



National Safety Council's Committee on Alcohol and Other Drugs

Position of the NSC Committee on Alcohol and Other Drugs on the Source Code of Evidential Breath-Alcohol Analyzers

Adopted February 16, 2009 by the NSC CAOD

Beginning in the late 1980s in Washington State, and more recently and frequently in other jurisdictions including Arizona, Connecticut, Florida, Georgia, Kentucky, Louisiana, Massachusetts, Minnesota, New Jersey, New York, Tennessee, Texas, and the Province of Ontario, Canada, defendants in driving-under-the-influence-of-alcohol cases have made discovery demands for the Source Code* of the computer software of the evidential breath-alcohol analyzers with which they had been tested.

The Committee on Alcohol and Other Drugs has been advised that the great majority of trial and appellate court decisions on such Source Code issues to date have denied the defense access to the Source Code, chiefly on the grounds that it is not material or necessary to the challenge of the evidential breath-alcohol analyzer and/or the results yielded by that device, or that the state has no duty to disclose information not in its control, custody, or possession. However, in aggregate, Source Code litigation has resulted in great expenditures of effort, time, and costs as well as substantial delays in resolving the underlying cases, without useful outcomes. Therefore, the Committee has in the public interest examined in detail the Source Code litigation discovery issue, from a forensic science and technological perspective.

It is the position of the National Safety Council Committee on Alcohol and Other Drugs that access to the Source Code of the software of an evidential breath-alcohol analyzer is not pertinent, required, or useful for examination or evaluation of the analyzer's accuracy, scientific reliability, forensic validity, or other relevant characteristics, or of the trustworthiness and reliability of analysis results produced by the analyzer. These matters can be and have been fully assessed and examined by multiple other well established and recognized methods and procedures in common use worldwide; and many other adequate and appropriate means exist to challenge evidential breath-alcohol analysis results.

* Source Code is a series of statements written in human-readable computer programming language. It is the basis of all computer programs, and consists of a structured set of instructions that cause a computer or microprocessor-equipped device to perform specific operations.

COMMENT

The above position of the Committee is reflected universally in operational practices in evidential breath-alcohol testing, nationally and internationally. The comprehensive national program for evaluating evidential breath-alcohol analyzers for conformity with Federally established Model Specifications for Evidential Breath Testing Devices, an activity carried out by the National Highway Traffic Safety Administration of the U. S. Department of Transportation to establish and maintain a Conforming Products List of such devices, does not use or evaluate Source Codes of the analyzers in that process. Likewise, the International Recommendation on Breath Alcohol Analyzers, OIML R 126 “Evidential breath analyzers,” promulgated by the International Organization of Legal Metrology (OIML), an international treaty organization of which the United States of America is a Member State, does not refer to or include the Source Code of analyzers in its Recommendation, the purpose of which is to define the performance requirements of evidential breath analyzers for alcohol and the means and methods employed in testing them. The evidential breath-alcohol analyzer instrument standards and approval procedures officially used in Canada have been recommended by the Alcohol Test Committee of the Canadian Society of Forensic Science. These standards and procedures do not mention or utilize analyzer Source Codes. The leading treatises on the subject of quality assurance in breath-alcohol analysis, published in the peer-reviewed scientific literature, authored by Dubowski (1994) and Gullberg (2000), are intended to enhance the reliability and validity of evidential breath-alcohol testing practice. They do not mention Source Codes, although both scientists are fully familiar with that aspect of computerization.

The References cited below confirm and support the Committee’s foregoing position.

REFERENCES

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[The New Jersey Supreme Court Special Master’s “Supplemental Findings and Conclusions of Remand Court,” on the Source Code issue and dated Nov. 8, 2007, in *State of New Jersey v. Chun, et al.*, contain much information about the complexities of examining and evaluating Source Codes of the software of evidential breath-alcohol analyzers; and establish that these are not simple or routine tasks. The Special Master, at pp. 51-52, recorded that an expert witness for the defendants, without rebuttal, testified that “the Alcotest’s software was ‘far too complex’ to test” and that the same witness also “...estimated that it would require all of mankind for the rest of time to test all of the paths in the Alcotest’s source code.”]

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