates of analysis shall be retained by an agency for at least three years after receipt. The above records shall be accessible to the Department upon request. The purpose of this section is solely for regulatory and administrative use, and any violation of this section shall not affect the admissibility, validity or reliability of breath test results.

Agency Inspection of the Intoxilyzer 8000

5.19 State to conduct an agency inspection on an Intoxilyzer 8000, the agency inspector will need an Intoxilyzer 8000, alcohol reference solutions, dry gas standard, a minimum of two properly operating reference sample devices (simulators), mouth alcohol solution, distilled or deionized water, class "A" glass 3ml pipette, acetone stock solution, ¼ inch ID tygon tubing, tubing connectors, mouthpieces, external printer, and a copy of FDLE/ATP Form 39, Agency Inspection Procedures – Intoxilyzer 8000.

5.20 An agency inspection of an Intoxilyzer 8000 must be conducted in accordance with FDLE/ATP Form 39, Agency Inspection Procedures – Intoxilyzer 8000 and the results recorded on FDLE/ATP Form 40, Agency Inspection Report – Intoxilyzer 8000.

- The agency inspector must never open the top cover of an Intoxilyzer 8000. There are no user serviceable parts inside.
- The agency inspection must be conducted in a facility with an external printer attached.
- The dry gas standard cylinder used must not contain less than 50 psi of pressure. Replace if the cylinder is below this pressure. The instrument will also inform the Agency Inspector if there is insufficient pressure to conduct an agency inspection.
- The agency inspector must verify the lot numbers and expiration dates of the alcohol reference solutions being used to determine that only approved and un-expired alcohol reference solutions are being used. The agency inspector must verify that the dry gas standard being used is from an approved source and un-expired.
- Simulators and dry gas standard cylinders are connected to the calibration inlet via a quick connect.
- The simulator return port is only used for vapor return to a simulator. It is not used with a dry gas standard cylinder.

5.21 Describe and explain each step of FDLE/ATP Form 39, Agency Inspection Procedures – Intoxilyzer 8000.

- The Intoxilyzer 8000 has the agency inspection routine automatically programmed to closely follow FDLE/ATP Form 39 Agency Inspection Procedures – Intoxilyzer 8000.

FDLE/ATP Form 39 Agency Inspection Procedures – Intoxilyzer 8000

Step	Procedure	Description
1	• Prepare at least two simulators for use and allow them to warm up for at least thirty minutes prior to the first analysis. • When changing solutions, allow the new solution to warm up for at least ten minutes after the heater light turns off for the first time. • Ensure that each simulator maintains an air leak resistant seal and an operational temperature of 34C (+/- 0.2C).	

