



STATE OF MINNESOTA

OFFICE OF THE ATTORNEY GENERAL

January 31, 2011

LORI SWANSON
ATTORNEY GENERAL

SUITE 1800
445 MINNESOTA STREET
ST. PAUL, MN 55101-2134
TELEPHONE: (651) 297-2040

Greg Ess
Court Administrator
Scott County Government Center
200 Fourth Avenue West, JC 115
Shakopee, MN 55379-1220

**Re: *In re Minnesota Intoxilyzer 5000EN Source Code Litigation in Implied Consent Cases, and
In re Minnesota Intoxilyzer 5000EN Source Code Litigation in Criminal Cases***
Court File Nos. 70-CV-09-19459 & 70-CR-09-19749

Dear Court Administrator:

Enclosed herewith for filing please find the following documents in the above-referenced matter:

1. Commissioner of Public Safety's Post-Hearing Brief, and
2. Affidavit of Service.

A courtesy copy of the documents are being sent via electronic mail to Judge Abrams.

By copy of this letter, all counsel are being served with same.

Sincerely,

EMERALD GRATZ
Assistant Attorney General

(651) 757-1243 (Voice)
(651) 297-4077 (Fax)

Enclosures

Cc/we: Honorable Jerome B. Abrams (*via electronic mail*)
Charles A. Ramsay, Esq. (*via U.S. mail and electronic mail*)
Jeffrey S. Sheridan, Esq. (*via U.S. mail and electronic mail*)
Marsh Halberg, Esq. (*via U. S. mail and electronic mail*)
Derek A. Patrin, Esq. (*via U. S. mail and electronic mail*)
Pam King (*via U.S. mail and electronic mail*)

AG: #2763632-v1

STATE OF MINNESOTA

DISTRICT COURT

In re Minnesota Intoxilyzer 5000EN
Source Code Litigation
in Implied Consent Cases,

Case Type: **Consolidated Source Code Cases**
Court File Nos. 70-CV-09-19459
70-CR-09-19749

and

**COMMISSIONER OF PUBLIC SAFETY'S
POST-HEARING BRIEF**

In re Minnesota Intoxilyzer 5000EN
Source Code Litigation
in Criminal Cases.

INTRODUCTION

Minnesota currently uses the Intoxilyzer 5000EN to conduct breath alcohol tests on individuals arrested for violating the driving while impaired (“DWI”) laws. The Intoxilyzer 5000EN is manufactured by CMI of Kentucky, Inc. (“CMI”). Prior to deploying the Intoxilyzer 5000EN into the field for use by law enforcement, the Minnesota Bureau of Criminal Apprehension (“BCA”) conducted extensive validation testing on the Intoxilyzer 5000EN. Based on the validation studies, the BCA concluded that the instrument provides consistently valid and reliable measurements of a test subject’s breath alcohol concentration. Currently, there are 264 Intoxilyzer 5000EN instruments available for use by law enforcement agencies throughout Minnesota.

In 2006, some individuals arrested for DWI began claiming that the source code for the Intoxilyzer 5000EN was defective, which rendered their breath test results unreliable. Therefore, these individuals began making demands for production of the source code. Based on *In re Commissioner of Public Safety*, 735 N.W.2d 706 (Minn. 2007) (*Underdahl I*), state district court judges throughout Minnesota began ordering production of the source code in hundreds of implied consent cases. The Commissioner sent these orders requiring production of the source

code in implied consent cases to CMI, requesting that it produce the source code. After months of extensive negotiations, CMI ultimately declined to provide the Commissioner with access to the source code. Therefore, the Commissioner filed a lawsuit in federal district court in March 2008 seeking access to the source code.

In June 2009, the Commissioner and CMI reached a settlement in the federal source code litigation. The terms of the settlement provided Petitioners with access to the source code based upon a finding by a state district court judge that production of the source code was relevant to the particular case and the issuance of an appropriate protective order. An electronic copy of the source code was made available in Kentucky at CMI's headquarters and a printed copy of the source code was made available in Minnesota. On July 16, 2009, the federal district court issued a Consent Judgment and Permanent Injunction, approving the settlement terms.

Pursuant to an order filed on January 11, 2010, the Minnesota Supreme Court directed this Court to "administer, hear, and decide all pretrial matters concerning challenges to the reliability of Intoxilyzer 5000EN results based on the source code of the instrument" Based on the order, more than 4200 criminal DWI and implied consent cases were consolidated into the above-captioned proceeding.

After several months of discovery and motion practice, the hearing for the above-captioned proceeding commenced on December 8, 2010, and lasted until December 23, 2010. The issue presented for the Court's consideration is whether a defect or error in the source code renders Intoxilyzer 5000EN test results unreliable.

FACTS

During the hearing, the Court heard testimony from eight witnesses: Timothy Black, Dr. Karl Schubert, Matthew Willis, Mary McMurray, Dr. Stephen Nuspl, Karin Kierzek, Patrick Pulju, and David Edin.

Testimony of Timothy Black

Timothy Black of Quantalink L.L.C. is the computer expert retained by defense attorney Derek Patrin. Based upon his examination of the source code, Mr. Black wrote an initial report discussing his findings. *See Ex. 14.*¹ In his report, Mr. Black admitted that he did not perform a full “measurement” of the source code to look for potential errors based on his “understanding that other defense experts [CFS] would be performing this type of analysis.” *Id.* at 4. Nonetheless, Mr. Black summarily concluded that the Intoxilyzer 5000EN is a “brittle device” based on the “trial and error method of developing the source code,” resulting in “unpredictable results” under “real life conditions.” *Id.* at 21.

The extent of Mr. Black’s efforts in his source code review consisted of looking at the source code in Kentucky, running tests on an Intoxilyzer 5000EN in the basement of his home in Ohio, and reviewing information he found on the internet, although he failed to record the internet sources. Mr. Black admitted that he had no previous experience working with the Intoxilyzer 5000EN and did not use a certified operator when running his tests on the instrument. In completing his source code review, Mr. Black never looked at the printed copy of the source code or requested information from BCA about the history or operation of the Intoxilyzer 5000EN in Minnesota.

¹ “Ex.” refers to the exhibits offered and received by the Court as evidence during the hearing that took place December 8-23, 2010.

Mr. Black conceded that he spent only seven hours looking at the source code. In his words, a “true examination” of the source code was looking at the behavior of the Intoxilyzer 5000EN instrument, not examining the actual source code. Mr. Black attributed any “suspect” behaviors exhibited by the instrument during his testing to errors in the source code. Although he relied on other experts to perform a “comprehensive analysis” of the source code, he never communicated with the other experts regarding their findings. Mr. Black described his methodology as “wandering in the woods” looking for source code bugs in extreme or corner cases. He did not focus on normal field testing circumstances during his own testing of the Intoxilyzer 5000EN.

During the hearing, Mr. Black offered several opinions regarding alleged source code errors in the Intoxilyzer 5000EN. First, Mr. Black testified that the self-test evaluation completed at the start of an Intoxilyzer 5000EN test is not sufficiently comprehensive, which he characterized as an “error of omission” in the source code. Nonetheless, Mr. Black conceded that the source code currently used during the self-test evaluation does not contain any errors or defects.

Second, Mr. Black opined that the radio frequency interference (“RFI”) detection system in the Intoxilyzer 5000EN is not sufficiently comprehensive, which he characterized as another “error of omission” in the source code. Mr. Black built a “contraption” to run RFI testing on the Intoxilyzer 5000EN instrument and based upon his own testing, opined that the Intoxilyzer 5000EN is only able to detect RFI between 148 and 156 megahertz. However, Mr. Black conceded that he did not request information from the BCA or CMI regarding the instrument’s RFI detection system. Furthermore, Mr. Black never looked at the source code for the RFI

detection system in the Intoxilyzer 5000EN and does not know if any actual errors exist in that part of the code.

Finally, Mr. Black opined that errors exist in the instrument's ability to measure breath volume. To conduct his testing, Mr. Black used "testing rigs" that were custom built, not industry standard, and not of a forensic testing quality. Based on his testing, Mr. Black concluded that in a majority of tests, the breath volume measurement is inaccurately reported as too high. However, Mr. Black was not aware how the breath volume measurement affects the test results generated by the instrument. Moreover, Mr. Black could not identify any errors in the breath volume measurement section of the source code.

Testimony of Dr. Karl Schubert and Matthew Willis

The group of defense counsel known as the Source Code Coalition hired Computer Forensic Services ("CFS") as their computer experts. CFS performed a comprehensive source code review focused on "the ability of the instrument to provide a valid breath-alcohol concentration (BrAC) using the supplied source code." *See* Ex. 166 at 4. Working from the "scientific position that the truth of this result should provide an unbiased answer to all parties," CFS examined all aspects of the Intoxilyzer 5000EN instrument and repeatedly concluded that no defect in the source code causes the instrument to be unreliable. *Id.* at 22-23, 50, 52, 58, 64 and 65. Ultimately, "CFS determined that the Intoxilyzer 5000EN instruments in use in Minnesota provide valid BrAC measurements and function as designed." *Id.* at 5.

Matthew Willis is the Vice President of Security Services for CFS and was the project supervisor for the Intoxilyzer 5000EN source code review. Dr. Schubert was an independent contractor retained by CFS as a technical expert to help review the source code because his background and expertise were a "good fit" for the specific project. During the hearing, Dr.

Schubert stated that he was not testifying on behalf of CFS. Instead, he was independently contracted by defense counsel to offer additional testimony as part of the hearing.

Dr. Schubert provided testimony on two primary topics. First, Dr. Schubert testified regarding the sample acceptance parameters set by the source code and the instrument's rejection of deficient samples. Dr. Schubert opined that the "tolerance" for the slope detection should be increased to allow the instrument to accept more breath samples and decrease the number of samples rejected as deficient. In his opinion, the parameters for slope detection are "too tight" and are inconsistent with the goal of trying to get as many complete tests from subjects as possible. Dr. Schubert also discussed "granularity" or the level of detail used by the Intoxilyzer 5000EN when reporting problems with the test. In Dr. Schubert's opinion, the notation on the test record of "deficient sample" is too broad because it fails to express which of the sample acceptance parameters were not met and rendered the sample deficient. However, Dr. Schubert conceded that the source code for sample acceptance and deficient samples does not contain any errors or defects.

