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Currency Contamination and Drug-Sniffing Canines: Should Any Evidentiary Value Be Attached to a Dog's Alert on Cash?

BY ANDY G. RICKMAN*

INTRODUCTION

Police seize money from thousands of people each year because a dog with a badge sniffs, barks, or paws to show that bills are tainted with drugs. If a police officer picks you out as a likely drug courier, the dog is used to confirm that your money has the smell of drugs. But scientists say the test the police rely on is no test at all because drugs contaminate virtually all the currency in America.¹

Studies have shown that a large amount of the United States' cash supply is contaminated with cocaine residue.² This Note will discuss the legal impact of these studies. Part I will discuss some of the major studies.³ Part II will provide a detailed analysis of how the currency becomes contaminated.⁴ Part III will examine the detection capabilities of drug sniffing police canines.⁵ Part IV will scrutinize the evidentiary value of a canine's alert to drugs on currency.⁶ Part V will analyze the effect of currency contamination on civil forfeiture proceedings.⁷ Finally,

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³ See infra notes 8-52 and accompanying text.

⁴ See infra notes 53-72 and accompanying text.

⁵ See infra notes 73-99 and accompanying text.

⁶ See infra notes 100-40 and accompanying text.

⁷ See infra notes 141-60 and accompanying text.
the Note will conclude that a canine’s alert to cash should not routinely be given evidentiary value or used to bolster reasonable suspicion for search or seizure.

I. THE VAST CONTAMINATION OF THE UNITED STATES’ CASH SUPPLY

Due to the reports of high levels of drug contaminated currency, a study was conducted by The Miami Herald in 1985 wherein eleven local citizens each supplied The Miami Herald with a twenty-dollar bill for testing purposes.\(^8\) Some of the citizens who participated in the study included: then-state attorney, Janet Reno; the Catholic Archbishop; then-first son, Jeb Bush; former Miss America, Kylene Barker Brandon; and the Broward County sheriff, Nick Navarro.\(^9\)

The results of the study showed that ten out of the eleven bills were significantly contaminated with cocaine residue.\(^10\) The Broward County sheriff, who was the only one to submit a clean twenty, apparently knew what was going on and submitted a brand-new bill.\(^11\)

In April of 1992, another test was conducted in Orlando, Florida, wherein reporters from The Orlando Sentinel Tribune approached unsuspecting community leaders and traded cash with them.\(^12\) The community leaders who allowed some of their cash to be examined for cocaine residue included: a police chief, a circuit judge, a state senator, a mayor, a community college president, the editor of The Orlando Sentinel Tribune, a minister, and a county chairman.\(^13\) The results of the test showed that every one of the used bills taken from the community leaders tested positive for cocaine contamination.\(^14\) The test conducted by The Orlando Sentinel Tribune is significant because microscopic quantities of cocaine have allowed the government to seize tens of millions of dollars in Florida alone.\(^15\)

\(^9\) Id.
\(^10\) Id.
\(^12\) Jeff Brazil & Steve Berry, You May Be Drug Free, But Is Your Money?, Orlando Sentinel Tribune, June 15, 1992, at A6.
\(^13\) Id.
\(^14\) Id. (Two of the bills tested were clean, but these bills were new and unused.)
\(^15\) Id.
Along with the tests in Florida, Dr. Jay Poupko, a toxicologist, has performed numerous studies on the subject of currency contamination. Dr. Poupko and his associates have consistently examined cash from Austin, Dallas, Los Angeles, Memphis, Miami, Milwaukee, New York City, Pittsburgh, Seattle, and Syracuse. The results of Dr. Poupko’s tests show that 96% of cash in the United States is contaminated with cocaine residue. Furthermore, Dr. Poupko examined cash from banks throughout the Northeast and found that every bill tested positive for cocaine. Dr. Poupko stated that “I don’t think any rational-thinking person can dispute that almost all the currency in this country is tainted with drugs.”

In another survey, which supported Dr. Poupko’s findings, Dr. Lee Hearn, a toxicologist, tested 135 individual bills ranging from one to one hundred dollars in denomination, from banks in twelve different cities across the country. Of the 135 bills tested, 131, or approximately 97%, were contaminated with cocaine residue. The four bills that did not show signs of contamination were new and unused. The least amount of cocaine that Dr. Hearn detected on the bills was a few nanograms and the most was 270 micrograms, with the average being 7.3 micrograms per bill.

