

CHEMICAL CONTROLS

Summary

The unique challenges posed by the control of the precursor chemicals used in the manufacture of methamphetamine have become a major focus of chemical control efforts. Unlike cocaine and heroin, methamphetamine, amphetamine and other synthetic drugs require no plant material, they require relatively small amounts of chemicals, and they can be produced in crude labs located anywhere. The principal precursors required for methamphetamine and amphetamine are pseudoephedrine and ephedrine. Traffickers obtain them in bulk or extract them from pharmaceutical products, sold over-the-counter in many areas.

The pattern has been for small “mom and pop” labs to rely on pharmaceutical preparations bought locally and criminal “super” labs to rely on bulk chemicals. However, large traffickers are increasingly turning to pharmaceutical preparations traded internationally in large quantities. This is made possible because pharmaceutical preparations are excluded from the chemical control provisions of the 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. We are working with the major countries producing the precursors and products containing them to develop mutually beneficial procedures to exchange production and sales data in order to identify diversion points and stop them. To be successful, these procedures must provide for confidentiality, since most of the information involves legitimate transactions and proprietary information.

The two voluntary operations to control better trade in the cocaine chemical potassium permanganate (Operation Purple) and the heroin chemical acetic anhydride (Operation Topaz) have been combined into one operation, Operation Cohesion, with the International Narcotics Control Board (INCB) serving as the focal point. This recognizes that the operations use essentially the same strategy in tracking their chemicals throughout the chain of a transaction. We believe Cohesion will continue as a valuable tool for monitoring trade and preventing diversion of these chemicals. Project Prism is the INCB program to better control synthetic drug precursors and equipment. The U.S. initiative on methamphetamine and amphetamine precursors outlined above will be coordinated within the scope of Project Prism.

Background

Chemicals are essential to the manufacture of narcotic drugs. They become an integral component in the case of synthetic drugs, and are required for the processing of coca and opium into heroin and cocaine. Only marijuana, of the major illicit drugs of abuse, is available as a natural, harvested product.

Chemicals used in drug manufacture are divided into two categories, precursor and essential chemicals, although the term “precursors” is often used to identify both. Precursor chemicals are used in the manufacture of synthetic drugs and become part of the final product. They are sold commercially in relatively small quantities. Essential chemicals are used in the refining of coca and opium into cocaine and heroin. Although some remain in the final product, the basic raw material is the coca or opium. Many essential chemicals required for illicit drug manufacture have extensive commercial applications, are widely traded, and are available from numerous source countries.

Chemical diversion control is a proactive and straightforward strategy to deny traffickers the chemicals they must have. It involves the regulation of licit commerce in the chemicals most necessary for drug manufacture to ensure that transactions are permitted to proceed only after legitimate end-uses for the chemicals involved have been established. This requires verifying that both the chemicals and the quantities ordered are appropriate for the needs of the buyer. Chemical control is a cost-

effective strategy to prevent the manufacture of illicit drugs through the regulation of licit chemical commerce.

Chemical control requires the examination of proposed commercial chemical transactions, the large majority of which are legitimate, in order to identify and stop transactions vulnerable to diversion to illicit drug manufacture. Chemical producers and traders must provide transaction details to their national authorities. In the case of export transactions, some of this information must be shared with importing governments so they can ascertain the legitimacy of the proposed end-uses of the chemicals. When transactions are denied, this information must be shared with third countries to prevent traffickers from turning to alternative chemical source countries. To avoid hindering legitimate commerce and obtain the cooperation of industry, the information exchange and the decision-making must be rapid.

Many governments consider chemical control to be a law enforcement issue. Some consider it a health issue to be handled by health ministries, with a primary interest in protecting public health. Others consider it a trade issue to be handled by trade ministries/agencies with a bias towards promoting, not regulating trade. If these ministries do not allow sufficient scope for regulatory as well as law enforcement measures in support of chemical control, they may unwittingly undermine this effective counternarcotics strategy.

The U.S. has found a combination of regulation and law enforcement to be the most effective approach to chemical control. The regulatory component controls commerce in chemicals subject to diversion, authorizing legitimate transactions and stopping those vulnerable to diversion. The law enforcement component provides the capability to detect diversion, identify and apprehend criminals diverting or seeking to divert chemicals, and to track back cases of successful diversion.

Information exchange to prevent chemical diversion must include all countries involved in chemical transactions, exporting, trading, transit, and importing. Backtracking operations on seized diverted chemicals require cooperation from the same countries. The information exchange must include feedback from countries receiving information, particularly importing countries, on actions they have taken in response to it.