2	Only distilled or deionized water must be used for the Alcohol Free Test and the Interferent Detect Test. Class A glassware must be used when measuring solutions.	
3	Only approved and non-expired alcohol reference solution and non-expired dry gas standard from an approved source must be used during the applicable portions of the inspection.	
4	• Press ESC twice to access the main menu. Enter Agency Inspector last name, first name and middle initial at USER prompts. • Press the 2 key to access the Agency Inspector menu. Enter password. • Scroll to Inspection Test and press ENTER. Enter Agency Inspector last name, first name and middle initial at INSPECTOR prompts.	
5	• All results are reported to three decimal places in g/210L. • The result must be 0.000 for each air blank. The instrument will abort the inspection process if the air blank result is not 0.000. • If any test is out of compliance the instrument will prompt the Agency Inspector to REPEAT (Y/N) the test. Each test may only be repeated once. • If a test must be repeated, the REASON must be entered when prompted and recorded in the Remarks section of FDLE/ATP Form 40 Agency Inspection Report – Intoxilyzer 8000. • Verify DATE. Adjust if necessary. Press ENTER. Verify TIME. Adjust if necessary. Press ENTER. • DIAGNOSTIC CHECK (Pre-Inspection). Press ENTER. The result must be OK for each diagnostic check. If any diagnostic check is not OK, the instrument will abort the inspection process. • NUMBER OF SIMULATORS USED. Enter the number of simulators used during the inspection. • ALCOHOL FREE SUBJECT/MOUTH ALCOHOL TEST. Press ENTER. When PROVIDE SAMPLE NOW is displayed, introduce an alcohol-free breath sample into the instrument. The result must be 0.000. Rinse mouth with mouth alcohol solution. When PROVIDE SAMPLE NOW is again displayed introduce a breath sample into the instrument. The result must be SLOPE NOT MET. • ALCOHOL FREE TEST. Attach a simulator containing 500 mL distilled or deionized water to the instrument. Press ENTER. Conduct three (3) analyses. The result must be 0.000 for each analysis. • INTERFERENT DETECT TEST. Attach a simulator containing 3 mL of acetone stock solution and 500 mL distilled or deionized water to the instrument. Press ENTER. Conduct three (3) analyses. The result must be INTERFERENT DETECT for each analysis. • 0.05 g/210L TEST. Attach a simulator containing 0.05 g/210L alcohol reference solution to the instrument. Press ENTER. Enter the lot number and expiration date of the alcohol reference solution used. Conduct three (3) analyses. The result of each analysis must be within the acceptable range. • 0.08 g/210L TEST. Attach a simulator containing 0.08 g/210L alcohol reference solution to the instrument. Press ENTER. Enter the lot number and expiration date of the alcohol reference solution used. Conduct three (3) analyses. The result of each analysis must be within the acceptable range. • 0.20 g/210L TEST. Attach a simulator containing 0.20 g/210L alcohol reference solution to the instrument. Press ENTER. Enter the lot number	Check simulator seal, temperature and connections or dry gas standard connection and pressure before repeating. An agency inspector must use at least two (2) properly operating simulators. Acceptable Range: 0.045 to 0.055 g/210L. Acceptable Range: 0.075 to 0.085 g/210L. Acceptable Range: 0.190 to 0.210 g/210L.

	and expiration date of the alcohol reference solution used. Conduct three (3) analyses. The result of each analysis must be within the acceptable range. • 0.08 g/210L DRY GAS STANDARD TEST. Attach a cylinder containing 0.08 g/210L dry gas standard to the instrument. Press ENTER. Enter the lot number and expiration date of the dry gas standard used. Conduct three (3) analyses. The result of each analysis must be within the acceptable range. • DIAGNOSTIC CHECK (Post-Inspection). Press ENTER. The result must be OK for each diagnostic check. If any diagnostic check is not OK, the instrument will abort the inspection process. • REVIEW REMARKS. Enter Y/N. • IN COMPLIANCE. Enter Y/N to state whether the instrument complies or does not comply with the requirements of Chapter 11D-8, F.A.C. If the instrument does not comply with Chapter 11D-8, F.A.C., remove the instrument from service and notify the Department Inspector.	Acceptable Range: 0.075 to 0.085 g/210L.
6	The results of the Agency Inspection must be recorded on FDLE/ATP Form 40 Agency Inspection Report – Intoxilyzer 8000.	
7	For regulatory and administrative purposes only, the results of the agency inspection must be made electronically available to the Department within five (5) days of completing the inspection.	Press the Escape button until READY MODE is displayed.

5.22 Describe the proper completion of FDLE/ATP Form 40 – Agency Inspection Report – Intoxilyzer 8000.

- FDLE/ATP Form 40 Agency Inspection Report – Intoxilyzer 8000 must be printed when the inspection is complete. The instrument must be connected to an external printer.
- After the inspection is complete and the report is printed, but before the upload is conducted, the agency inspector must carefully review the printed Agency Inspection Report for accuracy and completeness.
- The agency inspector will sign the Agency Inspection Report – Intoxilyzer 8000 FDLE/ATP Form 40, certifying that the agency inspection was conducted in accordance with Chapter 11D-8, Florida Administrative Code.
- The agency inspector is required by Chapter 11D-8, Florida Administrative Code to make the agency inspection results electronically available to the Department with five business days. This requirement is satisfied by using the Upload function in the level 2 menu.
- Note: If the agency inspection is not uploaded at the time of inspection, the instrument will scroll the remaining days left to upload. If the agency inspection is not uploaded within the remaining time, the instrument will not allow breath tests to be conducted on it.