Dr. Hearn’s results have been confirmed by Dr. Frederic Rieders, who is the Laboratory Director of National Medical Services in Willow Grove, Pennsylvania. Dr. Rieders believes that the United States’

\footnote{16 Dr. Poupko works at Toxicology Consultants Inc. in Miami and has studied currency contamination over a seven-year period.}
currency supply is so contaminated with cocaine that tellers at banks could absorb enough cocaine through the palms of their hands that it could be detected in their urine.\textsuperscript{30}

Along with the findings of Drs. Poupko, Hearn, and Rieders, Dr. James Woodford,\textsuperscript{31} a forensic chemist, stated that it is highly likely that everyone in the United States is carrying cash that would test positive for drugs.\textsuperscript{32} Also, Wayne Morris,\textsuperscript{33} a toxicologist, has asserted in numerous criminal proceedings that there are cities in which 90% of the currency is contaminated with cocaine.\textsuperscript{34}

Furthermore, Toxicology Testing Service, Inc., a Miami, Florida, corporation, has conducted numerous studies showing that ten out of every eleven bills nationwide will test positive for cocaine.\textsuperscript{35} In one study, the corporation conducted a test in Orange County, California, wherein twenty-four bills were randomly selected and tested for cocaine.\textsuperscript{36} The results showed that every bill was contaminated with cocaine.\textsuperscript{37}

The Ninth Circuit was recently confronted with the contamination problem when testimony from forensic expert Jay B. Williams\textsuperscript{38} came before the court.\textsuperscript{39} Mr. Williams stated that he has tested various denominations of cash taken "from noncriminal sources, such as banks, casinos, department stores and restaurants, in various cities throughout the western United States."\textsuperscript{40} Mr. Williams' results showed that 75% of the

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\textsuperscript{30} Id.

\textsuperscript{31} Dr. Woodford is a noted forensic toxicologist who has performed numerous studies on the subject of currency contamination.

\textsuperscript{32} Curriden, \textit{supra} note 8, at 22.

\textsuperscript{33} Wayne Morris owns Morris Forensics Inc. in Winter Park, Florida. Morris is a former crime-laboratory specialist for the Florida Department of Law Enforcement.

\textsuperscript{34} Brazil & Berry, \textit{supra} note 12, at A6.


\textsuperscript{36} Id.

\textsuperscript{37} Id.

\textsuperscript{38} Mr. Williams is a forensic expert who has specialized in drug and alcohol analysis for over twenty-four years.

\textsuperscript{39} United States v. $30,060, 39 F.3d 1039, 1042 (9th Cir. 1994).

\textsuperscript{40} Id. (paraphrasing Mr. Williams).
paper money in Los Angeles, the city in question, was contaminated with cocaine residue. The amount of cocaine present on each bill ranged from milligrams to nanograms.

In addition to all the private studies that have been conducted on currency contamination, a scientist working for the Drug Enforcement Administration ("DEA") performed a study in 1987 suggesting that traces of cocaine contaminate one-third of all the cash in the Federal Reserve Building in Chicago. The scientist even found cocaine residue on the agency's fast-moving sorting equipment and concluded that cocaine was more than likely being transferred to other currency. The scientist's report concluded that chemical analysis of cash for law enforcement or seizure purposes should be discontinued.

In addition to the DEA's findings, Steven Fike, a representative of the United States Customs Laboratory in San Francisco, found, based on his examinations of currency in 1987, that 70% of the United States' cash supply would test positive for cocaine. As compared to three years earlier, this was an increase of ten to fifteen percent.

Moreover, Congress has recognized that currency contamination is a problem. United States Representative Henry Hyde of Illinois has adopted the finding that 97% of the folding currency in the United States would test positive for drugs.

Hence, even though the studies disagree as to the exact percentage, there is no doubt that currency contamination is a significant problem in the United States. This raises the question of how United States currency becomes contaminated with drugs.

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41 Id.
42 A millgram is one-thousandth of a gram.
43 §30,060, 39 F.3d at 1042.
44 Curriden, supra note 8, at 22.
45 Id.
46 Id.
47 Nation's Money Supply Dusted with Cocaine, supra note 35.
48 This article came out in 1987; thus, three years earlier would be referring to 1984.
49 Id.
51 Id.
II. HOW DOES UNITED STATES CURRENCY BECOME CONTAMINATED?

Dr. Hearn believes that United States currency becomes contaminated with cocaine residue in the following ways: (1) by users of the drug rolling up their bills to snort the cocaine powder; (2) by users folding up their cash and carrying the powder in their wallets; and (3) by users and dealers touching their cash after handling cocaine. Dr. Hearn suggests that the rampant spreading of contaminated currency starts when bills get passed around and the cocaine residue moves "from bill to bill in wallets, in cash registers, and in banks." Banks contribute to the spreading of contaminated cash because tellers spread grains of cocaine when they count and recount the bills, pressing one bill against another. Speaking to the size of the currency contamination problem, Dr. Hearn stated that "[t]he police could go into any bank in the country and seize all their money."

Along with the reasons given by Dr. Hearn for the spreading of currency contamination, Steve Graham, Assistant United States Attorney, has another idea as to how currency contamination starts. Graham stated that cocaine is a cash business. Thus, contamination occurs because drug dealers and users keep their cocaine and cash in the same area. This allows cocaine dust, which can be carried in the air, to settle on the surrounding currency.

In addition, when drug dealers exchange large quantities of cash in cocaine-related transactions, cocaine grains will scatter and stick to the bills. It is in the nature of cocaine that it is easily transferable, and this fact has been recognized by the Ninth Circuit in accepting that:

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53 Dr. Hearn is the Chief Toxicologist at the Dade County Medical Examiner’s Office in Miami. See supra note 22.