The U.S. continues to seek implementation of effective multilateral mechanisms for this information exchange. One obstacle is a reluctance to share information on commercial transactions for fear it will reach competitors. This concern is unfounded. There is no evidence that the multilateral chemical information exchange now occurring is being abused by governments or firms to gain competitive advantage. Nevertheless, the concern is genuine and chemical transaction information exchange procedures must provide assurances of confidentiality.

Informal, voluntary arrangements in law enforcement channels targeting specific chemicals or classes of chemicals have proved effective in gaining participation in multilateral chemical control operations. By focusing on “choke point” chemicals, these operations allow authorities to concentrate resources on denying traffickers chemicals that are difficult to substitute in the drug production process. In 2005, two of the major operations, Purple and Topaz, targeting respectively the cocaine precursor potassium permanganate and the heroin precursor acetic anhydride, were combined into one operation, Operation Cohesion. The INCB continues as the focal point. Project Prism is an INCB initiative concentrating on stricter tracking of trade in the chemicals and equipment required for synthetic drug manufacture.

Participation in multilateral chemical control mechanisms requires the promulgation of national chemical control regimes, the regulatory structures to implement them, and the law enforcement structures to enforce them. The national regimes must include provisions for the multilateral information exchange, while respecting the legitimate commercial interests of the businesses involved.

International Framework for Chemical Control

Chemical control requires multilateral cooperation. Article 12 of the 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988 UN Drug Convention) recognizes this and establishes the obligation and international standards for parties to the Convention to cooperate in controlling their chemical commerce to prevent diversion to illicit drug manufacture. The two tables of the Annex to the Convention list 23 chemicals as those most necessary for drug manufacture and, therefore, subject to control. The Convention contains provisions for adding and deleting chemicals from the tables. Signatories to the Convention accept the obligation to enact national laws and regulations to carry out its provisions.

The European Union has chemical control regulations binding on all Member States. The European Council approved new updated regulations on November 25, 2004. The new regulations attack new drugs, establish an early warning system to identify new drugs and precursors, and control additional precursors. The EU regulations meet the chemical control provisions of the 1988 UN Drug Convention. EU Member States implement the regulations through national laws and regulations.

The Inter-American Drug Abuse Control Commission of the Organization of American States (CICAD) has approved Model Regulations for the control of drug-related chemicals that set a high standard for government action. The Model Regulations cover all the chemicals included in the 1988 UN Drug Convention. Many Latin American countries have adopted chemical control laws and regulations based on the CICAD Model Regulations. A CICAD experts group on chemical control meets annually to coordinate efforts in the hemisphere.

The 1988 UN Drug Convention, regional regulations and model legislation, and national legislation and regulations provide frameworks for chemical control, particularly domestic control regimes. They do not provide the mechanisms for the multilateral cooperation required for their successful implementation internationally. The United States and other governments use ad hoc arrangements and the more formal annual meetings of the UN Commission on Narcotic Drugs (CND) to forge agreement on information exchange mechanisms and to highlight emerging chemical control concerns.

Ad hoc multilateral arrangements have the advantage of developing cooperation among the countries most concerned with a particular diversion situation, for example the diversion of precursors to synthetic drug manufacture. Participation in the arrangements is voluntary and is most effective when done in law enforcement channels, because this approach eases the concern of many countries in sharing proprietary commercial information in more formal channels.

The CND can be used to forge consensus on more formal procedures. However, many governments resist more formal arrangements, particularly if they provide for multilateral information exchange beyond that required by the 1988 UN Convention. Moreover, any resolution calling for such arrangements must be approved by the consensus of the 53-member body. The result is resolutions weakened with caveats and nonobligatory language.

The CND is effective in highlighting emerging drug control concerns, advising CND members of ad hoc arrangements that have been established and inviting their participation, and alerting members to the use by traffickers of substitute chemicals in place of those controlled under the 1988 UN Drug Convention, particularly in the manufacture of synthetic drugs. In 1996, the United States introduced a resolution which was adopted by the CND requesting the UN International Narcotics Control Board (INCB), with the UN Office of Drugs and Crime, to establish a limited international special surveillance list of chemicals not included in the Convention for which substantial evidence exists of their use in illicit drug manufacture. In 1998, the INCB, drawing on contributions of different governments, established the list to alert governments to the chemicals.

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. In 2003, the fifth anniversary of the UNGASS, CND members formally reviewed progress in achieving the ten-year goals and objectives established by the UNGASS. Progress is reviewed less formally at intervening CND meetings and a more formal review is planned for the tenth anniversary of the UNGASS.

