Royal Canadian Mounted Police
Criminal Intelligence Directorate

Drug Enforcement Administration
Intelligence Division

CHEMICAL DIVERSION AND SYNTHETIC DRUG MANUFACTURE

DEA/RCMP Joint Report Prepared by:

RCMP's Drug Analysis Section
Criminal Analysis Branch
Criminal Intelligence Directorate

DEA's Europe, Asia, Africa Strategic Intelligence Unit
Office of International Intelligence
Intelligence Division

September 2001

Table of Contents

Executive Summary

The monitoring and control of precursor and other chemicals used in the manufacture of illicit drugs are recognized as a significant supply and demand reduction initiative in a comprehensive strategy to tackle drug abuse and trafficking. Both Canada and the United States are signatories to, and have ratified, the 1988 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (Vienna Convention). Provisions adopted in this Convention dealing with precursor and other chemicals frequently used in the manufacture of illicit drugs provide a global solution to the worldwide issue of chemical diversion.

The United States has adopted various legislative measures dealing with the problem of chemical diversion, fulfilling its obligations under the Vienna Convention. The Canadian Government, led by Health Canada, is drafting a regulatory framework and administrative system to control and monitor precursors and other chemicals frequently used in the clandestine production of controlled substances. The regulations, which will satisfy Canada's international obligations/commitments and domestic requirements, are expected to come into force in 2002. The RCMP National Chemical Precursor Diversion Program has had success with voluntary reporting and cooperation from the domestic chemical industry, however, legal controls are required to enable law enforcement to effectively investigate chemical diversion and clandestine laboratory activities in Canada. Notwithstanding the absence of legal controls, Canadian law enforcement have continually responded to DEA investigative requests concerning chemical diversion.

Without regulatory chemical controls in Canada, drug traffickers have been able to legitimately purchase chemical products from licensed distributors. U.S.-based traffickers have taken great advantage of absent regulations and have crossed the border to obtain chemicals from Canadian suppliers. Chemical company distributors are not the sole sources for precursor and other chemicals used to synthesize illicit drugs. In both Canada and the United States, many of these products are readily available from aroma therapy companies, pharmacies, grocery, convenience and home improvement stores and other retailers where they are sold for a multitude of legitimate uses.

There is an apparent expansion of illicit methamphetamine production in North America. Pseudoephedrine (PSE) is the most common precursor used in methamphetamine synthesis in both Canada and the United States. Recent U.S. legislative controls regulating the sale and purchase of chemicals, coupled with a major nationwide investigation targeting PSE traffickers, have greatly limited the ability of groups or individuals to divert precursors from American supply sources. Consequently, Canada has become a major alternate source country from which huge amounts of PSE have been diverted for use in methamphetamine "super labs," notably in the State of California. The DEA has documented the involvement of ethnic Middle Eastern crime groups in the smuggling of precursor chemicals used in methamphetamine production in both the United States and Canada. The diversion of PSE from Canadian suppliers to the illicit market is reaching a critical level. This is supported by unprecedented increases in the amount of PSE imported into Canada over the last several years.

MDMA (Ecstasy) trafficking and use has escalated in Canada and the United States. Although domestic production occurs, the bulk of Ecstasy available in the North American market is imported

from Western Europe. Dutch-based and Israeli-based crime groups continue to hold a monopoly on the international market. In Canada, there is an increasing number of poly-drug labs involving the production of MDMA, methamphetamine and other amphetamine-based drugs. In particular, the clandestine manufacture of MDA has increased. The Rave phenomenon in the United States and Canada has clearly propelled the demand for and supply of Ecstasy and has introduced a variety of other "club drugs," including gamma-hydroxybutyrate (GHB), ketamine and PMA. LSD popularity has had a resurgence in the U.S. Rave and nightclub scene.

The threat to public safety from explosion, fire, gas, groundwater contamination, and hazardous by-products associated with chemical synthesis is likely to increase with the proliferation of synthetic drug production in the United States and Canada. These dangers affect the safety and well-being of the public and the law enforcement personnel involved in the dismantling of these laboratories.

Among the recommendations made in the report include continued cross-border cooperation, an urgency for Canada to adopt a regulatory framework, consideration for charges of public endangerment resulting from clandestine laboratories, an industry code of good practices, and close cooperation between authorities and legitimate producers and distributors of chemical products.

Overview

Synthetic drugs continue to present a threat to North America. Domestic production of methamphetamine, MDMA and its analogues, and other synthetic drugs contribute to the overall drug threat in Canada and the United States. One of the primary strategies for combating the proliferation of synthetic drugs is the control and monitoring of precursor chemicals required for the production of these substances.

This intelligence product is a result of a joint assessment of the precursor chemical situation in Canada and the United States, conducted by the Royal Canadian Mounted Police (RCMP) and United States Drug Enforcement Administration (DEA).

Brief History of Chemical Control

The potential for chemical control to impact on the illegal drug trade and thereby benefit public health and safety is enormous. The subject of the comprehensive need for chemical controls, as distinct from drug controls, was first examined in depth by an informal conference of U.S., Canadian and European drug control officials in Rome in May 1984. Thereafter, a series of special international conferences were organized on the subject: in Wiesbaden in 1986; Kuala Lumpur and Quito in 1987; and Washington, D.C. in 1989. These efforts resulted in the adoption of Article 12 of the 1988 Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (known as the Vienna Convention), establishing the foundation for international cooperation in chemical control. Also in 1988, the United States incorporated into its national controlled substances legislation the comprehensive Chemical Diversion and Trafficking Act (CDTA).

