CHEMICAL CONTROLS

Introduction

Only marijuana, of all the major illicit drugs of abuse, is available as a natural, harvested product. All of the others such as cocaine, heroin, and amphetamine-type-stimulants must be manufactured. This process requires chemicals.

Chemical diversion control is a proactive and straightforward strategy to deny traffickers the chemicals they must have to manufacture illicit drugs. It involves the regulation of licit commerce in the chemicals most necessary for drug manufacture to ensure that only transactions for which legitimate end-uses have been established are permitted to proceed, thereby preventing the diversion of drug-producing chemicals from licit trade to illicit drug manufacture. Chemical control is a cost-effective strategy to prevent the manufacture of illicit drugs through the regulation of licit commerce.

There is widespread international commerce in many of the chemicals required for illicit drug manufacture. Many of them have extensive commercial applications and are available from numerous source countries. Therefore, an essential element of effective international chemical control is rapid multilateral exchange of information among competent national authorities on proposed transactions in regulated chemicals in order to identify and stop or seize shipments of chemicals likely to be diverted.

National control systems alone cannot prevent diversion. All countries having commerce in regulated chemicals—exporting, trading, transit, and importing—must participate. Participation must also include feedback from countries receiving information, particularly importing countries, on actions they have taken in response to the information. The United States continues to seek the establishment of multilateral mechanisms for this information exchange.

Chemical control is a strategy to prevent a crime. It requires the examination of proposed commercial transactions, the bulk of which are legitimate—an examination that requires chemical manufacturers and traders to provide commercial information to the exporting country's authorities. These authorities must share at least a portion of this information with other governments to ascertain the legitimacy of the proposed end-use, and to prevent traffickers from turning to alternative chemical source countries when transactions in one country are denied.

Many governments consider chemical control a trade issue to be handled by trade ministries/agencies with a bias toward promoting, not regulating, trade. If these ministries do not allow sufficient scope for regulatory and law enforcement measures in support of chemical control, they may unwittingly undermine this effective counternarcotics strategy. Trade ministries tend to reinforce the reluctance of companies to share information with their governments that will in turn be shared with other governments for fear of its reaching competitors. This concern is unfounded. There is no evidence that states or firms are abusing the multilateral chemical information exchange now occurring to gain competitive advantage.

To participate in multilateral chemical control mechanisms, countries must establish national chemical control regimes and administrative structures to support them. To be effective, the national regimes must provide for the multilateral exchange of information necessary for their implementation, while respecting the legitimate commercial interests involved. A key element is recognition that chemical control is also a law enforcement strategy to be administered in cooperation with law enforcement agencies to curb criminal activities.

International Framework for Chemical Control

The need for chemical control has been internationally accepted. Article 12 of the 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988 UN Drug Convention) establishes the obligation and international standards for parties to the Convention to control their chemical commerce to prevent diversion to illicit drug manufacture and to cooperate with one another. The two tables of the Annex to the Convention list 22 chemicals as those most necessary for drug manufacture and, therefore, subject to control. Parties to the Convention accept the obligation to enact national laws and promulgate regulations to carry out its provisions.

In 1990, the Inter-American Drug Abuse Control Commission of the Organization of American States (CICAD) approved Model Regulations for the control of drug-related chemicals that set a high standard for government action. In June 1999, the Model Regulations were updated to cover all the chemicals included in the 1988 UN Drug Convention, and to strengthen domestic and international chemical controls and enforcement provisions and authorities. Many Latin American countries have adopted chemical control laws and regulations based on the CICAD Model Regulations.

The United States and other governments use the annual meetings of the United Nations Commission on Narcotic Drugs (CND) to promote international acceptance of chemical control, to highlight emerging chemical control concerns, and to promote mechanisms for information exchange.

The CND is also used to focus international attention on the use by traffickers of substitute chemicals in place of those controlled under international conventions, particularly in the manufacture of synthetic drugs such as methamphetamine.

The June 1998 "United Nations General Assembly Special Session Devoted to Countering the World Drug Problem Together" (UNGASS) was an important vehicle for promoting chemical control. Two of the five action plans adopted by the Special Session—those dealing with amphetamine-type stimulants and their precursors and the control of precursors—were directly connected to chemical control.

