

RULES  
OF  
THE ALABAMA DEPARTMENT OF FORENSIC SCIENCES

CHAPTER 370-1-1  
CHEMICAL TEST FOR INTOXICATION

TABLE OF CONTENTS

370-1-1-.01 Admissibility Rule for the Evidential Breath Alcohol Test Method  
370-1-1-.03 Blood, Urine, and Other Bodily Substances  
370-1-1-.04 Field Sobriety Screening Tests  
370-1-1-.05 Field Sobriety Alcohol Screening Devices  
370-1-1-.06 Field Sobriety Drug Screening Devices

370-1-1-.01 Admissibility Rule for the Evidential Breath Alcohol Test Method.

(1) Purpose.

This rule addresses the statutory elements required for the admissibility of evidence obtained from Breath Alcohol Testing Instruments. This rule contains the METHOD, as referred to by §32-5A-194 Code of Alabama, 1975 as amended, which insures and verifies that each individual Breath Alcohol Test is performed accurately and reliably. IN EVENT THAT ONE OF THESE REQUIREMENTS IS NOT FULFILLED, BREATH ALCOHOL TESTING EVIDENCE MAY STILL BE OFFERED THROUGH TRADITIONAL EVIDENTIARY PREDICATE as approved of in *Ex parte Mayo*, 652 So. 2d 201 (Ala. 1994).

(2) Definitions and Abbreviations.

(a) *Acceptable Breath Sample.* For the purpose of this rule the subject must provide the Draeger Alcotest 7110 MKIII with a breath sample of sufficient volume and duration, as required by the software to be accepted for analysis. Software versions prior to and including version 3.24 require the subject to provide a minimum of 1.5 liters of breath, for a minimum of 4.5 seconds. Software versions 3.25 or later require the subject to provide a minimum of 1.3 liters of breath, for a minimum of 4.0 seconds.

(b) *Accuracy Check Fail.* When the Calibration Check results are outside the programmed parameters of the Draeger Alcotest 7110 MKIII, the instrument will abort the testing sequence.

(c) *Admin. Breath Temperature Correction.* Administrative Breath Temperature Correction can result in an administrative lowering of the reported Breath Alcohol Result. When the Draeger Alcotest 7110 MKIII determines a subject's Breath Temperature is not 34.0°C an adjustment to the reported value will be made. When the Breath Temperature is above 34.0°C the adjustment will result in a lower reported Breath Alcohol Concentration.

(d) *Alcohol.* For the purpose of this rule, use of the term alcohol shall refer to ethanol or ethyl alcohol unless otherwise specified.

(e) *Air Blank Check.* The Draeger Alcotest 7110 MKIII Breath Alcohol Testing Instrument verifies that the analytical pathway is free of contamination.

(f) *Ambient Air Check.* The Draeger Alcotest 7110 MKIII Breath Alcohol Testing Instrument verifies that the air used to purge the analytical pathway was free of contamination.

(g) *Ambient Air Fail.* The Draeger Alcotest 7110 MKIII will terminate a Breath Testing Sequence when the detector systems respond to ethanol or other substances in the room air.

(h) *Blowing Not Allowed.* Only when the "PLEASE BLOW" message appears will the Draeger Alcotest 7110 MKIII accept a subject breath sample. Any breath sample provided to the Draeger Alcotest 7110 MKIII at any time other than when prompted to do so will not be accepted by the instrument.

(i) *Blowing Time Too Short.* When a breath sample is provided to the Draeger Alcotest 7110 MKIII that is sufficient in volume but deficient in duration, as required by the software, the instrument will not accept the sample.

(j) *Br-Temp Meas Not Ok.* Breath Temperature Measurement Not Ok occurs when the difference between the two Breath Temperature thermistor values is outside the specified range for a single breath sample.

(k) *Breath Alcohol Test.* For the purpose of this rule, two (2) acceptable breath samples in conjunction with two diagnostic checks and two acceptable calibration checks shall constitute a Breath Alcohol Test.

(l) *Calibration.* The purpose of the calibration is to define the appropriate parameters to allow the instrument to accurately quantitate alcohol in a breath sample. The Draeger Alcotest 7110 MKIII does not calibrate itself at the time of the test; calibration is performed at the Alabama Department of Forensic Sciences laboratory and subsequently verified at the time of the test with dry gas standards.

(m) *Calibration Check.* For the purpose of this rule, a calibration check is the automated process whereby the Draeger Alcotest 7110 MKIII samples and tests a known dry gas standard to verify the instrument's acceptable calibration.

(n) *Certificate of Analysis.* For the purpose of this rule, the Certificate of Analysis is the document generated by the Draeger Alcotest 7110 MKIII for introduction of Breath Alcohol Test results to the Courts. By design, when the Certificate of Analysis indicates a numerical value for the subject's Breath Alcohol Concentration, the Certificate of Analysis is confirmation of successful method completion.

(o) *Chemical Analysis.* For the purpose of this rule, chemical analysis is the separation of a substance into its constituent elements to determine either their nature or their portions. The goal as set forth in §32-5A-194 Code of Alabama, 1975 as amended, is the chemical analyses of a person's breath to determine the presence and quantity of alcohol (ethanol).

(p) *Data Pack.* The Data Pack contains the supporting data for the Certificate of Analysis as referred to at the bottom of that document. By design, the Data Pack along with the Subject Mis-Try file, and when needed the IR Curves, EC Profile Plot, and Flow Profile Plot, constitute "...full information concerning the test or tests shall be made available to him or his attorney..." as referred to by §32-5A-194(a)(4) Code of Alabama, 1975 as amended.

(q) *Draeger.* For the purpose of this rule, Draeger is the appropriate English translation of the German name Dräger.

(r) *Deprivation Period.* For the purpose of the METHOD as referred to by §32-5A-194 Code of Alabama, 1975 as amended, prior to submitting to a Breath Alcohol Test a person should not be allowed to put anything in their mouth for at least 20 minutes.