54 Crime and Chemical Analysis, supra note 23, at 1555.

55 Id. (paraphrasing Dr. Hearn).


57 Crime and Chemical Analysis, supra note 23, at 1555.

58 Graham investigates drug cases in San Francisco.

59 Nation’s Money Supply Dusted with Cocaine, supra note 35.

60 Id.

61 Id.

62 United States v. $30,060, 39 F.3d 1039, 1042 (9th Cir. 1994).
“Cocaine can be easily transferred simply by shaking hands with someone who has handled the drug: a pharmacist, toxicologist, police officer, or drug trafficker.” In fact, “a single bill used to snort cocaine or mingled with the drug during a transaction can contaminate an entire cash drawer.” Those bills go on to contaminate others as they pass through cash registers, wallets, and counting machines.63

Along with the Ninth Circuit, the Sixth Circuit, in trying to answer the question of why this country’s cash is so contaminated with cocaine, found that “one out of every three circulating bills has been involved in a cocaine transaction.”64 The Third Circuit is also aware of the problem. In a 1994 decision, Judge Becker of the Third Circuit stated that:

Drug-tainted money is passed around as quickly and as effortlessly as money not tainted with illegal drugs, and given the vast amounts of cash apparently consumed by the black market in drugs it is easily conceivable that, as the studies indicate, between 70%-97% of all used bills come tainted with traces of illegal drugs.65

In addition to the previously mentioned reasons, currency contamination is spreading because of Federal Reserve Banks. Evidence shows that cocaine residue contaminates the very belts used to sort the cash at Federal Reserve Banks.66 Estimates are that 200 nanograms of cocaine contaminate each belt at Federal Reserve Banks.67

Furthermore, a federal district court in Tennessee, in Jones v. U.S. Drug Enforcement Administration,68 adopted some of the aforementioned findings when it stated that:

The presence of trace narcotics on currency does not yield any relevant information whatsoever about the currency’s history. A bill

63 Id. (citations omitted) (quoting Judith D. Wolferts, Note, In re One Hundred Two Thousand Dollars: Cash-Friendly Civil Forfeiture, 1993 UTAH L. REV. 971, 979 and Price, supra note 29, at D6).

64 United States v. $5,000, 40 F.3d 846, 849 (6th Cir. 1994) (citing R. SIEGEL, INTOXICATION 293 (1989)).


67 Id.

68 Id.
may be contaminated by proximity to a large quantity of cocaine, by its passage through the contaminated sorting machines at the Federal Reserve Banks, or by contact with other contaminated bills in the wallet or at the bank. 69

Although currency contamination can be caused in a variety of ways, including many standard banking procedures, seizing agencies are still placing confiscated tainted currency back into banks. 70 Of twenty-one seizing agencies71 interviewed, every one stated that the contaminated cash was deposited into the bank after it was processed.72

Due to all the ways currency can become contaminated and the large amounts of contaminated currency presently in circulation, the question becomes whether a drug-trained canine can detect the minute amounts of drugs that contaminate the cash.

III. DETECTION CAPABILITIES OF DRUG-SNIFFING CANINES

Along with demonstrating the vastness of currency contamination, the test conducted by The Orlando Sentinel Tribune73 suggested that the amounts of cocaine found on the samples could easily be detected by drug-trained canines.74 In addition, Dr. Woodford75 found that a drug-sniffing dog would be able to detect cocaine on 90% of all United States currency.76 Dr. Woodford stated that, although some of the bills "contain as little as a millionth of a gram of cocaine, . . . that is many times more cocaine than is needed for a dog to alert."77

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69 Id.
70 Wolferts, supra note 63, at 980.
71 A seizing agency is a government agency that confiscates property used in the commission of a crime, as well as the proceeds of a crime. See the definition of "forfeiture" in BLACK'S LAW DICTIONARY 650 (6th ed. 1990).
72 Wolferts, supra note 63 (referring to a six-part newspaper series on civil forfeiture).
73 See supra notes 12-15 and accompanying text.
74 Brazil & Berry, supra note 12, at A6.
75 Dr. Woodford is a noted forensic toxicologist who has performed studies on currency contamination. See supra notes 31-32 and accompanying text.
76 United States v. $639,558, 955 F.2d 712, 714 n.2 (D.C. Cir. 1992).
77 Id. (paraphrasing Dr. Woodford).
Moreover, the court in *Jones* noted that drug-trained canines are highly perceptive in detecting the presence of cocaine. Courts in other jurisdictions have found that drug-trained canines will alert to cocaine even in the extremely minute amounts that are present on tainted cash. A prominent trainer of drug-sniffing canines stated that scientific studies show that canines can alert to the presence of odors in parts per trillion. If this is true, and it is combined with Dr. Hearn's conclusion, then an interesting analysis can be set forth.

First, if drug-trained canines have the ability to detect traces of cocaine in parts per trillion, then even using the smallest amount of cocaine contamination found by Dr. Hearn—a few nanograms per bill—this scent would still be 1000 times stronger than necessary to alert a trained canine. If Dr. Hearn's average of 7.3 micrograms is used, then the scent of cocaine would be at least 1,000,000 times stronger per bill than necessary to alert a trained canine.

