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Drug Testing Section  
Division of Workplace Programs  
Substance Abuse and Mental Health Services Administration  
Department of Health and Human Services

From: National Federation of Federal Employees  
Drug Policy Alliance  
DKT Liberty Project

Date: July 12, 2004

Re: **Proposed Revisions to Mandatory Guidelines for Federal Workplace Drug Testing Programs, FR DOC # 04-7984, SAMHSA, HHS**

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The National Federation of Federal Employees, Drug Policy Alliance, and DKT Liberty Project hereby submit comments in response to the Proposed Revisions to Mandatory Guidelines for Federal Workplace Drug Testing Programs, FR DOC # 04-7984, published on April 13, 2004 by the Substance Abuse and Mental Health Services Administration, Department of Health and Human Services.<sup>1</sup>

The National Federation of Federal Employees is the oldest labor union representing Federal employees exclusively. NFFE's nearly 80 collective bargaining agreements cover approximately 60,000 individuals in 50 Federal agencies. NFFE strives to protect, preserve, and enhance the working conditions of its membership through collective bargaining, litigation, legislative action, and education.

The Drug Policy Alliance is an organization whose mission is to advance those policies and attitudes that best reduce the harms of both drug misuse and drug prohibition, and to promote the sovereignty of individuals over their minds and bodies. The Drug Policy Alliance envisions a just society in which the use and regulation of drugs are grounded in science, compassion, health and human rights.

The DKT Liberty Project was founded in 1997 to promote individual liberty against encroachment by all levels of government. The organization espouses vigilance over regulation of all kinds, as well as restriction of individual civil liberties which threaten the reservation of power to the citizenry that underlies our constitutional system.

The regulations in question alter the federal government's system for drug-testing federal employees, and will affect as many as 1.9 million employees. They do not themselves require any federal agency to drug-test its workers; rather, they establish procedures that must be used by any federal agency that *chooses* to drug-test its workers. The draft regulations would greatly expand the use of new drug-testing technologies by the federal government. The above-named organizations are gravely concerned that these new technologies would lead to many wrongly accused federal workers.

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<sup>1</sup> See Federal Register, Vol. 69, No. 71, pp. 19673-19732.

The existing regulations allow agencies to test employees using laboratory controlled urinalysis testing, a methodology that while not failsafe, is by far the most well-established one available. The proposed regulations would expand this universe to allow agencies to test hair, sweat, and saliva, as well as allow point of collection testing of urine. Each of these newer testing techniques is less reliable and more prone to lead to false positive results, which in turn can cause serious harm to individual employees and at a significant cost to the federal government. Permitting these new technologies is therefore unwarranted, risky and entirely unjustified.

Protecting federal workers from being falsely accused as a result of a false positive drug test results does not appear to be a priority of the draft regulations. Instead, the proposal reflects the desire of the drug testing industry to expand the role of drug testing in the workplace, without adequate safeguards to prevent false positive test results due to contamination, sample mishandling, or other sources. The proposal is also designed to cast a wide net so as to deter use and catch as many drug users as possible. Unfortunately, this goal is pursued at the expense of accuracy.

The following is an overview of scientific and logistical concerns regarding the proposed regulations.

## **Hair Testing**

The draft regulations permit federal agencies to use hair testing for several kinds of drug testing, including pre-employment and return-to-duty testing. Hair testing can yield false positive results for two important reasons:

- *Environmental Contamination.* Because hair is outside the body, minute amounts of drugs in the environment can bind to the hair and even change over time in a way that mimics the effect of drug use. No industry method to “clean” such contaminated hair has been shown to be effective, and the regulations do not require that any such process be implemented. In the introduction to the draft regulations, SAMHSA admits that environmental contamination of hair is an issue, but claims that current tests can distinguish between the hair of a drug user and that from a person who has simply been exposed to drugs in the environment.<sup>2</sup> This is simply false. Published, peer-reviewed research has shown that hair that is externally contaminated with drugs can yield test results similar to that produced by the hair of a person who is using illegal drugs.<sup>3</sup>
- *Racial Bias.* Many published, peer-reviewed studies demonstrate that dark-colored hair incorporates drugs more rapidly than light-colored hair.<sup>4</sup> This means that individuals with dark-colored hair are especially likely to have false positive test results due to environmental contamination. In addition, given similar drug-use patterns, individuals with dark hair will test positive more frequently than those with light-colored hair. This “hair-color bias” effect would translate into a racial bias when large numbers of people are being tested.

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<sup>2</sup> See *id.* at p. 19675.

<sup>3</sup> See, e.g., Romano, Barbera, Lombardo (2001) Hair Testing for Drugs of Abuse: evaluation of external cocaine contamination and risk of false positives. *Forensic Science International*, 123:119.

<sup>4</sup> See, e.g., Reid R.W., O’Connor F.L., and Crayton J.W. (1994). The in vitro differential binding of benzoylecgonine to pigmented human hair samples. *J. Toxicol Clin Toxicol*, 32:405.

