IDAHO BREATH ALCOHOL

STANDARD OPERATING PROCEDURES

Table of Contents

Revision History

Revision #	Description of Changes
1	Original Issue in Qualtrax Template Previous revisions and revision section numbering may not correspond to the current procedure. Refer to the archived method for the sections in place at the time of edit for section specific edits.
2	Changes were made to sections: 4.1, 4.1.3.1, 4.1.3.4 (NOTE deleted), 4.1.4.5 (NOTE deleted), 4.1.7, 4.2, 4.2.1, 4.2.1.1, 4.2.1.3, 4.2.1.5, 4.2.1.6, 4.2.2 (global wording change from specific instrumentation to 'Benchtop instrument" with defined approved benchtop instruments), 4.2.2.1, 4.2.2.2, 4.2.2.3, 4.2.2.4, 4.2.2.5, 4.2.2.8, 4.3.1, 4.3.1.2, 4.3.2.1, 4.3.2.2.2, 4.3.2.3, 4.4.1.3.1, 4.5.1, 5.0
3	Changes were made to section 4.1
4	Changes were made to sections 4.1, 4.1.6, 4.2.1.5, 4.2.2.3, 4.2.2.4, 4.2.2.5, 4.3.1, 4.3.1.2, 4.3.1.4.3, 4.3.2, 4.3.2.1, 4.3.2.1.2, 4.3.2.3, 4.3.2.4, 4.5.1, 4.5.2.3, 4.5.3 and 5.0
5	Updated revision history to reflect Rev 4 changes
6	Changes made to section 4.2.1.5, 4.2.2.5, 4.3.2 - Note, 4.3.2.1, 4.3.2.2, 4.3.2.2.1, 4.3.2.2.3, 4.3.2.2.3.1, 4.5.3.2, and 4.5.3.2.2. Added sections 4.3.2.2.3.2, 4.4.3 and 4.4.3.1. Clarified the use of 'breath sample' and 'breath results' throughout, Changes were made to the Glossary as well.
7	Added ISO 17034 terminology, removed references to ASIII and Intox 5000, added definition of Air Blank.
8	Changes made to section 4.1.3, 4.1.4.2, 4.2.2.3, 4.2.2.4 and removed 4.2.2.8
9	Edits made to sections 4.2.1.4, 4.2.1.4.3, 4.2.2.4.1, 4.3.2.2, 4.3.2.3, 4.4.1.1, 4.4.1.2, 4.4.1.3, 4.4.1.3.2 and 4.5.3.2
10	AM#1 added section 4.2.3
11	Added section 4.3.3 and Definitions 5.21, 5.29. Edited sections 4.2.1.5.1 and 4.3.2.2.1

1.0 Background/References

1.1 Method Historical Changes: Refer to archived version of the method as numbering has changed.

2.0 Scope

2.1 This method describes the Idaho State Police Forensic Services (ISPFS) procedure, for use by agencies external to ISPFS, for the analysis of breath for the presence of volatile compounds using an approved breath testing instrument. This method provides for the quantitative analysis of alcohol. Following all the recommendations of this external procedure will establish the scientific validity of the breath alcohol test. Failure to meet all of the recommendations within this procedure does not disqualify the breath alcohol test but does allow for the questioning of the breath alcohol tests as it pertains to its foundation of admissibility in court. The foundation can be set, through testimony, by a Breath Testing Specialist expert or ISPFS expert in breath testing as to the potential ramifications of the deviation from the procedure as written.

2.2 Safety: Within the discipline of breath alcohol testing, the general biohazard safety precautions should be followed. This is due to the potential infectious materials that may be ejected from the mouth during the sampling of the breath. Caution should be taken that the expired breath is not directed towards the officer or other unrelated bystander. Other hazards that may be present include, but are not limited to, the use of compressed gas cylinders, flammable alcohol solutions, or other volatile materials.

3.0 Equipment/Reagents

3.1 Applicable approved Breath Testing Instrument used by external agencies.

4.0 Procedure

4.1 Instrument and Operator Certification

ISPFS maintains a list of benchtop and portable instruments approved for evidentiary testing use in Idaho. Each individual breath testing instrument must be certified by ISPFS. Currently ISPFS approves the Lifeloc FC20 series and the Draeger 9510 series instruments. Evidential breath alcohol tests must be administered by an operator (BTO or BTS) currently certified in the use of the instrument. To ensure minimum standards are met, individual breath testing instruments, Operators, and Breath Testing Specialists (BTS) must be approved and certified by the Idaho State Police Forensic Services (ISPFS). The current and past versions of the conforming products list (for IDAPA reference purposes) can be found at www.federalregister.gov or at www.nhtsa.gov (or) https://www.gpo.gov/fdsys/pkg/FR-2017-11-02/pdf/2017-23869.pdf.