In 1990, the significance of chemical control was acknowledged at the Group of Seven (G-7) Houston Economic Summit in its mandate of a Chemical Action Task Force (CATF). The CATF's purpose was to develop effective procedures to ensure that precursor and essential chemicals are not diverted to manufacture illicit drugs. Results of the CATF's efforts included a recommendation that ten additional chemicals be added to the list of 12 in the Vienna Convention. Also, in December 1990, the European Community adopted a binding regulation on the commerce in listed chemicals, which was later modified and extended to include other chemicals as of January 1, 1993.

Additional chemical control action followed quickly in the 1990s. Thus, within a decade of the birth of the precursor and essential chemical diversion control concept, the legal framework for a concerted international control effort was firmly established.

Chemical Control in the United States

In the United States, chemical control measures strive to reach a balance between legitimate trade and law enforcement. U.S. chemical control requirements include the registration of List I chemical companies. Companies which handle above-threshold quantities of any Listed Chemicals are required to maintain transaction records for two years and must report suspicious transactions to the DEA. DEA monitors the import and export of Listed Chemicals and engages in the "Letter of No Objection" Program. In addition, the United States participates in multilateral chemical reporting and bilateral

agreements with a number of countries through its chemical control program.

The first major chemical control law in the United States was the Chemical Diversion and Trafficking Act (CDTA) of 1988, which instituted a control system for 20 chemicals, including those listed in the Vienna Convention. The regulatory and enforcement framework for precursor control was further enhanced through the Crime Control Act of 1990. The subsequent Domestic Chemical Diversion Control Act of 1993 specifically targeted the illicit production of methamphetamine and the related drug methcathinone (which has virtually disappeared as a clandestine product). The 1993 amendment began to close the "legal drug exemption" that had allowed traffickers to avoid regulatory requirements by buying thousands of legal FDA-approved tablets. The bill brought over-the-counter, single-entity ephedrine products under DEA regulatory control, and permitted DEA to add other products by regulation. It also required the registration of handlers of List I chemicals, similar to the requirements for controlled substances.

In 1996, Congress enacted a major piece of methamphetamine-related legislation. The Comprehensive Methamphetamine Control Act (MCA) of 1996 broadened controls on listed chemicals used in the production of controlled substances and increased penalties for the trafficking and manufacture of methamphetamine and listed chemicals. This legislation removed the remaining CDTA-granted exemptions for combination ephedrine, pseudoephedrine (PSE) and phenylpropanolamine drug products. The Methamphetamine Penalty Enhancement Act of 1998, lowered certain quantity thresholds for mandatory minimum trafficking penalties. The recent Methamphetamine Anti-Proliferation Act of 2000 and Ecstasy Anti-Proliferation Act of 2000 enhanced the federal sentencing guidelines for these two substances.

Chemical Control in Canada

Canada is a signatory to, and has ratified, the Vienna Convention since November 1990. The Convention calls for all signatory countries to control the distribution and sale of certain chemicals used in the clandestine manufacture of synthetic drugs. Nine precursor chemicals are currently listed in Schedule VI of the 1997 Controlled Drugs and Substances Act (CDSA); however, the CDSA does not include regulations for the control of precursors and other substances nor is there an administrative system in place to satisfy Canada's international obligations/commitments and domestic requirements. The Canadian Government, led by Health Canada, is currently preparing such regulations that give effect to the provisions of Article 12 of the Convention. Canada will fulfill its obligation by establishing appropriate monitoring and control measures over the precursors and other substances listed in Table I and Table II of the Convention. These regulations are expected to come into force in 2002.

There are no legal controls to assist Canadian law enforcement agencies in the investigation of chemical diversion cases. In the absence of regulations, the RCMP instituted in 1995 the Chemical Diversion Reporting Program in an effort to liaise with, and educate, chemical industry representatives regarding suspicious transactions of chemicals and equipment which have possible application to clandestine drug manufacture. Overall, voluntary reporting and cooperation have been positive, although resources and the absence of legal measures have greatly limited investigative capabilities. Notwithstanding, Canadian law enforcement have continually responded to DEA investigative

requests concerning chemical diversion. Private industry is willing to assist the police, but it is reluctant to become heavily involved in the absence of a legal structure or a code of conduct. In March 2000, the Federal Government approved funding for Health Canada to develop regulations and to establish a monitoring unit. The RCMP also received funding to set up five full-time positions to monitor suspicious chemical transactions. In addition to a national coordinator position at RCMP Headquarters in Ottawa, four positions are located in Toronto, Montreal, Vancouver and Edmonton.

As part of the recently established RCMP National Precursor Chemical Diversion Program, investigators will work closely with other RCMP personnel; domestic and foreign law enforcement agencies; Federal Government Departments such as Health Canada, the Department of Foreign Affairs and International Trade (DFAIT), and the Canada Customs and Revenue Agency; and private industry to create a comprehensive national program that will focus on chemical diversion and clandestine laboratory investigations. DFAIT is responsible for issuing individual and general export permits under the Export Import Permits Act. In 1992, chemicals listed in Tables I and II of the 1988 Convention were, as an interim measure, placed on Group 8 of the Export Control List, according to categories determined by the CATF**.** Quantities in excess of chemical thresholds require individual permits to all non-U.S. destinations. Ephedrine and PSE require individual permits for all destinations. Other exports over indicated thresholds require a general export permit[1]. In reality, less than one dozen export permits have been issued since 1992. This further indicates the weak monitoring and control of chemical exports from Canada.