The U.S. has a chemical control agreement with the European Union, signed on May 28, 1997. It is particularly valuable in that it involves a 25-Member State organization representing some of the world’s largest chemical manufacturing and trading nations. As a result of this agreement and a natural confluence of interests, U.S./European cooperation in chemical control is strong.

How Traffickers Obtain Chemicals

Chemicals are traded in vast quantities from multiple sources, both domestically and internationally, offering many opportunities for their diversion to illicit drug manufacture. Transshipment or smuggling from third countries into drug producing countries is increasing as the drug producing countries tighten their chemical controls, particularly in the case of synthetic drug precursors. The exploitation of nonprescription drugs containing easily extractable pseudoephedrine is a major source of that key chemical used in illicit manufacture of methamphetamine.

The following are some of the more common diversion and other methods used to obtain chemicals:

- Traffickers extract chemicals, particularly pseudoephedrine, from pharmaceutical preparations. Under prevailing international interpretations of the 1988 UN Drug Convention, it does not control pharmaceutical preparations, allowing them to be traded internationally without regard to legitimate requirements unless exporting and importing countries impose such controls.
- Chemicals are diverted from domestic chemical production to illicit in-country drug manufacture.
- Chemicals are imported legally into drug-producing countries with official import permits and subsequently diverted.
- Chemicals are manufactured in or imported by one country, diverted from domestic commerce, and smuggled into neighboring drug-producing countries.
- Chemicals are mislabeled or re-packaged and sold as noncontrolled chemicals.
- Chemicals are shipped to countries or regions where no systems exist for their control.
- New drugs (“designer drugs”) are developed that have physical and psychological effects similar to controlled drugs, but which can be manufactured with noncontrolled chemicals.
- Traffickers manufacture the controlled chemicals they require from unregulated raw materials, a costly and difficult process.

These tactics are masked by the use of front companies, false invoicing, multiple transshipments, use of 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; recycling cannot be used for acids, alkaline materials or oxidizing agents. 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 precursor chemicals used in the manufacture of synthetic drugs such as methamphetamine and ecstasy cannot be recycled.

2005 Chemical Diversion Control Trends and Initiatives

The emergence of methamphetamine as a major drug of abuse and a significant domestic law enforcement problem in the United States was the most important factor impacting U.S. chemical control in 2005. Roughly thirty-five percent of the methamphetamine produced in the country comes from small toxic labs (“mom and pop labs”) using chemicals procured locally, most commonly pseudoephedrine extracted from nonprescription pharmaceutical preparations. The traffickers involved are usually addicts themselves and they are producing the product for their use, that of their friends and limited sales.

Professional traffickers operating “super labs” (those capable of producing ten pounds of methamphetamine in a single production cycle) rely on international sources for their chemicals. Since, depending on the efficiency of the lab, the ratio of pseudoephedrine to methamphetamine is approximately 1-1.6 to 1, and labs are easy to establish, traffickers can move their operations to where the chemicals are available. This occurred when many super labs moved from the U.S. West Coast to Mexico as tighter precursor controls in Canada and better interdiction on the border cut precursor smuggling from the north. Mexico is now tightening its controls on methamphetamine precursors and the concern is that they will be sold to countries with fewer controls and smuggled into Mexico, or the U.S., for drug production.

The 1988 UN Drug Convention includes pseudoephedrine and ephedrine as Table 1 chemicals, which are subject to stricter controls than those in Table II, but less strict than those for narcotic and psychotropic substances under the 1961 and 1971 UN Drug Conventions. The controls, however, are only as good as the ability of the countries concerned to implement them with national laws and regulations, and through effective procedures for multilateral cooperation. Furthermore, the Convention excludes pharmaceutical preparations. Traffickers are exploiting the exclusion to obtain pharmaceutical preparations from which pseudoephedrine can be easily extracted.

Afghanistan continues as the world’s largest opium producer. Conditions within the country make implementing effective chemical control difficult. In March 2005, the U.S., Germany and the European Commission proposed at the UN Commission on Narcotic Drugs adding a backtracking element to Operation Topaz, the multilateral acetic anhydride control initiative, to determine the sources of that chemical seized in Afghanistan. This would help authorities intercept shipments before they reached the country. However, it has been difficult to obtain chemical samples because there is not sufficient time to collect and label samples under the circumstances in which authorities make lab seizures.