4.1.1 Approval of Breath Testing Instruments: In order to be approved and certified each instrument must meet the following minimum criteria:

4.1.1.1 The instrument shall analyze a reference sample or analytical test standard, the results of which must agree within +/- 10% of the target value or such limits set by ISPFS.

4.1.1.2 The certification procedures shall be adequate and appropriate for the analysis of breath specimens for the determination of alcohol concentration for law enforcement.

4.1.1.3 Any other tests deemed necessary to correctly and adequately evaluate the instrument to give accurate results in routine breath alcohol testing.

4.1.2 The ISPFS may, for cause, remove a specific instrument by serial number from evidential testing and suspend or withdraw certification thereof.

4.1.3 Operators: Become certified by completing a training class approved by ISPFS. Certification is for 2 years from their calendar date of completion. Certification will allow the Operator to perform all functions required to obtain a valid breath alcohol test. It is the responsibility of the individual Operator to maintain their current certification; the ISPFS may not notify Operators that their certification is about to expire.

4.1.3.1 Recertification for another 2-year period is achieved by completing an ISPFS approved class.

4.1.3.2 If the individual fails to satisfactorily complete the class (including the written and practical tests), or allows their certification status to expire, he/she must retake the Operator class in order to become certified.

4.1.3.3 If current Operator certification is expired, the individual is not approved to run evidentiary breath alcohol tests on the instrument in question until the Operator class is completed.

4.3.3.1 There are no grace periods or provisions for extension of Operator certification.

4.1.3.4 The Idaho State Police Forensic Services may revoke Operator certification for cause. Examples of what may constitute grounds for revocation may include falsification of records, failure to perform required performance verification, failure to successfully pass an Operator recertification class and failure to meet standards in performance of proficiency tests.

4.1.4 Breath Testing Specialists (BTS) are Operators who have completed an advanced training class and are ISPFS-certified to perform routine instrument maintenance, teach instrument operation skills and proctor proficiency tests for instrument Operators.

4.1.4.1 BTS certification is obtained by completing an approved BTS training class.

Note: The prior Operator status on a particular instrument requirement is waived for new instrumentation.

4.1.4.2 BTS Certification is for 2 years from their calendar date of completion.

4.1.4.3 If BTS certification is allowed to expire, he/she may no longer perform any BTS specific or Operator duties relating to that particular instrument.

4.1.4.3.1 BTS specific duties entail the teaching of Operator skills, proctoring of proficiency tests for Operators, and testifying as experts on alcohol physiology and instrument function in court.

4.1.4.4 BTS certification is renewable by completing an approved BTS training class.

4.1.4.5 The Idaho State Police Forensic Services may revoke BTS certification for cause. Examples of what may constitute grounds for revocation may include falsification of records, failure to perform required performance verification, failure to successfully pass a BTS recertification class and failure to meet standards in conducting Operator training and proctoring proficiency tests.

4.1.5 Adoption of a new instrument by an agency will require updating any BTS and Operators in that agency in the use of the new instrument.

4.1.5.1 A currently certified BTS may become a certified BTS for a new instrument by completing an ISPFS approved BTS Instrumentation class and proficiency test using the new instrument.

4.1.5.2 A currently certified Operator may certify on a new instrument by completing an ISPFS approved Operator Instrumentation Class and proficiency test using the new instrument.

4.1.5.3 Individuals not currently certified as Operators must complete an Operator Class for each approved instrument.

4.1.6 Record maintenance and management. It is the responsibility of each individual agency to store performance verification records, subject records, instrument logs, or any other records as pertaining to the evidentiary use of breath testing instruments.

4.1.6.1 It is the responsibility of the agency to see that the said records are stored and maintained a minimum of (3) years in accordance with IDAPA 11.03.01.

4.1.6.1.1 Records may be subject to periodic audit by the Idaho State Police Forensic Services.

4.1.6.2 The Idaho State Police Forensic Services will not be responsible for the storage of such records not generated by ISPFS.

4.1.7 EasyCal® System: The EasyCal® dry gas delivery system is not an evidential breath testing instrument, and therefore there is no requirement to be a certified operator in order to utilize it in the field for obtaining a performance verification. There is recommended training and certification for the EasyCal®, but it is not a requirement.