Many exporting countries require a permit from the importing country to verify that the company importing the chemical is conducting a legitimate transaction. In Canada, there are no regulations governing the issue of an import permit. In lieu of this, Health Canada issues a "Letter of No Objection" to the Canadian importer, who, in turn, sends the letter to the foreign supplier with a purchase order. Health Canada issued 116 letters for precursor chemicals in 2000 and 84 as of July 2001. There is no legal basis for this process; it is a courtesy to the industry, enabling the orderly importation of Table 1 substances. Health Canada also uses this process as a tracking mechanism to gather data on imports of these substances into Canada. Through this program, between 90 percent and 95 percent of the precursors entering Canada is traceable.

Health Canada's Notice of Intent appeared in the *Canada Gazette, Part I* of March 24, 2001: "The Drug Strategy and Controlled Substances Programme (DSCS) of Health Canada intend to develop a new regulatory framework and administrative system to control and monitor precursors and other substances frequently used in the clandestine production of controlled substances." The DCSC will identify affected clients and assess the scope of products containing precursors and other substances in Table I and Table II. Feedback has been sought from all potentially affected stakeholders through a policy discussion paper released in May 2001 and a Health Canada consultation workshop held in June 2001. The information received as a result of this process will be instrumental in preparing the new regulatory framework. Following publication of the proposed regulatory framework in *Canada*

[1] Health Canada, Discussion Document, *"Control of Precursors and Other Substances Frequently used in the Clandestine Production of Controlled Substances*," 2001

Gazette Part I, interested parties will be given another opportunity to provide further feedback[2]. The regulations will then be published in *Canada Gazette Part II*, followed by immediate implementation.

Chemical Situation

United States/Canada Chemical Origins (import/export)

The world's leading chemical producers include the United States, the People's Republic of China, India, Germany and the Czech Republic. Ephedrine and PSE, precursors for methamphetamine, however, are not produced in the United States or Canada. There are currently four countries that provide significant quantities of these chemicals to the international market: the Peoples' Republic of China, India, Germany, and the Czech Republic. Though Germany produces significant quantities of ephedrine and PSE, it maintains strict domestic controls of these substances, and has not been identified as a significant source country for these precursor chemicals in diversion investigations in the United States or Canada.

Four of the precursor chemicals potentially used for the production of Ecstasy (ethylamine, methylamine, nitroethane and piperonal) are produced in the United States, though not in significant quantities. These chemicals are regulated (List I) and domestic diversion is negligible. Imports and exports of these, and all List I chemicals, are monitored by the DEA Office of Diversion Control. The U.S. strategy toward international chemical diversion concentrates on chemicals destined for drug-producing regions.

While chemical products are manufactured domestically, imported products account for the bulk of precursor chemicals distributed to, and sold by, the Canadian chemical industry and other commercial outlets. In order to import commercial goods into Canada, clients report their goods, obtain release and submit customs accounting documents. Depending on the nature of the goods being imported, certain criteria must be met prior to the release of those goods. Most clients forward electronic data to Customs prior to the arrival of goods. Customs inspectors review the data and make release decisions or send the goods for inspection based on indicators.[3]

Canada Customs lacks the authority to seize or detain imported precursor chemicals unless they are not declared to Customs, or exceed the threshold limit as listed in Group 8 of the Export and Import Permits Act. However, despite the inability to seize imported goods, the Canada Customs Contraband and Intelligence Unit has been monitoring the movement of precursor chemicals into and out of the country for approximately two years. Information from international law enforcement agencies regarding serious suspicious shipments into and out of Canada has also helped the Unit to develop client profiles and to identify high risk exporters/importers. Canada Customs will ensure that a comprehensive monitoring and control program is implemented and ready to function once the

---

[2] Health Canada, *Healthy Environments and Consumers Safety Branch, Drug Strategy and Controlled Substances Programme, 2001*

[3] Canada Customs, *"Canadian Trade of Illicit Drug Precursor Chemicals",* April 2000

pending CDSA regulations are sanctioned.[4]

Domestic Movement of Chemicals

Canada

Chemical company distributors are not the sole sources of precursor chemicals in Canada. Aromatherapy companies sell sassafras oil off the shelf or in multi-litre quantities through the Internet. Commercial substances that include chemicals such as sulfuric acid are marketed under various brand names of drain cleaners, for example, and are available in most hardware, home improvement or grocery stores. Decongestants (over-the-counter products containing PSE) are available without prescription from any drug or convenience store. Many legitimate distributors post their chemical catalogues on the Internet. At least one Canadian-based web-site has been selling complete gamma hydroxybutyric acid (GHB) kits. Purchasing chemicals in this manner simply involves sending the distributor a bank draft and having the material delivered to a designated address or post office box.

United States

Sources of supply in the United States for methamphetamine precursor chemicals include convenience stores, liquor stores, gas stations, pharmacies, grocery stores, discount department stores, home improvement stores, tack and feed stores and other retailers. Decongestants and bronchodilators are purchased in drug and convenience stores, but there is no indication that they have been purchased in Canada and shipped to the United States. PSE tablets are also sent to individuals at their residences by mail order distributors, which often involves companies taking orders via the Internet. Increasingly, larger methamphetamine laboratories in the United States use PSE tablets manufactured in Canada and smuggled into the United States, often by traffickers who can no longer obtain large amounts from domestic U.S. companies. U.S.-based aromatherapy companies, using safrole, benzaldehyde, isosafrole, etc. as end products, are not required to be registered with DEA as List I chemical handlers.