The two voluntary multilateral initiatives to track shipments of acetic anhydride (Operation Topaz) and potassium permanganate (Operation Purple) have been combined into Operation Cohesion, recognizing that they involve many of the same countries, the major source countries and destination countries for the chemicals. However, traffickers continue to evade the reach of these initiatives by turning to nonparticipating countries to obtain these key cocaine and heroin chemicals. Many of these countries lack the legal, administrative, and law enforcement infrastructure to control the chemicals. Central Asian countries bordering Afghanistan are particularly worrisome in this regard.

The Road Ahead

A major focus will be on better control of the chemicals used to produce amphetamine and methamphetamine, primarily ephedrine and pseudoephedrine. A consensus needs to be developed to include pharmaceutical preparations, now being used as a source of the precursor pseudoephedrine, in these efforts.

The 1988 UN Drug Convention includes provisions for exchange of information on transactions involving controlled chemicals on a bilateral basis. Pharmaceutical preparations are excluded from the information exchange requirements. We need procedures for the multilateral exchange of information on bulk and pharmaceutical transactions in order to identify countries with excessive imports, or spikes in imports, that would indicate diversion. With this information, the countries involved can be approached and the excess imports stopped. Countries targeted by traffickers for this type of transshipment frequently lack the administrative structure to identify excess imports.

We have found a voluntary approach to information exchange in law enforcement channels works best in obtaining cooperation in chemical control beyond that required by the international drug conventions. This was the approach successfully used in establishing Operations Purple and Topaz. Information exchange in law enforcement channels offers assurances of confidentiality and provides that the information is directed to those who can most effectively act on it.

The Drug Enforcement Administration will be using this approach in a meeting it is hosting in late February 2006 in Hong Kong of the major pseudoephedrine and ephedrine producing countries, and the countries most affected by amphetamine and methamphetamine abuse. The purpose will be to review the problem and develop procedures for information exchange, including information on transactions involving pharmaceutical preparations.

The U.S. also intends to introduce a resolution in the March 2006 UN Commission on Narcotic Drugs requesting that countries provide to the International Narcotics Control Board annual estimates of their requirements for bulk ephedrine and pseudoephedrine and pharmaceutical products containing them. The Board would publish the results, as it does for estimated requirements for substances in the 1961 and 1971 UN Drug Conventions, to assist exporting countries in deciding the legitimacy of proposed exports of the products.

Chemical laws, regulations and cooperative multilateral chemical control operations require an administrative structure and trained personnel. The evolving methamphetamine situation makes this particularly important in Mexico where we are providing training and technical assistance to Mexican chemical control agencies on control mechanisms, information sharing, chemical shipments, enforcement, and prosecution. Mexico is also implementing a UN Office of Drugs and Crime (UNODC) National Data System to monitor importation and movement of precursor chemicals at a central site and 17 field sites. We also support UNODC chemical training programs in Central Asia, South Asia and Southeast Asia. To assist the INCB in its central role in multilateral chemical control operations, the U.S. has provided \$1.1 million since FY 2002 to INCB Data Bank for Precursor Control. We plan to continue supporting programs of this type in the future.

The two-way nature of information exchange will continue to be emphasized. In too many instances, exporting countries are not receiving replies to pre-export notifications sent to importing countries. The purpose of the pre-export notification is to enable importing country authorities to verify the legitimacy of the transaction and reply to the exporting country, approving or denying the transaction. The system breaks down without replies, allowing shipments to proceed without verification and leading to a situation where exporting countries no longer bother with pre-export notifications. One option selectively employed by the U.S. and some other countries is to agree that the exporting country will not allow shipment of chemicals until the importing country issues either a "letter of no objection" to the proposed shipment or an import permit.

Major Chemical Source Countries

The countries included 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 for smuggling into neighboring drug-producing countries. Designation as a major chemical source country does not indicate 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 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.

The list is reviewed annually. This year we looked carefully at countries that are major producers and/or traders of synthetic drug chemicals, and found that these countries are already included by virtue of their large chemical industries.

Many other countries manufacture and trade in precursor chemicals, but not on the same scale, or with the broad range of precursor chemicals, as the countries in this section.

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 annex to the Convention lists the 23 chemicals most essential to illicit drug manufacture. The Convention includes provisions for the Parties to maintain records on transactions involving these chemicals, and to provide for their seizure if there is sufficient evidence that they are intended for illicit drug manufacture.

The Americas

Argentina

Due to its advanced chemical industry, Argentina continues to be a source of chemicals liable for diversion to cocaine and heroin manufacture. Neighboring Bolivia is the major destination for these chemicals. Domestic cocaine manufacture in Argentina using smuggled cocaine base and locally diverted precursors continues. Argentina is a party to the 1988 UN Drug Convention and has laws meeting the Convention's requirements for record keeping, import and export licensing, and the authority to suspend shipments. Presidential decrees have placed controls on precursor and essential chemicals, requiring that all manufacturers, importers or exporters, transporters, and distributors of these chemicals be registered with the Secretariat for the Prevention of Drug Addiction and Narcotics Trafficking (SEDRONAR).