(s) *EC.* For the purpose of this rule, EC will be the abbreviation for the electrochemical cell detector utilized by the Draeger Alcotest 7110 MKIII.

(t) *EC Profile Plot.* For the purpose of this rule, the EC Profile Plot is a plot utilized by the Draeger Alcotest 7110 MKIII that depicts EC Detector signal for a given breath sample.

(u) *Flow Profile Plot.* For the purpose of this rule, the Flow Profile Plot is a plot utilized by the Draeger Alcotest 7110 MKIII that depicts breath sample flow into the instrument.

(v) *Forensic Edits.* In the event an operator incorrectly input clerical data as requested by the Breath Alcohol Testing method, this information can be corrected by the following procedure: the operator should strike through the incorrect data (preferably a single strike leaving the original data legible), insert the correct data, and initial and date the correction.

(w) *Interference.* When the detector systems of the Draeger Alcotest 7110 MKIII respond to a substance other than alcohol (ethanol, ethyl alcohol), the instrument will terminate the test.

(x) *IR.* For the purpose of this rule, IR will be the abbreviation for the infrared detector utilized by the Draeger Alcotest 7110 MK III.

(y) *IR Curve.* For the purpose of this rule, the IR Curve is a plot of the infrared detector data utilized by the Draeger Alcotest 7110 MK III for a given breath sample.

(z) *Method.* For the purpose of this rule a method is an orderly and systematic approach to accomplishing a goal. The goal as set forth in §32-5A-194 Code of Alabama, 1975 as amended, is the chemical analyses of a person's breath to determine the presence and quantity of alcohol (ethanol). Therefore the method refers only to those tasks, manual or automated, which occur at the time of the breath test and result in accurately identifying and quantifying the amount of alcohol on a particular person's breath. The method in its entirety is performed and confirmed at the time of the breath test.

(aa) *Minimum Volume Not Achieved.* When a breath sample is provided to the Draeger Alcotest 7110 MKIII that is deficient in volume, as required by the software, the instrument will reject the sample.

(ab) *Mouth Alcohol.* When a breath sample contains a measurable amount of alcohol originating from the mouth, and is higher in concentration than the end expiratory air, the Draeger Alcotest 7110 MKIII will determine the sample to contain residual mouth alcohol. Once the presence of residual mouth alcohol has been determined the instrument will suspend the testing sequence for twenty (20) minutes. The testing sequence will resume at the end of the twenty-minute wait preserving all clerical data entries.

(ac) *Out of Measuring Range.* When the alcohol concentration of a breath sample exceeds 0.45 g/210L the instrument will abort the testing sequence.

(ad) *Operator.* For the purpose of this rule, an operator is an employee of a law enforcement agency possessing a valid permit (active permit number) and who is in control of the Draeger Alcotest 7110 MKIII during a testing sequence. The operator also acts as a "FACT" witness with regard to instrument operation in any litigation arising from the breath test. As stated by the Court in *Stubstad v. City of Orange Beach*, 575 So.2d 1240 (Ala.Cr.App. 1991), the operator need not be an expert on the mechanical functioning of the instrument.

(ae) *Permit.* For the purpose of this rule, a permit is an electronic mechanism for controlling access to a Breath Alcohol Testing Instrument through a unique operator permit number. Confirmation of an operator's active status as well as pending expiration date is designated on the Certificate of Analysis.

(af) *Purging*. The Draeger Alcotest 7110 MKIII Breath Alcohol Testing Instrument cycles fresh air through the instrument analysis path to cleanse the pathway of the last sample analyzed.

(ag) *Refusal*. The operator may elect to end an incomplete test by declaring the subject has refused to provide two complete and acceptable samples. Refusal indicates the operator believes the subject to be intentionally obstructing the collection of evidence via the breath sample. The Draeger Alcotest 7110 MKIII Breath Alcohol Testing Instrument cannot make the decision for the operator that any unacceptable subject breath sample or sequence of unacceptable subject breath samples constitutes a subject refusal. After each unacceptable subject breath sample the operator has the opportunity to determine by which of the following three options the testing sequence will proceed: <1> REFUSAL <2> UNABLE <3> RESTART TEST. In event circumstances require abruptly ending the testing sequence with a refusal, the operator may select <R> at the "PLEASE BLOW" prompt.

(ah) *Standard Gas Supply*. Failure of one of the two dry gas samples to be delivered to the Draeger Alcotest 7110 MKIII for analysis will result in the termination of the testing sequence.

(ai) *Subject "Mis-Try"*. A subject "Mis-Try" is a breath sample that failed to meet the acceptable criteria as determined by the Draeger Alcotest 7110 MKIII. A record of the attempted breath sample is preserved in the Subject "Mis-Try" file.

(aj) *Unable*. The operator may elect to end an incomplete test by declaring the subject is unable to provide two complete and acceptable samples. Unable indicates the operator believes the subject to be incapable of providing the required breath sample and thereby is not intentionally obstructing the collection of evidence via the breath sample. The Draeger Alcotest 7110 MKIII Breath Alcohol Testing Instrument cannot assess the subject's physical condition for the operator. After each unacceptable subject breath sample the operator has the opportunity to determine by which of the following three options the testing sequence will proceed: <1> REFUSAL <2> UNABLE <3> RESTART TEST.

(3) Approved Evidential Breath Alcohol Instrument List.

(a) Alcotest 7110 MKIII, Draeger Safety, Inc., Durango CO. For the purpose of this rule, variations or enhancements that do not have any bearing on the alcohol measuring capability of the instrument, such as the addition of a modem designated as an Alcotest 7110 MKIII C, are approved.

(4) Approved Evidential Breath Alcohol Test Method.

(a) The method of operation of the Draeger Alcotest 7110 MKIII is software driven and controlled so as not to be influenced by operator technique. The method

requires the operator to input the following clerical data (steps 1-18) as prompted. It is appropriate for the operator to enter a “-“ for steps 6.(i), 6.(ii), 6.(iii), 6.(iv), 6.(v), and 10 - 16 when the requested information cannot be obtained. Omission of an entry in any field will prevent the completion of the Breath Alcohol Testing method.