The U.S. has a chemical control agreement with the European Union, which was signed on May 28, 1997, and entered into force on July 1, 1997. It is particularly valuable in that it involves a 15-member state organization representing some of the world's major chemical manufacturing and trading nations. Significantly, it also provides for the exchange of information on chemical transactions with third countries under certain circumstances.

Tactics Used to Obtain Chemicals

The huge trade in chemicals, both domestic and international, offers multiple opportunities for their diversion from legitimate commerce. This is the principal method used by traffickers to obtain chemicals. In doing so, they use a variety of tactics, exploiting legal and regulatory weaknesses, to circumvent national chemical control laws and regulations. The following are some of the more common diversion methods:

- Chemicals are diverted from domestic chemical production to illicit in-country drug manufacture. This requires the domestic capacity to manufacture the needed chemicals, coupled with poor domestic controls on them.
- Chemicals are imported legally into drug-producing countries with official import permits and subsequently diverted. The failure of importing countries to investigate legitimate end-use adequately before issuing import permits, and the acceptance by exporting countries of import permits as sufficient proof of legitimate end-use without any effort at independent verification make this possible.
- Chemicals are manufactured in or imported by a country, then are diverted from domestic commerce, and smuggled into neighboring drug-producing countries. Inadequate internal and import controls and weak border security make this type of diversion possible.
- Chemicals are mislabeled throughout a transaction, either domestic or international, as non-controlled chemicals. In this case, the diversion takes place at the manufacturer or distributor level. Poor domestic controls that permit the initial diversion, coupled with

the inability of enforcement officials to determine the true nature of the chemicals, allow this form of diversion.

• Chemicals are shipped to countries or regions where no systems exist for their control. This occurs because some chemical source countries do not require that controlled chemicals be exported only to countries where viable, countrywide regulatory systems are in place.

These tactics are masked by the use of front companies, false invoicing, multiple transshipments, free trade zones, and any other device that will conceal the true nature of the product, its ultimate recipient, or its final end-use.

There is some recycling of the solvents used in illicit drug manufacture; acids, alkaline materials, or oxidizing agents cannot be recycled. Since recycling requires some sophistication, and there is a loss of chemical with each recycling process, it is not a preferred method for unsophisticated heroin and cocaine laboratories. The chemicals used in the manufacture of synthetic drugs such as methamphetamine and ecstasy cannot be recycled.

A more recent development is the manufacturing by traffickers of the chemicals they need from unregulated raw materials. Enhanced controls on potassium permanganate, the key chemical for manufacturing cocaine, have created shortages, and laboratories for its manufacture have been discovered in Colombia.

2001 Chemical Diversion Control Trends and Initiatives

"Club drugs" have emerged as a major problem in recent years. This is a general term for a number of illicit drugs, primarily synthetic, that are most commonly encountered at nightclubs and "raves." The drugs include ecstasy, LSD, GHB, GBL, amphetamine, and methamphetamine. The drugs have gained in popularity in part due to the perception that they are not harmful, nor as addictive as mainstream drugs such as cocaine and heroin. This is a problem not only in the United States, but also in Europe and Asia. Given their widespread abuse, particularly by young people, there is an emerging international consensus to cooperate in controlling the chemicals required for their manufacture.

The problem is complicated by the changing nature of the drugs and the chemicals used in their manufacture. To escape controls traffickers create new drugs—"designer drugs"—with the same physical/psychological effects of regulated drugs. Traffickers can also use unregulated substitute chemicals in manufacturing designer drugs. As a result, in addition to controlling already regulated drugs and chemicals, systems have to be devised to identify and bring under control new drugs and the chemicals used in their manufacture.

The United States has legislation providing for emergency scheduling, which permits DEA to maintain one-year temporary controls on new substances upon the determination that they are an imminent risk to the public health while a fuller scientific study is undertaken. There are also legislative provisions for the prosecution of trafficking in new synthetic drugs intended for human consumption if their chemical structure or their physical/psychological effect is like that of a controlled substance, or if the new substance is purported to produce effects like a controlled substance.

As with other precursor chemicals, national systems alone cannot adequately control precursors used for synthetic drugs. Operation Mountain Express III, a multi-agency U.S. and Canadian operation targeting pseudoephedrine smuggling from Canada dramatically illustrated this. Pseudoephedrine is a key chemical used in the manufacture of methamphetamine. As a result of successful U.S. domestic initiatives controlling the chemical, traffickers have turned elsewhere, including to Canada, to meet their needs. On January 10, 2002, DEA and other participating agencies announced the arrest of over 100 individuals involved in smuggling the chemical from Canada. DEA Administrator Asa Hutchinson noted, "In the last two years, the use of Canadian pseudoephedrine has become the norm rather than the exception in West

Coast-based Mexican methamphetamine laboratories." Pseudoephedrine is easily obtained in Canada because the sale of precursor chemicals for domestic use is not restricted. Aware of the problem, Canada is developing chemical control regulations and plans to implement them by the end of 2002.