Second, Dr. Schubert testified regarding the precision of the breath alcohol measurement reported by the Intoxilyzer 5000EN. The CFS report determined that the Intoxilyzer 5000EN should be given "an allowed variance in the precision of its measurements," and gave an example of a ten percent variance. *See* Ex. 166 at 56-57. Dr. Schubert testified that unless a measurement of uncertainty is reported on the face of the Intoxilyzer 5000EN test result, the alcohol concentrations reported at 0.08 or 0.20 are not accurate. However, Dr. Schubert conceded that the source code does not contain any errors or defects related to the instrument's ability to report accurate breath alcohol concentration results.

Testimony of Mary McMurray

Mary McMurray is a private forensic toxicologist hired by defense attorney Derek Patrin. During the hearing, Ms. McMurray offered limited testimony related to breath testing. Ms. McMurray admitted that she did not review the source code, but based her testimony and opinions solely upon Mr. Black's findings. On the issue of RFI, Ms. McMurray opined that the RFI detection system in the Intoxilyzer 5000EN is not 100% reliable. However, she could not provide any foundation for her opinion. On the issue of breath volume measurement, Ms. McMurray opined that the Intoxilyzer 5000EN cannot accurately determine breath volume measurements under some circumstances. Specifically, Ms. McMurray discussed the amount of pressure a person is capable of blowing when providing a breath sample. But Ms. McMurray conceded that her information was based on providing a breath sample into a closed environment (such as a medical device used to measure lung capacity), not an open environment like the Intoxilyzer 5000EN.

Testimony of Dr. Stephen Nuspl

The State hired Dr. Stephen Nuspl of Mitrin Inc. to review the source code. Dr. Stephen Nuspl has over forty years of experience in software development and computer systems architecture, including work for Control Data and Honeywell. Over the years, Dr. Nuspl has worked on numerous projects involving Z80 and 8051 processors, which are used in the Intoxilyzer 5000EN. For his source code review, Dr. Nuspl spent more than 100 hours reviewing both the printed version of the source code in Minnesota and the electronic version of the source code in Kentucky. Dr. Nuspl also received information and training on the Intoxilyzer 5000EN from the BCA.

After reviewing the reports submitted by the other experts on October 1, 2010, Dr. Nuspl concluded that “[n]one of the observations or recommendations presented in the CFS [or Black reports are] a basis for disputing the [breath alcohol concentration] readings already reported or for preventing the future use of the Intoxilyzer 5000EN.” *See* Ex. 100 at 7-8. And based upon his independent review of the source code, Dr. Nuspl concluded that “source code errors that would lead to invalid [breath alcohol concentration] readings will never be found.” *See id.* at 7.

During the hearing, Dr. Nuspl offered testimony in response to several subjects discussed by the other experts. First, Dr. Nuspl testified about the claims made by Mr. Black regarding the lack of self-test checks performed by the Intoxilyzer 5000EN. In Dr. Nuspl’s opinion, most of the functions run during an Intoxilyzer 5000EN do not need to be automated in the software because the system is designed based on the presence of a trained operator during breath testing in the field. Dr. Nuspl testified that relying on trained operators to be present for testing allows space on the software processors to be utilized in other ways.

Next, Dr. Nuspl testified regarding claims of RFI affecting Intoxilyzer 5000EN test results. Dr. Nuspl described his background, which includes classes in electromagnetic theory while working toward his doctorate, and also includes consultation on software projects involving radio frequency. In response to Mr. Black’s testimony regarding the inability of the Intoxilyzer 5000EN to detect RFI, Dr. Nuspl explained that the testing results obtained by Mr. Black were not indicative of how the Intoxilyzer 5000EN was reading the radio frequencies, but instead they were influenced by the manner in which Mr. Black conducted his testing. Specifically, the length of wire used by Mr. Black to connect his RFI generator to the Intoxilyzer 5000EN instrument created a transmitter rather than a receiver. *See* Ex. 16. Dr. Nuspl explained that the source code for RFI is an extremely simple function. If RFI is detected, the software will

generate an appropriate message and the instrument will abort a test. Dr. Nuspl testified that the source code for the RFI detection in the Intoxilyzer 5000EN does not contain any errors or defects.

Dr. Nuspl also discussed breath volume measurement for the Intoxilyzer 5000EN. Dr. Nuspl testified that the source code used to measure breath volume is located in two sections. One module measures the pressure input via the transducer, taking readings from the analog to digital converter in a 12-bit format. The second source code module receives the pressure reading and applies a calibration constant to convert pressure to flow rate. An algorithm is then used to multiply the rate of flow over time. Dr. Nuspl testified that no errors or defects exist in the source code associated with calculating breath volume. In Dr. Nuspl's opinion, the actual breath volume measurement is not necessary to achieve the alcohol concentration result; instead, the volume requirement is only necessary to determine when the minimum adequate sample is collected by the instrument.

Finally, Dr. Nuspl discussed the sample acceptance parameters and slope detection. Dr. Nuspl explained that during a breath test, the 8051 slave processor continuously checks the sample acceptance criteria (flow rate, pressure, timing, and volume) and then reports to the Z80 master processor whether a proper slope is achieved. According to Dr. Nuspl, the source code for the sample acceptance criteria and slope detection does not contain any errors or defects. If the sample acceptance parameters were to be changed, it would be a design change and not due to an error or defect in the source code.

Testimony of BCA witnesses

Three members of the breath testing section at the BCA testified during the hearing. Karin Kierzek and David Edin are forensic scientists, and Patrick Pulju is a forensic breath

alcohol specialist. All three individuals discussed BCA policies, procedures, and training with regard to the Intoxilyzer 5000EN, as well as the BCA's working relationship with CMI.

According to BCA testimony, the best breath sample for alcohol concentration testing consists of deep lung air. The amount of breath a test subject needs to exhale before reaching deep lung air varies from individual to individual and can be affected by many factors, including gender, height, and lung health. To provide all testing subjects an equal opportunity to provide a proper breath sample, the BCA had to set sample acceptance criteria for the Intoxilyzer 5000EN. The BCA witnesses testified that establishing the sample acceptance criteria requires striking a balance between accuracy of the breath alcohol concentration results and the number of samples accepted by the instrument. Achieving the most accurate breath alcohol concentration readings by reaching deep lung air samples is the most important goal in the BCA breath testing program.

The BCA witnesses testified that five criteria must be met for the Intoxilyzer 5000EN to accept a breath sample: (1) the test subject must start blowing at a rate of 0.17 liters per second, (2) the test subject must maintain a breath flow rate of at least 0.15 liters per second, (3) the test subject must blow for at least two seconds continuously, (4) the test subject must blow at least 1.1 liters of breath, and (5) the slope cannot increase at a rate greater than seven percent. If any of these criteria is not met within the four-minute period provided to the test subject, the Intoxilyzer 5000EN will reject the breath sample as deficient.

The BCA trains and certifies all law enforcement officers who administer Intoxilyzer 5000EN tests in Minnesota. In an effort to help test subjects meet all of the sample acceptance criteria, the BCA trains operators to instruct test subjects to blow long and steady when providing breath samples into the Intoxilyzer 5000EN. If the Intoxilyzer 5000EN reports a deficient sample, the BCA witnesses testified that operators are trained to offer another breath

test with additional instruction or offer an alternate type of test (blood or urine). Under appropriate circumstances, an operator may charge the test subject with refusal to submit to a breath test if the operator observes that the subject's conduct is deliberately frustrating the testing process.

In 2006, a sample acceptance issue was brought to the BCA's attention, which involved a test subject appearing to blow extremely hard but the Intoxilyzer 5000EN rejected the sample as deficient. To reproduce the scenario, members of the BCA breath testing section tried numerous times to blow what was described in the September 27, 2006 email as "eye popping hard" to get the instrument to reject their samples, but could not get their samples rejected as deficient. *See* Ex. 7 at 32. While conducting these studies, the BCA discovered that the amount of time a subject must blow for samples to be accepted was longer under some rare circumstances. The BCA testified that the difference in the amount of time was a fraction of a second. The BCA also discovered that when more than 1.1 liters of air was blown but the sample was not accepted due to other criteria not being met, the puff counter doubled the number of puffs counted. These findings were summarized in the email of September 27, 2006, with a request that CMI explain the cause. *See id.*

On November 1, 2006, CMI sent an email to the BCA and explained their assessment of the sample acceptance issue. *See* Ex. 7 at 27. CMI explained that the math calculations for the revised relative standard deviation used to detect interferents had slowed down the processors and increased the amount of time it takes to accept samples under some rare circumstances. *See id.* CMI indicated that it would do further testing and see if anything could be changed. *See id.*

On April 24, 2007, CMI sent a test version of updated software to the BCA, which included a fix for the puff counter issue, a correction to daylight savings time, and a change in

the timing notation when a test is taken over midnight. *See Ex. 7* at 12. CMI also stated that the test version of updated software included a change in the criteria for slope acceptance. *See id.* Patrick Pulju burned the test version of software onto an EPROM and put it into an Intoxilyzer 5000EN to run tests. He testified that on both trial runs, the test version of updated software immediately failed. At that point, the test version was set aside because the issues to be resolved by the updated software were not critical.

Patrick Pulju testified that although the BCA could have further explored a solution with CMI regarding the sample acceptance issue, any solution would have been at the expense of the accuracy of the breath alcohol concentration results reported by the Intoxilyzer 5000EN. Mr. Pulju explained that increasing or widening the seven percent parameter for a level slope would allow mouth alcohol to affect a greater number of tests. He further pointed out that changing any parameters would only affect one percent of the 0.6% of tests reported as deficient samples, or allow 1.2 more tests to be accepted by the instrument. *See Ex. 7* at 34. Because the negative consequences of altering the criteria were outweighed by any potential benefits, the sample acceptance parameters were not changed.

During the hearing, the BCA witnesses also testified in response to subjects discussed by other witnesses. On the topic of RFI, Patrick Pulju testified that the Intoxilyzer 5000EN is shielded from RFI by the metal case surrounding the instrument. Mr. Pulju further testified that the instrument can detect RFI between 80 and 220 megahertz, and the Intoxilyzer 5000EN will stop the test if RFI is detected. Regarding breath volume measurement and puff counter, the BCA witnesses testified that based on their validation studies and review of field data, the Intoxilyzer 5000EN generally measures accurate breath volumes. Although there have been some tests where a hardware malfunction in the pressure transducer can cause the reported

volume measurement to be artificially elevated, these tests still report accurate breath alcohol measurement results. According to the BCA witnesses, once the volume of breath exceeds 1.1 liters, the volume measurement and number of puffs counted have served their purpose for the testing process.