1. PERMIT NO. (NUMBER): The operator must enter and confirm his/her unique Draeger permit number.

2. <1> DUI <2> ADMIN <3> DEMO: The operator must select the type of testing routine to be administered to the subject.

3. ENTER DRY GAS STND (STANDARD) #1 PRESSURE: The operator must observe and record the pressure from the gas regulator gauge on dry gas standard #1 (0.020 g/210L ethanol standard). It should be noted that the gas pressure has no bearing on the analytical result obtained from the DUI testing routine.

4. ENTER DRY GAS STND (STANDARD) #2 PRESSURE: The operator must observe and record the pressure from the gas regulator gauge on dry gas standard #2 (0.080 g/210L ethanol standard). It should be noted that the gas pressure has no bearing on the analytical result obtained from the DUI testing routine.

5. 20 MIN (MINUTE) DEPRIVATION PERIOD: The operator must confirm that the subject has been under the control of the arresting officer, the operator, and/or other employee of a law enforcement agency for a minimum of 20 minutes. Enter “Y” for yes or “N” for no.

6. ARREST OFFICER SAME AS OPERATOR: The operator must designate whether the breath test operator is or is not the arresting officer. Enter “Y” for yes or “N” for no. If the arresting officer is not the breath test operator then the following information identifying the arresting officer will also be required.

(i) ARREST OFFICERS LAST NAME: The operator must enter the last name of the arresting officer.

(ii) ARREST OFFICERS FIRST NAME: The operator must enter the first name of the arresting officer.

(iii) ARREST OFFICERS MIDDLE INITIAL: The operator must enter the middle initial of the arresting officer.

(iv) ARREST OFFICERS IDENTIFICATION NUMBER: The operator must enter the agency identification number of the arresting officer.

(v) ARREST OFFICERS AGENCY: The operator must enter the agency of the arresting officer.

7. TIME OF OFFENSE: The operator must enter the date and time of the offense using the following format <MM/DD/YYYY\_HH:MM>.

8. COUNTY OF OFFENSE: The operator must enter the county in which the offense occurred.

9. SUBJECT'S UTC (UNIFORM TRAFFIC COMPLAINT NUMBER): The operator must enter the subject's Uniform Traffic Complaint number.

10. SUBJECT LAST NAME: The operator must enter the subject's last name.

11. SUBJECT FIRST NAME: The operator must enter the subject's first name.

12. SUBJECT MIDDLE INIT (INITIAL): The operator must enter the subject's middle initial.

13. SUBJECT STREET ADDR/APT (ADDRESS/APARTMENT): The operator must enter the subject's street or apartment address.

14. SUBJECT TOWN/CITY: The operator must enter the subject's town or city of residence.

15. SUBJECT STATE: The operator must enter the subject's state of residence using appropriate two-letter designation.

16. SUBJECT DL# (DRIVER'S LICENSE NUMBER) OR SS# (SOCIAL SECURITY NUMBER): The operator must enter the subject's driver's license number, Alabama file number, social security number or Alabama I.D. number.

17. SUBJECT <M/F> (MALE/FEMALE): The operator must designate the subject's gender using "M" for male and "F" for female.

18. SUBJECT DOB (DATE OF BIRTH): The operator must designate the subject's date of birth using the format <MM/DD/YYYY>. An entry of 01/01/1900 will be used when the subject's date of birth cannot be obtained.

(b) Upon completion of clerical data entry the Draeger Alcotest 7110 MKIII continues the Breath Alcohol Testing method by performing or displaying the following automated steps or messages.

1. PURGING
2. AMBIENT AIR CHECK
3. AIR BLANK CHECK

4. ACCURACY CHECK (0.020 g/210L)
5. PURGING
6. AMBIENT AIR CHECK
7. AIR BLANK CHECK
8. INSERT MOUTHPIECE, PRESS BUTTON (Operator Task)
9. PLEASE WAIT
10. PLEASE BLOW (First Subject Sample)
11. STOP
12. REMOVE MOUTHPIECE
13. PURGING
14. AMBIENT AIR CHECK
15. AIR BLANK CHECK
16. PLEASE WAIT
17. PURGING
18. AMBIENT AIR CHECK
19. AIR BLANK CHECK
20. INSERT MOUTHPIECE, PRESS BUTTON (Operator Task)
21. PLEASE WAIT
22. PLEASE BLOW (Second Subject Sample)
23. STOP
24. REMOVE MOUTHPIECE
25. PURGING
26. AMBIENT AIR CHECK

27. AIR BLANK CHECK
28. ACCURACY CHECK (0.080 g/210L)
29. PURGING
30. AMBIENT AIR CHECK
31. AIR BLANK CHECK
32. RESULT
33. DATA STORED

(5) Report of Breath Alcohol Test Result.

(a) The Certificate of Analysis produced for each individual Breath Alcohol Test is confirmation of successful METHOD completion when an analytical result (number) is obtained. For a Breath Alcohol Test result to be reported, indicating successful METHOD completion, the following steps must be performed.

1. "DIAGNOSTIC CHECKS BEFORE AND AFTER OK": An automated internal diagnostic check is performed by the Draeger Alcotest 7110 MKIII one hundred twenty eight (128) times per second. For each Breath Alcohol Test, the Draeger Alcotest 7110 MKIII stores in memory a record of a single diagnostic "Snap Shot" before the first subject sample is collected and after the second subject sample is collected.

