Statement of
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Mr. Chairman and Members of the Committee: Good morning. My name is Dr. Christine Sannerud. I am a Drug Science Officer for the Drug Enforcement Administration. I appreciate the opportunity to appear before you today to testify and answer questions regarding gamma hydroxybutyrate (GHB), a drug now being discussed for proposed scheduling in the Commonwealth of Pennsylvania.

GHB is a central nervous system depressant which is abused for its ability to produce euphoric states and its alleged role as a growth hormone releasing agent to stimulate muscle growth. Although GHB gained early favor with health enthusiasts as a safe and "natural" food supplement sold in health food stores in the late 1980's, the medical community soon became aware of overdoses and related problems caused by its abuse. In 1990, the FDA issued an advisory declaring GHB unsafe and illicit, except under FDA-approved, physician-supervised, study protocols. GHB has not been approved by the FDA for marketing, but it is currently under investigation for use in treating narcolepsy under the FDA's Orphan Drug program.

The United States is currently experiencing a problem with the clandestine production, abuse and trafficking of GHB. GHB is not approved for marketing as a medicine in the United States. Doctors do not prescribe it, pharmacists do not sell it and patients do not use it. The abuse of GHB is in the absence of medical supervision.

Although its importation, distribution and use as a drug are not allowed by the FDA, the abuse of GHB has increased. As a drug of abuse, GHB is generally ingested orally after being mixed in a liquid. The onset of action is rapid and unconsciousness can occur in as little as 15 minutes and profound coma can occur within 30 to 40 minutes after oral ingestion of high doses. GHB produces dose-

dependent drowsiness, dizziness, nausea, amnesia, visual hallucinations, reduced blood pressure, decreased heart rate, hypnotic effects resembling petit mal epilepsy, convulsions, severe respiratory depression and coma. Overdose frequently requires emergency room care, including intensive care for respiratory depression and coma.

In recent years GHB has emerged as a significant drug of abuse throughout the United States and a number of foreign countries. Since 1993, more than 3,500 GHB-related cases of abuse, overdose, possession, manufacturing, diversion and trafficking have been documented by Federal, state and local officials. GHB is frequently taken with alcohol or other drugs that heighten its effects, and it is often found at bars, night clubs, rave parties and gyms. The primary users are teenagers and young adults who frequent these establishments. The populations abusing this drug fall into three major groups: (1) Users who take GHB as an intoxicant or euphoriant or for its alleged hallucinogenic effects; (2) bodybuilders who abuse GHB for its alleged utility as an anabolic agent or as a sleep aid; and (3) individuals who use GHB to commit sexual assault. These categories are not mutually exclusive and an abuser may use the drug illicitly to produce several effects.

The GHB encountered by law enforcement has been produced in clandestine laboratories. GHB synthesis requires no special knowledge of chemistry, the precursor chemicals [gamma-butyrolactone (GBL) and sodium hydroxide (lye)] are inexpensive and readily available, and the process can be accomplished without special equipment by a simple "one-pot" stove top method. GBL is a solvent with many industrial uses. As an unregulated chemical, GBL is sold in chemical supply companies, and GHB "kits" containing the precursor chemicals are available for sale on the Internet.

Since 1997, the DEA is aware of at least 100 cases involving GHB illicit laboratories and over 200 submissions to DEA and state and local forensic laboratories. GHB has been encountered in every region of the United States and both small (personal use amounts) and large (intended for distribution) clandestine laboratories have been encountered. It is marketed as a "legal high" or a substitute for MDMA (Ecstasy) and is sold in solid and liquid forms. Indicators

suggest that GHB abuse and trafficking are escalating and pose a serious health and safety risk.

The abuse of GHB is associated with significant adverse effects to the abuser and health risk to the general public. In the last several years there has been an increase in the number of emergency room episodes as reported to the Drug Abuse Warning Network (DAWN). From 1992 through June 1997, there have been 575 GHB-related DAWN emergency room mentions, with 257 of them occurring in 1996, and 164 of them occurring in the first 6 months of 1997. Alcohol and GHB mutually enhance each other's toxic effects and many of the mentions involved the use of GHB in combination with alcohol. DEA has also collected 32 medical examiner reports from twelve different states involving the detection of GHB in the biological fluids of deceased individuals. GHB is repeatedly detected in driving under the influence (DUI) cases which shows the public health and safety hazards associated with its abuse. In addition, the DEA is aware of twenty cases of sexual assault involving GHB.

DEA is pursuing measures to administratively schedule GHB under the federal Controlled Substances Act (CSA). DEA has been documenting cases of abuse, diversion and trafficking of GHB and is currently awaiting the recommendations of Department of Health and Human Services, as required under federal law. Currently, there are no sanctions under the CSA for the abuse and trafficking of GHB.

DEA supports the need to make GHB a controlled substance under federal law. Final determination of GHB placement will include a consideration of DHHS's scientific and medical evaluation and recommendation. Placing GHB in any schedule under the CSA, including Schedule I, should have no adverse impact on the pharmaceutical industry, medical profession, patients or health care in the United States. Such control would not adversely affect the research or pharmaceutical industry to conduct studies or develop the drug for marketing in the United States.

Control of GHB in the CSA would allow the law enforcement and the judicial system to combat the trafficking of GHB in the United States. Such

control of GHB would establish its high abuse potential and increase awareness of the public health risks associated with its abuse to the law enforcement community, the judicial system and the general public.

Although it is not yet controlled at the Federal level, twenty states have already controlled GHB: Rhode Island, Georgia, Hawaii, Illinois, Nevada, Wisconsin, Michigan, Delaware, Idaho, Oklahoma, Nebraska, Alabama in Schedule I; Florida, California and Indiana, Louisiana, New Hampshire in Schedule II; and Tennessee, Alaska and North Carolina in Schedule IV. In addition, Texas and New Jersey have criminalized the sale and possession of GHB and placed in the same penalty group as LSD and marijuana.

Mr. Chairman, in closing, I would like to thank you for providing me with the opportunity to offer the DEA's position and comments on the very serious problem of GHB abuse and the issues of GHB control . I will be happy to answer any questions you may have.