ARGUMENT

In this consolidated proceeding, Petitioners have the burden of proof to show that an error or defect exists in the source code that renders Intoxilyzer 5000EN test results unreliable. During the hearing, Petitioners presented evidence on a variety of topics, including RFI, breath volume measurement, the self-test function, precision of measurement, and sample acceptance. In each instance, Petitioners attempted to prove that an error or defect in the source code caused components of an Intoxilyzer 5000EN test to provide inaccurate or unreliable results. Petitioners failed to meet their burden of proof. Accordingly, the Court should conclude that no defect or error in the source code renders Intoxilyzer 5000EN test results unreliable and preclude any more challenges to the reliability of Intoxilyzer 5000EN test results based on the source code.

I. PETITIONERS HAVE THE BURDEN OF PROOF.

In Minnesota, the Intoxilyzer 5000EN has been approved for conducting breath alcohol concentration testing. *See* Minn. R. 7502.0420, subp. 3 (2010). A prima face case of test reliability is satisfied “by demonstrating that a certified Intoxilyzer operator administered the test, and that diagnostic checks showed that the Intoxilyzer machine was in working order and the chemicals used were in proper condition.” *Kramer v. Commissioner of Public Safety*, 706 N.W.2d 231, 236 (Minn. Ct. App. 2003). This evidence provides “almost incontrovertible proof not only that the chemicals are proper but that the instrument is in proper order.” *State, Dep’t of Public Safety v. Habisch*, 313 N.W.2d 13, 16 (Minn. 1981).

In all of the cases involved in this consolidated proceeding, it is undisputed that an approved breath test instrument, the Intoxilyzer 5000EN, was used, and a certified Intoxilyzer operator conducted the test. As such, the Commissioner has met the burden to establish a prima facie case of test reliability. The only issue before the Court is whether a defect or error in the source code renders Intoxilyzer 5000EN test results unreliable.

The burden is on Petitioners in this consolidated proceeding. *See Przymus v. Commissioner of Public Safety*, 488 N.W.2d 829, 833 (Minn. Ct. App. 1992). It is not sufficient to merely raise possible explanations or speculation regarding any alleged defects or errors in the source code. *See Bielejeski v. Commissioner of Public Safety*, 351 N.W.2d 664, 666 (Minn. Ct. App. 1984) (trial court properly admitted test result where driver presented no evidence, but only “an invitation to speculation”); *Wells v. Commissioner of Public Safety*, 392 N.W.2d 721, 724 (Minn. Ct. App. 1986) (expert’s “possible explanations” are not facts which impugn the reliability of the test). Petitioners must present affirmative evidence proving that (1) a source code defect or error exists, and (2) the source code defect or error renders Intoxilyzer 5000EN results unreliable.

II. SAMPLE ACCEPTANCE PARAMETERS AND DEFICIENT SAMPLES.

Petitioners claim that a source code defect exists in the sample acceptance parameters set for the Intoxilyzer 5000EN. They argue that under some rare circumstances, the instrument’s rejection of a breath sample as deficient is based on a defect or error in the source code. However, the evidence shows that the source code does not contain any errors in the sample acceptance parameters and properly reports samples as deficient. Moreover, Intoxilyzer 5000EN operators are trained to observe a subject providing a breath sample and determine whether their behavior is consistent with the instrument’s report of a deficient sample. Therefore, Petitioners have not met their burden of proof.

Under Minnesota law, failure to provide adequate breath samples constitutes a test refusal. *See* Minn. Stat. § 169A.51, subd. 5(c) (2010). A sample is adequate if the instrument analyzes the sample and does not indicate the sample is deficient. *See* Minn. Stat. § 169A.51, subd. 5(b) (2010). The statute is consistent with case law stating that a driver has a duty to comply reasonably with the administration of a breath test, and failure to follow instructions for providing adequate breath samples constitutes a refusal. *See Makki v. Commissioner of Public Safety*, No.A03-1763, 2004 WL 1445404 (Minn. Ct. App. June 29, 2004) (unpublished opinion)² (affirming finding of refusal where driver agreed to take test but Intoxilyzer 5000EN reported a deficient sample during driver's second attempt and officer charged driver with refusal based on assessment that driver was not cooperating with test instructions). Uncooperative conduct may constitute a refusal even where the driver agrees to take a breath test. *See Bultman v. Commissioner of Public Safety*, No. A06-1857, 2007 WL 2998969 (Minn. Ct. App. Oct. 16, 2007) (unpublished opinion)³ (driver agreed to take a breath test but did not provide adequate sample during four minute period provided by the Intoxilyzer 5000EN). Based on the subject's conduct during the test, a trained Intoxilyzer operator may determine whether a driver should be charged with refusal when the Intoxilyzer 5000EN reports a deficient sample.⁴ *See Makki*, 2004 WL 1445404 at *3. An operator's determination that a deficient sample constitutes a refusal

² Pursuant to Minn. Stat. § 480A.08, subd. 3 (2010), a copy of *Makki v. Commissioner of Public Safety* is attached.

³ Pursuant to Minn. Stat. § 480A.08, subd. 3 (2010), a copy of *Bultman v. Commissioner of Public Safety* is attached.

⁴ Petitioners may argue that the Court of Appeals' recent decision in *Hansen v. Commissioner of Public Safety*, No. A10-749, 2011 WL 9166 (Minn. App. Jan. 4, 2011) (unpublished and attached), requires this Court to give more weight to their argument regarding deficient samples. However, the analysis of a statutory refusal in *Hansen* directly contradicts established precedent and is therefore inaccurate. The Commissioner has filed a petition for review of *Hansen* with the Minnesota Supreme Court.

does not violate the driver's due process rights even when the operator does not offer the driver another opportunity to test. *See State v. Netland*, 762 N.W.2d 202, 209 (Minn. 2009).

In these consolidated proceedings, Petitioners rely on testimony from Dr. Karl Schubert and the BCA witnesses to support their claim that a source code error exists in the sample acceptance parameters for the Intoxilyzer 5000EN. While conducting studies in September 2006, the BCA discovered that the amount of time for breath samples to be accepted by the Intoxilyzer 5000EN was slightly longer (a fraction of a second) under rare circumstances. In addition, the BCA became aware that when a test subject is blowing "eye popping hard," it might be possible for the instrument to reject the sample as deficient even when a sufficient volume of air is provided. *See Ex. 7* at 32. Based on this information, Dr. Schubert opined that the "tolerance" for the slope detection should be increased to allow the instrument to accept more breath samples and decrease the number of samples rejected as deficient. In his opinion, the parameters for slope detection are "too tight" and are inconsistent with the goal of trying to get as many complete tests from subjects as possible.

Petitioners arguments ignore the contradictory evidence offered by the State. Dr. Nuspl explained that during a breath test, the 8051 slave processor continuously checks the sample acceptance criteria and then reports to the Z80 master processor whether the criteria are met. The source code for the sample acceptance criteria does not contain any errors or defects. If the sample acceptance parameters were to be changed, it would be a design change, not a reflection of an error in the source code. Dr. Schubert conceded during his testimony that the source code for sample acceptance and deficient samples does not contain any errors or defects. Dr. Schubert's testimony was consistent with the CFS report, which concluded that the Intoxilyzer 5000EN correctly determines deficient samples. *See Ex. 166* at 66-68.

The BCA witnesses testified that the Intoxilyzer 5000EN's determination of deficient samples is reliable. Five criteria must be met for the Intoxilyzer 5000EN to accept a breath sample as adequate: (1) the test subject must start blowing at a rate of 0.17 liters per second, (2) the test subject must maintain a breath flow rate of at least 0.15 liters per second, (3) the test subject must blow for at least two seconds continuously, (4) the test subject must blow at least 1.1 liters of breath, and (5) the slope cannot be increasing at a rate greater than seven percent. If any of these criteria is not met within the four-minute period provided to the test subject, the Intoxilyzer 5000EN will reject the breath sample as deficient. In an effort to help test subjects meet all of the sample acceptance criteria, the BCA trains operators to instruct test subjects to blow long and steady when providing breath samples into the Intoxilyzer 5000EN. If the Intoxilyzer 5000EN reports a deficient sample, operators are trained to offer another breath test with additional instruction or offer an alternate type of test (blood or urine). In most cases, a trained operator can identify the reason for a deficient sample, even if it is not reported on the test record. Under appropriate circumstances, the operator may charge the test subject with refusal to submit to a breath test if the operator observes conduct indicating that the test subject is deliberately frustrating the testing process.

In addition, the BCA witnesses testified that the current sample acceptance parameters set for the Intoxilyzer 5000EN are appropriate. CMI determined that the increased length of time needed for sample acceptance was due to a change in math calculations for the revised relative standard deviation used to detect interferents. *See Ex. 7 at 27.* On April 24, 2007, CMI sent a test version of updated software to the BCA, but the test version of updated software immediately failed preliminary testing. Patrick Pulju testified that although the BCA could have further explored with CMI the sample acceptance issue, any modification to the acceptance

criteria would have been at the expense of the accuracy of the breath alcohol concentration results reported by the Intoxilyzer 5000EN. Establishing the sample acceptance criteria requires striking a balance between accuracy of the breath alcohol concentration results and the number of samples accepted by the instrument. Achieving the most accurate breath alcohol concentration readings by reaching deep lung air samples is the most important goal in the BCA breath testing program. Mr. Pulju explained that increasing or widening the seven percent parameter for a level slope would allow mouth alcohol to affect a greater number of tests. He further pointed out that changing the parameters would only affect one percent of the 0.6% of tests reported as deficient samples, or allow 1.2 more tests per year to be accepted by the instrument. *See Ex. 7 at 34.* Therefore, the sample acceptance parameters were not changed.