The international community is mobilizing now to develop multilateral mechanisms to control the key precursor chemicals used in manufacturing synthetic drugs. The models are Operation Purple, the successful international initiative directed against potassium permanganate, a key cocaine chemical, and Operation Topaz, directed at acetic anhydride, a key heroin chemical. The United States and the European Union co-sponsored a resolution at the March 2001 CND urging multilateral cooperation in controlling synthetic drug chemicals. The United States will host a conference in June 2002, to be chaired by the International Narcotics Control Board, for the most important concerned countries to agree on a multilateral strategy to control synthetic drug precursor chemicals more effectively. Experts' meetings are being held in advance to develop proposals to present to the June meeting. The United States and the European Union have agreed to cooperate at the March 2002 CND meeting in promoting the June conference.

Controlling synthetic drug chemicals presents a complex problem. While operations Purple and Topaz are tracking operations directed at a single chemical, there are more chemicals involved in manufacturing synthetic drugs, in part because of the variety of synthetic drugs available. The initial focus of the synthetic drug initiative will be on establishing tighter controls on the chemicals required by some of the most widely abused synthetics, such as ecstasy, amphetamine, and methamphetamine.

The attention to key cocaine and heroin chemicals continued in 2001. The March 2001 CND meeting approved the recommendation of the International Narcotics Control Board to move potassium permanganate and acetic anhydride from Table II of the 1988 UN Drug Convention to the more restrictive Table I. The principal change is that parties to the Convention now must provide, as a treaty obligation, pre-export notification for all shipments of these chemicals to importing countries when requested by the importing country.

Participation in Operation Purple grew to 30 countries in 2001. However, there are still 63 nonparticipating countries receiving shipments of potassium permanganate, of which 15 have received more than 100,000 kilograms of the chemical. Since its inception in April 1999 through September 2001, Operation Purple monitored 1,374 potassium permanganate shipments totaling 38,010,480 kilograms. A total of 3,776,471 kilograms were stopped or seized. Indicative of the success of the operation is the discovery of ten potassium permanganate laboratories in Colombia as traffickers seek other sources for the chemical previously diverted from commercial channels. The International Narcotics Control Board also notes in its annual report for the year 2001 that chemical analysis of samples of cocaine seized throughout the world show that the use of potassium permanganate as an oxidizing agent in the cocaine purification process has remained at an all-time low for the second consecutive year.

Operation Topaz, which began in March 2001, now has 32 participating countries. Through September 2001, 1,458 shipments of acetic anhydride totaling 155,330,000 kilograms were monitored and 213,000 kilograms stopped or seized. The higher figures for Operation Topaz indicate the higher volume of trade in acetic anhydride and the greater difficulty in monitoring it.

There are indications that Operation Topaz and moving acetic anhydride to Table I of the 1988 UN Convention are having an impact. Many participants at a November 2001 meeting of the United Nations International Drug Control Program Subcommission on Illicit Drugs Trafficking and Related Matters in the Near and Middle East reported significant success in intercepting acetic anhydride transiting their countries enroute to heroin laboratories in Afghanistan. One result is the increasing appearance of brown heroin in the region, indicating the absence of acetic anhydride in the final stage of the purification process.

The Road Ahead

The international consensus that more needs to be done to control synthetic drugs is an opportunity to develop specific multilateral mechanisms for the control of their precursor chemicals. The March 2002 CND meeting and the June 2002 Washington conference on synthetic drug chemicals will be used for that purpose. However, these efforts should not be made at the expense of operations Purple and Topaz. Therefore, the U.S. will continue its active support for and participation in these operations and urge non-participating countries to join.

The Afghan Interim Authority on January 16, 2002 issued a decree banning the cultivation, processing, and trafficking of opiates. Multilateral cooperation in controlling chemical commerce with Afghanistan to prevent the importation and diversion of chemicals required for heroin manufacture will be required to assist the Interim Authority implement this decree. Countries exporting these chemicals to Afghanistan and neighboring countries will need to be particularly vigilant to ensure that legitimate end-uses exist for chemical orders they receive from these areas.