2. "CALIBRATION CHECKS BEFORE AND AFTER OK": An automated calibration check is performed before the first subject sample is collected and after the second subject sample is collected to verify the calibration of the Draeger Alcotest 7110 MKIII at the time of the breath test. A 0.020 g/210L ethanol standard is introduced into the instrument before the first subject sample is collected. An acceptable result of 0.015 to 0.025 g/210L will allow the Breath Alcohol Test to proceed. A 0.080 g/210L ethanol standard is introduced into the instrument after the second subject sample is collected. An acceptable result of 0.076 to 0.084 g/210L must be obtained before the results of the Breath Alcohol Test will be reported. When results obtained from the calibration checks are not within the stated acceptable ranges, the "Certificate of Analysis" obtained from the Draeger Alcotest 7110 MKIII will indicate ACCURACY CHECK FAIL and no numerical result will be reported at the time of the breath test..

3. "INSPECTION BEFORE AND AFTER TEST OK": Completed Diagnostic Checks and Calibration Checks verify instrument accuracy and reliability and therefore constitute a time of test inspection. When a condition exist which prevents the completion of either the diagnostic checks or the calibration checks the "Certificate of Analysis" will not bear this statement.

4. "THE SUBJECT MUST COMPLETE A DEPRIVATION PERIOD OF AT LEAST TWENTY MINUTES BEFORE PROVIDING THE FIRST BREATH SAMPLE". An operator must attest that reasonable efforts were made by an employee of a law enforcement agency to deprive the subject of putting potentially interfering substances in their mouth. In event the operator becomes aware of potentially interfering substances in the mouth, the deprivation period should be restarted.

5. "TWO ACCEPTABLE BREATH SAMPLES WERE ANALYZED, THE LOWEST RESULT IS REPORTED". The subject must provide two acceptable breath samples for analysis. The lowest alcohol result generated from each breath sample must agree within 0.020 g/210L of breath. If the alcohol results from the two breath samples do not agree within 0.020 g/210L of breath, the instrument will begin a second breath sample collection sequence. Failure to provide two (2) acceptable breath samples for the second breath sampling sequence will constitute a refusal of the whole test. When the results of two acceptable breath samples do agree within 0.020 g/210L of breath, the Draeger Alcotest 7110 MKIII will report the lowest result truncated to the second decimal place.

6. When the subject provides a breath sample that does not meet the minimum acceptable criteria or when not prompted to do so, one of the following errors will be recorded in the Subject "Mis-Try" file: "Minimum Volume Not Achieved", "Blowing Time Too Short", or "Blowing Not Allowed". When the Draeger Alcotest 7110 MKIII determines a sample or samples to be unacceptable the operator has the opportunity to determine by which of the following three options the testing sequence will proceed: <1> REFUSAL <2> UNABLE <3> RESTART TEST.

(b) Four copies of the Certificate of Analysis will be generated each bearing the statement "SUPPORTING DATA FOR THIS DOCUMENT IS AVAILABLE UPON WRITTEN REQUEST TO THE ALABAMA DEPARTMENT OF FORENSIC SCIENCES, IMPLIED CONSENT SECTION". The supporting data or information as referred to in §32-5A-194(a)(4) Code of Alabama, 1975 as amended, for the Certificate of Analysis consists of the "Data Pack", "Subject Mis-Try File", and when needed IR Curves, EC Profile Plot, and Flow Profile Plot.

(6) Qualifications:

An applicant must satisfactorily complete a new operator's course in the operational procedures of the Breath Alcohol Testing Instrument and be an employee for one of the agencies listed in §32-5A-194, Code of Alabama, 1975 as amended.

(7) Permits:

(a) Permits to perform a chemical analysis of a person's breath pursuant to §32-5A-194, Code of Alabama, 1975 as amended, will be issued by the Director of the Department of Forensic Sciences upon the recommendation of the Technical Director of the Implied Consent Section of the Department of Forensic Sciences.

(b) Permits issued to new operators will automatically expire at the end of the succeeding calendar year.

(c) Operator permit status can remain active by satisfactorily completing a continuing education session each calendar year and by being an employee for one of the agencies listed in §32-5A-194, Code of Alabama, 1975 as amended. The permit of an operator failing to complete a continuing education session any year after their new operator's course will automatically expire at the end of that calendar year.

(d) An operator who fails to attend a continuing education session may be reactivated provided they attend a continuing education session within two calendar years. Any operator who remains inactive for more than two successive calendar years must attend a new operator's class to be reinstated.

(e) Any action or practice which is misleading or deceptive, or the violation of any of the rules of the Alabama Department of Forensic Sciences promulgated under the provisions of §32-5A-194, Code of Alabama, 1975 as amended, shall constitute grounds upon which the Director may revoke such permit.

(f) If the Director receives a complaint or has reason to believe that an operator is participating in misleading or deceptive practices, violating or has violated any of the rules, he shall notify the operator of a hearing to determine if the alleged infraction has occurred. The Director will designate a place and time for the hearing.

(g) The Director or his designee shall conduct the hearing.

(h) Upon revocation of a permit, the Director shall notify the operator, the operator's immediate superior and the Technical Director of the Implied Consent Section of the Alabama Department of Forensic Sciences.

**Relevant Cites:**

**Designated Instrument:** *Harper v. City of Troy*, 467 So.2d 269 (Ala.Cr.App. 1985)

**Method:** *McDaniel v. State*, 706 So. 2d 1305, (Ala.Crim.App. 2001).

**Predicate:** *Ex parte Mayo*, 652 So. 2d 201 (Ala. 1994); *Ex Parte Vizzina*, 533 So.2d 269,271 (Ala. 1988); *Ex Parte Bush*, 474 So.2d 168 (Ala. 1985); *Moore v. State*, 442 So.2d 164, 167 (Ala.Cr.App.1983); *Patton v. City of Decatur*, 337 So.2d 321 (Ala.1976); *McGough v. Slaughter*, 395 So.2d 972, 977 (Ala.1981).