In Minnesota, the legislature delegated authority to the Commissioner to adopt methods and procedures for DWI chemical testing. *See Minn. Stat. § 169A.75(c) (2010).* For breath testing, the BCA is responsible for setting all policies and procedures. *See Minn. R. 7502.0410 (2010).* The sample acceptance parameters set for the Intoxilyzer 5000EN are a policy decision made by the BCA pursuant to the statute and rule. Testimony given during the hearing demonstrates why the BCA set the current sample acceptance criteria and why the criteria have not been changed. Contrary to arguments made by Petitioners, the evidence does not show that the sample acceptance criteria are defective based on the source code, and there is no need for a “fix” or revision to the software. Instead, the evidence shows that the BCA made a policy decision to retain the existing parameters based on the information provided to them. Dr. Schubert’s testimony on this issue is essentially a disagreement with a policy decision by the BCA, which is beyond the scope of the Court’s review of the source code issue.

Petitioners did not meet their burden to show that an error or defect in the source code for the sample acceptance parameters and deficient samples renders Intoxilyzer 5000EN test results unreliable.

III. PRECISION OF MEASUREMENT (MARGIN OF ERROR).

Petitioners claim that Intoxilyzer 5000EN test results lack precision of measurement. Petitioners seem to argue that a ten percent variance should apply to all Intoxilyzer 5000EN test results. Because Minnesota law does not require breath test results to be reported within a margin of error, and the evidence does not show that a source code defect or error causes alcohol concentration measurements to vary by ten percent, the claim by Petitioners should be rejected.

In Minnesota, breath test results do not need to be reported within a scientific margin of error. *See e.g., Schildgen v. Commissioner of Public Safety*, 363 N.W.2d 800, 801 (Minn. App. 1985). This rule of law has existed through a succession of breath testing instruments, including the Intoxilyzer 5000EN. *See Hrcir v. Commissioner of Public Safety*, 370 N.W.2d 444, 445 (Minn. App. 1985).

In this consolidated proceeding, Petitioners rely on testimony from Dr. Karl Schubert to support their precision of measurement claim. The CFS report determined that the Intoxilyzer 5000EN should be given “an allowed variance in the precision of its measurements” and gave an example of a ten percent variance. *See Ex. 166 at 56-57.* Dr. Schubert testified that unless a measurement of uncertainty is reported on the face of the Intoxilyzer 5000EN test result, the alcohol concentrations reported at 0.08 or 0.20 are not accurate. Dr. Schubert believes that this opinion is consistent with the scientific article written by Rod Gullberg. *See Ex. 42.*

Dr. Schubert’s opinion on this issue is not credible and it is not supported by the grounds he based it on. The Gullberg article is based on data taken from breath tests in Minnesota and

the author concludes that the Intoxilyzer 5000EN is “fit for purpose,” meaning that test results generated by the instrument are reliable. *See* Ex. 42. Although Dr. Schubert claimed to rely on the Gullberg article as a basis for his opinion, the article contradicts Dr. Schubert’s opinion. Regarding the ten percent measure of uncertainty noted in the CFS report, Matthew Willis testified that ten percent is an example, not a specific recommendation. It is not based on an industry standard and does not suggest that the Intoxilyzer 5000EN actually has a ten percent margin of error. Furthermore, the BCA witnesses testified that any alleged uncertainty is already built into the test result when the Intoxilyzer 5000EN measures the alcohol concentration of two breath samples and reports a truncated version of the lowest alcohol concentration result. Finally, Dr. Schubert conceded that the source code does not contain any errors or defects related to the instrument’s ability to report accurate breath alcohol concentration results.

Case law in Minnesota does not require Intoxilyzer 5000EN test results to be reported within a margin of error. Moreover, the evidence presented during the hearing demonstrates that precision of measurement has little to do with the source code for the instrument. Therefore, the Petitioners’ claim lacks merit.

IV. RADIO FREQUENCY INTERFERENCE.

Petitioners claim that the Intoxilyzer 5000EN does not properly detect and flag radio frequency interference (“RFI”) during testing. However, the evidence shows that the source code does not contain any errors or defects in the RFI detection system. Therefore, Petitioners have not met their burden under applicable law and the claim must fail.

The presence of RFI does not automatically render Intoxilyzer 5000EN test results unreliable. *See Roettger v. Commissioner of Public Safety*, 633 N.W.2d 70, 74 (Minn. App. 2001). Instead, the driver must provide affirmative evidence showing that RFI caused the

instrument to be untrustworthy or the certified operator did not follow BCA recommendations when dealing with RFI affecting the instrument. *See id.* at 74-75.

In this case, Petitioners rely on testimony from Timothy Black and Mary McMurray to support their claim that the RFI detection system in the Intoxilyzer 5000EN is inadequate. During the hearing, Mr. Black opined that the RFI detection system in the Intoxilyzer 5000EN is not sufficiently comprehensive, which he characterized as an “error of omission” in the source code. As in many areas of his analysis, Mr. Black’s methodology was inadequate and unreliable. Mr. Black built a testing contraption to run RFI testing on the Intoxilyzer 5000EN instrument and opined that the Intoxilyzer 5000EN is only able to detect RFI between 148 and 156 megahertz. Relying on this information, Mary McMurray testified that the RFI detection system in the Intoxilyzer 5000EN is not 100% reliable. According to Ms. McMurray, if RFI affects an Intoxilyzer 5000EN test, the alcohol concentration generated will be a random number, ranging anywhere between 0.01 and 0.78. Ms. McMurray claimed that she had seen cell phones cause RFI during Intoxilyzer testing and affect test results, but she could not document any specific test result where this occurred.

The evidence presented by Petitioners was not credible. Dr. Nuspl explained that the testing results obtained by Mr. Black were the result of how Mr. Black conducted his testing, not a function of how the Intoxilyzer 5000EN was reading the radio frequencies. Specifically, the length of wire used by Mr. Black to connect his RFI generator to the Intoxilyzer 5000EN instrument created a transmitter rather than a receiver. *See Ex. 16.* This explanation was supported by BCA testimony that the instrument can detect RFI between 80 and 220 megahertz. Mr. Black did not know the frequencies the Intoxilyzer 5000EN was designed to detect. He conceded that he did not request information from the BCA or CMI regarding the instrument’s

RFI detection system. Dr. Nuspl explained that the source code for RFI is an extremely simple function. If RFI is detected, the software will generate an appropriate message and the instrument will abort a test. Dr. Nuspl conclusively established that the source code for RFI detection in the Intoxilyzer 5000EN does not contain any errors or defects. Mr. Black admitted that he never actually looked at the source code for the RFI detection system in the Intoxilyzer 5000EN and does not know if any errors exist in that part of the code. Therefore, the Court should reject the testimony from Mr. Black because it is not credible.

Dr. Nuspl also testified regarding claims that cell phone use might generate sufficient RFI to affect Intoxilyzer 5000EN test results. In order for a cell phone to generate sufficient RFI to affect an Intoxilyzer 5000EN test result, the cell phone would have to be transmitting extremely close to the instrument. A cell phone is inactive most of the time to conserve the battery, so a cell phone does not transmit continuously. Thus, the risk of a cell phone causing RFI is extremely minimal. Mary McMurray could not provide any foundation for her opinion, such as published studies or articles regarding cell phone use interfering with Intoxilyzer tests. She could not even provide any documentation regarding her own observations. Like Mr. Black, Ms. McMurray's testimony is not credible and should be rejected by the Court.

In an individual case, litigants have the opportunity to challenge a test result if there is evidence of RFI. Based on the evidence presented in this proceeding, however, Petitioners did not meet their burden to show that an error or defect in the source code for the RFI detection system of the Intoxilyzer 5000EN renders test results unreliable.

V. BREATH VOLUME MEASUREMENT AND PUFF COUNTER.

Petitioners claim that the Intoxilyzer 5000EN does not properly measure breath volume or correctly record the number of puffs during testing. However, the evidence shows that the

source code does not contain any errors or defects in the breath volume measurement section. Moreover, the number of puffs counted while a subject is taking a breath test does not affect the instrument's ability to produce reliable test results. Therefore, Petitioners have not met their burden under applicable law.

Under Minnesota law, the final volume measurement of a breath sample given during an Intoxilyzer test is irrelevant. See *Weierke v. Commissioner of Public Safety*, 578 N.W.2d 815, 816 (Minn. App. 1998); *State v. Rader*, 597 N.W.2d 321, 324 (Minn. App. 1999). In *Weierke*, the Court of Appeals rejected the driver's claim that a breath sample should be analyzed at the precise point when the minimum adequate volume is provided. See *id.* Instead, the Court of Appeals concluded that a valid and reliable test includes analysis of the breath sample at any point greater than the minimum adequate volume required by the Intoxilyzer. See *id.* This method of testing does not violate a driver's due process rights. See *Brooks v. Commissioner of Public Safety*, 584 N.W.2d 15, 17-19 (Minn. App. 1998); *Rader*, 597 N.W.2d at 325.

Petitioners rely on testimony from Timothy Black, Mary McMurray, and the BCA to support their claim that the Intoxilyzer 5000EN does not properly measure breath volume or correctly record the number of puffs during testing. Based on his testing, Mr. Black concluded that in a majority of Intoxilyzer 5000EN tests, the breath volume measurement is inaccurately reported as too high. Relying on Mr. Black's findings, Ms. McMurray agreed that the Intoxilyzer 5000EN cannot accurately determine breath volume measurements. The BCA testified that when more than 1.1 liters of air is blown into the Intoxilyzer 5000EN but the sample is not accepted by the instrument due to other sample acceptance criteria not being met, the puff counter doubled the number of puffs counted.

The evidence presented by Petitioners was not credible and contradicted testimony offered by the State. The BCA witnesses testified that based on their validation studies and review of field data, the Intoxilyzer 5000EN generally measures accurate breath volumes. Although there have been some tests where a hardware malfunction in the pressure transducer can cause the reported volume measurement to be artificially elevated, these tests still report accurate breath alcohol measurement results. Once the volume of breath exceeds 1.1 liters, the volume measurement and number of puffs counted have served their purpose during the testing process. Dr. Nuspl testified that he examined the two source code modules associated with breath volume measurement, which do not contain any errors or defects. Mr. Black referred to the breath volume measurement issue as a source code error, but he could not identify where any error exists in the source code itself. Dr. Nuspl agreed with the BCA witnesses that the final breath volume measurement is not relevant to the alcohol concentration result. Instead, the volume requirement is only necessary to determine when the minimum adequate sample is collected by the instrument.

Based on the evidence presented, Petitioners did not meet their burden to show that an error or defect in the source code for breath volume measurement or the puff counter renders Intoxilyzer 5000EN test results unreliable.