Therefore, if Dr. Hearn's conclusion that 97% of all currency is contaminated with cocaine residue is anywhere close to being correct, then a drug-trained canine could easily detect cocaine on cash carried by anyone. It should be noted that the previous analysis is in regard to the capabilities of a drug-sniffing canine alerting to one bill. If a person were carrying multiple bills, simple multiplication can be used to illustrate how

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79 *Id.*
80 This particular trainer works on the West Coast where he helped pioneer the art of training canines for law enforcement in the areas of explosives and narcotics detection. *See* People v. Sommer, 16 Cal. Rptr. 2d 165, 169 (Cal. Ct. App. 1993).
81 *Id.* at 170. One-trillionth is the same as 1/1,000,000,000,000.
82 Dr. Hearn is the Chief Toxicologist at the Dade County Medical Examiner's office in Miami. *See supra* note 22.
83 *See supra* notes 22-28 and accompanying text. Dr. Hearn's conclusion was that 97% of United States currency is contaminated with at least a few nanograms of cocaine, with the average amount being 7.3 micrograms per bill.
84 A nanogram is one-bilionth of a gram, 1/1,000,000,000,000.
85 A trillion is a thousand times larger than a billion. One-billionth of a gram is a nanogram.
86 A microgram is one-millionth of a gram, 1/1,000,000.
87 A trillion is a million times larger than a million. One-millionth of a gram is called a microgram.
88 *See supra* notes 22-28 and accompanying text.
many times greater the scent of drugs on the currency would be over what would be needed for a drug-canine to alert at a minimum level.

In addition to the previous findings, Sgt. White, who works with the Canine Training Center and is part of the Metro Police Canine Unit in Washington, D.C., stated that "if a dog was instructed to search for drugs on a person and the person was carrying drug-tainted cash in his wallet, then the dog could detect the drugs and alert."\(^{89}\) Sgt. White emphasized that whether a canine would alert in a specific case would depend on the amount of contamination and the training of the dog.\(^{90}\)

Sgt. White also noted that "it is certainly possible and may be probable" that a person who innocently received some drug-tainted cash in the amount of three or four twenties and had it in his wallet could trigger an alert by a drug-trained canine.\(^{91}\) However, he pointed out that an officer would have had to instruct the dog to search for the drugs, and whether an officer decided to have a canine search for drugs would depend upon the officer and the situation.\(^{92}\)

In addition, according to Wayne Morris,\(^{93}\) it is likely that a drug-sniffing canine will alert to the presence of cocaine on anyone carrying used cash in the state of Florida.\(^{94}\) Likewise, according to Don Samuel, a criminal defense attorney, the problem with canines is that their detection abilities are so strong they can detect drugs on everyone's cash.\(^{95}\) Hence, even if just 70% of United States currency is contaminated with cocaine, then all canine alerts to cash should come to a halt.\(^{96}\) Moreover, Dr. Hearn stated that "[i]t would not surprise me that a dog would alert to a stack of money containing just one contaminated bill . . . and that is like making it illegal to carry cash."\(^{97}\)

A drug-trained canine's alert to cash will generally lead to an arrest and prosecution on drug charges. At this point, the issue of currency contamination comes before the court as an evidentiary matter.\(^{98}\) If

\(^{89}\) Telephone Interview with Sgt. White, Washington D.C. Metro Police Canine Unit (July 1, 1996).

\(^{90}\) Id.

\(^{91}\) Id.

\(^{92}\) Id.

\(^{93}\) See supra note 33.

\(^{94}\) Brazil & Barry, supra note 12, at A6.

\(^{95}\) Curriden, supra note 8, at 22.

\(^{96}\) Id. (quoting Samuel — 70% was the most recent estimate at the time Samuel was interviewed).

\(^{97}\) Price, supra note 29, at D6.

\(^{98}\) United States v. $80,760, 781 F. Supp. 462, 476 (N.D. Tex. 1991) (stating
almost all the cash in the United States is contaminated with at least trace amounts of cocaine\textsuperscript{99} and drug-trained canines can detect trace amounts, then the evidentiary value of a canine's alert to cash could be called into question.

IV. THE EVIDENTIARY VALUE OF CONTAMINATED CURRENCY

Contrary to prevailing views, I insist that the use of dogs and technological devices to detect items concealed with a reasonable expectation of privacy constitutes a species of search. I sorely dread the day when police will routinely patrol neighborhoods and with impunity search every person, vehicle, or house at whom or at which the dog barks or the beeper beeps.\textsuperscript{100}

A dog's alert\textsuperscript{101} to currency is often used to support a police officer's claim of reasonable suspicion.\textsuperscript{102} In addition, a canine's alert

that courts should "seriously question[ ] the value of a dog's alert without other persuasive evidence"). The reason a canine's alert on cash places the issue of currency contamination before the court is that the judge does not know how the drugs got there:

The presence of trace narcotics on currency does not yield any relevant information whatsoever about the currency's history. . . [A]lthough the positive dog alert [ ] links the currency to controlled substances, it does not link the claimants' use of the defendant currency to controlled substances.