**Testimony:** *Stubstad v. City of Orange Beach*, 575 So.2d 1240 (Ala.Cr.App. 1991)

**Author:** Dale A. Carpenter, Mark A. Pevey, and Gregory L. Turner.

**Statutory Authority:** Section 32-5A-194 Code of Alabama, 1975, as amended.

**History:** Amended: Filed December 4, 1998; effective January 8, 1999. Amended: Filed May 7, 1999; effective June 11, 1999; Amended: Filed May 19, 2003; adopted

July 7, 2003; effective August 11, 2003; Filed April 12, 2004: adopted June 4, 2004: effective July 9, 2004. Amended: Filed May 10<sup>th</sup>, 2018; effective June 24<sup>th</sup>, 2018.

370-1-1-.03 Blood, Urine and Other Bodily Substances

(1) Purpose.

This rule describes the statutory elements required for the admissibility of evidence obtained from chemical analyses of a person's blood, urine, or other bodily substance. This rule contains the METHODS as referred to by §32-5A-194 Code of Alabama, 1975 as amended, that insures and verifies each chemical analysis is performed accurately and reliably. IN THE EVENT THAT ONE OF THESE REQUIREMENTS IS NOT FULFILLED, CHEMICAL ANALYSIS EVIDENCE MAY STILL BE OFFERED THROUGH TRADITIONAL EVIDENTIARY PREDICATE as described in *Powell v. State*, 515 So.2d 140 (Ala.Cr.App. 1986).

(2) Definitions and Abbreviations:

(a) *Alcohol*- For the purpose of this rule, use of the term alcohol shall refer to ethanol or ethyl alcohol unless otherwise specified.

(b) *Method*- For the purpose of this rule, a method is an orderly and systematic approach to accomplishing a goal. The goal as set forth in §32-5A-194 Code of Alabama, 1975 as amended, is the chemical analyses of a person's blood, urine or other bodily substance to determine the presence and/or quantity of alcohol (ethanol) or other chemical substances. Therefore the method refers only to those tasks, manual or automated, that result in accurately identifying and/or quantifying the amount of alcohol or other chemical substance in a particular person's blood, urine or other bodily substance.

(c) *Permit*- For the purpose of this rule, a permit is authorization by the Director allowing an employee to analyze blood, urine, or other bodily substances for alcohol, drugs, or other chemical entities. By assigning a qualified employee this particular task the Director has expressed authorization.

(3) Qualifications. Applicants for a permit to perform a chemical analysis of a person's blood, urine, or other bodily substance pursuant to the Alabama Chemical Test for Intoxication Act shall meet the following requirements.

(a) Be employed as a Forensic Scientist by the Alabama Department of Forensic Sciences and be assigned to the Toxicology Section or Implied Consent Section by the Director.

(b) Have been approved by the Toxicology Discipline Chief to perform analyses on blood, urine, or other bodily substance analyses for the purpose of identification and quantitation of alcohol and/or other drugs.

(4) Certification Permits.

(a) Permits to perform a chemical analysis of a person's blood, urine, or other bodily substance pursuant to the Alabama Chemical Test for Intoxication Act will be issued by the Director and certified by the Toxicology Discipline Chief.

(b) Once issued, permits will remain effective concurrent with the term of employment of the individual. At the Director's discretion permits may be rescinded.

(5) Methods.

(a) Analysis of blood, urine, or other bodily substances for the presence of volatile compounds; such as alcohol (ethanol), shall be performed by Gas Chromatography utilizing internal standard headspace injection, in accordance with the Toxicology Discipline's Standard Operating Procedure for that analysis.

(b) Analysis of blood, urine, or other bodily substances for drugs or other chemical substances will utilize a screening technology in conjunction with Mass Spectrometry confirmation, in accordance with the Toxicology Discipline's Standard Operating Procedure for that analysis.

**Author:** Dale A. Carpenter, Jack R. Kalin, and Curt E. Harper

**Statutory Authority:** §32-5A-194 Code of Alabama, 1975 as amended.

**History:** Amended: Filed May 19, 2003; adopted July 7, 2003; effective August 11, 2003. Amended: Filed May 10<sup>th</sup>, 2018; effective June 24<sup>th</sup>, 2018.

370-1-1-.04 Field Sobriety Screening Tests

## (1) Purpose.

This rule describes the approved TECHNIQUE (Procedure) as referred to by §32-6-49.13 Code of Alabama, 1975 as amended, that insures each Field Sobriety Screening Test performed on an operator of a commercial vehicle is performed in a standardized and reliable fashion.

## (2) Definitions and Abbreviations.

(a) *Alcohol*- For the purpose of this rule, use of the term alcohol shall refer to ethanol or ethyl alcohol unless otherwise specified.

## (3) Approved Procedure.

The test battery comprising the Horizontal Gaze Nystagmus (HGN), One-leg Stand (OLS), and Walk and Turn (WAT) Field Sobriety Tests as described and applied according to the DUI Detection and Standardized Field Sobriety Testing Student Manual, Publication HS178, Transportation Safety Institute, National Highway Traffic Safety Administration, U.S. Department of Transportation in its June, 1992 or successor printings.

## (4) Training Certificates.

A certificate will be issued to each officer who successfully passes written and practical examinations during a minimum of 16 hours of Standardized Field Sobriety Test Training which included no less than two controlled drinking workshops using volunteer drinkers and wherein the administration and interpretation of the HGN, OLS, and WAT tests was presented.

**Author:** Dale A. Carpenter, Mark A. Pevey, and Gregory L. Turner

**Statutory Authority:** §32-6-49.13 Code of Alabama, 1975 as amended.

**History:** Amended: Filed May 19, 2003; adopted July 7, 2003; effective August 11, 2003.

370-1-1-.05 Field Sobriety Alcohol Screening Devices

## (1) Purpose.

This rule lists the approved "FIELD BREATHALYZER or OTHER APPROVED DEVICE" as referred to by §32-6-49.13 Code of Alabama, 1975 as amended. Additionally, this rule describes training requirements and minimal operational criteria necessary for accurate and reliable results.

## (2) Definitions and Abbreviations:

(a) *Alcohol*. For the purpose of this rule, use of the term alcohol shall refer to ethanol or ethyl alcohol unless otherwise specified.