4.2 Performance Verification of Breath Testing Instruments

Performance verifications aid Operators, the Breath Testing Specialist (BTS) and the Idaho State Police Forensic Services (ISPFS) in determining if a breath testing instrument is functioning correctly. Performance verifications are performed using a performance verification standard. The standard is provided by and/or approved by ISPFS. The certificate of analysis confirms the target value and acceptable range of the standards used for the verification and includes the acceptable values for each standard.

Note: Certified copies of Certificates of Analysis not produced by ISPFS must be obtained from the manufacturer of the standard.

4.2.1 Portable Breath Testing Instrument Performance Verification. The currently approved portable breath testing instrument is the Lifeloc FC20 series of instruments.

4.2.1.1 The portable breath testing instrument performance verification is run using approximately 0.08 and/or 0.20 performance verification standards provided by and/or approved by ISPFS.

4.2.1.2 The performance verification using the 0.08 and 0.20 performance verification standards consist of two samples.

4.2.1.2.1 For the Lifeloc FC20, the performance verifications can be obtained using either the appropriate screen located in the calibration menu, or they can be performed as a regular test using the test sequence or non-sequence data acquisition modes.

4.2.1.3 A performance verification of the portable instruments using a 0.08 or 0.20 performance verification standard must be performed within 24 hours, before or after, an evidentiary test to be approved for evidentiary use. Multiple breath alcohol tests may be covered by a single performance verification. *Reference 4.2.1.4.2 for clarification on the use of the 0.20 standard in this capacity*.

4.2.1.3.1 A wet bath 0.08 performance verification standard should be replaced with fresh standard approximately every 25 verifications or every calendar month, whichever comes first.

4.2.1.3.2 A 0.08 dry gas performance verification standard should not be used beyond its expiration date and does not need to meet the requirements set forth in 4.2.1.3.1.

4.2.1.4 A 0.20 performance verification should be performed, and results logged once per calendar month and wet bath solutions should be replaced with fresh standard approximately every 25 verifications or until it reaches its expiration date, whichever comes first.

Note: The 0.20 performance verification was implemented for the sole purpose of supporting the instruments' results for an 18-8004C charge. Failure to perform a monthly 0.20 performance verification will not invalidate tests performed that yield results at other levels or in charges other than 18-8004C.

4.2.1.4.1 A 0.20 dry gas performance verification standard should not be used beyond its expiration date and does not need to be replaced in accordance with the schedule set forth in 4.2.1.4.

4.2.1.4.2 The 0.20 performance verification satisfies the requirement for performance verification within 24 hours, before or after, an evidentiary test at any level.

4.2.1.4.3 When a suspect provides a breath result over a 0.20, the officer is not required to conduct a performance verification using a 0.20 standard within 24 hours, as long as any performance verification was conducted within 24 hours of the breath alcohol test pursuant to 4.2.1.3.

4.2.1.5 Acceptable results for a 0.08 or 0.20 performance verification are a pair of samples in sequence that are both within +/- 10% of the performance verification standard target value. Target values are included in a certificate of analysis for each standard lot series for solutions certified by ISPFS.

4.2.1.5.1 A limit of three separate attempts are allowed to acquire a valid PV check. Each attempt consists of two manually acquired samples or one automated check sequence. Troubleshooting should be performed if the initial results are not acceptable. If the results after all attempts are still unsatisfactory, the instrument must be sent to ISP Forensic Services for calibration or to the instrument manufacturer for service.

4.2.1.6 Wet Bath Only: Temperature of the simulator must be between 33.5°C and 34.5°C in order for the performance verification results to be valid.

Note: The simulator may need to warm for approximately 15 minutes to ensure that the metal lid is also warm. If the lid is cold, condensation of alcohol vapor may occur, producing low results.

4.2.1.7 Performance verification standards should be used prior to the expiration date.

Note: The passage of the expiration date does not immediately invalidate the standard's target value. The use of an expired standard may require, at the court's discretions, testimony as to the long-term stability of the alcohol standard in order to validate its usage past its expiration date.

4.2.1.8 An agency may run additional performance verification standard levels at their discretion.

4.2.1.9 The official time and date of the performance verification is the time and date recorded on the printout, or the time and date recorded in the log, whichever corresponds to the performance verification referenced in section 4.2.1.3 or 4.2.1.4.2.

4.2.2 Benchtop Performance Verification

Benchtop instruments must have a performance verification with each evidentiary test. If the performance verification is within the acceptable range for the lot of standards being used, then the instrument will be approved, and the resulting breath results will be deemed valid for evidentiary use. The currently approved benchtop breath testing instrument is the Draeger 9510 series instrument.