Diversion – Cross Border Issues

Without legal control measures in Canada, drug traffickers are able to purchase chemical products openly from legitimate distributors. Notwithstanding this, they take certain precautions such as using fictitious names, paying by cash and picking up the merchandise in rented vehicles. American-based traffickers have also taken advantage of absent regulations and have increasingly crossed the border to purchase chemicals from Canadian suppliers. Intelligence shows that some traffickers manufacture the drugs in Canada and then transport the finished products back to the United States.

The growing number of suspicious transactions in chemicals from legitimate suppliers is directly linked to increased domestic clandestine laboratory activity. PSE, sassafras oil, piperonal and gamma-

---

[4] Health Canada, Discussion Document, "*Control of Precursors and Other Substances Frequently Used in the Clandestine Production of Controlled Substances", 2001.*

Butyrolactone (GBL) are among the most frequently diverted precursor chemicals. Cash sales in Quebec for 2000 included 500 kilograms of piperonal (potential yield of 205 kilograms of MDA), 3000 kilograms of sassafras oil (potential yield of 960 kilograms of MDMA) and 2000 kilograms of cellulose (used to make tablets)[5]. In Ontario, approximately 8,000 litres of GBL (potential yield of 66,000 litres of GHB is about 14,000,000 doses of GHB) have been sold for cash over the last two years[6]. Prior to 1997, commercial distributors received little or no demand for GBL, which is also used in the manufacture of cleaning products. A surge in cash sales of such chemical products has also occurred in British Columbia, where the greatest quantities of sassafras oil have been sold over the last five years**.** The expansion of methamphetamine production is clearly indicated by increased cash sales of chemicals such as ephedrine/pseudoephedrine, red phosphorous and hydriodic acid.

Pseudoephedrine (PSE)

PSE is the most common precursor used in North American methamphetamine production. The diversion of PSE from legitimate Canadian suppliers to the illicit market is reaching a critical level. Massive quantities are being smuggled into the United States for use in methamphetamine "super-labs" (methamphetamine laboratories capable of producing 10 pounds or more per batch or "cook"), notably in the State of California. Since late 1999, DEA has documented more than 20 PSE and/or methamphetamine cases in the United States demonstrating a Canadian nexus.

Historically, the vast majority of the PSE diverted to clandestine laboratories in the United States was tablet product manufactured or distributed by U.S. companies. California has been the center of methamphetamine production and trafficking in the United States. As law enforcement attention increased and strong state precursor control laws were instituted in the State of California, making it difficult to obtain sufficient amounts of PSE locally, traffickers turned to suppliers nationwide. Traffickers purchased PSE at relatively low prices on the U.S. East Coast and moved the product to California, where the black market price reached between US$3,500 and US$4,000 per case.[7] Nationwide networks of PSE suppliers, working together in loosely but not necessarily in identifiable hierarchies, provided ton quantities of PSE pill products to the market in California. These same operators also supplied distributors in other states who diverted product to local methamphetamine laboratories.

In response to the increasing diversion of PSE from U.S. sources, the MCA was enacted. When the provisions of the MCA went into effect in 1997, the ability of U.S.-based traffickers to acquire large

---

[5] Potential yield is defined as a practical yield, that which a reasonably skilled chemist would obtain. A potential yield is calculated using the Drug Yield Calculator Program. The program, developed by the RCMP and Health Canada, assists law enforcement investigators and chemists in determining approximate yields and in supplying basic information for intelligence purposes.

[6] In Canada, the common form of GHB available in the illicit market is as a solution in water, while in the United States it is commonly distributed as the solid.

[7] One case of PSE pills (14,400 tablets) produces one pound of methamphetamine. The base cost of one case of PSE tablets is approximately US$450.

amounts of PSE was curtailed, forcing the traffickers to find alternate sources of supply. During this time period, Canada began to emerge, on a small-scale, as a source of PSE for U.S.-based traffickers.

Through DEA's Operation MOUNTAIN EXPRESS, a nationwide investigation targeting PSE traffickers, investigators learned that wholesalers in Colorado, Florida, Michigan, Kentucky, Ohio, Texas, Arkansas, Illinois and New York were shipping multi-ton quantities of PSE tablets that ended up in California for the production of methamphetamine. The take down of this criminal network resulted in the arrests of more than 140 individuals in eight cities and enforcement actions against at least 35 others. More than US$8 million, 10 metric tons of PSE tablets, 83 pounds of finished methamphetamine, two PSE extraction laboratories, one methamphetamine laboratory, and 136 pounds of chemical solvents and reagents were seized. DEA served administrative orders to revoke the registrant status of at least 20 major PSE distributors, and executed administrative inspection warrants and notices of inspection to examine records of numerous additional PSE distributors.

Following the culmination of Operation MOUNTAIN EXPRESS in August 2000, opportunities for diversion at the wholesale distribution level in the United States were further reduced, forcing traffickers to vigorously seek alternative sources of supply for PSE. Canada, which currently has no legal chemical controls, has become the favored source of supply.

Although sporadic incidences of PSE entering the United States have been reported over the course of the 1990s, large-scale smuggling of the precursor was not noted until the close of the decade. Shipments are generally smuggled across the U.S.-Canada border through border ports of entry in cities such as Detroit, Michigan, and moved through the United States destined for methamphetamine laboratories in the West and Southwest, primarily California. In recent years, DEA has documented the involvement of ethnic Middle Eastern chemical smuggling organizations in methamphetamine precursor smuggling in both the United States and Canada.