(b) *Observation*. For the purpose of this rule, use of the term observation shall mean to watch. Prior to the administration of a field sobriety screening test employing an approved field sobriety screening device a subject must be under the observation of the operator of the device or other law enforcement officer for a period of not less than twenty minutes.

(3) Approved Training. Training afforded by the manufacturer of an approved device and/or training received as a part of the Alabama Preliminary Breath Testing Instrument course shall constitute approved training.

## (4) Operation of Devices.

(a) Officers shall use the device according to the manufacturer's operational procedure.

(b) Every subject must be under observation by the arresting officer for a period of twenty minutes before the screening device test is administered.

(5) Calibration. Calibration shall be checked every twelve (12) months. The device passes the calibration check if it renders a reading between 0.030 g/210L and 0.050 g/210L inclusive on a 0.040 g/210L percent standard delivered from either a wet bath simulator or a dry gas cylinder.

(6) Training and Calibration Records. It shall be the responsibility of each law enforcement agency to maintain permanent records documenting the training of each officer in the use of approved field sobriety screening devices and the annual calibration check results on each device in use by the law enforcement agency.

(7) [Approved Field Sobriety Alcohol Screening Device List](#).

**NOTE:** For the purpose of this rule, variations or enhancements that do not have any bearing on the alcohol measuring capability of the instrument, such as the addition of a modem, external printer or passive sampling systems are approved.

**The list of field sobriety alcohol screening devices approved for use in Alabama can be found by following the link on the Department's web page at [www.adfs.alabama.gov](http://www.adfs.alabama.gov).**

**Author:** Dale A. Carpenter, Mark A. Pevey, Curt E. Harper, and Gregory L. Turner

**Statutory Authority:** §32-6-49.13 Code of Alabama, 1975 as amended.

**History:** Amended: Filed May 19, 2003; adopted July 7, 2003; effective August 11, 2003. Amended: Filed May 10<sup>th</sup>, 2018; effective June 24<sup>th</sup>, 2018.

### 370-1-1-.06 Field Sobriety Drug Screening Devices

(1) Purpose.

This rule list the approved "FIELD BREATHALYZER or OTHER APPROVED DEVICE" as referred to by §32-6-49.13 Code of Alabama, 1975 as amended. Additionally, this rule describes training requirements and minimal operational criteria necessary for accurate and reliable results from oral fluid drug screening devices.

(2) Definitions and Abbreviations:

- (a) *Drug.* Any substance, when taken into the human body, which can impair the ability of a person to operate a vehicle safely.
- (b) *Negative Result.* A negative result indicate the samples is drug-free for the tested targets or below the cutoff level of the test.
- (c) *Observation.* For the purpose of this rule, use of the term observation shall mean to watch. Prior to the administration of a field sobriety screening test employing an approved field sobriety drug screening device a subject must be under the observation of the operator of the device or other law enforcement officer for a period of not less than ten minutes.
- (d) *Oral Fluid.* A clear, tasteless fluid comprised of saliva produced by multiple salivary glands, and other constituents inside the mouth.
- (e) *Positive Result.* A positive result indicates presence of the drug, its metabolites, or cross-reacting substance but does not indicate level of intoxication, administration route or concentration in the oral fluid. A positive test result should be confirmed by a second test method such as GC/MS (gas chromatography-mass spectrometry) or LC/MS (liquid chromatography-mass spectrometry).

(3) Approved Training. Training afforded by the manufacturer of an approved device and/or training received from the Alabama Department of Forensic Sciences shall constitute approved training.

(4) Operation of Devices.

(a) Officers shall use the device according to the manufacturer's operational procedure.

(b) Every subject must be under observation by an officer for a period of ten minutes before the screening device test is administered.

(c) The subject should not eat, drink, or smoke ten minutes prior to giving a sample.

(5) Quality Control Tests and Maintenance.

(a) Quality control (QC) tests and annual maintenance shall be conducted per manufacturer's operational procedure.

(b) The device is working properly if the QC test(s) pass.

(c) QC test(s) should be conducted at the time of testing or within 24 hours of the subject test.

(6) Training and Maintenance Records. It shall be the responsibility of each law enforcement agency to maintain permanent records documenting the training of each officer in the use of approved field sobriety screening devices and the annual maintenance results on each device in use by the law enforcement agency.

(7) [Approved Field Sobriety Drug Screening Device List](#).

**NOTE:** For the purpose of this rule, variations or enhancements that do not have any bearing on the drug detecting capability of the instrument, such as the addition of a modem, external printer or passive sampling systems are approved.

**The list of field sobriety drug screening devices approved for use in Alabama can be found by following the link on the Department's web page at [www.adfs.alabama.gov](http://www.adfs.alabama.gov).**

**Author:** Curt E. Harper

**Statutory Authority:** §32-6-49.13 Code of Alabama, 1975 as amended.

**History:** Filed May 10<sup>th</sup>, 2018; effective June 24<sup>th</sup>, 2018.

## Evidential Breath Alcohol Testing Quality Control.

## Purpose.

The purpose of this section is to inform the public of the quality control or good laboratory practices that are utilized by the Alabama Department of Forensic Sciences to support Breath Alcohol Testing in the field. The practices described in this section only demonstrate that each Draeger Alcotest 7110 MKIII is capable of performing as expected. The method as described in 370-1-1-.01(4) is the only sequence of steps that isolates alcohol (ethanol) from a subject to accurately determine the amount. Subsequently the quality control built into the method is the only process that verifies a particular Breath Alcohol Test did indeed perform as expected. Since the authority derived from §32-5A-194 Code of Alabama, 1975 as amended, is limited to a method to perform a chemical analysis to determine the alcoholic content of a subjects blood the following information pertaining to good laboratory practice **does not constitute a rule.**

(1) Pre-installation Evaluation. Each Draeger Alcotest 7110 MKIII is evaluated by the Alabama Department of Forensic Sciences Technical Director or his designee prior to being placed in operation. The evaluation will demonstrate the ability of each Draeger Alcotest 7110 MKIII to identify and flag specific conditions; as well as, verify the analytical integrity of the instrument.