VI. SELF-TEST FUNCTION.

Petitioners claim that the Intoxilyzer 5000EN self-test function is inadequate. However, the evidence shows that the source code for the self-test function does not contain any errors or defects. Therefore, Petitioners have not met their burden of proof.

To support their claim regarding the self-test function, Petitioners rely solely on very suspect testimony from Timothy Black. Mr. Black testified that the self-test evaluation

completed at the start of an Intoxilyzer 5000EN test is not sufficiently comprehensive, which he characterized as an “error of omission” in the source code. Mr. Black went through a list of other components or functions in the Intoxilyzer 5000EN that he believed should have been checked by the self-test function, including the power supply and automatic gain control. According to Mr. Black, the lack of checks during the self-test function could affect the accuracy of Intoxilyzer 5000EN test results.

The evidence presented by Petitioners on this issue is weak. Dr. Nuspl explained that most of the functions run during an Intoxilyzer 5000EN test do not need to be automated in the software because the system is designed based on the presence of a trained operator during breath testing in the field. The BCA witnesses testified that operators are trained to check many of the Intoxilyzer 5000EN components prior to the start of a breath test, such as the heating tube and simulator solution. Dr. Nuspl testified that relying on trained operators to be present for testing allows space on the software processors to be utilized in other ways. Dr. Nuspl and Mr. Black both testified that the source code currently used for the self-test evaluation does not contain any errors or defects.

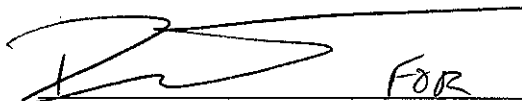
Based on the evidence presented, Petitioners did not meet their burden to show that an error or defect in the source code for the self-test function renders Intoxilyzer 5000EN test results unreliable.

CONCLUSION

Based on the foregoing arguments, Petitioners have failed to meet their burden of proof to show that a defect or error in the source code renders Intoxilyzer 5000EN results unreliable. Accordingly, the Court should find that no defect or error in the source code renders Intoxilyzer 5000EN test results unreliable, sustain the license revocations in this consolidated proceeding, and preclude any further challenges to the reliability and accuracy of Intoxilyzer 5000EN test results based on the source code.

Dated: January 31, 2011

LORI SWANSON
Attorney General
State of Minnesota

A handwritten signature in black ink, appearing to read "EMERALD GRATZ FOR", is written over a horizontal line.

EMERALD GRATZ
Assistant Attorney General
Atty. Reg. No. 0345829

KRISTI NIELSEN
Assistant Attorney General
Atty. Reg. No. 0329770

445 Minnesota Street, Suite 1800
St. Paul, Minnesota 55101-2134
(651) 757-1243 (Voice)
(651) 282-2525 (TTY)

ATTORNEYS FOR
COMMISSIONER OF PUBLIC SAFETY

Not Reported in N.W.2d, 2004 WL 1445404 (Minn.App.)
 (Cite as: 2004 WL 1445404 (Minn.App.))

Only the Westlaw citation is currently available.

NOTICE: THIS OPINION IS DESIGNATED AS
 UNPUBLISHED AND MAY NOT BE CITED EX-
 CEPT AS PROVIDED BY MINN. ST. SEC.
 480A.08(3).

Court of Appeals of Minnesota.
 Kamran MAKKI, petitioner, Appellant,
 v.
 COMMISSIONER OF PUBLIC SAFETY, Re-
 spondent.

No. A03-1763.
 June 29, 2004.

Hennepin County District Court, File No. IC
 482761.

Paul B. Ahern, Paul B. Ahern, P.A., Minnetonka,
 MN, for appellant.

Mike Hatch, Attorney General, Sean R. McCarthy,
 Assistant Attorney General, St. Paul, MN, for re-
 spondent.

Considered and decided by KALITOWSKI, Presid-
 ing Judge, WRIGHT, Judge, and HUSPENI, Judge.

UNPUBLISHED OPINION
 HUSPENI, Judge.^{FN*}

FN* Retired judge of the Minnesota Court
 of Appeals, serving by appointment pursu-
 ant to Minn. Const. art. VI, § 10.

*1 Appellant challenges the district court's or-
 der sustaining the revocation of his driver's li-
 cense. He contends that his revocation should be rescinded
 because the officer repeatedly advised him that if
 he did not provide an adequate breath sample he
 could retake the test, but when he failed to provide
 a second adequate sample, the officer did not allow

him to retest and instead revoked his driver's li-
 cense. Because the district court did not clearly err
 in determining that appellant refused testing and
 that he was not confused by the officer's comments,
 we affirm.

FACTS

In the early morning hours of July 4, 2004, Po-
 lice Officer Robert Johnston stopped appellant
 Kamran Makki and arrested him for DWI. The of-
 ficer read the implied consent advisory to appellant,
 who agreed to take a breath test.

The officer conducted the test using an Intoxi-
 lyzer 5000, which requires two adequate breath
 samples. A tone sounds as long as the person's
 breath pressure is sufficient; it will stop sounding
 when the pressure is insufficient. The driver has a
 four-minute period to provide each sample.

The tone sounded six times while appellant was
 providing his first breath sample. He nonetheless
 provided an adequate sample that indicated an alco-
 hol concentration of .11. While he was giving the
 second sample, the tone sounded 24 times and he
 did not provide an adequate sample before the four-
 minute period lapsed. The officer explained that ap-
 appellant blew very softly, he stopped and started nu-
 merous times, he blew around the mouthpiece, and
 he would not make a proper seal. The officer con-
 tinually urged appellant to blow and warned him
 that the time would run out and that he would have
 to do it again. The four-minute period lapsed and
 appellant did not provide a second adequate
 sample.

Comments made by the officer during the test-
 ing procedure form the basis of appellant's argu-
 ment that additional testing should have been al-
 lowed. During the production of the first sample,
 the officer commented:

You're going to have to do it over and over and
 over and over if you don't do it right.

Not Reported in N.W.2d, 2004 WL 1445404 (Minn.App.)
 (Cite as: 2004 WL 1445404 (Minn.App.))

....

... It's not going to work if you don't do it. It's going to time out and we're going to have to start all over again. So the more you dink around with it, the longer you're going to be here, okay?

During appellant's attempt to provide the second adequate sample, the officer stated:

You need enough air to keep the tone going or it will not accept the test and you're going to have to keep doing this, okay?

....

Do you want to keep doing this over and over and over?

....

... You're going to time it out.

....

You're going to have to do it all over again.

The officer also warned appellant, however, that he blew a deficient sample because he was "screwing around with the test" and not doing his best, that he should make "a good seal and blow as hard as you possibly can for as long as you possibly can," that the marked difference in the air volume provided during the first and second breath samples was evidence of an intentional refusal to blow as instructed, and that appellant was purposely delaying the test. Despite the officer's comments, appellant continued to ask if he could take the test again, and insisted that he had been doing his best. After concluding the testing and after discussing with appellant whether it was "worth it" to allow him to try the test again, the officer consulted with the sergeant on duty, although not relating to him the content of the discussion with appellant during testing. The decision was made that appellant was not, in fact, cooperating, and that the noncooperation constituted a refusal. No further testing was conducted, and appellant's driver's license was revoked.

*2 Appellant petitioned for judicial review of his license revocation. After a hearing,^{FN1} the district court sustained the license revocation and stated:

FN1. Appellant chose not to testify at the hearing.

The issue here was presented to me in the context first was there a refusal. Second, if there was a refusal ... was it reasonable because the officer said something that was confusing or misleading and because of that, should a second test have been offered.

I don't need briefs.... I listened carefully to the cassette.... I've reviewed carefully the comments on the bottom of the intoxilyzer test record. [Appellant] has no one on the planet earth to blame other than himself for the fact that he didn't give an adequate sample....

He simply, in my mind, as the officer told him at least 15 or 20 times, was screwing around and he refused to take the test....

This appeal followed.

DECISION

Whether a driver refused a test and whether that refusal was reasonable under the implied consent law is a question of fact that will not be set aside unless clearly erroneous. *State, Dep't of Highways v. Beckey*, 291 Minn. 483, 486-87, 192 N.W.2d 441, 444-45 (1971). Conclusions of law will be reviewed de novo. *See Berge v. Comm'r of Pub. Safety*, 374 N.W.2d 730, 732 (Minn.1985).

Under the implied consent law, an officer may require a driver to take a chemical test to determine the presence of alcohol. Minn.Stat. § 169A.51, subd. 1 (2002). When the officer requests a breath test, failure to provide two separate, adequate breath tests constitutes a refusal. Minn.Stat. § 169A.51, subd. 5(c) (2002). A driver may prove as an affirmative defense that the refusal was reasonable. Minn.Stat. § 169A.53, subd. 3(c) (2002).

Not Reported in N.W.2d, 2004 WL 1445404 (Minn.App.)
 (Cite as: 2004 WL 1445404 (Minn.App.))

Appellant concedes, as he must, that failure to provide two adequate breath samples usually constitutes a refusal under the implied consent law. Minn.Stat. § 169A.51, subd. 5(c). But he argues that because of the circumstances present here, the revocation should be rescinded. Appellant argues that during the second four-minute period, the officer "repeatedly insisted" that if appellant did not provide an adequate sample, he would have to take another test. But when the period lapsed, the officer did not allow him to take the test again, even when appellant asked, and instead determined that he refused testing. Appellant argues that where the officer told him that his behavior would lead to one result, taking the test again, but then imposed a more serious sanction, a determination of refusal, his due process rights were violated. At the very least, he contends that the statements were contradictory and confusing and that under the circumstances, the officer was obligated to allow appellant to take the test again before revoking his license for refusal.

We recognize that "due process does not permit those who are perceived to speak for the state to mislead individuals as to either their legal obligations or the penalties they might face should they fail to satisfy those obligations." *McDonnell v. Comm'r of Pub. Safety*, 473 N.W.2d 848, 854 (Minn.1991). A refusal may be reasonable if an officer actively misleads a driver as to the statutory obligation to take an implied consent test. *Id.* at 853-54; *cf. Gunderson v. Comm'r of Pub. Safety*, 351 N.W.2d 6, 7 (Minn.1984) (driver was obligated to submit to testing when officer's comments did not mislead him as to obligation to take test). Whether the driver was in fact confused by the officer's comments is a question of fact for the district court to determine. *See Gunderson*, 351 N.W.2d at 7; *Golinvaux v. Comm'r of Pub. Safety*, 403 N.W.2d 916, 919 (Minn.App.1987). A refusal may be reasonable if the driver is confused about his obligations under the implied consent law. *Gunderson*, 351 N.W.2d at 7. But if the driver is not confused, the revocation will be sustained. *See Golinvaux*,

403 N.W.2d at 919 (affirming district court's finding of no confusion or improper advice as to serious consequences of refusal).