The international community needs to continue improving implementation of the general international system for chemical control based on the 1988 UN Drug Convention, as well as the operations targeting specific chemicals. An important element of this effort will be to press for feedback when exporting and importing countries exchange information. Pre-export notifications lose value unless they are acted upon and the exporting country is informed of the results. One aspect of improving feedback is greater recognition that chemical control is a law enforcement activity for fighting criminal drug trafficking, not only a regulatory activity to control chemicals. Therefore, there is greater urgency required in processing and acting upon information.

The focus on specific chemicals and regions does not lessen the importance of controlling the other chemicals included in the 1988 UN Drug Convention, or the commerce in these chemicals with other geographic regions. As controls tighten on traditional sources, traffickers must be prevented from shifting to other chemicals or regions where controls are looser to obtain chemicals.

Major Chemical Source Countries

The countries discussed in this section are those with large chemical manufacturing or trading industries that have significant trade with drug-producing regions, and those countries with significant chemical commerce susceptible to diversion domestically and smuggling into neighboring drug-producing countries. Designation as a major chemical source country does not indicate that a country lacks adequate chemical control legislation and the ability to enforce it. Rather, it recognizes that the volume of chemical trade with drug-producing regions, or countries in proximity to them, makes these countries the sources of the greatest quantities of chemicals liable to diversion. The United States, with its large chemical industry and extensive trade with drug-producing regions, is included in the list.

Many other countries manufacture and trade in precursor chemicals, but not on the scale, or with the broad range of precursor chemicals, of the countries in this section. These designations are reviewed annually.

Article 12 of the 1988 UN Drug Convention is the international standard for national chemical control regimes and for international cooperation in their implementation. The tables in the Annex to the Convention lists the 22 chemicals most essential to illicit drug manufacture. The Convention includes provisions for maintaining records on transactions involving such chemicals, and provides for their seizure if there is sufficient evidence that they are intended for use in illicit drug manufacture.

Western Hemisphere

Argentina

Argentina has a large well-developed chemical industry that exports to customers throughout Latin America. The industry produces many of the solvents, acids, and oxidizing chemicals required for manufacturing cocaine. Argentina is a party to the 1988 UN Drug Convention. A 1989 law meets the Convention's requirements for record keeping, import and export licensing, and authority to suspend shipments. Presidential decrees in 1991 and 1996 added the requirement that all manufacturers, importers, exporters, distributors, and transporters be registered with the Secretariat for the Prevention of Drug Addiction and Narcotics Trafficking (SEDRONAR).

Due to resource constraints and deficiencies in the relevant decrees, there have been very few investigations into suspicious chemical transfers. This may be attributable in part to the fact that Argentine law does not recognize the illegal possession of precursor chemicals as a serious criminal offense. Thus, Argentine law enforcement officials seem to place little emphasis on the arrest and prosecution of individuals found in possession of precursor chemicals. Argentine authorities did, however, seize 350,465 liters of these chemicals in 2001, a significant increase from the 2,702 liters seized in 2000.

The Argentine Government has introduced new and more secure import and export certificates and formed an eight-person chemical investigation unit. It also continues to propose to its neighbors that they work together to monitor chemical commerce in the region.

DEA continues to work with Argentine authorities to identify solutions to the problems of controlling international and domestic diversion of Argentine chemicals. Presently, DEA is working with Argentine authorities to establish chemical enforcement groups and, through coordination with DEA offices in Bolivia and Paraguay, plans to assist in targeting regional chemical traffickers. Argentine authorities exchange chemical transaction records with U.S. law enforcement officials.

Brazil

Brazil has South America's largest chemical industry. It also imports significant quantities of chemicals to meet its industrial needs. Brazil is a party to the 1988 UN Drug Convention.

A new chemical control law was approved and signed by Brazilian President Cardoso on December 27, 2001. The new law is intended to amplify and fortify current Brazilian chemicalcontrol statutes by increasing the number of controlled chemicals. The initial proposal is for the Brazilian Federal Police (DFP) to control 35 chemicals, but this may change since the new law gives the authorities the flexibility to add as many chemicals to the controlled list as they find appropriate. The new law also makes it easier to investigate and prosecute the diversion of precursor chemicals.