Note: If the Draeger 9510 instrument is utilized in a mobile capacity, it is still considered a benchtop unit and must still comply with the guidelines of a benchtop unit within this procedure.

4.2.2.1 Benchtop instrument performance verification is run using 0.08 and/or 0.20 performance verification standards provided by and/or approved by ISPFS.

4.2.2.2 During each evidentiary breath alcohol test using a benchtop instrument, a performance verification will be performed as directed by the instrument testing sequence and recorded on the printout. If the results are not within the acceptable range for the standard lot being used, the testing sequence will abort, and no breath samples will be obtained.

4.2.2.3 Dry gas performance verification standards may be used continuously without replacement until the canister is spent or the expiration date is reached.

4.2.2.4 A 0.20 performance verification should be performed, and results logged once per calendar month. Dry gas performance verification standards may be used continuously without replacement until the canister is spent or the expiration date is reached.

Note: The 0.20 performance verification was implemented for the sole purpose of supporting the instruments' results for an 18-8004C charge. Failure to perform a monthly 0.20 performance verification will not invalidate tests performed that yield results at other levels or in charges other than 18-8004C.

4.2.2.4.1 When a suspect provides a breath result over a 0.20, the officer is not required to conduct a performance verification using a 0.20 standard within 24 hours, as long as a performance verification was conducted pursuant to 4.2.2.2.

4.2.2.5 Acceptable results for an independent 0.08 or 0.20 performance verification, which is not performed during a breath testing sequence, are a pair of back-to-back samples that are both within +/- 10% of the performance verification standard target value. Performance verifications that are performed during a breath testing sequence are acceptable if the acquired test results are within +/- 10% of the standard target value. Target values for each standard lot series are included in a certificate of analysis.

Note: Due to external factors associated with changing a performance verification standard, the results of the initial performance verification may not be within the acceptable range therefore the performance verification may be repeated until a pair of satisfactory results is obtained. Follow the suggested troubleshooting procedure if the initial performance verification does not meet the acceptance criteria. However, if results after a total of three test series for any standard (equivalent to six tests) are still unsatisfactory, contact the appropriate ISPFS the instrument must be sent into ISP Forensic Services for calibration or sent directly to the instrument manufacturer for service.

4.2.2.6 The official time and date of the performance verification is the time and date recorded on the printout, or the time and date recorded in the log.

4.2.2.7 Performance verification standards should be used prior to the expiration date.

Note: The passage of the expiration date does not immediately invalidate the standard's target value. The use of an expired standard may require, at the court's discretions, testimony as to the long-term stability of the alcohol standard in order to validate its usage past its expiration date.

4.2.2.8 An agency may run additional performance verification standard levels at their discretion.

4.2.2.9 The correct acceptable range limits and performance verification standard lot number should be set in the instrument before proceeding with evidentiary testing.

4.2.3 Calibration of Breath Testing Instruments

4.2.3.1 Instrument should be calibrated once per calendar year, per ISPFS recommendation. IDAPA requirements supersede this recommendation.

4.2.3.2 An instrument test/sample is valid if the instrument was certified for use at the time of sample collection, and the instrument had passed all its required verification checks for the test/sample.

4.3 Evidentiary Testing Procedure

Proper testing procedure by certified Operators is necessary in order to provide accurate results. Instruments used in Idaho measure alcohol in the breath sample, not the blood, and report results as grams of alcohol in 210 liters of breath.

4.3.1 Prior to evidentiary breath alcohol testing, the subject/individual shall be monitored for fifteen (15) minutes. Any foreign objects/materials which have the potential to enter the instrument/breath tube or may present a choking hazard should be removed prior to the start of the 15-minute monitoring period. The monitoring period, deprivation period and observation period are defined in IDAPA 11.03.01 and section 5.0 of this document.

Note: If a foreign object/material is left in the mouth during the entirety of the 15-minute monitoring period, any potential external alcohol contamination will come into equilibrium with the subject/individual's body water and/or dissipate so as not to interfere with the results of the breath alcohol test.

4.3.1.1 The breath alcohol test must be administered by an Operator currently certified in the use of the instrument.

4.3.1.2 False teeth, partial plates, mouth jewelry, bridges or comparable dental work do not need to be removed to obtain a valid test (*see above Note (4.3.1) for clarification on foreign objects being left in the mouth*).

4.3.1.3 The Operator may elect a blood test in place of the breath alcohol test if there is a failure to complete the 15-minute monitoring period successfully.

4.3.1.4 During the monitoring period, the Operator should be alert for any event that might influence the accuracy of the breath alcohol test.