*3 We recognize, also, that a driver's license is an important property interest subject to due process protection. *Bell v. Burson*, 402 U.S. 535, 539, 91 S.Ct. 1586, 1589 (1971). But "[i]mplied consent laws are remedial statutes, and must be liberally interpreted in favor of the public interest and against the private interest of the drivers involved." *Ekong v. Comm'r of Pub. Safety*, 498 N.W.2d 319, 322 (Minn.App.1993).

In a very literal sense, appellant's claim that he did not refuse is understandable—he did not affirmatively decline to take the test. But he had a duty to comply with the test in good faith:

Beyond the duty to make the initial decision of whether or not to submit to a test, the courts have recognized that the implied consent law imposes on a driver a requirement to act in a manner so as not to frustrate the testing process. If a driver does frustrate the process, his conduct will amount to a refusal to test.

Busch v. Comm'r of Pub. Safety, 614 N.W.2d 256, 259 (Minn.App.2000). Further, failure to provide adequate breath samples constitutes refusal. Minn.Stat. § 169A.51, subd. 5(c).

The district court clearly was convinced that appellant did not comply in good faith. That judgment is highly dependent on the fact-finder's assessment of the credibility of the witnesses and of other evidence on the record. We see no clear error in the determination of the district court that there had been no representation that appellant would be provided additional tests, and therefore, that he refused to comply with the testing process.

Finally, appellant argues that the facts are not in dispute because the issue concerns the legal consequences of statements in evidence. This argument, however, is directly contrary to appellant's

Not Reported in N.W.2d, 2004 WL 1445404 (Minn.App.)
(Cite as: 2004 WL 1445404 (Minn.App.))

theory of the case that the officer's comments confused him as to his obligations under the implied consent law. The district court explicitly rejected appellant's argument that the officer confused or misled him, and ruled that appellant had only himself to blame for the fact that he did not provide an adequate sample. This finding is not clearly erroneous.

The district court order sustaining appellant's license revocation is affirmed.

Affirmed.

Minn.App.,2004.
Makki v. Commissioner of Public Safety
Not Reported in N.W.2d, 2004 WL 1445404
(Minn.App.)

END OF DOCUMENT

Not Reported in N.W.2d, 2007 WL 2998969 (Minn.App.)
 (Cite as: 2007 WL 2998969 (Minn.App.))

Only the Westlaw citation is currently available.

NOTICE: THIS OPINION IS DESIGNATED AS
 UNPUBLISHED AND MAY NOT BE CITED EX-
 CEPT AS PROVIDED BY MINN. ST. SEC.
 480A.08(3).

Court of Appeals of Minnesota.

John David BULTMAN, petitioner, Respondent,
 v.

COMMISSIONER OF PUBLIC SAFETY, Appel-
 lant.

No. A06-1857.

Oct. 16, 2007.

Review Denied Jan. 15, 2008.

Dakota County District Court, File No.
 C2-06-12709.

Jason W. Eldridge, Caplan Law Firm, P.A., Min-
 neapolis, MN, for respondent.

Lori Swanson, Attorney General, Emerald A. Gratz,
 Assistant Attorney General, St. Paul, MN, for ap-
 pellant.

Considered and decided by PETERSON, Presiding
 Judge; LANSING, Judge; and KLAPHAKE, Judge.

UNPUBLISHED OPINION

PETERSON, Judge.

*1 In this appeal from an order rescinding the
 revocation of respondent's driver's license under the
 implied-consent law, appellant Commissioner of
 Public Safety argues that the district court erred in
 concluding that respondent's refusal to submit to a
 breath test was reasonable. We reverse.

FACTS

Respondent John David Bultman was arrested
 for driving while impaired (DWI) and transported
 to the Eagan Police Department. It was extremely

cold outside at the time of the arrest. At the police
 department, an officer read Bultman the implied-
 consent advisory. Bultman indicated that he under-
 stood the advisory and asked to speak with an attor-
 ney. After speaking with an attorney, Bultman
 agreed to submit to a breath test. The officer pre-
 pared an Intoxilyzer 5000 to administer a test.
 When the machine was prepared, the officer told
 Bultman that it was time to take the test, and Bult-
 man told the officer that he wanted another 15
 minutes to warm up before providing a breath
 sample. The officer told Bultman that he had four
 minutes to provide a breath sample and that if he
 failed to provide a sample in the time allowed, his
 failure would be deemed a refusal to take the breath
 test.

Bultman testified that there were no clocks in
 the room and he tried to wait as long as he could
 during the four minutes before attempting to take
 the test. Bultman also testified that the officer
 warned him a couple of times that he needed to take
 the test, and he requested more time, but the officer
 was not going to allow that. Before four minutes
 had passed, Bultman stood up and walked to the In-
 toxilyzer. As he was approaching the Intoxilyzer,
 the four-minute period expired, and the Intoxilyzer
 shut down. The officer told Bultman that his
 driver's license was being revoked for refusing to
 take the test.

Bultman's driver's license was revoked, and he
 petitioned for judicial review of the revocation. Fol-
 lowing a hearing, the district court concluded that
 "[Bultman's] refusal to submit to the Intoxilyzer
 5000 test at the Eagan Police Department was based
 upon reasonable grounds." The district court rescin-
 ded the revocation, and this appeal followed.

DECISION

Under certain circumstances, the implied-con-
 sent statute requires the Commissioner of Public
 Safety (commissioner) to revoke a person's license
 to drive if the person refuses to submit to a chemi-

Not Reported in N.W.2d, 2007 WL 2998969 (Minn.App.)
(Cite as: 2007 WL 2998969 (Minn.App.))

al test for the presence of alcohol. Minn.Stat. § 169A.52, subd. 3(a) (Supp.2005). "It is an affirmative defense for the [driver] to prove that, at the time of the refusal, the [driver's] refusal to permit the test was based upon reasonable grounds." Minn.Stat. § 169A.53, subd. 3(c) (Supp.2005). A driver who asserts the affirmative defense of reasonable refusal has the burden of proving reasonableness by a preponderance of the evidence. *Winder v. Comm'r of Pub. Safety*, 392 N.W.2d 21, 24 (Minn.App.1986), review denied (Minn. Oct. 22, 1986).

The questions of whether a person arrested refused to take the test or had reasonable grounds to do so are questions of fact. Where ... the evidence and the inferences to be drawn therefrom conflict, the court holding the hearing must find the facts. Upon appeal, the question presented is whether such findings are supported by the evidence.

*2 *State, Dep't of Highways v. Beckey*, 291 Minn. 483, 486-87, 192 N.W.2d 441, 444-45 (1971).

Findings of fact will be upheld unless they are clearly erroneous. *Ekong v. Comm'r of Pub. Safety*, 498 N.W.2d 319, 321 (Minn.App.1993). "Findings of fact are clearly erroneous only if the reviewing court is left with the definite and firm conviction that a mistake has been made." *Fletcher v. St. Paul Pioneer Press*, 589 N.W.2d 96, 101 (Minn.1999) (quotation omitted).

I.

Beyond the duty to make the initial decision of whether or not to submit to a test, the courts have recognized that the implied consent law imposes on a driver a requirement to act in a manner so as not to frustrate the testing process. If a driver does frustrate the process, his conduct will amount to a refusal to test.

Busch v. Comm'r of Pub. Safety, 614 N.W.2d 256, 259 (Minn.App.2000).

Appellant commissioner argues that Bultman's conduct tended to subvert the testing process and, therefore, operated as a refusal. The district court found that Bultman's conduct did not "evidence an intention to refuse the test" and that "[i]n light of [Bultman's] expressed consent to take the test and affirmative action to approach the machine to provide a breath sample within the time period required by the officer, [the officer's] determination that [Bultman] refused testing is not supported."

We have found no authority that requires a showing of intent to refuse the test in order to prove that a driver's conduct amounts to a refusal. The implied-consent statute specifically provides that "when a test is administered using an infrared or other approved breath-testing instrument, failure of a person to provide two separate, adequate breath samples in the proper sequence constitutes a refusal." Minn.Stat. § 169A.51, subd. 5(c) (2004).^{FN1} Bultman requested an additional 15 minutes to warm up, and when the officer refused his request, Bultman did not make any further demands and apparently attempted to comply with the four-minute time limit. But Bultman's delay in waiting until almost the end of the four-minute testing period before approaching the Intoxilyzer resulted in the failure to provide an adequate breath sample within the four-minute time limit, and under Minn.Stat. § 169A.51, subd. 5(c), this failure constitutes a refusal. See *Cole v. Comm'r. of Pub. Safety*, 535 N.W.2d 816, 818 (Minn.App.1995) (explaining that failure to produce adequate breath sample within four-minute period constitutes refusal and affirming finding that officer provided driver reasonable opportunity to produce a sample even though officer used much of the time changing the mouthpiece and examining the machine); *Frost v. Comm'r of Pub. Safety*, 401 N.W.2d 454, 456 (Minn.App.1987) (affirming finding of refusal when driver refused to take alcohol-concentration test unless his doctor was present).

FN1. Bultman contends in his brief that the officer did not tell him that a complete test

Not Reported in N.W.2d, 2007 WL 2998969 (Minn.App.)
 (Cite as: 2007 WL 2998969 (Minn.App.))

required two breath samples or that in order to complete testing with the Intoxilyzer 5000, a subject must actually perform two tests. But Bultman did not need to produce two breath samples in the four-minute period. See *Cole v. Comm'r. of Pub. Safety*, 535 N.W.2d 816, 818 (Minn.App.1995) (indicating that Intoxilyzer 5000 operators allow a person two four-minute periods to produce two separate, adequate breath samples). Bultman failed to produce even one breath sample during the four-minute period.

II.