The new law became effective January 1, 2002, and January 31, 2002 was the date for compliance. The Brazilian authorities, however, will provide the chemical industry adequate time to comply with the new regulations that implement the law. These regulations require currently registered chemical handlers to re-register. The re-registration will be approved after company facilities have been inspected by the DFP. Companies will also be required to submit audits and reports to the authorities on a monthly basis.

In anticipation of the changes to come, DEA is assisting in the development of a special unit of DFP agents dedicated exclusively to the identification and prevention of chemical diversion to illicit drug manufacture. However, an overall shortage of agents and resources, as well as other law enforcement priorities, hinders the development and expansion of this unit.

Brazil has established procedures under which records of transactions in precursor and essential chemicals can be made available to other countries' law enforcement authorities. An agreement between Brazil and the United States on mutual cooperation for reducing demand, preventing illicit use, and combating illicit production and trafficking of drugs was signed I 1986 and entered into force in 1991. The agreement provides the formal basis for bilateral cooperation in chemical control, including information sharing with U.S. authorities.

Mexico

Mexico has major chemical manufacturing and trading industries that produce, import or export most of the chemicals necessary for illicit drug manufacture. Mexico is an importer and transit country for potassium permanganate, an essential chemical in the manufacture of cocaine. It is an important entry and transit point for ephedrine, pseudoephedrine and phenylpropanolamine, which are used in the illicit manufacture of amphetamine-type-stimulants. During 2001, the government prohibited the use of phenylpropanolamine in the manufacture of pharmaceutical products; therefore all import requests for that chemical are being been denied by the Secretariat of Health.

Comprehensive chemical control legislation adopted in 1997 placed 24 chemicals under government regulation: 13 precursor chemicals used in the manufacture of synthetic drugs and 11 essential chemicals used in refining opium and coca leaf into heroin and cocaine. In September 1999, implementing regulations were published which defined reporting and notification requirements for both the import and export of these chemicals, explained what constituted enduse, and authorized Mexican government agencies to share information with other governments. These laws and regulations meet the requirements of the 1988 UN Drug Convention, to which Mexico is a party.

Nevertheless, enforcement of these laws and regulations is weak. Chemical control and enforcement responsibilities are splintered among eight government entities, leading to information gaps, duplication of effort, and lack of accountability. The continued lack of field inspections and investigations makes verification and prosecution of violators difficult. For example, there has apparently been no investigation into the theft of 1.5 tons of pseudoephedrine from a truck leaving Mexico City International Airport.

The bilateral chemical control working group the United States and Mexico established in 1996 to act as a formal mechanism for cooperation and information exchange has not been able to sustain its early progress. The group drafted a memorandum of understanding (MOU) to formalize elements of bilateral cooperation in 2000, but, although initialed in August 2001, it has not been signed. Complicating matters, authority within the Mexican government over enforcement matters addressed in the MOU has been transferred to the Center for Drug Planning, an intelligence analysis agency, which presumably would have to join the MOU. Additionally, due to the division of responsibilities within the government, the Secretariat of Health must be made a signatory for the MOU to be effective. Despite the dormancy of the MOU, cooperation and information exchange on chemical control between U.S. and Mexican law enforcement agencies continues.

Mexico is a participant in Operation Purple, the multilateral initiative that monitors shipments of potassium permanganate. Nonetheless, more than half the potassium permanganate seized in Colombia since the operation's inception came via Mexico, while no legitimate Mexican sources have reported missing the over 80 tons of the chemical involved.

The Mexican government is aware of its deficiencies in chemical control. One positive step has been the recent creation of the Health Quality Commission, which has been charged with creating and implementing compliance standards for chemical control. The commission intends to retain compliance fees to use for enhancing its operations. Mexico continues to make efforts through highway and airport checkpoints to interdict illicit chemical shipments. It also participates in U.S. training exercises to dismantle clandestine laboratories.

The United States

The United States manufactures and/or trades in all 22 chemicals listed in the Annex to the 1988 UN Drug Convention. It is a party to the Convention and has laws and regulations meeting its chemical control provisions.