5.23 Describe how to UPLOAD the agency inspection and/or the breath test results.

- After the results have printed, the instrument will ask the Agency Inspector to UPLOAD NOW. Ensure the instrument is plugged into an analog telephone line and press ENTER. The results will automatically be uploaded. The breath test results will automatically be uploaded as well.
- If the agency inspection is not uploaded at the time of the inspection, the results may be uploaded using the Comms Transfer section in the level 2 menu:
  - In the level 2 menu, scroll to C and press ENTER. Ensure the instrument is connected to an analog phone line.
  - Enter or verify the telephone number to the database in Tallahassee and press ENTER.
  - All information will automatically be uploaded to the database in Tallahassee. The instrument will notify the agency inspector if the data was successfully uploaded.

Breath Test Instructor Course

Lesson Six
Courtroom Testimony

Introduction

During this lesson, the student will learn how to conduct the courtroom testimony portion of the Breath Test Operator and Agency Inspector curricula.

Objectives

GENERAL TESTIMONY

6.1 Review the dress and demeanor of a witness who is to testify in court.

Testifying in Court:

- Dress professionally – uniform or business attire.
- Speak loudly and clearly.
- Emphasize you training, education and experience.
- Speak in simple language when possible. Breath testing contains complex scientific language but try to keep it simple and use analogies when possible.
- Do not be afraid to say "I don't know" when you do not know the answer.
- Do not argue with either the prosecutor or the defense counsel.
- Listen carefully to the question and answer only the question asked.
- Take your time when answering a question. If necessary, think about your answer before giving it.
- If possible, use visual aids or demonstrations when testifying.

BREATH TEST OPERATOR

6.2 When testifying in court the operator should be well prepared and ready to answer questions regarding the breath test.

Before going to Court:

- Review course material in conducting breath tests (for example, instrument theory, instrument operation and the rules of conducting a breath test).
- Review the Affidavit to re-familiarize yourself with the occurrences of the breath test.

6.3 The operator should be familiar with answering questions asked in court regarding the breath test.

- The class will be broken down into small groups. Using an Affidavit from the practical conducted earlier, students will take turns asking and answering the following questions below:

  Getting "qualified" as a Breath Test Operator:

  - Please state your name.
  - Where are you employed?
  - How long have you been employed with that agency?
  - What are your duties and responsibilities?
  - Do you have any education or experience in conducting breath tests?
  - Did you learn how to conduct breath tests in accordance with Chapter 11D-8, FAC?
  - Do you hold a permit to conduct breath tests?
  - When did you obtain it?
  - How many breath tests have you administered?
  - What are your duties as a breath test operator?

The Breath Test:

- Did you conduct a breath test on this defendant?
- What instrument did you use to conduct the breath test?
- Does this instrument use infrared light absorption?
- What is infrared light absorption?
- Did you conduct a twenty minute observation prior to conducting the breath test?
- When did it begin?
- When did it end?
- Did you reasonably ensure that the defendant did not take anything by mouth or regurgitate during the twenty minute observation period?
- What time was the breath test conducted?
- What procedures did you follow when conducting the breath test?
- Are these the procedures required by Chapter 11D-8, FAC when conducting a breath test?
- Did you follow all the required procedures when conducting this breath test?
- Did the defendant provide at least two valid breath samples?
- Were they deep lung air samples?
- How do you know they were deep lung air samples?
- Do the results agree within 0.020 g/210L as required by Chapter 11D-8, FAC?

Admission of the Affidavit:

- Do you recognize this document?
- How do you recognize it?
- What is this document?
- Did you complete the document at or near the time of the breath test?

(Affidavit must be admitted into evidence)

- What were the results of the breath test?

AGENCY INSPECTOR

6.4 When testifying in court the agency inspector should be well prepared and ready to answer questions regarding the breath test.

Before going to Court:

- Review course material in conducting the agency inspection (for example, instrument theory, instrument operation and the rules of conducting an agency inspection).
- Understand why you conduct agency inspections of evidentiary breath test instruments (for example, to ensure the accuracy and reliability and proper operation of the evidentiary breath test instrument).
- Review your agency inspections to re-familiarize yourself with the occurrences of the agency inspections.