In 2005, legislation was passed giving SEDRONAR registry system the force of law. This increased its ability to regulate the distribution of precursors and impose fines on those who transport and sell unregistered chemicals.

The DEA-funded Northern Border Investigations Task Force seized 54,690 kilograms of diverted solid precursors and 88,020 liters of liquid precursors from January 2005 to September 2005. This is up from the previous year and indicates chemical diversion remains a serious problem.

Argentina participates in Operation Cohesion and the regional Operation Seis Fronteras. Argentine authorities willingly share chemical control information with U.S. authorities.

Brazil

Brazil has South America's largest chemical industry and also imports significant quantities of chemicals to meet its industrial needs. Brazilian law controls 146 substances that can be used for drug production. All companies that handle, import, export, manufacture, or distribute any of them must be registered with the Brazilian Federal Police. The registered companies are required to send monthly reports to the police on their usage, sales and inventory of any of the 146 substances they handle. Any person or company that is involved in the purchase, transportation or use of the substances must have a certificate of approval of operation, real estate registry, or special license issued by the police. Companies that handle the 22 most sensitive substances with regard to drug production are also regulated by the Ministry of Health's National Sanitary Vigilance Agency.

Brazil is a party to the 1988 UN Convention and these legislative provisions meet the chemical control requirements. The country also participates and supports the multilateral chemical control initiatives, Operation Cohesion, Project Prism and Operation Seis Fronteras. US/Brazilian cooperation in chemical control is good, and includes information exchange. The Brazilian Federal Police have recently agreed to work with DEA, in the context of Operation Cohesion, to perform a study of domestic use and exports of acetic anhydride. DEA has a Diversion Investigator assigned to its Brasilia office.

Canada

Canada remains a producer and transit country for precursor chemicals and over-the-counter pharmaceuticals used to produce synthetic drugs, particularly methamphetamine. Health Canada, the RCMP and the Canadian Border Services Agency are the agencies responsible for chemical control. Health Canada is the competent authority for managing the export of precursor chemicals listed in the 1988 UN Convention.

The Canadian Government continues to strengthen controls on precursor chemicals and their products. In August 2005, methamphetamine was moved from Schedule III to Schedule I of the Controlled Drugs and Substances Act to increase maximum penalties for its possession, trafficking, importing, exporting, and production. In November 2005, the 2003 Precursor Control Regulations were amended by adding six chemicals to the list of controlled chemicals and strengthening regulatory authorities to control chemicals. These measures follow others in recent years that have helped to significantly reduce the amount of Canadian-source pseudoephedrine discovered in clandestine U.S. methamphetamine laboratories.

Canada is a party to the 1988 UN Convention and complies with its record keeping requirements. Cooperation between U.S. and Canadian law enforcement agencies is excellent. Information sharing is part of this cooperation. Canada participates in Project Prism, targeting synthetic drug chemicals, its principal precursor concern, and is a member of the North American working group. Although it supports Operation Cohesion and contributes on an ad hoc basis, Canada is not actively engaged in it.

Mexico

Mexico has major chemical manufacturing and trading industries that produce, import and export most of the chemicals necessary for illicit drug manufacture. The country is a party to the 1988 UN Convention and has laws and regulations meeting its chemical provisions.

The Mexican Federal Commission for the Protection Against Sanitary Risks (CONEPRIS) strengthened chemical controls in 2005. Commission officials performed "no-notice"

inspections at the premises of chemical importers and prepared pre-export notifications messages on exports. With U.S. Government support, the UN Office of Drugs and Crime worked with CONFEPRIIS to establish a database for enhanced chemical control. CONFEPRIIS also began installing new computer equipment, procured by the Embassy's Narcotics Affairs Section, at 17 ports of entry to record the importation of precursor chemicals capable of producing synthetic drugs, particularly methamphetamine.

A series of laws and regulations have been passed to restrict precursor imports and regulate their sales, with an emphasis on pseudoephedrine. These include:

- Prohibiting import shipments weighing more than three tons;
- Restricting importation of pseudoephedrine to drug companies only, all other licenses were cancelled;
- Requiring shipments of pseudoephedrine to be transported in GPS-equipped, police-escorted armored vehicles to prevent hijacking and unauthorized drop offs;
- Limiting sales of pills containing pseudoephedrine to licensed pharmacies; and
- Restricting customer purchases to no more than three boxes of pills with a prescription required for larger doses.