4.3.1.4.1 The Operator should be aware of the possible presence of mouth alcohol as indicated by the testing instrument. If mouth alcohol is suspected or indicated, the Operator should begin another 15-minute monitoring period before repeating the testing sequence (*see sections 4.3.2.2.1 and 4.3.2.2.3.2 for guidance*).

4.3.1.4.2 If, during the 15-minute monitoring period, the subject/individual vomits or regurgitates material from the stomach into the subject/individual's breath pathway, the 15-minute monitoring period should begin again.

4.3.1.4.3 If there is doubt as to the events occurring during the 15-minute monitoring period, the officer should look at results of the breath alcohol test for evidence of potential alcohol contamination. *For clarification see section 4.3.2.2.2*.

4.3.2 **A complete breath alcohol test includes two (2) valid breath results** taken during the procedure and preceded by air blanks. The breath samples performed with a portable breath testing instrument should be approximately 2 minutes apart or more. The entire breath testing procedure may require multiple instrument sequences to complete in order to obtain the required valid and sufficient samples to complete the test. *Refer to section 4.3.2.2.2 for further guidance*.

Note: A deficient or insufficient sample does not automatically invalidate a breath test. An 'insufficient sample' is not considered to be a valid sample or a sample "result", but instead it is a failed attempt to provide an adequate sample to the instrument. A breath sample was not analyzed by the instrument in these instances, and they do not produce a quantitative alcohol result.

4.3.2.1 If the subject/individual fails, refuses or is incapable of providing two adequate breath samples, having results within 0.020 of each other as requested by the Operator, the breath test result of a single adequate breath sample shall be considered a valid breath test. If a single test result is used, then the observation criteria of the monitoring period (observation period) is mandatory. Refer to 4.3.2.4 for further guidance.

4.3.2.1.1 The Operator may repeat the testing sequence as required by circumstances.

4.3.2.1.2 For hygienic reasons, the Operator should use a new mouthpiece for each subject/individual tested.

4.3.2.2 An additional sample(s) should be collected if the first two valid breath samples provided give results that differ by more than 0.020.

4.3.2.2.1 Unless mouth alcohol is indicated by the instrument or suspected by the officer due to circumstances occurring during the testing procedure, it is **not** necessary to repeat the 15-minute monitoring period to obtain additional breath samples/results, or to start additional sequences to continue the testing procedure.

4.3.2.2.2 The results for valid breath samples should correlate within 0.020 to indicate the absence of alcohol contamination in the subject/individual's breath pathway, show consistent sample delivery, and indicates the absence of RFI as a contributing factor to the breath results.

4.3.2.2.3 In the event that:

1) All valid breath test results fall outside the 0.020 correlation, AND

2) The officer suspects that mouth alcohol could have been a contributing factor (*see section 4.3.2.2.3.1 for guidance*) **OR** it is specifically indicated by the instrument (*see section 4.3.2.2.3.2 for guidance on instrumental indications*),

Then,

3) The operator shall restart the 15-minute monitoring period and retest the subject or have a blood sample(s) drawn (see section 4.3.2.2.4 for guidance).

4.3.2.2.3.1 If the officer suspects that the breath test result variability was due to a lack of subject cooperation in providing consistent samples as requested, and not from the presence of mouth alcohol in the breath pathway, then the results can be considered valid if all three results are above the per se limit of prosecution.

4.3.2.2.3.2 In the event that the instrument indicates that mouth alcohol was detected, **and** the officer suspects that the indication was a false positive detection, the officer (or other qualified agent) must be able to clearly articulate through their training and experience how and why the false detection was produced.

4.3.2.2.4 If the valid breath sample result(s) provided cannot establish a 0.020 correlation the officer may at their discretion elect to have a blood sample drawn for analysis in lieu of retesting the subject's breath alcohol concentration.

4.3.2.3 The Operator should document test results (*via written log or other reasonably permanent method*) and/or retain printouts, if any, for possible use in court. In the absence of printed results, the officer is responsible for documentation of the sequence of events occurring during the breath testing procedure.

4.3.2.4 If a subject/individual fails or refuses to provide adequate valid samples as requested by the Operator, the results obtained are still considered valid by the ISPFS, **provided** the failure to supply the additional samples was the fault of the subject/individual and not the Operator.

4.3.2.4.1 Failure to provide a complete breath test due to the lack of 0.020 correlation in the samples provided needs to be clearly articulated that the lack of sample correlation was the fault of the subject and not of the instrument or of the samples themselves. The officer's observations of the subject need to be clear enough to explain any discrepancies. *Refer to 4.3.2.2.2 for some examples of 0.020 correlation deficiencies*.