The basic United States chemical control law is the Chemical Diversion and Trafficking Act of 1988. This law and three subsequent chemical control amendments were designed as amendments to the U.S. controlled substances laws rather than as stand-alone legislation and are administered by DEA. In addition to registration and record keeping requirements, the legislation requires traders to file an import/export declaration at least 15 days prior to shipment of regulated chemicals. DEA uses the 15-day period to determine if the consignee has a legitimate need for the chemical diversion investigators are assigned to DEA offices in ten key countries and at INTERPOL to assist in determining legitimate end-use. In other countries, DEA agents perform this task. The diversion investigators and agents work closely with host country officials in this process. If legitimate end-use cannot be determined, the legislation gives DEA the authority to stop shipments.

The legislation also requires chemical traders to report suspicious transactions to DEA such as those involving extraordinary quantities or unusual methods of payments. Close cooperation has developed between the U.S. chemical industry and DEA in implementing the legislation.

The United States has been active in initiating and supporting cooperative multilateral chemical control initiatives. The United States chaired the G-7 Chemical Action Task Force, whose 1990 report established many of the standards and procedures now applied to international chemical control. The Multilateral Chemical Reporting Initiative, which provides the information exchange procedures for subsequent chemical tracking operations, was a United States initiative. DEA

organized the two international conferences in 1999 that resulted in Operation Purple, the potassium permanganate tracking operation. The United States participated in and supported the meeting in 2000 organized by the International Narcotics Control Board to plan Operation Topaz, the acetic anhydride tracking operation.

The United States co-sponsored with the European Union a resolution at the March 2001 CND meeting calling for greater attention to and multilateral cooperation in controlling the chemicals required for manufacturing synthetic drugs. In pursuit of this objective, the United States will host a conference in June 2002, chaired by the International Narcotics Control Board, to agree on multilateral mechanisms to better control synthetic drug chemicals.

Asia

China

China has a major chemical industry. It is a large producer of potassium permanganate, a key cocaine essential chemical, and a major producer of acetic anhydride and ephedrine, two other important precursor chemicals. The country is a party to the 1988 UN Drug Convention and has regulations for record keeping and import/export controls on the 22 chemicals listed in Tables I and II of the Convention. Several provinces, including Yunnan (which shares a border with Burma), have more stringent controls than called for in the Convention. China also requests "letters of no objection" from importing countries prior to authorizing exports of methamphetamine precursor chemicals.

Internally, the government has issued regulations tightening controls on transportation licenses for ephedrine, a methamphetamine precursor. One result has been to drive up the price on the black market for the chemical.

China actively cooperates with multilateral initiatives to control chemicals in international commerce, and it has been a strong partner with the United States and other countries in implementing a system of notification of dual-use chemicals. It reports the highest number and largest quantities of potassium permanganate shipments to the Operation Purple control system. It is participating in Operation Topaz, the acetic anhydride tracking initiative that became operational in March 2001. China and the United States also cooperate in Operation Icebreaker, a regional initiative to combat the diversion of precursor chemicals for the production of crystal methamphetamine.

China cooperates closely with the U.S. on chemical control issues. The two countries have in place a strong pre-export notification system for shipments of ephedrine and pseudoephedrine. Chinese officials routinely take part in chemical control courses sponsored by the Department of State and taught by DEA. Information is exchanged through mechanisms such as operations Purple and Topaz and in the course of normal counternarcotics cooperation.

India

India's location between the drug producing regions of Afghanistan and Burma and its large chemical industry make it a natural target for traffickers seeking chemicals. India is a party to the 1988 UN Drug Convention, but it does not have laws and regulations providing for controls on all the chemicals listed in the Convention.

There are controls on the chemicals most likely to be diverted: acetic anhydride for heroin manufacture in Afghanistan and Burma and ephedrine and pseudoephedrine for amphetaminetype-stimulants in Burma. No objection certificates from the Central Bureau of Narcotics are required to export these and six other precursors. Imports of acetic anhydride and three other precursors also require no objection certificates.

Indian authorities cooperate closely with DEA in controlling chemicals, sharing information and actively participating in multilateral chemical control initiatives such as Operations Purple and Topaz. India continues to notify DEA of any seizures of Indian controlled chemicals, and frequently provides samples of heroin seizures for analysis as part of DEA's Heroin Signature Program. India co-chairs the steering committee for Operation Topaz.

Europe

Chemical diversion control within the European Union (EU) is regulated by two EU regulations binding on all member states. The first, issued in 1990, meets the chemical control provisions of the 1988 UN Drug Convention. The second, issued in 1992, expanded the first to incorporate the more comprehensive recommendations contained in the 1991 G-7 Chemical Action Task Force Report. The EU regulations include provisions for record keeping on transactions in the chemicals listed in the 1988 UN Drug Convention, require a system of permits or declarations for exports and imports of regulated chemicals, and authorize governments to suspend chemical shipments. EU member states implement the regulations through national laws and regulations.