The amount of PSE imported into Canada has increased exponentially. Between 1999 and 2000 alone, the amount of PSE imported rose by 500 percent. One factor that may have impacted increased PSE importation is the replacement of PPA (phenylpropanolamine) preparations by products containing PSE. In November 2000, Health Canada issued an advisory warning that PPA would be removed from the Canadian market. While all PPA-containing products were legally removed as of May 30, 2001, it appears that suppliers had already begun the voluntary withdrawal of PPA based on the Health Canada warnings. Notwithstanding this, it is clear that the removal of PPA-containing products does not account significantly for the dramatic increases in the amount of imported PSE observed over the last several years.

Imports* by Country of Origin for Pseudoephedrine (in kilograms)

Country of ORIGIN	1996 Quantity	1997 Quantity	1998 Quantity	1999 Quantity	2000 Quantity
CH (Switzerland)	2	7	7	9	5
CN (China)	500	1,000	500	14,257	20,496
DE (Germany)	14,171	7,567	11,010	44,052	428,189
GB (Great Britain)	1	2	0	0	0
IN (India)	646	1,325	1,100	3,300	32,043
USA (United States)	14,514	20,987	75,479	47,720	30,751
Totals	29,834	30,888	88,096	109,338	511,484

* Source: Canada Customs

The following are some current U.S. examples detailing the smuggling of Canadian PSE.

- In January 2001, more than 5 million tablets of PSE (1000 count bottles) were seized in California. Packaging information indicated Canadian origin.

- In January 2001, approximately 74 kilograms of PSE were seized in New Mexico. Labels indicated Canadian origin.

- In January 2001, authorities in the State of Missouri seized approximately 1 million PSE tablets pursuant to a traffic stop. Label information indicated a Canadian manufacturer.

- In April 2001, U.S. authorities seized more than 42 million 60-mg tablets of PSE (1000 count bottles) from an individual entering the United States at the Detroit, Michigan port of entry. This quantity of PSE had the potential to produce more than 5,000 pounds of methamphetamine. This was the largest seizure of Canadian PSE effected in the United States to date.

- In May 2001, U.S. authorities seized approximately 6 million 60-mg tablets of PSE (1000 count bottles) from an individual entering the United States at the Detroit, Michigan port of entry.

- In May 2001, U.S. authorities in the State of Oklahoma seized approximately 9 million 60-mg tablets of PSE (1000 count bottles) pursuant to a vehicle stop. Packaging label indicated Canadian origin.

In addition to overland smuggling, illegal mail order sales of precursor chemicals to the United States have been documented for at least a decade. In most instances, shipments seized by the U.S. Customs Service (USCS) have involved small numbers of bottles shipped to individuals. In several cases, however, U.S. law enforcement has intercepted much larger postal shipments from Canadian sources. The sale of precursor chemicals on the Internet magnifies the risk of diversion. As the popularity of the Internet continues to grow, and more commerce is conducted via the Internet, new opportunities for diversion become increasingly apparent. Below are specific examples of large-scale chemical

diversion encountered from Canadian mail order and Internet sources of supply.

- In September 1999, DEA received information from counterparts in Canada about a shipment of 20 kilograms of sassafras oil to a customer in Chicago. A controlled delivery of the precursor led investigators to an MDMA laboratory in the subject's residence. It was later determined that the sassafras oil had been ordered from an Internet distributor based in Canada.

- In August 2000, pursuant to a controlled delivery of a mail parcel, more than one million tablets of PSE (1000 count bottles) were seized in California. Labels on the bottles indicated a Canadian manufacturer.

Synthetic Drug Situation

Situation Report – Canada

The trafficking and use of MDMA/Ecstasy has significantly raised the level of threat of the synthetic drug trade in Canada. Although domestic illicit production occurs, the bulk of Ecstasy available in the North American market is imported mostly from Western Europe. Dutch-based and Israeli-based crime groups continue to hold a monopoly on the international MDMA market, although it is likely that international traffickers of other drug commodities will become more extensively involved in the Ecstasy trade.

Canadian traffickers of Ecstasy range from individual entrepreneurs to organized criminals, including outlaw motorcycle gangs, as well as Asian-based (notably in British Columbia and Ontario) and Italian-based groups. Intelligence indicates that mid-level U.S. traffickers have increasingly crossed the border to purchase MDMA from Canadian sources. At the higher level, American-based organized crime groups are using Canadian cities as transit points for Ecstasy shipments destined for the USA.

The attraction of MDMA originates from the Rave movement. The drug's continuing popularity and demand remain contingent on the widely available supply. The amount of Ecstasy seized has soared from 1,000 tablets in 1996, to about 10,000 in 1997, 70,000 in 1998, 400,000 in 1999, and more than two million in 2000. The importation flow continues unabated, with traffickers introducing new and different transportation modes and concealment methods in attempts to evade detection by law enforcement. The couriers who import Ecstasy as air passengers have changed from being mostly foreign nationals to being predominantly Canadian citizens. Air passengers have employed more diverse methods of concealment, including hollowed-out books, picture frames, stuffed toys, children's games and videotapes. Ecstasy smuggling via postal service accounted for almost half of all shipments intercepted by Canada Customs in 2000. Marine containers and air cargo were used to import large-scale MDMA shipments into Canada. In August and December 2000, 311,200 Ecstasy tablets hidden in mag wheels and 202,000 tablets concealed amongst rolls of textiles, respectively, were seized from marine containers at the Port of Montreal. In May 2001, almost 860,000 tablets of Ecstasy were seized from an air cargo shipment declared as bed sheets.