4.3.2.5 If the additional samples are lacking due to instrument failure, the Operator should attempt to utilize another instrument or have blood drawn.

4.3.3 The collection of breath samples can be accomplished in sequence mode or in manual mode. Either mode is authorized for the collection of evidential breath samples.

4.3.3.1 Sequence mode will guide the user through the process and automatically progress through the evidential collection process.

4.3.3.1.1 Manual sample collection during sequence mode is still considered to be done in sequence mode. The manual sample process is utilized to manually collect the sample from the subject and override the minimum sample criteria that is programmed into the automatic collection during sequence mode.

4.3.3.2 Manual mode requires the user to progress through the collection procedure, manually collect each sample and ensure that each step is performed and documented (i.e., Blanks before each test, two-minutes between sample collection, etc.).

4.4 Troubleshooting Procedure

Proper testing procedure by certified Operators is necessary in order to provide accurate results.

4.4.1 Performance verification: If, when performing the periodic performance verification, the instrument falls outside the limits of the verification, the troubleshooting guide should be used.

Note: This is a guide for troubleshooting performance verifications outside the verification limits and the procedure is recommended to streamline and isolate the potential cause of the problem. Strict adherence to the guidelines is not required.

4.4.1.1 The three sources of uncertainty when performing the periodic performance verifications are in the verification instrument setup and/or Operator technique, the performance verification standard, and the instrument calibration itself.

4.4.1.2 If the first performance verification is outside the verification limits, the verification setup and/or technique of the Operator performing the verification should be evaluated. The simulator, if used, should be evaluated to ensure that it is hooked up properly, uses short hoses, is properly warmed, is within temperature, the Operator blow technique is not too hard or soft, and that the Operator does not stop blowing until after the sample is taken. When using dry gas standards, the temperature of the cylinder and verification setup should be at comfortable room temperature and setup should be away from air condition venting and out of direct sunlight.

4.4.1.2.1 The performance verification should be run a second time.

4.4.1.2.2 If the performance verification is within the verification limits on the second try, the instrument passes the performance verification.

4.4.1.3 If the second performance verification is outside the verification limits, then the performance verification standard should be evaluated next.

4.4.1.3.1 The performance verification standard should be changed to a fresh standard. In lieu of changing the solution, a known calibrated and well-functioning instrument can be used to evaluate the status of the performance verification standard. If using dry gas standards, evaluate the remaining cylinder pressure. If the cylinder pressure is near the end of its usable range, you should install a new cylinder.

4.4.1.3.2 The wet bath standard should be warmed for approximately 15 minutes, or until the temperature is within range, and the simulator lid is as warm as the simulator jar. All dry gas standards should be allowed to warm to room temperature prior to installation and use.

4.4.1.3.3 The performance verification may then be repeated.

4.4.1.4 If the third performance verification is outside the verification limits, the instrument must be taken out of service and sent to the ISPFS or an approved service provider.

4.4.1.5 Upon return from service, the instrument should be recertified by ISPFS before being put back into service.

4.4.2 Thermometers:

4.4.2.1 If a bubble forms in the thermometer, the Operator or BTS can place the thermometer in a freezer to draw the mercury (or equivalent) into the bulb of the thermometer. This should disperse the bubble.

4.4.3 Dry Gas Performance Verifications

4.4.3.1 Dry gas standards are hard on fuel cell based instruments due to their lack of moisture. When using the dry gas performance verification system, it is advisable to wait approximately 5-10 minutes or more in between performance verification attempts at different verification levels.

4.5 Minors in Possession/Minors in Consumption Procedure

Breath testing instruments certified by ISPFS are often used in investigating violations of Idaho Code § 23-949 (punishment set forth by I.C. § 18-1502) or Idaho Code § 23-604 (punishment set forth by I.C.18-1502), wherein a person under twenty-one (21) years of age is deemed to have possessed and consumed alcohol. Unlike the Driving Under the Influence statutes and their associations with per se limits of 0.08 and 0.20, a specific level of alcohol is not required to prove a violation of I.C. § 23-949 or § 23-604. There is no requirement that the State prove the person is impaired by alcohol. Rather, the presence or absence of alcohol is a determining factor for proving the offense. Therefore, there is a different standard operating procedure associated with this type of charge. The main purpose of the procedure outlined below is to rule out "mouth alcohol" as a potential contributing factor to the results given during the breath testing done for MIP/MIC cases.

