



## Jurisprudence Section – 2011

### E24 The NSC-CAOD's Source Code Resolution: Scientific Nonsense, Legal Misrepresentations, and Political Bias

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After attending this presentation, attendees will understand the ethical improprieties, political bias, legal misrepresentations, and scientific nonsense promulgated and promoted by the National Safety Council's Committee on Alcohol and Drugs (NSC-CAOD).

This presentation will impact the forensic science community by promoting the use of reliable source code software in breath alcohol testing equipment and exposing political motives to remove related evidentiary standards.

The National Safety Council is a non-profit organization devoted to developing and fostering public policy on safety. On February 16, 2009, the NSC-CAOD enacted its "Position of the NSC Committee on Alcohol and Other Drugs on the Source Code of Evidential Breath-Alcohol Analyzers" (hereafter, Resolution). The Resolution addresses breath alcohol test evidence used in the prosecution of driving under the influence of alcohol (DUI) cases. The source code 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. Removal of the source code causes the device to stop functioning. Questioning of the source code program in court proceedings has exposed various flaws.

The Resolution states in part, "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."<sup>1</sup> It defies the practice of good science, technology, ethics, and current law.

The Resolution was published as a political statement to commercially benefit breath alcohol-analyzer manufacturers and affect policy positions on drunk driving by unilaterally declaring it a nonissue.

Breath alcohol test (BrAC) results are collected solely for the purpose of prosecution. Too often the BrAC result is the only significant evidence of impairment. The proponent must establish the validity of the computer program that generated the BrAC statement.<sup>2</sup> The reliability of the device's source code, based upon a proper legal foundation (critical impact or crucial evidence) is a question for the jury, not a predetermination by the NSC-CAOD or any other party.

The Resolution selectively relies upon self-serving scientific and legal citations which are obscure, relatively difficult to obtain, and improperly referenced. The Resolution repudiates the integrity of the measurement process (metrology), including potential sources of undetected software errors, quality assurances for intended purpose, and validation techniques by the manufacturer. It ignores that analysis of the source code provides a recognized means for validating error handling routines. For example, normal quality assurance and quality control procedures do not test for, or validate, a unit's ability to detect and properly respond when an internal component failure occurs.

The legal references within the Resolution were cited for narrow propositions taken out of context or are non-authoritative. The cases and articles, cited by NSC-CAOD, are actually indicative of a judicial trend to maintain a defendant's constitutional right to confront the evidence used against them.

The Resolution disregards conflicts announced in the National Academy of Sciences Report, *Strengthening Forensic Science in the United States: A Path Forward*,<sup>3</sup> including those between the needs of law enforcement, forensic science, and criminal defendants. By all practical measures, the Resolution selectively rejects relevant material against its position. The Resolution is intended to be accepted without question.

The NSC-CAOD sought and obtained validating recognition for its Resolution through the Journal of Analytical Toxicology (JAT). The Resolution was published in June, 2009 through JAT, without apparently subjecting it to editorial review, peer review process, or accompanying disclaimer.<sup>4</sup> Publication was based upon JAT's previously unpublished expanded editorial or relaxed publication standards.<sup>5</sup>

The NSC-CAOD should not attempt to limit constitutional and evidentiary standards under the guise of a scientific statement. Courts should take into account the motivations behind this Resolution and maintain their independent views when it comes to source code material. The NSC-CAOD source code resolution is a political statement, not a scientific one, and should not be given any legal credence.

#### References:

<sup>1</sup>. Journal of Analytical Toxicology, vol.33, no.5, p.287-290 (June, 2009)

<sup>2</sup>. Edward J. Imwinkelried, This Is Like Deja Vu All Over Again:



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- The Third, Constitutional, Attack On The Admissibility Of Police Laboratory Reports In Criminal Cases, 38 N.M. L.Rev. 300, 320 (Spring, 2008)
3. Harry A. Edwards and Constantine Gatsonis, Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences, The National Academy Press, Feb. 2009, ISBN 0-309-1313-6, 254 pages (2009);  
[www.nap.edu/catalog/12589.html](http://www.nap.edu/catalog/12589.html).
  4. Journal of Analytical Toxicology, vol.33, no.5, p.287-290 (June, 2009)
  5. Journal of Analytical Toxicology, Editor's Note, vol.33, no.9, p.16A (Nov./Dec., 2009)

**Source Code Software, National Safety Council, DUI/DWI**