

**IN THE UNITED STATES DISTRICT COURT FOR THE
WESTERN DISTRICT OF MISSOURI
WESTERN DIVISION**

UNITED STATES OF AMERICA,)	
)	
Plaintiff,)	
v.)	No. 97-0138-03-CR-W-DW
)	
MELINDA S. ZUBECK,)	
)	
Defendant.)	

ORDER

Pending before the Court is the United States' motion to revoke Defendant's supervised release. Evidence relating to the pending motion was presented by the parties at a hearing before the Court on March 15, 2002. The hearing was continued to allow the parties to develop evidence specifically addressing the reliability of the PharmChek sweat patch and its susceptibility to external contamination. The hearing was resumed on October 9, 2002. This Order supplements a portion of the Court's ruling at the October 9, 2002 hearing. Specifically, this Order supplements the Court's rejection of Defendant's challenge to the results of tests performed on a PharmChem sweat patch indicating the presence of illegal drugs. For the following reasons in addition to those stated at the October 9, 2002 hearing, the Court rejects Defendant's challenge to the reliability of the sweat patch and finds that the sweat patch is reliable evidence that Defendant used illegal drugs thereby violating a condition of her supervised release.

On January 28, 1999, Defendant was sentenced after pleading guilty to one count of conspiracy to manufacture methamphetamine. After granting a motion for downward departure filed by the United States, the Court sentenced Defendant to five (5) years of supervised release. The

United States moves to revoke Defendant's supervised release because, according to the United States, Defendant used methamphetamine while on supervised release.¹

The United States alleges that Defendant used methamphetamine in violation of the following condition on her supervised release: "[t]he defendant shall refrain from any unlawful use of a controlled substance." Before the Court will revoke Defendant's supervised release, the United States must show by a preponderance of evidence that Defendant violated a supervised release condition. See 18 U.S.C. § 3583(e)(3). If the Court so finds, it can sentence Defendant to all or part of the term of supervised release authorized by statute for the offense for which Defendant was originally sentenced with or without credit for time served. See id.

The United States' allegation is based on a PharmChem laboratory report which finds that a sweat patch applied to Defendant on October 31, 2001 and removed on November 8, 2001 tested positive for methamphetamine. Defendant counters that the sweat patch, in this case, was an unreliable indicator of drug use because it is susceptible of being contaminated by drugs from outside sources.

Specifically, Defendant argues that Martin Joyce, the Chemical Dependency Technician who applied the sweat patch, was unqualified to do so and did so in a sloppy manner. This conclusion is based on the testimony of Defendant's expert Dr. Smith that Mr. Joyce's understanding of a compromised patch is unduly narrow. Defendant also contends that Mr Joyce erred in leaving the

¹In addition, the United States also moved to revoke Defendant's supervised release for attempting to suborn perjury. At the October 9, 2002 hearing, in addition to finding that defendant violated a condition of her supervised release by using methamphetamine, the Court orally granted the United States' motion to revoke Defendant's supervised release on the basis that she attempted to suborn perjury.

sweat patch on Defendant for eight days as opposed to the seven days recommended by the manufacturer.

Defendant also takes issue with results contained in the PharmChem report arguing that inconsistencies in the report indicate that Defendant's sweat patch should not be relied upon in this case. First, Defendant points out that the PharmChem litigation packet shows that a different specimen number was originally written in the space identifying the specimen tested on the first analysis. Defendant's specimen number was written over the other number. Also, the results from the first analysis performed by PharmChem identified methamphetamine but failed to identify amphetamine. In order to be considered a positive test for methamphetamine, some amphetamine should be detected. Furthermore, when Defendant's specimen was retested after PharmChem received Defendant's request for the litigation packet, the results showed a larger concentration of methamphetamine than that which was present in the first test as well as sufficient amphetamine to justify a finding that Defendant used methamphetamine.

The aforementioned arguments notwithstanding, the bulk of Defendant's argument was based on the testimony of her expert, Dr. Frederick P. Smith, that the sweat patch is susceptible to being contaminated from outside sources even if properly applied. In 1999, Dr. Smith, along with Dr. David A. Kidwell, conducted a study on the sweat patch for the Naval Research Laboratory and wrote a report of his findings titled, "Susceptibility of PharmChek Drugs of Abuse Patch to Environmental Contamination." The report, in relevant part, stated that the sweat patch becomes susceptible to outside contamination when the underside, or pad, of the patch is saturated with an acidic substance (a substance with a pH lower than seven (7)) and at the same time, a drug such as cocaine is dissolved in a basic substance (a substance with a pH higher than seven (7)), then applied

to the outside of the patch. When this is done, the basic substance containing the drug may pass through the membrane on the outside of the patch and deposit some of the drug in the pad of the sweat patch. If the sweat patch is then tested, it will test positive for the presence of illegal drugs even though the wearer did not actually take any drugs.