U.S. and Mexican authorities cooperate in law enforcement. A formal mechanism for cooperation is the U.S-Mexico Bilateral Chemical Control Working Group, and day-to-day contact is handled by the DEA Country Office, notably by a group of Diversion Investigators and agents posted to Mexico City. The result is a good bilateral working relationship, involving information exchange and operational cooperation. Mexico also participates in the multilateral chemical control initiatives Operation Cohesion and Project Prism.

The United States

The United States manufactures and/or trades in all 23 chemicals listed in Tables I and II of the 1988 UN Drug Convention. It is a party to the Convention and has laws and regulations meeting its chemical control provisions.

The basic U.S. chemical control law is the Chemical Diversion and Trafficking Act of 1988. This law and three subsequent chemical control amendments were all designed as amendments to U.S. controlled substances laws, rather than stand-alone legislation. They are administered by the Drug Enforcement Administration (DEA). In addition to registration and record keeping requirements, the legislation requires traders to file import/export declarations 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 10 key countries and one 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.

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

Criminal penalties for chemical diversion are strict; they are tied to the quantities of drugs that could have been produced with the diverted chemicals. Persons and firms engaged in chemical diversion have been aggressively and routinely subjected to civil and criminal prosecution and revocation of DEA registration.

The U.S. has had a leadership role in the design, promotion and implementation of cooperative multilateral chemical control initiatives. It is actively working with other concerned countries to develop information sharing procedures to better control pseudoephedrine and ephedrine, the principal precursors for methamphetamine production. It is on the steering committee for Operation Cohesion and the task force coordinating Project Prism. It also has established close operational cooperation with counterparts in major chemical manufacturing and trading countries. This cooperation includes information exchange in support of chemical control programs and in the investigations of diversion attempts.

Asia

China

China has one of the world's largest chemical industries, producing large quantities of important precursors that can be used for illicit drug manufacture such as acetic anhydride (heroin), potassium permanganate (cocaine), PMK (ecstasy) and pseudoephedrine and ephedrine (methamphetamine). The country is a party to the 1988 UN Drug Convention and has regulations for record keeping and import/export controls on the 23 chemicals included in it. In November 2005, China passed its first administrative law on precursor chemicals aimed at preventing the illicit use of precursors. It regulates the manufacture, distribution, purchase, transport, and import and exports of precursor chemicals. The law represents the first action by the Chinese Government to control domestic sales of precursors, previous laws and regulations focused solely on imports and exports. Several provinces, including Yunnan (which shares a border with Burma), have more stringent controls than called for in the Convention.

The Chinese Public Security Bureau maintains a chemical control unit in Beijing to investigate chemical diversion and to verify the legitimacy of chemical handlers and transactions. In the provinces, provincial police only address controlled chemicals when they are discovered at a clandestine laboratory. China also requests "letters of no objection" from importing countries prior to authorizing exports of methamphetamine precursor chemicals.

Despite the adequate legislation, China's large chemical industry produces significant amounts of chemicals subject to diversion in countries around the world for the illicit production of cocaine, heroin, methamphetamine, and ecstasy. Although on paper China meets or exceeds the chemical control requirements of the 1988 UN Drug Convention, the size of its chemical industry is not matched by a law enforcement infrastructure adequate to effectively monitor its production and international trade.

U.S. and Chinese cooperation in chemical control is good, within the limits of Chinese capabilities. China is a participant in Operation Cohesion and Project Prism. Information is exchanged through these operations and in the course of normal counternarcotics cooperation. China is also a participant in Operation Icebreaker, an effort to combat diversion of precursor chemicals for the production of crystal methamphetamine. DEA has Diversion Investigator positions in its Beijing and Hong Kong offices. The Chinese signed a memorandum of understanding with the Netherlands on October 22, 2004, governing the sharing of

information on precursor shipments to prevent diversion, and the Dutch assigned a law enforcement liaison officer to Beijing in July 2005.

India

India's large chemical industry manufactures a wide range of chemicals, including the precursor chemicals acetic anhydride, ephedrine, and pseudoephedrine, which can be diverted for illicit drug manufacture.