\textsuperscript{99} \textit{See supra} notes 8-52 and accompanying text.

\textsuperscript{100} \textit{Raglin v. Commonwealth}, 812 S.W.2d 494, 496 n.4 (Ky. 1991) (Combs, J., dissenting).

\textsuperscript{101} An alert from a dog can come in a variety of forms depending upon how the dog is trained. For instance, some canines are trained to bark or paw when they detect drugs. \textit{Virtually All U.S. Paper Money Is Contaminated with Cocaine, supra} note 1, at A8. In one case, the court described a canine that "'showed a strong, positive aggressive alert, shaking the bag, ripping it apart, grabbing the money in his mouth, and ripping the money.'" \textit{United States v. Saccoccia}, 58 F.3d 754, 776 (1st Cir. 1995) (quoting the canine's trainer), \textit{cert. denied}, 116 S. Ct. 1322 (1996). Conversely, some canines are trained to sit down when they detect drugs. \textit{People v. Sommer}, 16 Cal. Rptr. 2d 165, 170 (Cal. App. 6 Dist. 1993).

\textsuperscript{102} Nkechi Taifa, \textit{Civil Forfeiture vs. Civil Liberties}, 39 N.Y.L. SCH. L. REV. 95, 106 (1994).
to cash has been used as one of the evidentiary factors to validate searches on potential suspects. If almost all currency is contaminated, then officers could turn their dogs loose on almost anyone carrying cash, and after the dog alerts, harass the person by searching him or her.

Consider the following hypotheticals:

(1) A woman goes to an ATM and withdraws $100 in cash. On her way home, she goes through a police roadblock where an officer instructs a drug-trained canine to search her for drugs. Based on the studies, it is very likely that the woman is carrying cocaine-tainted bills and that the canine will alert to her. If the dog alerts to the woman because the bills that she received from the ATM are contaminated with trace amounts of cocaine, she could be subjected to the continued nuisance of a search of herself and her car.

(2) A man goes to a grocery store and buys some groceries, receiving cash back from the clerk. While driving home, he is pulled over for a traffic violation. If the officer conducts a search using a drug-trained dog, it is possible that the dog would alert to the cash the man received from the grocery store in change. Thus, the man could be subjected to an annoying search.

(3) A waiter who receives tips from customers all night is very likely carrying drug-tainted currency. If an officer directed a drug-sniffing canine to sniff the waiter, the dog would probably alert.

(4) If airport security guards saw a person that they thought was suspicious and brought in a drug-sniffing canine, the dog could alert to the individual even if he was not carrying drugs as long as the individual was carrying cash. Thus, the person might be stopped and harassed merely because he was carrying cash.

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104 See United States v. Carr, 25 F.3d 1194, 1215-17 (3d Cir. 1994) (Becker, J., concurring in part and dissenting in part) (noting that anyone could carry drug-tainted cash, yet not be a “drug trafficker . . . or a money launderer.” Id. at 1216 n.7), cert. denied, 115 S. Ct. 742 (1995).
105 See supra notes 8-52 and accompanying text.
106 See supra notes 73-99 and accompanying text.
107 See United States v. Hubbard, 61 F.3d 1261, 1273 (7th Cir. 1995) (canine alert to scent of narcotics in secret compartment of automobile could have been in reaction to a scent on money received as change from a purchase), cert. denied, 116 S. Ct. 1268 (1996).
Though the above examples are hypothetical, these types of situations are realistic possibilities and have been dealt with by state and federal courts. For example, in Monroe County in southern Florida, police saw a suspect by the name of Leroy Lord drop what turned out to be a cocaine-tainted dollar bill.\footnote{Lord v. Florida, 616 So. 2d 1065 (Fla. Dist. Ct. App. 1993).} At trial, prosecutors argued that the cocaine residue found on the bill proved beyond a reasonable doubt that Mr. Lord had caused the contamination.\footnote{Id. at 1066.} This argument convinced the jury, and Mr. Lord was convicted of possessing cocaine.\footnote{Id. at 1067.} However, the appellate court reversed the conviction.\footnote{Id.} The court held that: "[t]he mere presence of trace amounts of cocaine on a common object . . . is insufficient to support a felony conviction for possession of cocaine."\footnote{Id. at 1067.}

In another example, the DEA seized $39,000 from Ethyl Hylton at a Houston airport.\footnote{Id.} A DEA agent explained to Ms. Hylton that she was under arrest because a drug-sniffing canine had alerted to her luggage.\footnote{Id.} After the alert, both Ms. Hylton and her bags were thoroughly searched, with Ms. Hylton being strip-searched.\footnote{Id.} No contraband was found among her belongings.\footnote{Id.} The DEA, however, alleging a drug connection, seized all of Ms. Hylton’s money except for a ten-dollar bill.\footnote{Id.} Ms. Hylton was never charged with a crime because the money that was found in her purse was from an insurance settlement.\footnote{Id. at 106-07.} Yet, Ms. Hylton was forced to go through the hassle of trying to get her money back from the federal government.\footnote{Id.}