4.5.1 A 15-minute monitoring period: The monitoring/observation period is not required for the MIP/MIC procedure. The samples, separated by approximately 2 minutes or more and within the 0.020 correlation, provide the evidence of consistent sample delivery, the absence of "mouth alcohol" as well as the absence of RFI (radio frequency interference) as a contributing factor to the results of the breath test.

4.5.2 MIP/MIC requirements:

4.5.2.1 The breath alcohol test must be administered by an operator currently certified in the use of that instrument.

4.5.2.2 The instrument used must be certified by ISPFS.

4.5.2.2.1 The instrument only needs to be initially certified by ISPFS. Initial certification shows that the instrument responds to alcohols.

4.5.2.2.2 The instrument used does not need to meet other requirements set forth in previous sections of this SOP. It does not need to be checked regularly or periodically with any of the 0.08 or 0.20 standards.

4.5.2.3 False teeth, partial plates, mouth jewelry, bridges or comparable dental work do not need to be removed to obtain a valid test.

4.5.2.4 The officer should have the individual being tested remove all loose foreign material from their mouth before testing. The officer may allow the individual to briefly rinse their mouth out with water prior to the breath testing.

4.5.2.5 Any material left in the mouth during the entirety of the breath testing sampling could contribute to the results in the breath testing sequence. (*For clarification refer to section 4.5.1*)

4.5.3 Procedure: A complete breath alcohol test includes two (2) valid breath samples taken from the subject and preceded by air blanks. The breath samples do not need to be consecutive samples. The individual breath samples should be 2 minutes or more apart, to allow for the dissipation of potential mouth alcohol contamination.

Note: A deficient or insufficient sample does not automatically invalidate a test sample.

4.5.3.1 If the subject/individual fails or refuses to provide adequate samples with results within 0.020 of each other as requested by the operator, the results of a single test result will be considered **valid**. If only a single test result is used, the monitoring period (with an observation period) becomes mandatory.

4.5.3.1.1 The operator may repeat the testing sequence as required by circumstances.

4.5.3.1.2 The operator should use a **new mouthpiece** for each individual and for each series of tests (i.e., complete set of breath testing samples).

4.5.3.2 Additional valid breath sample(s) should be collected if the first two valid breath samples provided give results that differ by more than 0.020.

4.5.3.2.1 The breath results should correlate within 0.020 to indicate the absence of alcohol contamination in the subject's breath pathway (mouth alcohol), show consistent sample delivery, and indicates the absence of RFI as a contributing factor to the breath results.

4.5.3.2.2 In the event that all valid samples fall outside the 0.020 correlation, and the officer suspects that mouth alcohol could have been a contributing factor, then they should administer a 15-minute monitoring period and then retest the subject. If mouth alcohol is not suspected, then the officer may reinstruct the individual in the proper breath sample technique and retest the subject without administering a 15-minute monitoring period.

4.5.3.3 The operator should manually log test results and/or retain printouts for possible use in court.

4.5.3.4 The instrument **<u>should not</u>** be in passive mode for the testing of **<u>subjects</u>** for the purposes of the previous sections within 4.5.

4.5.4 Passive mode:

4.5.4.1 The passive mode of testing using the Lifeloc FC20 should be used for testing liquids or containers of liquid for the presence or absence of alcohol.

4.5.4.2 The passive mode can be used for screening purposes on individuals who are required to provide breath samples whenever requested by a law enforcement agency. Example may include but are not limited to: probationers, work release, parolees, prison inmates, etc.

5.0 Glossary

5.1 **Air Blank.** An air blank is a test of the environmental air prior to an evidential breath test. A passing air blank demonstrates that the environment is suitable for breath alcohol testing and the immediate area and instrument are free of external sources of contamination.

5.2 **Alcohol**. The chemical compounds of ethyl alcohol, methyl alcohol, or isopropyl alcohol.

5.3 **Approved Vendor.** A source/provider/manufacturer of an approved standard.

5.4 **Blood Alcohol Analysis**. An analysis of blood to determine the concentration of alcohol present.

5.5 **Breath Alcohol Analysis**. An analysis of breath to determine the concentration of alcohol present.

5.6 **Breath Alcohol Test.** A breath sample or series of separate breath samples provided during a breath testing sequence(s).

5.7 **Breath Alcohol Result.** The numeric display of the analysis of the breath sample or series of separate breath samples provided during a breath testing sequence(s).

5.8 **Breath Alcohol Testing Sequence.** A sequence of events as determined by the Idaho State Police Forensic Services, which may be directed by the instrument, the Operator, or both, and may consist of air blanks, performance verification, internal standard checks, and breath samples.