India is a party to the 1988 UN Drug Convention, but it does not have controls on all the chemicals listed in the Convention. The GOI controls acetic anhydride, N-acetylanthranilic acid, anthranilic acid, ephedrine, pseudoephedrine, potassium permanganate, ergotamine, 3, 4-methylenedioxyphenyl-2-propanone, 1-phenyl-2-propanone, piperonal, and methyl ethyl ketone, all chemicals listed in the convention. Indian law allows the government to place other chemicals under control. Violation of any order regulating controlled substance precursors is an offense under the Narcotics Drugs and Psychotropic Substances Act, the key law controlling trafficking and is punishable with imprisonment of up to ten years. Intentional diversion of any substance, whether controlled or not, to illicit drug manufacture is also punishable under the Act.

The Indian Government in partnership with the Indian Chemical Manufacturing Association imposes controls on acetic anhydride, a key heroin chemical. Chemical manufacturers visit customers to verify the legitimacy of their requirements, and shipments are secured with specially fabricated sealing systems to prevent diversion. Domestic and export sales of acetic anhydride require a letter of no objection from the government.

Indian authorities cooperate with U.S. authorities on letters of no objection and verification of end-users, especially with regard to ephedrine and pseudoephedrine. Information is shared between Indian and U.S. authorities and India is a participant in Operation Cohesion and Project Prism. DEA has a Diversion Investigator assigned to its New Delhi office.

Europe

Chemical diversion control within the European Union (EU) is regulated by EU regulations binding on all Member States. The regulations have been updated to establish an early warning system to identify new drugs and precursors, and control additional precursors. The EU regulations meet the chemical control provisions of the 1988 UN Drug Convention, including provisions for record keeping on transactions in controlled chemicals, a system of permits or declarations for exports and imports of regulated chemicals, and authority for 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.

A Joint Unit on Precursors has been established, located at and supported by Europol in The Hague, the Netherlands. This has improved cooperation and the exchange of chemical control information between the Netherlands, Belgium, France, Germany, Austria, and the United Kingdom.

The U.S.-EU Chemical Control Agreement, signed May 28, 1997, is the formal basis for U.S. and EU Member State cooperation in chemical control. The agreement calls for annual meetings of a Joint Chemical Working Group to review implementation of the agreement and to coordinate positions in other areas. The annual meeting has been particularly useful in coordinating national or joint

initiatives such as resolutions at the annual UN Commission on Narcotic Drugs. The December 2005 meeting concentrated on coordinating actions to control better synthetic drug precursors.

Bilateral chemical control cooperation is also good between the U.S. and EU Member States, and many are participating in and actively supporting voluntary initiatives such as Operation Cohesion and Project Prism.

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

Germany

Germany's large chemical industry manufactures and sells most of the precursor and essential chemicals that may be used in illicit drug manufacture. It is one of the countries that produce large quantities of pseudoephedrine for licit pharmaceutical production. The country is a party to the 1988 UN Drug Convention and has chemical control laws and regulations, based on the EU regulations, meeting the Convention's requirements. The federal Precursor Control Act criminalizes the diversion of controlled chemicals for the illicit manufacture of drugs. In August 2005, three amendments to the chemical EU regulations to streamline control systems in the EU became effective, overriding many of the provisions of Germany's federal Precursor Control Act. The act is expected to be amended according to the provisions of the EU regulations.

Precursor control as a preventative measure is a major focus in combating drug crime in Germany. The country has an effective and well-respected chemical control program that monitors the 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 Criminal Investigative Service and German Customs Police have a very active Joint Precursor Chemical Unit, based in Wiesbaden, devoted exclusively to chemical diversion investigations. They investigated a total of 66 cases involving precursors and prevented shipments totaling 700 tons in 2004 (up from 18 tons in 2003).

Germany is in the forefront of international cooperation in chemical control. It developed and promoted the concept that led to Operation Purple and was one of the leaders in the organization of Operation Topaz. It strongly supports the INCB's Project Prism that concentrates on stricter tracking of trade in chemicals and equipment required for synthetic drug manufacturer. In January 2005, the Federal Criminal Police hosted a multilateral meeting in Wiesbaden to develop strategies to prevent the diversion of the key heroin chemical acetic anhydride to Afghanistan.

German chemical control officials and DEA counterparts maintain a close working relationship. A senior DEA Diversion Investigator in DEA's Frankfurt Resident Office spends at least two days a 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. German and U.S. delegations regularly support joint positions on chemical control in multilateral meetings such as the Commission on Narcotic Drugs. Information exchange during special operations has also been excellent.

The Netherlands

The Netherlands has a large (legal) chemical sector making it an attractive location for criminals to attempt to obtain chemicals for illicit drug manufacture. There are large chemical storage facilities and Rotterdam is a major chemical shipping port.