The conviction of Leroy Lord and the seizure of Ethyl Hylton’s insurance settlement are only two examples of questionable searches based upon a canine alert to drug-tainted bills. Vincent Cordova, who is the director of criminalistics at National Medical Services in Willow Grove, Pennsylvania, and directed the Philadelphia Police Crime Laboratory for eleven years, has commented on the evidentiary value of
contaminated bills.\textsuperscript{121} Mr. Cordova cautioned that: “‘Police and prose-
cutors have got to use caution in how far they go. The presence of
cocaine on bills cannot be used as valid proof that the holder of the
money, or the bills themselves, have ever been in direct contact with
drugs.’”\textsuperscript{122}

In addition, Judge Becker of the Third Circuit has stated that:

\begin{quote}
It is thus my considered opinion that the fact that numerous studies
by governmental and private agencies, studies which stand unrefuted,
strongly suggest that a trained canine will alert to all bundles of used
currency does not permit the jury to draw a reasonable inference that
the person in prior possession of such currency was a drug trafficker or
associated with one. Indeed, I am inclined to the view that the informa-
tion now available establishes a strong presumption against the
admissibility of evidence of a canine’s alert to currency, and that the
government can rebut that presumption only if it first clearly and
convincingly establishes, outside the presence of the jury, the relevance
and non-prejudicial character of the offered evidence.\textsuperscript{123}
\end{quote}

Judge Becker went on to say that:

\begin{quote}
The government’s dog handlers testified in unison at trial that they
could not tell how many in a bag of bills were tainted, that dogs would
alert if only one out of a thousand bills was tainted, and that there was
no way of knowing when a particular bill became tainted. Against this
background, the grossly prejudicial potential of canine-alert evidence is
readily apparent. . . . The facts would have been different if the
government had randomly selected out several hundred of the bills and
had subjected each one individually to a canine. This could establish
within a degree of probabilistic certainty what percentage of the bills in
the whole bundle contained traces of drugs. If as a statistical matter that
percentage departed significantly from the percentage of used bills in
general circulation to which the canines respond, the evidence might
bear some relevancy and with proper instructions might not be

\textsuperscript{121} Virtually All U.S. Paper Money Is Contaminated with Cocaine, supra note 1, at A8.
\textsuperscript{122} Id. (quoting Mr. Cordova).
\textsuperscript{123} United States v. Carr, 25 F.3d 1194, 1216-17 (3d Cir. 1994) (Becker, J.,
concurring in part and dissenting in part) (citations omitted) (emphasis in the
prejudicial. Alternatively, the government could have washed the bills and obtained exact measurements of the amount of drug traces the bills contained, and compared this quantity statistically to that found to taint currency in general circulation.\footnote{Id. at 1217 n.7 (citations omitted).}

Even Charles S. Saphos, Chief of the United States Justice Department’s Narcotic and Dangerous Drugs Section, has admitted that a large number of toxicologists have found drugs on United States currency.\footnote{Price, \textit{supra} note 29, at D6.} Furthermore, Saphos suggested that in a forfeiture hearing more evidence would be needed than just a canine’s alert to the currency for the government to be successful.\footnote{Id.}

Along with all the other findings of currency contamination, the Ninth Circuit adopted a drug analysis expert’s\footnote{The drug analysis expert is Jay Williams, who has specialized in drug and alcohol analysis for over twenty-four years. See \textit{supra} note 38.}\footnote{Id.} uncontradicted testimony that 75\% of all cash in Los Angeles is contaminated with cocaine.\footnote{United States v. $30,060, 39 F.3d 1039, 1043 (9th Cir. 1994).} Based on this testimony, the court stated that “the continued reliance of courts and law enforcement officers on [a trained canine’s alert to cash] to separate ‘legitimate’ currency from ‘drug-connected’ currency is logically indefensible.”\footnote{Id. (citations omitted).} Given that currency contamination is so widespread, the Ninth Circuit held it to be meaningless:

Undoubtedly, a positive dog alert is probative in showing that the currency has been in contact with a narcotics substance or contaminated currency at some “prior” point in time. The mere fact of prior contamination does not establish, however, that the currency was actually exchanged for or intended to be exchanged for drugs by the person currently in possession of the currency . . . \footnote{Id. at 1043 n.1 (suggesting that the court would have considered evidence of greater than normal contamination had such evidence been offered. The}

Although the Ninth Circuit rejected evidence of tainted cash in this case, it admitted evidence of tainted cash could have some evidentiary value if the state could show that the level of contamination is much higher than is normal for a specific area.\footnote{Id. at 1043 n.1 (suggesting that the court would have considered evidence of greater than normal contamination had such evidence been offered. The}
Along with the Ninth Circuit, the Sixth Circuit has held that a drug-snarfing dog’s alert to cash has very little evidentiary value. The Sixth Circuit held that unless there is strong supporting evidence, a court should highly scrutinize the evidentiary value of a drug-trained canine’s alert to cash.