6.5 The agency inspector should be familiar with answering questions asked in court regarding the agency inspection.

- The class will be broken down into small groups. Using an agency inspection from the practical conducted earlier, students will take turns asking and answering the following questions below:

  Getting "qualified" as an Agency Inspector:

  - Please state your name.
  - Where are you employed?
  - How long have you been employed with that agency?
  - What are your duties and responsibilities?
  - Do you have any education or experience in conducting agency inspections?
  - Did you learn how to conduct agency inspections in accordance with Chapter 11D-8, FAC?
  - Do you hold a permit to conduct agency inspections?
  - When did you obtain it?
  - How many agency inspections have you conducted?
  - What are your duties as an agency inspector?

The Agency Inspection:

- Are you familiar with Intoxilyzer8000 Serial Number _____?
- Where is this instrument kept?
- Is this instrument kept in a clean, dry and secure area?
- Who has access to this instrument?
- Is this instrument approved by FDLE?
- Does this instrument use infrared light absorption?
- What is infrared light absorption?
- Is this instrument registered by FDLE to conduct evidentiary breath testing?

Admission of the Agency Inspection:

- Do you recognize this document?
- How do you recognize it?
- What is this document?
- Did you complete the document at or near the time of the agency inspection?
- What is an agency inspection?
- Why do you conduct agency inspections?
- What tests are performed when conducting an agency inspection?

(Inspection must be admitted into evidence)

- What were the results of the agency inspection?
- Was this instrument operating correctly and in proper calibration as indicated by your agency inspection?

6.7 Review the administration of the scenarios that are a part of the Agency Inspector Course.

- The student must be able to answer questions regarding an agency inspection and what occurred during the inspection process.
- The students will be brought back into one group again. The following scenarios will be discussed as a class:

Scenario One: An Agency Inspection with an Out of Range 0.08 g/210L Alcohol Reference Solution Result.	
QUESTION	**SAMPLE ANSWER**
When conducting this agency inspection you received an out of range result for the 0.08 g/210L alcohol reference solution analysis. Results: 0.074, 0.081, 0.081 The instrument required you to repeat these tests. You repeated the analysis of the 0.08 g/210L analysis and all results were within acceptable range. **QUESTION 1:** Why did you obtain an out of range reading on your first 0.08 g/210L analyses? **QUESTION 2:** What did you do to address the out of range reading? **QUESTION 3**: So you just keep testing until you get the right answer? **QUESTION 4**: How do you know that the instrument is operating correctly?	ANSWER 1: The first reading (0.074) was out of range because the simulator had not warmed up to proper temperature to allow for full equilibration of the solution into the headspace of the simulator. ANSWER 2: I allowed the simulator to heat with the 0.08 g/210L solution in it for an additional 10 minutes and repeated the tests. ANSWER 3: No. I address the problem and repeat the tests. If out of range results were obtained on the repeat analysis, I would mark this inspection as DOES NOT COMPLY and remove the instrument from evidentiary use. ANSWER 4: On the repeat analysis, after addressing the problem, which was not the instrument, the results were within acceptable range and the instrument is operating correctly.

Scenario Two: An Agency Inspection with Out of Range 0.08 g/210L Dry Gas Standard Results.	
QUESTION	**SAMPLE ANSWER**
When conducting this agency inspection you received out of range results for the 0.08 g/210L dry gas standard analysis. Results: 0.000, 0.000, 0.000 The instrument required you to repeat these tests. You repeated the analysis of the 0.08 g/210L analysis and all results were within acceptable range. **QUESTION 1:** Why did you obtain an out of range reading on your 0.08 g/210L dry gas standard analyses? **QUESTION 2:** What did you do to address the out of range reading? **QUESTION 3**: So you just keep testing until you get the right answer? **QUESTION 4**: How do you know that the instrument is operating correctly?	ANSWER 1: The dry gas standard cylinder was not connected to the instrument. ANSWER 2: I attached the cylinder to the instrument and repeated the tests. ANSWER 3: No. I address the problem and repeat the tests. If out of range results were obtained on the repeat analysis, I would mark this inspection as DOES NOT COMPLY and remove the instrument from evidentiary use. ANSWER 4: On the repeat analysis, after addressing the problem, which was not the instrument, the results were within acceptable range and the instrument is operating correctly.