## Sweat Testing

The draft regulations permit federal agencies to use the “sweat patch” drug testing system for return-to-duty and follow-up drug testing. Several independent scientific studies have shown that the sweat patch can be contaminated by drugs in the environment and give false positive test results. At least fourteen scientists have gone on record in peer-reviewed, published articles, arguing that the sweat patch should not be used as a stand-alone indicator of drug use, due to the risk of false positives.<sup>5</sup> Moreover, real-life studies of the sweat patch have found that when the sweat patch is used to test non-drug-users, it will give false positive results *seven to forty percent of the time*.<sup>6</sup> In the introduction to its draft regulations, SAMHSA admits that the scientific community is concerned about false positives due to environmental contamination, but still endorses its widespread use. Sweat patch technology should not be used for employee drug tests because has been demonstrated to be unreliable. For a detailed analysis of the scientific literature casting doubt on the reliability of the sweat patch, see Appendix A to these comments, “The Scientific Issue: How accurate are positive sweat patch test results as an indicator of recent drug use by the test subject?”

## Saliva Testing

The draft regulations permit federal agencies to use “oral fluid” or saliva testing. Saliva testing is a new technology, and is not well understood by scientists.<sup>7</sup> While urinalysis has been studied closely by the scientific community for decades, saliva testing is the subject of only a few studies and even the draft regulations themselves acknowledge concerns about false positive results due to contamination.<sup>8</sup>

## Field Testing

The draft regulations permit federal agencies to use “point-of-collection testing,” or “POCT”: drug testing performed in the field, with a mobile device giving immediate results. One of the major concerns about the inclusion of this form of testing is that SAMHSA has abdicated its oversight role by delegating oversight to the federal agency that is testing their employees or potential employees.<sup>9</sup> Any agency that wishes to use field testing has the responsibility to (1) develop procedures for field testing; (2) train and certify testers; (3)

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<sup>5</sup> See Kidwell, Kidwell, Shinohara, Harper, Roarty, Bernardt, McCaulley, Smith (2003) Comparison of Daily Urine, Sweat, and Skin Swabs Among Cocaine Users. *Forensic Science International* 133(1-2):63. J.A. Levisky, Bowerman, Jenkins, Johnson, J.S. Levisky, Karch (2001) Comparison of Urine to Sweat Patch Test Results in Court Ordered Testing. *Forensic Science International* 122:65. Levisky, Bowerman, Jenkins, and Karch (2000) Drug Deposition in Adipose Tissue and Skin: Evidence for an Alternative Source of Positive Sweat Patches. *Forensic Science International* 110:35.

<sup>6</sup> Kidwell, Kidwell, Shinohara, Harper, Roarty, Bernardt, McCaulley, Smith (2003) Comparison of Daily Urine, Sweat, and Skin Swabs Among Cocaine Users. *Forensic Science International*, 133(1-2):63. Preston K.L., Huestis M.A., Wong C.J., Umbricht A., Goldberger M.A., Cone E.J (1999) Monitoring Cocaine Use in Substance-Abuse-Treatment Patients by Sweat and Urine Testing. *J. Analyt Toxicol*, 23:313.

<sup>7</sup> Proposed Revisions to Mandatory Guidelines for Federal Workplace Drug Testing Programs, 69 Fed. Reg. 19676 (April 13, 2004)(admitting that “less is known” about the science of oral fluid testing than urine testing and recommending urine testing of persons who test positive for marijuana use by oral fluid testing).

<sup>8</sup> Proposed Revisions to Mandatory Guidelines for Federal Workplace Drug Testing Programs, 69 Fed. Reg. 19676 (April 13, 2004)(SAMHSA admits that further study is necessary to differentiate between drug use and environmental contamination when testing for THC – the active component of marijuana).

<sup>9</sup> Proposed Revisions to Mandatory Guidelines for Federal Workplace Drug Testing Programs, 69 Fed. Reg. 19684-85 (April 13, 2004).

ensure that the testing procedures they develop are actually followed; and (4) develop and implement a quality-control and inspection program. Delegating these complex technical requirements to dozens of inexperienced federal agencies ensures that mistakes will be made as agencies struggle with their new responsibilities. This delegation also ensures a lack of uniformity in field testing around the country. SAMHSA itself acknowledges these potential problems, but declares that national oversight of field testing would “pose logistical challenges.” Reliability of the field testing program will suffer if this fractured field testing approach goes forward, leading to more wrongly accused workers.

### **Changes to Confirmatory Test Procedures**

Existing regulations governing the testing of employees’ urine samples approve the use of laboratory instruments that are hardly foolproof. The proposed regulations would add two newer instruments for confirmatory testing that are more likely to yield false positives and are even less accurate than the established drug testing system.<sup>10</sup>

### **Conclusion**

The National Federation of Federal Employees, Drug Policy Alliance, and DKT Liberty Project respectfully request that SAMHSA amend the draft guidelines to remove the use of hair, sweat, and saliva testing and to disallow point of collection testing.

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<sup>10</sup> Proposed Revisions to Mandatory Guidelines for Federal Workplace Drug Testing Programs, 69 Fed. Reg. 19713, Section 11.15 (April 13, 2004); Smith F.P., Kidwell D.A. (2000). Commentary on Minimal Standards for the Performance and Interpretation of Toxicology Tests in Legal Proceedings, J Forensic Sci 45(1):237.