The district court found that Bultman's failure to provide a breath sample was not an unreasonable refusal to submit to testing. The court explained:

*3 The officer told [Bultman] that he had four minutes to provide a breath sample into the machine. At no time did the officer explain how long it would take to provide the required breath sample. At approximately 3 minutes and 50 seconds, [Bultman] stood up and approached the Intoxilyzer machine. Just as [Bultman] was reaching for the mouthpiece, the Intoxilyzer timed out. The officer informed [Bultman] that this was a refusal.

... In this case, it does seem that [Bultman] was confused by the officer's explanation that he had four minutes to provide a breath sample. The officer didn't direct [Bultman] to stand up and take the test immediately. The officer simply told [Bultman] he had four minutes to provide a breath sample. It was reasonable for [Bultman] to assume that the officer meant that [Bultman] had four minutes to stand up and blow into the mouthpiece of the machine. [Bultman's] failure to immediately provide a breath sample was not unreasonable in light of the officer's explanation and the absence of any clocks or warnings that the time to provide a breath sample was about to expire and certainly does not evidence an intention to refuse the test.

"A refusal may be reasonable if the police have misled a driver into believing a refusal was reasonable, or if the police have made no attempt to explain to a confused driver his obligations." *Norman v. Comm'r of Pub. Safety*, 412 N.W.2d 22, 23 (Minn.App.1987). But the evidence would not support a finding that the officer who prepared the Intoxilyzer misled Bultman into believing that failing to provide a breath sample within four minutes was reasonable. As the district court found, the officer told Bultman that he "had four minutes to provide a breath sample." This was a correct statement about Bultman's obligation to provide a breath sample. And because Bultman did not inform the officer that he was confused about his rights, the officer had no obligation to clear up any alleged confusion. See *Norman*, 412 N.W.2d at 24 (stating that officer had no reason to clear up driver's alleged confusion about obligation to take test when driver did not inform officer that he was confused about his rights). Bultman argues that his failure to immediately begin taking the test should have indicated confusion to the officer. But because the entire four minutes is not required to provide a sample, Bultman's decision to use some of the allotted time to warm up did not necessarily indicate confusion. Cf. *O'Brian v. Comm'r of Pub. Safety*, 552 N.W.2d 760, 761 (Minn.App.1996) (noting that four-minute period "includes time for interruptions for further instructions, listening to arguments, answering questions and changing mouthpieces"); *Cole*, 535 N.W.2d at 818 (concluding that driver "had the benefit of a four-minute opportunity even though the officer used much of the time changing the mouthpiece and examining the machine").

Furthermore, even if the officer's explanation confused Bultman, and, as a result of the confusion, Bultman believed that he had four minutes to stand up and begin blowing into the mouthpiece of the machine, Bultman did not begin blowing into the mouthpiece within four minutes. Bultman stood up and approached the mouthpiece within four minutes, but he did not reach the mouthpiece before the four-minute period expired. Therefore, the evid-

Not Reported in N.W.2d, 2007 WL 2998969 (Minn.App.)
(Cite as: 2007 WL 2998969 (Minn.App.))

ence does not support a finding that Bultman's refusal was reasonable because his failure to provide a breath sample was caused by confusion about his obligation to submit to a test.

***4 Reversed.**

Minn.App.,2007.

Bultman v. Commissioner of Public Safety

Not Reported in N.W.2d, 2007 WL 2998969

(Minn.App.)

END OF DOCUMENT

Not Reported in N.W.2d, 2011 WL 9166 (Minn.App.)
(Cite as: 2011 WL 9166 (Minn.App.))

Only the Westlaw citation is currently available.

NOTICE: THIS OPINION IS DESIGNATED AS UNPUBLISHED AND MAY NOT BE CITED EXCEPT AS PROVIDED BY MINN. ST. SEC. 480A.08(3).

Court of Appeals of Minnesota.
Mark A. HANSEN, petitioner, Appellant,
v.
COMMISSIONER OF PUBLIC SAFETY, Re-
spondent.

No. A10-749.
Jan. 4, 2011.

Crow Wing County District Court, File No. 18-CV-08-5454.

Charles A. Ramsay, Daniel J. Koewler, Ramsay Law Firm, P.L.L.C., Roseville, MN, for appellant.

Lori Swanson, Attorney General, Kristi A. Nielsen, Assistant Attorney General, St. Paul, MN, for respondent.

Considered and decided by HUDSON, Presiding Judge; ROSS, Judge; and SCHELLHAS, Judge.

UNPUBLISHED OPINION

ROSS, Judge.

*1 The state revoked Mark Hansen's driver's license after a police officer deemed that his providing a weak breath sample constituted refusal to submit to an alcohol-content test in violation of Minnesota's implied-consent law. Hansen moved the district court to compel the state to disclose the Intoxilyzer 5000EN source code so he could prove that a defect in the Intoxilyzer's software caused the machine to reject the breath sample as inadequate. The district court held the source code to be irrelevant because an officer's testimony that Hansen intentionally offered an inadequate breath sample in-

dependently proved that Hansen had effectively refused the test. Because caselaw establishes that only the machine determines breath-sample inadequacy, the officer's observations about the sample's inadequacy does not render irrelevant technical evidence about the machine's proper functioning. We therefore reverse.

FACTS

A natural resources officer stopped Mark Hansen's ATV and noticed that Hansen smelled of alcoholic beverages and had watery eyes. The officer administered a hand-held breath test and arrested Hansen.

Officer Raymond Birkholtz twice attempted to administer a breath test using the Intoxilyzer 5000EN at the Crow Wing County jail. Before each attempt, he performed various diagnostic tests to verify the machine's proper functioning. Hansen verbally agreed to take the test, twice approached the machine, put the tube in his mouth, and exhaled air. Twice the Intoxilyzer 5000EN indicated that he did not expel enough air into its mouthpiece for the machine to calculate his alcohol content.

Birkholtz thought Hansen had merely feigned compliance and that he had intentionally provided an inadequate breath sample by using his tongue to block the mouthpiece and by failing to seal his lips around it when pretending to blow into the machine. He believed that Hansen "was purposely messing with the test and attempting to not provide a sample." He repeatedly told Hansen to make a tight seal around the mouthpiece and exhale steadily. The state revoked Hansen's license for refusing to provide an adequate sample in violation of Minnesota's implied-consent law, Minnesota Statutes section 169A.52 (2008).

Hansen challenged the revocation and moved the district court to compel discovery of the Intoxilyzer 5000EN source code. The court scheduled a combined administrative implied-consent and crim-

Not Reported in N.W.2d, 2011 WL 9166 (Minn.App.)
(Cite as: 2011 WL 9166 (Minn.App.))

inal omnibus hearing, but on the day of the hearing, the parties agreed that they would address only the discovery issue. In addition to Birkholtz's and the arresting officer's testimony, the district court received testimony from Thomas Burr, a forensic expert called by Hansen, and Karin Kierzek, a forensic expert called by the public safety commissioner.

Burr relied on the written records from both tests, the officer's written observations, the machine's maintenance and usage records, police reports, and e-mails between BCA scientists and the Intoxilyzer 5000EN manufacturer regarding testing of the Intoxilyzer 5000EN. He testified that a software problem in the Intoxilyzer 5000EN may have contributed to the machine's inability to test Hansen's breath. He specifically discussed the effects of a software problem related to the machine's ability to test a subject's breath sample:

*2 According to the BCA test, the harder you blow, the more liters are required for you to satisfy the device. So if the subject is blowing and not satisfying the device, you tell them to blow harder, harder. The result of that would be that they will have to have more liters of air than if they don't blow as hard, so to speak.

Burr also testified that the Intoxilyzer's manufacturer identified and fixed the software problem, but that the corrected version of the software was never implemented by the BCA. He said that Hansen's access to the source code would help show whether Hansen had intentionally deceived the system or whether the deficient sample was instead the result of a software problem. He opined that the software error could have caused the machine's failure to register the sample regardless of whether Hansen had made a tight seal:

If a person steps up and blows into an Intoxilyzer, the fact that air leaks around the mouth piece is of no consequence. That happens all the time. That's very common. I've done thousands of breath tests and that's very common and it doesn't

prohibit people from giving samples in a properly designed sampling system.

Karin Kierzek, a BCA scientist, acknowledged the existence of the software error but opined that the error was not related to the Intoxilyzer's inability to register Hansen's sample. She explained that the BCA had learned that one tested individual had been unable to cause the machine to register her breath sample after "blowing incredibly hard." She and two colleagues successfully replicated the problem in testing. She testified that they found that when blowing "eye-popping hard," there is a large increase in the volume of air needed to accept a sample, if the machine will accept it at all.

After that evaluation, BCA scientists asked the Intoxilyzer's manufacturer about the sample-acceptance problem. The manufacturer sent the BCA a software update, but Kierzek did not believe that the update was related to the problem. Kierzek acknowledged that she is "potentially" aware of a problem with the current version of software that would cause the machine to reject what should be a valid breath sample. She knows that the Intoxilyzer's manufacturer "purportedly" provided the BCA with a fix to correct the sampling problem, but she testified that the BCA did not test it.

The district court denied Hansen's request to compel discovery. It held that the source code was irrelevant because Officer Birkholtz's testimony that Hansen appeared to intentionally avoid blowing directly into the machine was sufficient to prove that Hansen had refused the test by his conduct regardless of any sample-acceptance technical failure. A second hearing was scheduled for remaining issues but the district court struck that hearing from its calendar after it concluded that Hansen had previously waived all other issues. It sustained the license revocation. Hansen appeals.

DECISION

*3 Hansen challenges his license revocation. The public safety commissioner may revoke an individual's driver's license if a peace officer has

Not Reported in N.W.2d, 2011 WL 9166 (Minn.App.)
 (Cite as: 2011 WL 9166 (Minn.App.))

probable cause to believe that he was driving while impaired and he “refused to submit to a test.” Minn.Stat. § 169A .52, subd. 3(a) (2008). The driver may petition for post-revocation review through an implied-consent hearing governed by the Minnesota Rules of Civil Procedure. Minn.Stat. § 169A.53, subd. 2(d) (2010). Hansen contends that the district court should have allowed him to discover the source code and that it should not have deemed his other issues to be waived.