Clandestine laboratory activity appears to be increasing in Canada, and involves a greater number of poly-drug laboratories. Eight clandestine labs were involved in the production of MDMA in 2000. As in previous years, most of the labs uncovered in 2000 involved the production of methamphetamine. Methamphetamine is a North American drug staple and will likely remain a dominant drug of abuse. Other amphetamine-based drugs, notably MDA, also have been more frequently encountered, usually sold as MDMA. Illicit MDA production has increased, with several large capacity labs detected in 2000. The trend of larger, more sophisticated MDMA and MDA lab operations continues to be observed in 2001.

GHB and ketamine, by-products of the Rave and youth-oriented drug culture, have become a growing concern for Canadian authorities. The availability of GHB is more widespread through Canada, facilitated by the simple process required to produce the drug. This is exacerbated by the fact that GBL ingested on its own will convert to GHB in the body. Ketamine is procured either through

diversion of pharmaceutical supply or by importation, mostly from Southeast Asia.

Situation Report – United States

The production, trafficking and abuse of synthetic drugs affects all Americans. DEA's strategy to combat the problem includes not only aggressive international, national, and local law enforcement efforts, but also domestic and international precursor chemical controls and interdiction.

Methamphetamine

Over the last decade, methamphetamine has become a significant drug threat facing the United States. The production, trafficking, and abuse of the drug, coupled with the violence associated with all aspects of the trade, are concerns for U.S. policy-makers and law enforcement. The rise in production and trafficking of methamphetamine has resulted in expansion of abuse from the West and Southwest, to the Midwest and portions of the Eastern United States.

Prior to the 1990s, methamphetamine production and trafficking in the United States was primarily controlled by outlaw motorcycle gangs, including the Hells Angels. Mexican traffickers first became involved in methamphetamine production and distribution in the early 1990s, resulting in a significant increase in high-purity supplies of the drug. The growing popularity of the Internet also contributed to the accessibility of methamphetamine "recipes," resulting in a dramatic increase in the number of small-scale, or "mom-and-pop," laboratories throughout the United States.

According to the El Paso Intelligence Center's (EPIC) National Clandestine Laboratory Seizure System (NCLSS), during 2000, approximately 6,700 clandestine methamphetamine laboratory sites were seized by DEA and state/local law enforcement, compared to 6,782 seized during 1999[8]. The States of California and Washington reported the greatest number of laboratory seizures during 2000. The majority of the laboratories, approximately 95 percent, seized in the United States are considered "mom and pop" laboratories, capable of producing ounce quantities of methamphetamine. The remaining five percent are considered "superlabs," capable of producing 10 or more pounds of methamphetamine in a single cook. The majority of the "superlabs" are believed to be tied to Mexican criminal groups and are located primarily in the State of California.

The supply of those chemicals needed to produce high-quality methamphetamine has been reduced through international chemical control efforts such as "Letters of No Objection" (LONO). DEA started issuing LONOs in 1995 to countries that require a letter stating that there is no objection to the export before allowing it to proceed. As a result of these efforts, the national purity level for methamphetamine, as well as amphetamine, has gone down dramatically. The average purity of methamphetamine exhibits seized by DEA dropped from 72 percent in 1994 to 31 percent in 1999. The average purity of amphetamine exhibits seized by DEA dropped from 41 percent in 1994 to only 21 percent in 1999. Emergency room mentions and overdose deaths involving methamphetamine show an analogous decrease. During 2000, however, there was a slight increase in the purity of

[8] Statistics based on data reported to EPIC and entered into CLSS as of June 18, 2001. Clandestine laboratory statistics include data on labs only.

methamphetamine to 35 percent and a slight decrease in the purity of amphetamine to 20 percent.

In addition, law enforcement efforts targeting both components of the methamphetamine trade, Mexican national organizations and "mom-and-pop" laboratory operators, have produced record arrests and seizures of methamphetamine, amphetamine and clandestine laboratories. In 2000, the Federal Drug Seizure System indicated seizures totaling 3,163 kilograms of methamphetamine, an increase from 2,774 kilograms in 1999.

3,4-Methylenedioxymethamphetamine (MDMA/Ecstasy)

In the United States, the 1990s have been marked by unprecedented growth in the demand for MDMA/Ecstasy. The Rave phenomenon served as the primary vehicle for the perpetuation of the drug.

Approximately 80 percent of the Ecstasy seized in the United States is produced in the Netherlands, and to a lesser extent, Belgium. Small-scale production is, however, reported in the United States. During 2000, according to the EPIC's NCLSS, DEA seized six MDMA laboratories and state/local authorities seized two compared to 1999, with DEA reporting 13 MDMA laboratory seizures and state/local authorities reporting six.

International MDMA smuggling, according to DEA reporting, is largely controlled by ethnic Israeli drug trafficking organizations. The DEA Brussels Country Office (BCO), for example, reports clearly established links to Israeli groups in 12 of the 39 Ecstasy cases initiated by the BCO between 1998 and 2000.