The EU regulations govern the regulatory aspects of chemical diversion control. Member states are responsible for the criminal aspects: investigating and prosecuting violators of the national laws and regulations implementing the EU regulations.

An agreement between the United States and the European Community on precursor and chemical substances, which was signed on May 28, 1977, and entered into force on July 1, 1997, is the formal basis for cooperation in chemical control between the United States and the EC, acting on behalf of its member states. The agreement establishes a Joint Follow-up to meet normally on an annual basis. Under the agreement, the Joint Follow-up Group is required to monitor the administration of the agreement and ensure its proper implementation. The annual meeting has been particularly useful in coordinating national or joint initiatives such as resolutions at the annual UN CND.

Bilateral chemical control cooperation is also good between the United States and EU member states, and many participate in and actively support voluntary initiatives such as the Multilateral Chemical Reporting Initiative, Operation Purple and the new Operation Topaz.

Germany and the Netherlands, with large chemical manufacturing or trading sectors and significant trade with drug-producing areas, are considered the major chemical source countries in Europe. Other European countries have important chemical industries, but the level of chemical trade with drugproducing areas is not as large and broad-scale as these countries.

Germany

Germany's large chemical industry manufactures and trades in most of the precursor and essential chemicals used in illicit drug manufacture, making it a target for traffickers seeking chemicals. Germany is a party to the 1988 UN Drug Convention, and its chemical industry complies with government regulations that became effective in 1993, which are in accord with the EU regulations and meet the Convention's requirements.

Germany maintains an effective and well-respected chemical control program, which monitors the country's chemical industry, as well as chemical imports and exports. Cooperation between chemical control officials and the chemical industry is a key element in Germany's chemical control strategy. The Federal Police in cooperation with German Customs have a very active Joint Precursor Chemical Unit based in Wiesbaden that solely handles chemical diversion investigations.

Germany is a leader in international cooperation in chemical control. It developed and promoted the concept that led to Operation Purple (the potassium permanganate tracking operation) and co-chairs its steering committee. Germany also was one of the leaders in the organization of Operation Topaz, the acetic anhydride tracking operation, and actively participates in its operation.

German chemical control officials and DEA counterparts maintain a close working relationship. A DEA diversion investigator in DEA's Frankfurt Resident Office spends at least one day per week with the Joint Precursor Chemical Unit working on chemical issues of concern to both countries. This arrangement allows for the real-time exchange of information.

The Netherlands

The Netherlands is a major chemical trading country with some 2,400 companies involved. It has large storage facilities to handle chemicals, and Rotterdam is the world's busiest port. The Netherlands is also the world's largest producer of the synthetic drug ecstasy, indicating that there is domestic diversion and/or smuggling from abroad to provide the required chemicals.

The Netherlands is a party to the 1988 UN Drug Convention and has legislation meeting the chemical control requirements of the Convention and EU regulations. Violations of the chemical control laws can lead to prison sentences (maximum of six years), fines (up to \$50,000), or asset seizures. The Netherlands supports and participates in multilateral chemical control initiatives such as operations Purple and Topaz. A May 2001 government offensive against synthetic drugs provided for intensified controls on chemical precursors and additional funding for the Economic Control Service, which is to have a central role.

The government has concluded that most of the chemicals required for ecstasy manufacture in the Netherlands come from China. However, because of the human rights situation in China, Dutch policy does not permit the exchange of criminal information with Chinese authorities. The government, therefore, is seeking to achieve a common European Community position allowing for the exchange of administrative information.

The Dutch continue to work closely with the United States on precursor controls and investigations. This cooperation includes formal and informal arrangements for information exchange. United States and Dutch authorities cooperate closely in multilateral operational initiatives and in international meetings such as the CND.

Major Heroin and Cocaine Manufacturing Countries

The manufacture of heroin and cocaine requires significant quantities of chemicals. Most major manufacturing countries for these illicit drugs do not produce all the required chemicals, and traffickers must meet the majority of their chemical requirements from external sources. This section summarizes the sources of chemicals used in heroin and cocaine manufacturing countries and their initiatives to control these chemicals.