The Sixth Circuit, in regard to qualifying a trained canine as an expert, stated that "'[t]he only thing a court should be concerned with in determining the qualifications of an expert is whether the expert’s knowledge of the subject matter is such that his opinion will likely assist the trier of fact in arriving at the truth.'" Since almost all of the United States’ currency supply is contaminated with cocaine and a drug-trained canine will detect even the most microscopic amounts of cocaine, a drug-sniffing dog will alert to almost anyone carrying cash. Thus, a dog’s alert will not assist the trier of fact in any way because the dog will alert to anyone carrying cash, drug user or not.

Therefore, courts should not allow a canine’s alert to come in as expert testimony without other strong supporting evidence or an offer of proof from the state that the level of the alert by the dog in question indicated that the currency had a higher level of contamination than that normally found on currency in that specific area. Sergeant White stated that some canines could be trained to react differently depending on the strength of the scent detected. For instance, if the canine was reacting to a weak scent then he might perk up and bark a couple of times. On the other hand, if the dog detected a strong scent of drugs, then he might bark continuously and circle the location of the scent. However, what a canine considers to be a strong or weak scent would depend upon the individual canine and its particular training. Thus, it would be difficult for a judge to rely solely on whether a canine aggressively or

government could not offer such evidence because it had deposited the cash into a government account and lost the plastic bag in which it had been contained before either could be tested.).

132 United States v. $5,000, 40 F.3d 846, 849 (6th Cir. 1994).
133 Id.
135 See supra notes 8-52 and accompanying text.
136 See supra notes 73-99 and accompanying text.
137 Telephone Interview with Sgt. White, supra note 89.
138 Id.
139 Id.
140 Id.
passively alerted to determine its evidentiary value. In regard to reliability and evidentiary value, a better way to train canines might be to have the canines alert only if the contamination was over a certain minimum level, which would depend upon the known contamination level for the particular area.

V. CURRENCY CONTAMINATION AND CIVIL FORFEITURE

"On many occasions, people have lost large amounts of money, simply because a drug-dog sniffed the cash and reacted to trace quantities of drugs remaining on the bills."\textsuperscript{141} Currency contamination can be an overriding issue in the area of civil forfeiture,\textsuperscript{142} as well as in criminal prosecution. This is illustrated by the case of \textit{U.S. v. $67,220}.\textsuperscript{143}

In that case, the district court held that the government did not have probable cause to believe that the currency seized from the claimant was substantially connected to illegal drugs and therefore granted summary judgment for the claimant.\textsuperscript{144} The government appealed, arguing that the reaction of a drug-sniffing dog, standing alone, was enough to establish probable cause.\textsuperscript{145}

The civil forfeiture statute at issue was 21 U.S.C. § 881(a)(6),\textsuperscript{146} which reads as follows:

The following shall be subject to forfeiture to the United States . . . :

. . . .

(6) All moneys . . . furnished or intended to be furnished by any person in exchange for a controlled substance in violation of this subchapter, all proceeds traceable to such an exchange, and all moneys . . . used or intended to be used to facilitate any violation of this subchapter . . . .\textsuperscript{147}

The Sixth Circuit Court of Appeals, overruling the district court, stated that "[t]he government ‘must establish \textit{probable cause} to believe that a substantial connection exists between the property to be forfeited

\textsuperscript{141} Taifa, \textit{supra} note 102, at 106.

\textsuperscript{142} United States v. $80,760, 781 F. Supp. 462, 475 (N.D. Tex. 1991).

\textsuperscript{143} United States v. $67,220, 957 F.2d 280 (6th Cir. 1992).

\textsuperscript{144} \textit{Id}.

\textsuperscript{145} \textit{Id}. at 285.

\textsuperscript{146} \textit{Id}. at 283.

\textsuperscript{147} \textit{Id}. (quoting 21 U.S.C. § 881(a)(6)).
and the illegal exchange of a controlled substance.'”\textsuperscript{148} It then went on to explain probable cause as it relates to the statute at issue:

“Probable cause means ‘reasonable ground for belief of guilt, supported by less than \textit{prima facie} proof but more than mere suspicion.’” Thus, in a subsection (a)(6) forfeiture proceeding, the government’s burden is to establish a reasonable ground for belief, supported by more than mere suspicion, that there is a substantial connection between the seized money and an illegal drug transaction. The aggregation of facts, each one insufficient standing alone, may suffice to meet the government’s burden. To determine whether the information is sufficient, a court must “weigh not the individual layers but the ‘laminated’ total.”\textsuperscript{149}