(a) *Purging Error.* Place the instrument in the “Error Check” mode. Restrict the air flow into the ambient air inlet while the pump is running. This will prompt the instrument to display “Check Sampling Hose” and sound an audible alarm. Record pass if the message “Error Triggered, Test Okay” is printed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(b) *Minimum Volume Not Achieved.* Place the instrument in the “Error Check” mode. At the prompt “Please Blow”, deliver a deficient sample volume. Record pass if the message “Error Triggered, Test Okay” is printed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(c) *Blowing Time Too Short.* Place the instrument in the “Error Check” mode. At the prompt “Please Blow”, deliver a sample of sufficient volume and deficient duration. Record pass if the message “Error Triggered, Test Okay” is printed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(d) *Blowing Not Allowed.* Place the instrument in the “Error Check” mode. At any time other than when the instrument indicates “Please Blow” deliver a sample into the instrument. Record pass if the message “Error Triggered, Test Okay” is printed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(e) *Ready To Blow Expired.* Place the instrument in the “Error Check” mode. At the prompt “Please Blow” do not provide a sample. After three (3) minutes has elapsed this error will be triggered by the instrument. Record pass if the message “Error Triggered, Test Okay” is printed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(f) *Ambient Air Check.* Place the instrument in the “Error Check” mode. When the instrument begins to purge itself, direct an ethanol vapor (typically from a 0.020 g/210L dry gas cylinder) near the breath hose inlet, but not directly into the breath hose inlet. Record pass if the message “Error Triggered, Test Okay” is printed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(g) *Interference.* Place the instrument in the “Error Check” mode. Prepare a methanol control by adding 105 microliters of methanol to 500 milliliters of distilled water and dispense into a simulator. At the prompt “Please Blow”, deliver a sufficient sample into the instrument. Record pass if the message “Error Triggered, Test Okay” is printed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(h) *Mouth Alcohol.* Place the instrument in the “Error Check” mode. At the prompt “Please Blow” the evaluator should rinse his or her mouth with a common mouthwash containing ethanol, then deliver a sufficient sample into the instrument. Record pass if the message “Error Triggered, Test Okay” is printed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(i) *Accuracy Check Fail.* Place the instrument in the “Error Check” mode. Connect the 0.020 g/210L dry gas cylinder to the 0.080 g/210L gas port and initiate a test. Record pass if the message “Error Triggered, Test Okay” is printed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(j) *Standard Gas Supply.* Disconnect the dry gas cylinders from the instrument and initiate a test. Record pass if the message “Std Gas Supply” is displayed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(k) *Outside +/- Tolerance.* Initiate an administrative test sequence. At the prompt “Please Blow” deliver a sufficient sample. When prompted to deliver the second sample, deliver a sufficient sample which varies in concentration from the first by at least 0.021 g/210 L. Record pass if the message “Outside +/- Tol” is displayed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(l) *No Admittance*. The evaluator should attempt to initiate a restricted function without the use of an appropriate key. Record pass if the message “No Admittance” is displayed. If the error is not triggered initiate the necessary corrective actions to restore the instrument to proper working condition.

(m) *Linearity Check*. Utilizing manufactured solutions prepare simulators with the following ethanol concentrations: 0.000g/210L, 0.020g/210L (+/- 0.005 g/210L), 0.040 g/210L (+/- 0.005 g/210L), 0.080 g/210L (+/- 5%), 0.120 g/210L (+/- 5%), 0.200 g/210L (+/- 5%), and 0.500 g/210L (+/- 5%). Place the instrument in the “Acc-Check” mode. When instructed, connect the appropriate simulator to the instrument. Repeat this procedure three times for each ethanol control. Average the results obtained for each concentration from the three runs. To record pass, the average results must fall within the following parameters: 0.000 g/210L, 0.020 g/210L (+/- 0.005 g/210L), 0.040 g/210L (+/- 0.005 g/210L), 0.080 g/210L (+/- 5%), 0.120 g/210L (+/- 5%), 0.200 g/210L (+/- 5%), and 0.500 g/210L (+/- 5%). If the instrument does not pass, initiate the necessary corrective actions to achieve the desired specifications.

(n) *Breath Temperature Check*. Place the instrument in “ABA” mode. Initiate a testing sequence consisting of three breath samples. When instructed to do so deliver three breath samples into the instrument from a precisely controlled water bath apparatus adjusted to a temperature of approximately 34.0°C. Repeat this procedure using a precisely controlled water bath apparatus adjusted to a temperature of approximately 37.0°C. Record pass if the instrument records a temperature within +/- 0.3°C of the actual temperature. If the instrument does not pass initiate the necessary corrective actions to restore the instrument to proper working condition.

(o) *Acetone Interference Check*. Prepare a solution consisting of 500 milliliters of a manufactured 0.080 g/210L solution of ethanol and 950 microliters of Acetone in a simulator. Initiate an administrative test sequence. At the prompt “Please Blow”, deliver a sufficient sample into the instrument. Record pass if the message “Interference” is displayed or if the instrument reports a result of 0.080 g/210 L +/- 0.004 g/210 L. If the check does not pass initiate the necessary corrective actions to restore the instrument to proper working condition.

(p) *Voltage Range Check*. Verify the Draeger Alcotest 7110 MKIII’s performance capability throughout a voltage range of approximately 90-200 volts AC and 12 volts DC.

1. With the instrument connected to a variable AC power supply, adjust the voltage to approximately 90 volts AC. Initiate a standard check sequence consisting of three measurements of a 0.080 g/210L dry gas standard. Record pass if the instrument records an average result between 0.076-0.084 g/210L. If the instrument does not pass, initiate the necessary corrective actions to achieve the desired specification.

2. With the instrument connected to a variable AC power supply, adjust the voltage to approximately 220 volts AC. Initiate a standard check sequence consisting of three measurements of a 0.080 g/210L dry gas standard. Record pass if the instrument

records an average result between 0.076-0.084 g/210L. If the instrument does not pass, initiate the necessary corrective actions to achieve the desired specification.