Ecstasy seizures in the United States have steadily increased over the course of the 1990s, from 11,913 tablets seized by DEA in 1996 to more than 3 million tablets in 2000. Several large seizures of Ecstasy during 2000 propelled totals far beyond 1999 levels. In July 2000, DEA and the USCS in Los Angeles effected a record seizure of more than 2 million Ecstasy tablets in an air freight shipment arriving from France. In November 2000, DEA, USCS, and the Federal Bureau of Investigation, in conjunction with state and local law enforcement authorities in Florida, seized approximately 635,000 Ecstasy tablets and arrested three Hungarian nationals. Also during November 2000, DEA authorities in New York seized approximately 600,000 Ecstasy tablets.

Air couriers, mail parcels and air cargo shipments are the primary smuggling methods utilized by traffickers transporting Ecstasy shipments to the United States. New York, Miami and Los Angeles are the primary ports of entry for couriers arriving from both major and secondary European airports. Newark, Buffalo, Boston, Atlanta, Chicago, Detroit, Houston and San Diego are gaining popularity with Ecstasy traffickers as ports of entry into the United States. In Canada, Toronto and Montreal are increasingly utilized as transit points for MDMA entering the United States.

As both trafficking organizations and law enforcement become increasingly sophisticated, routes are likely to diversify. INTERPOL reports for 1999 noted a movement away from the major European airports by international Ecstasy smugglers. Increasingly, couriers are utilizing secondary, or less heavily traveled, regional airports with direct connections to the United States, which include airports in Belgium, Germany, France, Spain, the Czech Republic and Iceland. During 2000, several Ecstasy

seizures have been effected from couriers arriving at U.S. ports of entry from Iceland. These couriers obtained the Ecstasy and initiated travel in the Netherlands.

The use of maritime containers and air cargo will likely increase as traffickers move larger quantities of Ecstasy from the source countries to destinations throughout the world. With Europe's sophisticated transportation networks and access to maritime commerce through the numerous container ports, these methods are likely to be frequently exploited in the future.

Paramethoxyamphetamine (PMA)

PMA, also known as 4-methoxyamphetamine, is an illicit, synthetic hallucinogen that has stimulant effects similar to other clandestinely manufactured amphetamine derivatives like MDMA. Until recently, illicit abuse of PMA was briefly encountered during the early 1970s in the United States. However, since February 2000, PMA has reemerged in Florida, Illinois, Michigan, Virginia, and internationally. Since May 2000, PMA ingestion has been associated with more than 20 deaths internationally, including three in Chicago and seven in central Florida. In Canada, small amounts of PMA have been encountered over the last several years. At least one drug-related death in the Greater Toronto area was linked to PMA use.

Like MDMA, PMA is currently distributed in the United States at Rave parties and clubs. Dealers may be unaware that they are buying or selling PMA rather than other club drugs such as MDMA.

Gamma-hydroxybutyrate (GHB)

GHB has grown in popularity in the United States in recent years, especially among young adults active in the Rave and nightclub scene. According to the EPIC's NCLSS, during 2000, DEA seized seven clandestine GHB laboratories compared to five the previous year. GHB laboratory seizures by state/local agencies also demonstrated an increase during 2000, with 12 laboratory seizures reported, compared to eight during 1999. Access to recipes on the Internet has contributed to increased local production of GHB. The primarily distributors of GHB are young adult Caucasian males, college students in particular.

Ketamine

Ketamine, or "Special K", is an anesthetic in human and veterinary medicine. The Special K trip is touted as better than lysergic acid diethylamide (LSD) or phencyclidine (PCP) because it lasts only about 30 to 60 minutes as opposed to several hours. As with GHB, ketamine has grown in popularity in recent years, becoming a staple at Rave parties and within the nightclub scene. Ketamine is not manufactured in the United States, but is imported as a bulk powder. Once in the United States, it is converted into injectable dosage forms by U.S. firms. Illicit supplies are generally diverted from licit sources, with burglaries of veterinary clinics being the most frequently reported source. Increasingly, tablets containing amounts of ketamine have been seized in locations throughout the United States, including the states of Michigan, California and New York. These tablets are often sold as Ecstasy.

Lysergic Acid Diethylmide (LSD)

The popularity of the Rave and nightclub scene has also given rise to a resurgence in the popularity of hallucinogens such as LSD. LSD is primarily produced in California, and more recently in the Midwest. Manufacture remains arduous and time-consuming, and is limited by federal chemical controls on the primary precursor chemicals, ergotamine tartrate, lysergic acid and lysergic acid amide. Other limitations include the high price of the precursor chemicals and the high degree of skill required for the manufacture of the drug.

Environmental and Public Health Hazards

The threat to public safety from explosion, fire, poison gas, groundwater contamination, and hazardous by-products associated with clandestine laboratories is likely to increase with the proliferation of synthetic drug production in the United States and Canada. These dangers affect the safety and well-being of the public and the law enforcement personnel involved in the dismantling of these laboratories.

A growing number of children are present at clandestine laboratory sites in the United States. During 1999, approximately 974 children were present at laboratory sites - 189 were exposed to toxic chemicals and 12 were injured. During 2000, the numbers increased, with 1,870 children present at laboratory sites - 296 exposed to toxic chemicals, 12 injured, and three killed. As of June 2001, the number of children reported at laboratory sites was 738, with 271 exposed to toxic chemicals and 8 injured.

In response to this trend, a variety of policy and public safety approaches have emerged in the United States. The State of California, Office of Criminal Justice Planning, initiated the Drug Endangered Children (DEC) Response Teams in 1993. According to the Crime Prevention Coalition of America, the primary goals of the inter-agency DEC Response Teams are to "improve the safety and health of children endangered by drug manufacturing, distribution, and use environments by providing appropriate services; improve the community's response to drug endangered children by establishing a multidisciplinary team; and establish a consistent response from law enforcement and social services."