Defendant testified that during the period of time that she was wearing the sweat patch she came into casual contact with methamphetamine although she did not use any herself. Defendant testified that during the time she wore the sweat patch she slept in the same bed where she had previously used methamphetamine and that the sheets had not been cleaned. Defendant also testified that during the time she was wearing the sweat patch, she wore clothes that she had previously worn while using methamphetamine. In light of Defendant's testimony, Dr. Smith testified that it was likely that Defendant's sweat patch was contaminated by an outside source of methamphetamine as opposed to ingestion by Defendant.

The United States presented testimony from its own expert, Dr. Kadehjian. Dr. Kadehjian agreed with much of Dr. Smith's testimony. Specifically, Dr. Kadehjian did not dispute the results of experiments performed by Dr. Smith in which the sweat patch was contaminated by outside sources. Dr. Kadehjian did disagree with Dr. Smith, however, over whether those experiments are of any relevance to whether a sweat patch, if properly applied can become contaminated when worn as intended during day-to-day life.

In light of the evidence presented by the parties at the October 9, 2002 hearing, the Court finds as follows:

1. The Court accepts the testimony of Dr. Kadehjian that Martin Joyce was well-trained and properly qualified to apply the sweat patch to Defendant. He did so consistent

with his training and took all reasonable steps to properly apply the sweat patch, including properly swabbing the area with an alcohol solution prior to application. The Court further finds that Joyce was properly qualified to remove the patch thus preserving the patch for testing by PharmChem. In removing the patch, Joyce properly inspected the patch to determine whether the patch had been compromised and finding that it had not, he properly packaged and preserved the patch. Having so found, the Court holds that the sweat patch was not rendered unreliable by any substance on the area prior to application of the patch. Furthermore, the patch was not rendered unreliable by any outside substance contaminating the patch due to inappropriate application or removal.

2. The Court finds, consistent with the testimony of Dr. Kadehjian, that leaving the sweat patch on Defendant for one additional day in no way compromises the accuracy and validity of the results of the tests performed on the sweat patch.
3. Having so found, the Court finds that PharmChem's report on the testing of the sweat patch and the information contained therein is generally reliable evidence from which to determine whether Defendant used methamphetamine thereby violating a condition of her probation.
4. The Court rejects Defendant's assertion that inconsistencies in the PharmChem report render the information therein unreliable. Initially, the fact that Defendant's

specimen number was written over a different number does not lead this Court to conclude that anything other than a simple clerical error was made. It does not lead this Court to conclude that the wrong specimen was tested. Furthermore, Dr. Kadehjian testified that the lack of any indication of the presence of amphetamine in the initial test run on Defendant's test patch did not necessarily render unreliable the finding that Defendant had used methamphetamine. The Court finds Dr. Kadehjian's explanation of PharmChem's findings to be credible. Thus, the Court finds that the results, as determined by PharmChem, upon testing Defendant's sweat patch are an accurate indication of the presence of drugs on the patch.

5. Absent a showing of outside contamination by Defendant, the Court finds that the PharmChem report submitted by the United States is a sufficient basis on which to find by a preponderance of the evidence that Defendant used methamphetamine in violation of the conditions of her supervised release.

6. The Court finds that the opinion of Dr. Smith that Defendant's sweat patch was likely contaminated by outside sources, even if it was applied correctly, is without merit. The tests performed by Dr. Smith on the sweat patch for the Naval Research Laboratory involved saturating the underside of a sweat patch with an acidic substance then saturating the outside of the sweat patch with drugs dissolved in a basic substance. Dr. Smith presented no scientific evidence demonstrating that the conditions under which he caused contamination in the lab could occur during casual

day-to-day contact with methamphetamine. Furthermore, Dr. Smith presented no evidence that methamphetamine smoke deposits a sufficient amount of methamphetamine on clothing or bed sheets to cause external contamination of a sweat patch if the clothing or bed sheets are subsequently contacted by a sweat patch wearer. According to the Supreme Court a district court need not admit an expert opinion “that is connected to existing data only by the ipsit dixit of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.” Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997). The Court finds that the conditions under which Dr. Smith performed experiments with the sweat patch do not accurately reflect the day-to-day use of the sweat patch and thus, possess little if no probative value in determining whether Defendant’s sweat patch was contaminated by an outside source. Dr. Smith’s opinion that Defendant’s sweat patch was likely contaminated by an outside source is purely speculative without foundation in objective scientific evidence.

7. Having found that Defendant presented little or no evidence of outside contamination, the Court finds that the results of testing performed on the sweat patch worn by Defendant show by a preponderance of the evidence that Defendant used methamphetamine in violation of the conditions of her supervised release.

IT IS SO ORDERED.

Dean Whipple
United States District Judge

Date: _____