I

First we address whether the district court erred by denying Hansen's motion to compel the state to disclose the Intoxilyzer 5000EN source code. We review district court discovery orders for abuse of discretion. *In re Comm'r of Pub. Safety*, 735 N.W.2d 706, 711 (Minn.2007). And we reverse if “the district court made findings unsupported by the evidence or ... improperly appl[ie]d the law.” *Id.* The combined implied-consent and omnibus hearing was governed by separate but similar discovery rules. Minnesota Rule of Civil Procedure 26.02(a) permits discovery of any matter “relevant to a claim or defense,” and Minnesota Rule of Criminal Procedure 9.01, subd. 2(3) permits discovery of any matter relevant “to the guilt or innocence of the defendant.”

The seminal case for determining whether the Intoxilyzer's source code is relevant under the criminal rule is *State v. Underdahl (Underdahl II)*, 767 N.W.2d 677 (Minn.2009), which illustrates two points on the relevancy continuum. That case held that a failure to make any “threshold evidentiary showing [of relevance] whatsoever” would justify a finding of irrelevance. *Id.* at 685. But it also held that attaching to the motion “source code definitions, written testimony of a computer science professor that explained issues surrounding the source codes and their disclosure, and an example of a breath-test machine analysis and its potential defects,” and explaining how “an analysis of the source code may reveal deficiencies that could challenge the reliability of the Intoxilyzer and, in

turn, would relate to [a defendant's] guilt or innocence,” was sufficient to show relevance to compel discovery of the source code. *Id.* at 686.

Hansen provided sufficient evidence to support his theory that the source code was relevant in the *Underdahl II* framework. He presented expert testimony that a software problem could have caused the Intoxilyzer not to register his sample even if he blew the requisite amount of air into the machine. The state's expert not only acknowledged one actual occurrence of machine failure, she also described simulated occurrences in which the Intoxilyzer was unable to register the breath sample of individuals blowing into the machine. Hansen's expert also pointed to a number of other inconsistencies and concerns about the Intoxilyzer software, focusing on the amount of breath required for the machine to obtain an objectively testable sample.

*4 The district court relied on the officer's subjective assessment to hold that the source code was irrelevant because Hansen refused testing by his conduct. This reasoning is certainly logical, and we have no reason to doubt the quality of the officer's observations. But relying on the officer's reasonable observations alone to determine that the breath sample is inadequate is inconsistent with the statute as interpreted by caselaw. Under the relevant statute, “when a test is administered using an infrared or other approved breath-testing instrument, failure of a person to provide two separate, adequate breath samples in the proper sequence constitutes a refusal.” Minn.Stat. § 169A.51, subd. 5(c) (2008). And “a sample is adequate if the instrument analyzes the sample and does not indicate the sample is deficient.” *Id.*, subd. 5(b). We have held that an identically worded statute “makes it clear that the Intoxilyzer, not the police officer, is to determine the adequacy of a breath sample.” *Genia v. Comm'r of Pub. Safety*, 382 N.W.2d 284, 286 (Minn.App.1986). And we found no statutory authority that, once the breath test began, “a refusal can be based on an officer's conclusion that a driver is not making a good-faith effort to provide an ad-

Not Reported in N.W.2d, 2011 WL 9166 (Minn.App.)
 (Cite as: 2011 WL 9166 (Minn.App.))

equate sample.” *Id.*

Genia controls here. Hansen stepped to the machine and blew air into it sufficient to cause the machine to engage and to assess the testability of the quantity of air that Hansen was providing. So the breath test had begun. Because Hansen was blowing at least some air into the machine sufficient to begin the test, the machine was able to definitively determine the inadequacy of his sample. The officer's testimony might corroborate the machine's assessment that Hansen provided an inadequate quantity of air for the machine's qualitative testing, but that testimony does not render the machine's determinative assessment irrelevant. *See id.*

Because the district court denied Hansen's request for discovery by relying on the officer's subjective testimony about Hansen's conduct without regard to the greater significance of the machine's inadequacy assessment, it mistakenly deemed the machine's assessment irrelevant. We therefore reverse and remand to the district court to consider Hansen's motion to compel discovery in light of the relevance of the machine's proper functioning when it rejects a breath sample based on quantitative inadequacy.

II

Because further proceedings will occur on remand, we also address whether the district court violated Hansen's due process rights by concluding that he waived his right to contest all other issues in his implied-consent hearing. We review *de novo* due process issues that can be decided on undisputed facts. *Bendorf v. Comm'r of Pub. Safety*, 727 N.W.2d 410, 413 (Minn.2007). And we will rely on a district court's findings of fact unless they are clearly erroneous. Minn. R. Civ. P. 52.01.

The record demonstrates that all parties were apparently confused about the scope of the combined administrative implied-consent and criminal omnibus hearing. Before it began, the court asked Hansen's attorney, Charles Ramsay, to clarify the issues for the hearing. Ramsay listed four issues, in-

cluding Hansen's motion to compel discovery of the source code. After reciting all four issues, the district court asked, “So all other issues raised in the Notice of Motion and Motion dated October 14, 2008, are waived?” Ramsay replied, “Yes, Your Honor.”

*5 But moments after this waiver, Ramsay qualified it. He said, “I'm uncomfortable having the sole issue or that there is a sole issue there. We are not waiving all of our issues in the Implied Consent case. We just think that we need to first necessarily address the discovery issue.” The district court responded, “All right. So you want it treated as a discovery motion, reserving all other issues under the implied [consent] motion?” Ramsay replied, “Yes, please.”

Kristi Neilsen, attorney for the state said, “[B]ut in light of the sole issue being whether or not the Source Code is needed, I guess I would ask for the Court's direction on how much testimony you would like.” The district court responded:

I see that it being a motion for discovery based upon the argument that the State should have incorporated its modified software into its system that would have addressed the issue that Counsel is raising as far as potentially deficient samples, and that I think is the issue, and then once we got past that hurdle, the issue of sustaining or not sustaining the revocation will go to your argument of whether or not it was a reasonable refusal.

Ramsay again clarified that the extant issue regarded discovery, and, citing *Underdahl II*, stated,

[A]s long as we make it a very limited threshold showing, we're entitled to the Source Code. The question here, I believe, is what is the Source Code that we're entitled to? Are we entitled to just what has been provided or permitted under the federal settlement, or are we entitled to more? And that's how I see the hearing today, Your Honor, to determine that.

Not Reported in N.W.2d, 2011 WL 9166 (Minn.App.)
 (Cite as: 2011 WL 9166 (Minn.App.))

Hansen and the commissioner now disagree about whether the discussion indicates Hansen's intent to waive all issues except the discovery contest. But we are convinced from this record that Hansen did not intentionally waive any other issue. The district court's order denying discovery of the source code expressly reserved all other issues. In both the order and the amended order, the district court stated, "The issue presented to the court was whether Petitioner is entitled to discovery of the source code for the Intoxilyzer 5000EN ("Source Code"). All other issues identified in the petition were reserved by Petitioner."

The district court's description of Hansen's reservation of issues is well supported. Given Ramsey's statement expressly reserving all other issues, the district court's acknowledgment that the other issues were reserved, and the actual scheduling of an implied-consent hearing to resolve the other issues, the district court reasonably perceived that Hansen reserved all other issues.

In light of this, the district court's statement in its later order that "[a]t the outset of the hearing ... [a]ll other issues were waived" is puzzling. That order amounts to the district court's *sua sponte* reversal of its earlier decision that Hansen had reserved the issues at the hearing, and the reversal came without notice to Hansen or without explanation. Both the United States and Minnesota constitutions provide that a person may not be deprived of life, liberty or property without due process of law. *See* U.S. Const. amend XIV, § 1; Minn. Const. Art. I, § 7. A driver's license is property. *Bell v. Burson*, 402 U.S. 535, 539, 91 S.Ct. 1586, 1589 (1971). For license revocations, "[d]ue process requires a ... meaningful postrevocation review." *Fedziuk v. Comm'r of Pub. Safety*, 696 N.W.2d 340, 346 (Minn.2005). At a minimum, "the petitioner [must] be given the right to compel witnesses to attend the hearing and to cross-examine persons who prepared [police or lab] reports." *Id.* By reversing itself *sua sponte* and without notice to conclude that Hansen waived all remaining issues, the district

court prevented Hansen from initial or appellate consideration of his previously asserted revocation issues other than the discovery issue. It is impossible for Hansen to have both reserved and waived the remaining issues, so the best explanation is that a mistake was made arising from the confusion. On remand, the district court should reconsider Hansen's discovery motion in light of our holding and address the unwaived issues.

***6 Reversed and remanded.**

Minn.App.,2011.

Hansen v. Commissioner of Public Safety
 Not Reported in N.W.2d, 2011 WL 9166
 (Minn.App.)

END OF DOCUMENT

AFFIDAVIT OF SERVICE BY U. S. MAIL

STATE OF MINNESOTA)
) ss.
COUNTY OF RAMSEY)

**Re: *In re Minnesota Intoxilyzer 5000EN Source Code Litigation in Implied Consent Cases, and
In re Minnesota Intoxilyzer 5000EN Source Code Litigation in Criminal Cases***
Court File Nos. 70-CV-09-19459 & 70-CR-09-19749

DEANNA DONNELLY, being first duly sworn, deposes and says:

That at the City of St. Paul, County of Ramsey and State of Minnesota, on January 31, 2011, she caused to be served the **COMMISSIONER OF PUBLIC SAFETY'S POST-HEARING BRIEF**, by depositing the same in the United States mail at said city and state, true and correct copy(ies) thereof, properly enveloped with prepaid first class postage, and addressed to:

Charles A. Ramsay, Esq.
2780 Snelling Avenue North, Suite 330
Roseville, MN 55113
charles@ramsayresults.com

Marsh Halberg
HALBERG CRIMINAL DEFENSE
3800 American Boulevard West, Suite 1590
Bloomington, MN 55431
MHalberg@halbergdefense.com

Jeffrey S. Sheridan, Esq.
STRANDEMO, SHERIDAN & DULAS
320 Eagandale Office Center
1380 Corporate Center Curve
Eagan, MN 55121
jsheridan@strandemoandsheridan.com

Derek A. Patrin, Esq.
MEANEY & PATRIN, P.A.
7582 Blackoaks Lane N.
Maple Grove, MN 55311
derek@dwiguys.com

Pam King
Assistant Public Defender
400 South Broadway, Suite 15
Rochester, MN 55904
Pam.king@pubdef.state.mn.us

Deanna Donnelly
DEANNA DONNELLY

Subscribed and sworn to before me on January 31, 2011.

Sandra A. Bush
NOTARY PUBLIC

AG: #2763632-v1