The risk of explosion and fire at clandestine laboratory sites is of great concern to the public and governmental agencies. Data from EPIC's NCLSS demonstrates that the instance of explosion or fire at laboratory sites in the United States has remained fairly constant over the past several years. Reported incidents include 114 laboratory explosions and 65 laboratory fires during 1999, 97 explosions and 78 fires during 2000, and 37 explosions and 40 fires as of June 2001. In Canada, reported incidents include one explosion and three fires in 1999 and one explosion and two fires in 2000.

The environmental degradation caused by the dumping of toxic by-products resulting from methamphetamine production places heavy financial burdens on law enforcement agencies and all levels of government. On average, five to six pounds of toxic waste are produced for every pound of methamphetamine produced. DEA data demonstrate that the average cost of laboratory cleanup ranges from US$3,100 to US$3,400. In Canada, clean-ups can range from CAN$1,500 to CAN$30,000, depending on the state and size of the site at the time of seizure. In 2000, a clandestine

lab-related fire destroyed a house in rural Ontario, resulting in significant environmental damage. The cost for this cleanup was about CAN$450,000.

The following chart depicts the funding sources for remediation of clandestine laboratory sites in the United States. Funding for the cleanup of DEA-seized laboratories is derived from several sources, including DEA appropriated funding (and during FY2000, DOJ supplemental funding) and the Asset Forfeiture Fund (AFF). Community Oriented Policing Service (COPS) funding as well as DEA appropriated funding are used for cleanups of state/local/tribal seizures. Bureau of Justice Assistance (BJA) "Hot Spots" funds are appropriated for cleanup in specific areas. In accordance with a 1989 agreement between DEA and the U.S. Environmental Protection Agency, DEA clean up of laboratory sites includes the removal and disposal of the chemicals and apparatus used for illegal drug manufacturing. Remediation of the sites, such as removal of contaminated soils or appliances, is the responsibility of the landowner or the local/state environmental or health agencies.

	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
Cleanup Funding[1]							
AFF	$2.0	$4.0	$6.8	$9.6	$6.9	$5.8	$6.1
COPS				$5.0	$5.0		$20.0
DEA Appropriated					$4.1	$4.1	$4.1
DOJ Supplemental						$5.0	
BJA (Hot Spots)							$3.8
Number of Cleanups[2]							
AFF	325	738	1,383	1,302	1,017	1,158	500
COPS				608	2,832	3,305	3,837

[1] Funding shown is in millions of dollars.
[2] Cleanups for FY 01 are as of May 31, 2001.

In addition to the chemical and/or fire threat to the health and safety of the officers involved in the dismantling of the clandestine laboratories, these sites often contain additional dangers such as blasting caps, dynamite, explosive booby-traps, explosives, grenades, pipe bombs and plastic explosives.

Recommendations/Outlook

- There is an urgent need for Canada to adopt a flexible regulatory and administrative framework for precursor chemicals as a dynamic response to a rapidly changing illegal synthetic drug environment, dominated by the production of methamphetamine and MDMA and its analogs in Canada and the United States. The expansion of synthetic drug production is clearly indicated by increased cash sales of precursor chemicals in Canada and an increase in precursor chemical cases in the United States demonstrating a Canadian nexus.

- Without legal control measures in Canada, drug traffickers from both countries are able to

purchase chemical products openly from distributors. The diversion of PSE, for example, from legitimate Canadian suppliers to the illicit market is reaching a critical level. An industry code of good practices can contribute significantly to minimize chemical diversion between our countries, particularly when complemented by an effective regulatory framework. This framework can be used to ensure compliance by the small portion of firms which neither belong to associations nor implement codes of practice.

- There are no legal controls to assist Canadian law enforcement agencies in the investigation of chemical diversion cases. New opportunities for diversion of precursor chemicals are becoming apparent, as seen by the increasing sales over the Internet. In the absence of regulations, the RCMP instituted a program in 1995 in an effort to liaise with, and educate, chemical industry representatives about suspicious chemical transactions. Voluntary cooperation has been positive. Close cooperation among Canadian authorities and legitimate producers and distributors of chemicals is a critical factor to the success of precursor control and monitoring.

- Despite the lack of controls enabling Canada Customs to seize or detain imported precursors, information from international law enforcement agencies regarding suspicious shipments into and out of Canada has helped Canada Customs identify high risk exporters/importers. Continued cross-border cooperation on chemical diversion cases would be enhanced by comprehensive chemical control regulations in Canada.

- Clandestine laboratory activity appears to be increasing in Canada, involving a greater number of poly-drug laboratories. Canadian law enforcement should consistently report clandestine laboratory seizures as an integral part of their comprehensive efforts for precursor control and monitoring.

- Consideration should be given to charges of public endangerment relative to the clandestine production of synthetic drugs. The threat of public safety from explosion, fire, poison gas, groundwater contamination and hazardous by-products associated with clandestine laboratories is likely to increase with the proliferation of synthetic drug production in the United States and Canada.

- Excellent cooperation involving all drug enforcement issues continues between DEA and the RCMP. One of the primary strategies for combating the proliferation of synthetic drugs is the control and monitoring of precursor chemicals required to manufacture these substances. The impending chemical control regulations by the Canadian Government will impact significantly on chemical diversion activities in both Canada and the United States.