The Sixth Circuit concluded that there was probable cause because: (1) the claimant lied about the amount of money and where it came from; (2) the destination and manner of travel was suspicious; (3) the claimant was carrying large amounts of cash and was carrying it on his person; and (4) a drug-sniffing dog alerted to the claimant’s cash.\textsuperscript{150} The Sixth Circuit found that the drug sniff was “probative but weak” only because the government did not substantiate the dog’s reliability.\textsuperscript{151} After evaluating the probative facts in the aggregate and admitting that the issue was close, the Sixth Circuit found that there was probable cause to suspect that the currency was substantially connected to illegal drug transactions.\textsuperscript{152} However, based on the studies showing currency contamination to be as high as 97% in the United States,\textsuperscript{153} an alert on cash by a drug-sniffing canine should have no evidentiary value in regard to showing probable cause that the cash was substantially connected to illegal drug transactions. Thus, in a close case like $67,220, if the Sixth Circuit had not placed any value on the canine’s alert, then there is a good chance that the court would not have found probable cause for the forfeiture. In another Sixth Circuit case, $16,520,\textsuperscript{154} the court stated that

\textsuperscript{148} \textit{Id.} (quoting United States v. 526 Liscum Drive, 866 F.2d 213, 216 (6th Cir. 1989)) (emphasis added).

\textsuperscript{149} \textit{Id.} at 284 (citations omitted) (quoting 526 Liscum Drive, 866 F.2d at 216 and United States v. Nigro, 727 F.2d 100, 104 (6th Cir. 1984)).

\textsuperscript{150} \textit{Id.} at 285.

\textsuperscript{151} \textit{Id.} at 285-86.

\textsuperscript{152} \textit{Id.} at 286.

\textsuperscript{153} See \textit{supra} notes 22-28 and accompanying text.

\textsuperscript{154} United States v. $16,520, No. 92-4288, 1994 WL 91810 (6th Cir. Mar.
an alert to currency by a reliable canine is strong evidence of a drug transaction.\textsuperscript{155}

This current view of the Sixth Circuit, that a drug-trained canine’s alert to cash has probative value in regard to the money being related to drug transactions,\textsuperscript{156} is unreasonable. In light of the vast amount of currency contamination, the Sixth Circuit’s view should be modified to hold that a drug canine’s alert to currency should have no evidentiary value unless the canine is trained to alert only to scents higher than that caused by the average amount of contamination on cash in that particular area of the country. If a canine is trained to distinguish between the low-level contamination on almost all currency and higher levels that could be indicative of a drug transaction, then the canine’s alert would have greater evidentiary value.

It is not enough to argue, as did the government in a recent federal forfeiture case, that the law against the possession of illegal narcotics must have been broken at some time in the past for the cash to have become contaminated with cocaine.\textsuperscript{157} However, the court pointed out that there was no evidence which showed that it was the claimants who caused the contamination.\textsuperscript{158} The court also noted that, in general, “[c]ourts have refused to prosecute defendants for possession of controlled substances where the sole evidence is unusable residue.”\textsuperscript{159}

Judge Becker of the Third Circuit sums up the issue well:

It may be true, although given the aforementioned studies which detail how traces of drugs may be transferred between bills it is doubtful, that “much of the money likely was used in drug transactions.” But what the evidence obviously fails to describe is who was involved in those drug transactions and who knew about them. If the person standing before me in the grocery line pays for his or her goods with cash earned in a drug sale, and I receive that cash as change, then I am clearly in possession

\begin{itemize}
\item[\textsuperscript{155}] Id. at **3 (comparing United States v. $215,300, 882 F.2d 417, 419 (9th Cir. 1989) (alert by reliable dog is probative of probable cause) with United States v. $67,220, 957 F.2d 280 (6th Cir. 1992) (dog-alert evidence weak where dog’s reliability was not established)).
\item[\textsuperscript{156}] United States v. $23,000, 54 F.3d 777, 1995 WL 296347 (6th Cir. May 15, 1995) (unpublished opinion).
\item[\textsuperscript{157}] United States v. $80,760, 781 F. Supp. 462, 462 (N.D. Tex. 1991).
\item[\textsuperscript{158}] Id. at 476.
\item[\textsuperscript{159}] Id. But see Commonwealth v. Shively, 814 S.W.2d 572 (Ky. 1991) (finding that unusable cocaine residue remaining on drug paraphernalia is sufficient to support a drug charge).
\end{itemize}
of "money . . . used in drug transactions," but I have not thereby become a drug trafficker . . . .160

CONCLUSION

Numerous studies have shown that cocaine contaminates nearly all of the United States' cash supply in large enough amounts to be detected by drug-trained canines.161 Thus, a canine's alert to currency should not give rise to reasonable suspicion or probable cause for a seizure or a further search. Likewise, courts should attach no evidentiary value to a drug-trained canine's alert to cash unless the government can prove that a higher level of cocaine is present than is routinely found in that area.

One way the government could bolster the evidentiary value of its canine alerts and show that the currency is more likely linked to a drug transaction is to train dogs to alert only to a higher level of contamination than that which is normally found on currency in that area. If this were done, there would be less harassment of innocent people, and the police could have greater confidence that they have found illegal drug money when a dog alerts.

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160 United States v. Carr, 25 F.3d 1194, 1216 n.7 (3d Cir. 1994) (Becker, J., concurring in part and dissenting in part) (quoting majority opinion, id. at 1206).
161 See supra notes 8-52 and accompanying text.