Scenario Three: An Agency Inspection with INTERFERENT DETECT not resulting during the Alcohol Free with Acetone Test.	
QUESTION	**SAMPLE ANSWER**
When conducting this agency inspection you did not obtain INTERFERENT DETECT on your Alcohol Free with Acetone Test analysis. Results: 0.000, 0.000, 0.000 The instrument required you to repeat these tests. You repeated the Alcohol Free with Acetone Test and all results were within acceptable range. **QUESTION 1:** Why was the acetone not detected? **QUESTION 2:** What did you do to address this? **QUESTION 3**: So the instrument really isn't operating correctly? **QUESTION 4**: How do you know that the instrument is operating correctly?	ANSWER 1: The bottle of acetone stock solution that was used was almost depleted. It may have not contained the correct amount of acetone for the instrument to detect. ANSWER 2: I obtained a fresh bottle of acetone stock solution and prepared a new simulator for the Alcohol Free with Acetone tests. I allowed the simulator to warm up properly and repeated the test. ANSWER 3: No. I address the problem and repeat the tests. If incorrect results were obtained on the repeat analysis, I would mark this inspection as DOES NOT COMPLY and remove the instrument from evidentiary use. ANSWER 4: On the repeat analysis, after addressing the problem, which was not the instrument, the results were within acceptable range and the instrument was operating correctly.

Breath Test Instructor Course

Lesson Seven
Administration of a Breath Testing Course

Introduction

During this lesson, the student will identify the forms and materials necessary to conduct breath testing courses, their purpose and proper completion. The student will learn how to evaluate participants in the proper operation of instrumentation, proficiency exercises and the written examination.

Objectives

7.1 Identify how to properly complete the Notification of Specialized Training Course form and submit to the Alcohol Testing Program.

- Notification is required by rule 11B-35, F.A.C.
- The Notification of Specialized Training Course should be used.
- Properly complete the notification form.
- All course schedules submitted will be posted at the ATP website.

7.2 Identify the need to arrange for, set up and test all equipment prior to the commencement of the training class.

- The instructor must arrange for the availability of all needed equipment, including the following, well in advance of the course dates:
    - Properly operating instruments
    - Mouthpieces
    - Properly operating simulators and Tygon tubing
    - Class A Glassware (500ml flasks / 3ml pipettes)
    - Paper Rolls
    - Alcohol Reference Solutions
    - Dry Gas Standard Cylinders
    - Acetone Stock Solution
    - Mouth Alcohol Solution
    - Distilled or deionized water
    - External printers
    - Current versions of applicable FDLE/ATP Forms
    - Written Examination and Answer Key

7.3 Identify how to properly evaluate a student's ability to properly operate the instrument during the laboratory practical.

- These exercises prepare the student for his proficiency testing but also must be used to train him/her to properly deal with situations he/she may encounter in evidential testing.
- The performance of each practicum exercise must be evaluated by the instructor using the same standards as would apply to proficiency. All related forms and documentation must be complete and checked for accuracy.
- In order for the students to learn effectively it is important to identify your expectations of them. Describe the tasks to be performed, equipment to be used, time limits and desired results.
- Each student in a Breath Test Operator Course must complete a minimum of five practicum exercises (Approved Breath Tests) and complete all of the applicable documentation.
- Each student in an Agency Inspector Course must complete a minimum of one practicum exercise (Agency Inspection) and complete all of the applicable documentation.

7.4 Identify how to properly complete FDLE/ATP Forms 8, 38, and 40.

- FDLE/ATP Form 8 the "Breath Test Permit Application" is used only for an initial permit application and must be completed by each student/applicant at the end of the Breath Test Operator and/or Agency Inspector Course provided the student has successfully completed the course. The information at the top of the form must be completed and must be signed and dated by the student.
- All Affidavits must be signed and dated in the presence of a notary or law enforcement officer. The person notarizing the Affidavit must complete the applicable portion of the form.
- All agency inspection reports must be signed and dated by the student conducting the agency inspection(s).
- All instructors must ensure that the most current forms are used during each course.