Asia

Afghanistan

Afghanistan had been the world's largest manufacturer of heroin until the Taliban in July 2000 issued an edict banning opium poppy cultivation in areas it controlled. The ban was reportedly largely observed in Taliban-controlled areas, but continued poppy cultivation in non-Taliban areas and opium stockpiles in Taliban areas allowed heroin manufacture to continue. The chemicals required for this manufacture must come from outside Afghanistan. Although Afghanistan is a party to the 1988 UN Drug Convention, it has no viable chemical control system.

Europe, the Central Asian states and India have been the principal sources for chemicals, either shipped directly to Afghan entities or to nearby countries and smuggled into Afghanistan. The Central Asian states and Persian Gulf countries have been used as smuggling routes.

On January 16, 2002, the Afghan Interim Authority issued a decree banning cultivation, processing, and trafficking of opiates. Future chemical requirements and sources will depend on the success of that decree and the authorities' ability to regulate chemical commerce and prevent smuggling. This will require the cooperation of chemical source and neighboring countries.

Burma

In 2001, Burma was the world's primary heroin producer. It was also an important manufacturer of amphetamine-type-stimulants in response to growing demand, primarily is Southeast Asia. Burma is a party to the 1988 UN Drug Convention, but it does not have a viable system in place to satisfy its chemical control provisions. The bulk of the key chemicals required for illicit drug manufacture, most importantly acetic anhydride for heroin and ephedrine for amphetamine-type-stimulants, are smuggled across porous borders from China, India, and Thailand where they were diverted from domestic commerce.

Latin America

Bolivia

Bolivia is not a major producer of precursor chemicals. Most chemicals required for illicit drug productions are smuggled from neighboring countries.

Bolivia is a party to the 1988 UN Drug Convention, and has the legal framework for implementing its chemical control provisions. Over the past four years, the government has developed an effective chemical interdiction program, making chemicals for producing illicit

drugs hard to obtain and expensive. Bolivian traffickers have been forced to alter the cocaine production process to reduce or eliminate the need for some chemicals and are using inferior substitute and recycled chemicals. However, there is a demand for Bolivian cocaine base and Bolivian processors have adapted to obtain the chemicals required to maintain a sufficient level of quality.

Bolivia participates in voluntary multilateral mechanisms such as the Multilateral Chemical Reporting Initiative and Operation Purple.

Colombia

Colombia is the world's largest producer of cocaine and an important producer of heroin. This requires chemicals, most of which are imported into the country with valid import licenses and subsequently diverted. Lesser amounts are smuggled in from neighboring Brazil, Ecuador, and Venezuela.

Colombia has chemical control laws meeting or exceeding the requirements of the 1988 UN Drug Convention to which it is a party. A major problem in their implementation continues to be the system for issuing import permits. These permits are not reliable proof that the legitimate end-use for the chemicals has been verified before they are issued. There have been numerous cases of diversion in which the Colombian importer had a valid import permit, and the diversion was accomplished after the legal importation. The permits are also issued for lengthy periods of time, rather than on a shipment-by-shipment basis. Before shipments may proceed, DEA requires documentation identifying the ultimate consignee and the end-use for all U.S. exports, and transshipments through the U.S., to Colombia of potassium permanganate and the solvents necessary for cocaine production.

Colombia participates in operations Purple and Topaz, the multilateral operations tracking potassium permanganate and acetic anhydride shipments. Ten clandestine labs for potassium permanganate production have been discovered in Colombia in 2001, indicating traffickers are being forced to find new sources for chemicals receiving special scrutiny.

Peru

Peru manufactures some of the chemicals required for cocaine processing and imports the remainder. Many of them are imported legally and diverted to illicit drug manufacture. Peru is a party to the 1988 UN Drug Convention and has laws meeting its chemical control provisions. Legislation passed in 1999 strengthened the ability of the chemical control unit of the Peruvian National Police, DICIQ, to regulate chemical companies. Additional legislation is required to impose criminal penalties for trafficking in controlled chemicals. While draft legislation has been submitted to the government for review, the authorities have not yet submitted that legislation to congress.

The DICIQ actively uses its existing legislative authorities. It conducted over 1,200 regulatory and criminal investigations in 2001, making 59 arrests and closing 70 chemical companies. It seized 108 metric tons of controlled precursor chemicals in 2001.

Peru participates in Operation Purple, the multilateral potassium permanganate tracking operation.