3. With the instrument connected to a DC power supply, adjust the voltage to approximately 12 volts DC. Initiate a standard check sequence consisting of three measurements of a 0.080 g/210L dry gas standard. Record pass if the instrument records an average result between 0.076-0.084 g/210L. If the instrument does not pass initiate the necessary corrective actions to achieve the desired specification.

(q) *Barometer Check.* Establish communication with the instrument in the diagnostic screen mode. Compare the barometric pressure as indicated by the instrument to the laboratories barometer. Record pass if the difference between the two readings is not greater than 5%. If the instrument does not pass initiate the necessary corrective actions to restore the instrument to proper working condition.

(r) *Standard Deviation Check.* Initiate a standard check sequence consisting of ten measurements of a 0.080% dry gas standard. Record pass if the instrument records the following: an average result between 0.076-0.084 g/210L and a standard deviation of less than 0.0025. If the instrument does not pass initiate the necessary corrective actions to restore the instrument to proper working condition.

(2) *Data Download Review.* The Test Data collected and stored by each Draeger Alcotest 7110 MKIII in the field is transferred to the Alabama Department of Forensic Sciences. Upon transfer, the data is systematically reviewed to identify instrument problems and to perform trend analyses. This data transfer allows the Alabama Department of Forensic Sciences to review essentially 100% of the Breath Alcohol Tests performed statewide.

(a) *Communication Check.* The Draeger Alcotest 7110 Data Retrieval and Archiving Program produces a Summary of Automatic Data Retrieval. The summary readily identifies those instruments for which communication was not established. For those instruments that automatic communication was unsuccessful, manually establish communication. If communication problems persist investigate the source of the problem and document.

(b) *Message Check.* Open the Message File (50 File) to identify the automatic Instrument Messages and Operator Messages retrieved by the current download. Review the messages to determine the needs of the instrument, operator, or location (supplies). Document any actions taken.

(c) *Instrument Parameter Check.* Open the Data File (10 File) to identify Instrument Parameter data retrieved by the current download. Isolate the data corresponding to each of the following parameters collected before and after the subject samples for review: *Ambient Air Pressure, 12V DC Power Supply, Battery Voltage, IR Signal, EC Offset, Cuvette Temperature, Breath Hose Temperature, Breath Probe Temperature, Breath Temperature Thermistors, Flow Sensor, Pre-Test Diagnostic Check,*

*and Post-Test Diagnostic Check.* For each parameter identify when if any an instrument recorded a result outside the specified operating range. Investigate the source of any problem and document any corrective action.

(d) *Dry Gas Configuration Check.* Open the Data File (10 File) to identify the Dry Gas Configuration data retrieved by the current download. Isolate the data corresponding to each of the following categories for review: *0.02 Gas Lot Number, 0.02 Gas Expiration Date, 0.08 Gas Lot Number, 0.08 Gas Expiration Date, 0.02 Target Concentration, 0.02 Relative Tolerance, 0.02 Absolute Tolerance, 0.08 Target Concentration, 0.08 Relative Tolerance, and 0.08 Absolute Tolerance.* For each category identify if the instrument contains the correct configuration. Investigate any discrepancy and document any corrective action.

(e) *Error and Accuracy Check.* Open the Data File (10 File) to identify the Error and Accuracy Check data retrieved by the current download. Isolate the data corresponding to each of the following errors or measurements: *Error, Error 2, Error 3, Error 4, 0.02 gas data, and 0.08 gas data.* For each category identify when if any an instrument recorded a result outside the specified operating range. Also review the 0.02 g/210L and 0.08 g/210L gas data to identify low or high trends. Investigate the source of any problem or trend and document any corrective action.

(3) *Electronic Inspection.* The Electronic Inspection serves primarily as a quality assurance role by being a back-up inspection to the instrument set-up procedures and Data Download Review. The Electronic Inspection also is an opportunity to evaluate instrument performance over an extended time frame.

(a) *Diagnostic Screen Check.* Initiate the Draeger Alcotest 7110 Data Retrieval and Archiving Program. Establish communication with the instrument through the Diagnostic Screen. Evaluate the following displayed parameters: *Instrument Serial Number, Instrument Location, Firmware Version, Date, Time, Ambient Air Pressure, 12VDC Power Supply, Battery Voltage, IR Signal, EC Offset, Cuvette Temperature, Breath Hose Temperature, Breath Probe Temperature, Breath Temperature 1, Breath Temperature 2, Function Key, and Flow Sensor.* Investigate any discrepancy and document any corrective action.

(b) *Interactive Screen Check.* Initiate the Draeger Alcotest 7110 Data Retrieval and Archiving Program. Establish communication with the instrument through the Interactive Screen. Evaluate the following displayed parameters: *Measuring Units, Calibration Configuration, and Cylinder Pressure Limit.* Investigate any discrepancy and document any corrective action.

(c) *Calibration Check Plot.* Open the Data File (10 File) to identify the Accuracy Check data retrieved by the instrument over the last 6 months. Plot the Accuracy Check data for both the 0.02 and 0.08 g/210L Accuracy Checks. Investigate the source of any problem or trend and document any corrective action.

(4) Annual Re-Evaluation/Pre-Installation Evaluation. Regardless of the performance of an instrument in the field each instrument will be brought back to the Alabama Department of Forensic Sciences laboratory once a year for evaluation. This evaluation will consist of the battery of tests described under (1) Pre-Installation Evaluation.

**Author:** Dale A. Carpenter, Mark A. Pevey, and Gregory L. Turner.

**Statutory Authority:** Section 32-5A-194 Code of Alabama, 1975, as amended.

**History:** New Appendix Filed July 7, 2003; Effective August 11, 2003. Amended: Filed May 10<sup>th</sup>, 2018; effective June 24<sup>th</sup>, 2018.