7.5 Identify the process of conducting proficiency testing of a student.

- In all instances the students must be under the observation of an instructor as they perform their proficiency testing.
- For Breath Test Operator and Breath Test Operator Renewal Courses this must include the complete process of the administration of an "Approved Breath Test" done in accordance with Form 37 and in compliance with all provisions of the applicable sections of Chapter 11D-8, F.A.C. It must also include the accurate completion of all related Forms and documents. (FDLE/ATP Form 38).
- For Agency Inspector and Agency Inspector Renewal Courses this must include the complete process of the administration of an Agency Inspection in accordance with FDLE/ATP 39 and in compliance with all provisions of the applicable sections of Chapter 11D-8, F.A.C. It must also include the accurate completion of all related forms and documents.
- The instructor must document the grade of the student for operation of the instrument and properly completing the forms on the Breath Test Training Report.

7.6 Identify how to properly review a student's completed proficiency test documents for both completeness and accuracy. Proficiency testing includes determining whether the student can properly operate an instrument or conduct an agency inspection and properly complete the forms associated with the test or inspection.

- Each form or document needed for the Breath Test or Agency Inspection must be completed by the student and reviewed by the instructor. Each form must be reviewed for both completeness and accuracy. Each form must be compared to related forms in the Breath Test or Agency Inspection process to ensure that all information was accurately transcribed.
- As to all of the above documents any and all corrections must be made by a single strike of the incorrect information followed by the insertion of the correct information and the initials of the Breath Test Operator and/or Agency Inspector making the correction. All corrections must be made only by the original author of the information recorded on the form.

7.7 Identify the process of administering, monitoring, grading and recording the grades on the written examination.

- A written examination is to be administered as a part of the Breath Test Operator and Breath Test Operator Renewal Courses and the Agency Inspector and Agency Inspector Renewal Courses. Although the Training Center Director or their designee is responsible for the written examination, the Alcohol Testing Program has provided a written examination and answer key to each Training Center Director for each applicable course.
- Students must be reminded to remove all books and papers from their work area other than the provided tests and answer sheets. (Answer sheets can be FDLE/ATP Form 31 or any other answer sheet commonly used by the particular training center.)
- There must be no talking and the instructor's attention must not be diverted from the monitoring of the class during the administration of the test.
- At the completion of the written test administration the instructor must ensure that he/she has received the same number of tests and answer sheets as provided to the class. Test security must be maintained at all times. The tests should be graded using the answer key provided to the Training Center.
- Each student must attain a score of 80% or higher in order to pass the written examination.

- Examination answer sheets are not public records. A separate record of the score of each individual student should be kept apart from answer sheets to provide for test security in the event of a subsequent public records request involving a class participant.
- The instructor must document the written examination grade for each student on the Breath Test Training Report.

7.8 Identify the need to advise students of that they are not authorized to conduct evidentiary breath tests or agency inspections of evidentiary breath test instruments prior to receipt of their permit from the FDLE.

- Students must be informed that a certificate of completion from the training center does not authorize them to perform the duties associated with a Breath Test Operator permit or Agency Inspector permit.

7.9 Identify the proper compilation of a class records folder.

- The class records folder for a Breath Test Operator Course must contain the following forms and documents for each student:
    - FDLE/ATP Form 8 Breath Test Permit Application
    - FDLE/ATP Form 38 Breath Alcohol Test Affidavit
    - CJSTC Form 14 – Breath Testing Course Performance Report
    - Written Examination Answer Sheet with grade obtained
- The class records folder for a Breath Test Operator Renewal Course must contain all of the above forms and documents for each student with the exception of FDLE/ATP Form 8 Breath Test Permit Application.
- The class records folder for an Agency Inspector Course must contain the following forms and documents for each student:
    - FDLE/ATP Form 8 Breath Test Permit Application
    - FDLE/ATP Form 40 Agency Inspection Report – Intoxilyzer 8000
    - FDLE/ATP Form 38 Breath Alcohol Test Affidavit
    - CJSTC Form 14 – Breath Testing Course Performance Report
    - Written Examination Answer Sheet with grade obtained
- The class records folder for an Agency Inspector Renewal Course must contain all of the above forms and documents for each student with the exception of FDLE/ATP Form 8 Breath Test Permit Application.