5.9 **Breath Testing Certification Class.** A department approved training class for prospective or uncertified breath alcohol Operators/Breath Testing Specialists.

5.10 **Breath Testing Specialist (BTS).** An operator who has completed advanced training approved by the department and are certified to perform routine instrument maintenance, teach instrument operation skills, proctor proficiency tests for instrument Operators, and testifying as an expert on alcohol physiology and instrument function in court.

5.11 **Calibration.** A set of laboratory operations which establish under specified conditions, the relationship between values indicated by a measuring instrument or measuring system, or values represented by a material, and the corresponding known values of a measurement.

5.12 **Certificate of Analysis/Approval.** A certificate stating the items have been tested and approved for use by the ISPFS, or are manufactured by an ISO 17025:2005, 17025:2017, 17034 (or equivalent) vendor and are traceable to N.I.S.T. standards. These two terms may be used interchangeably.

5.13 **Certificate of Instrument Calibration.** A certificate stating that an individual breath alcohol testing instrument has been evaluated by the ISPFS and found to be suitable for forensic alcohol testing. The certificate bears the signature of the calibration analyst at Idaho State Police Forensic Services, and the effective date of the instrument approval.

5.14 **Department**. The Idaho State Police.

5.15 **Deprivation Period**. A minimum time period of fifteen (15) minutes immediately prior to evidentiary breath alcohol testing during which the subject/individual shall not be allowed to smoke, drink, or eat substances containing alcohol.

5.16 **Evidentiary Test.** A blood, breath, or urine test performed on a subject/individual for potential evidentiary or legal purposes. A distinction is made between evidentiary testing and non-quantitative screening/monitoring.

5.17 **Idaho State Police Forensic Services (ISPFS).** A division of the Idaho State Police. ISPFS is dedicated to providing forensic science services to the criminal justice system of Idaho. ISPFS is the administrative body for the blood and breath alcohol testing programs in Idaho.

5.18 **Laboratory**. The place at which specialized devices, instruments and methods are used by trained personnel to measure the concentration of alcohol in samples of blood, vitreous humor, urine, or beverages for law enforcement purposes.

5.19 **MIP/MIC.** An abbreviation used to designate minor in possession or minor in consumption of alcohol.

5.20 **Monitoring Period**. A minimum time period of fifteen (15) minutes, immediately prior to evidentiary breath alcohol testing. The monitoring period consists of a mandatory deprivation period and discretionary observation period. The observation period becomes mandatory if the numeric results from only a single breath sample are used.

5.21 **Manual mode**. This process circumvents the automated process utilized in "sequence mode" and allows for the officer to manually work through the procedure for the collection of evidential samples and blanks.

5.22 **Observation period**. The time period running concurrently with the deprivation period in which the officer(s) should be observing the subject/individual, and any belch/burp/vomit/regurgitation should be noted by the operator(s). The officer(s) should be in a position, either physically or remotely, to be able to use their available senses to detect the aforementioned events.

5.23 **Operator Certification.** The condition of having satisfied the training requirements for administering breath alcohol tests as established by the department.

5.24 **Operator.** An individual certified by the department as qualified by training to administer breath alcohol tests.

5.25 **Performance Verification.** A verification of the accuracy of the breath testing instrument utilizing a performance verification standard. Performance verification should be reported to three decimal places. While ISPFS uses the term performance verification, manufacturers and others may use a term such as "calibration check" or "simulator check."

5.26 **Performance Verification Standard.** An ethyl alcohol standard used for field performance verifications. The standard is provided by and/or approved by the department.

5.27 **Proficiency Testing**. A periodic analysis of blood, urine, or other liquid specimen(s) whose alcohol content is unknown to the testing laboratory, to evaluate the capability of that laboratory to perform accurate analysis for alcohol concentration.

5.28 **Quality Control**. An analysis of referenced samples whose alcohol content is known, which is performed with each batch of blood, vitreous humor, urine, or beverage analysis to ensure that the laboratory's determination of alcohol concentration is reproducible and accurate.

5.29 **Sequence Mode (FC20 only)**. This mode is programmed into the instrument to automate the collection of evidential breath samples. This includes the timing and collection of the blanks and samples, as well as the "end of breath" criteria. The automatic capture of a breath sample is obtained after the minimum breath sample requirements are met ("end of breath" criteria). The manual capture of a breath sample is available to the user at any time during the exhalation via override.

5.30 **Urine Alcohol Analysis**. An analysis of urine to determine the concentration of alcohol present.