The Netherlands is a party to the 1988 UN Drug Convention and has legislation meeting its chemical control requirements and those of the EU regulations. The 1995 Act to Prevent Abuse of Chemical Substances is the most important piece of implementing legislation. The legislation provides for prison sentences up to six years, fines up to 50,000 Euros, and/or asset seizures. The Fiscal Information and Investigative Service and the Economic Control Service oversee implementation of the law.

The Netherlands participates in multilateral chemical control initiatives such as Operation Cohesion. It took an active role in the design of Project Prism, hosting an important organizational meeting December 2002. The Netherlands and the U.S. (DEA) have co-chaired Project Prism's Chemicals Working Group since its inception in 2002.

There is significant production of ecstasy and some production of amphetamines and other synthetic drugs in the Netherlands, indicating chemical diversion. The government has been proactive in meeting this threat. Many of the important ecstasy precursors originate in China and the government has increased cooperation with the Chinese. The joint Dutch/Chinese participation in Project Prism resulted in their signing a memorandum of understanding on October 22, 2004, governing the sharing of information on precursor shipments to prevent diversion. In July 2005, the Dutch assigned a law enforcement liaison officer to Beijing. One of the officer's primary missions is to coordinate the sharing of intelligence on precursor chemical investigations.

The Dutch and the U.S. have traditionally worked closely on precursor controls and investigations. There are formal and informal arrangements for information exchange. In addition to working together in multilateral operational initiatives, the U.S. and Dutch delegations to international meetings such as the Commission on Narcotic Drugs frequently coordinate positions. In November 2005, the Dutch hosted the second Synthetic Drug Enforcement Conference in Maastricht. Cooperation in precursor control and investigations was an important agenda item.

Major Drug Manufacturing Countries

Drug manufacturing requires significant quantities of chemicals. No major illicit drug manufacturing country produces all the required chemicals, and traffickers must meet their chemical requirements from external sources. This section summarizes the sources of chemicals and country initiatives to control them.

Asia

Afghanistan

Afghanistan produces nearly 90 percent of the world's opium. An increasingly large portion of the opium crop is being processed into heroin and morphine base by drug labs in Afghanistan. With no domestic chemical industry, the chemicals required for heroin processing must come from abroad. The principal sources are believed to be Europe, the Central Asian states and

India, but traffickers skillfully hide the sources of their chemicals by re-packaging and false labeling. There are no legitimate requirements in Afghanistan for most of the chemicals used in heroin manufacture, and most are smuggled in through the Central Asian states, the Persian Gulf and Pakistan, after being diverted elsewhere.

Afghanistan is a party to the 1988 UN Drug Convention. However, it lacks the administrative and regulatory infrastructure to comply with the Convention's record keeping and other requirements.

The same factors that adversely impact the interdiction of narcotics, the investigation of major trafficking organizations and the enforcement of the poppy ban hinder efforts to interdict precursor chemicals and processing equipment. While the Afghan Government understands the issue, progress in chemical control is primarily dependent upon establishment of specialized police and regulatory agencies. There currently are no registries or legal requirements for tracking, storing or owning precursor chemicals, although the new counternarcotics law adopted December 2005 requires the Ministry of Counternarcotics to develop a modern regulatory system.

Burma

Declining poppy cultivation in Burma has been matched by a sharp increase in the production and export of synthetic drugs. Burma does not have a significant chemical industry and does not manufacture ephedrine and pseudoephedrine used in synthetic drug manufacture, or acetic anhydride used in the remaining heroin manufacture. Most of the chemicals required for illicit drug manufacture are imported and diverted or smuggled into Burma from China, Thailand and India.

Burma is a party to the 1988 UN Drug Convention, but it does not have laws and regulations to meet all its chemical control provisions. In 1998, Burma established a Precursor Chemical Control Committee responsible for monitoring, supervising and coordinating the sale, use, manufacture, and transportation of imported chemicals. In 2002, the Committee identified 25 substances as precursor chemicals, including two not in the 1988 UN Drug Convention (caffeine and thionyl chloride) and prohibited their import, sale or use in Burma.

Burma is one of six countries (Burma, Cambodia, China, Laos, Thailand, and Vietnam) that are parties to the UN Office of Drugs and Crime sub-regional action plan for controlling precursor chemicals and reducing illicit narcotics production and trafficking in the highlands of Southeast Asia. In January 2003, Burma also held the first trilateral conference with India and China on precursor chemicals. In 2004, the conference expanded to include Laos and Thailand. As a result, India and China have taken steps to divert precursor chemicals away from Burma's border areas and India has added ephedrine to the 100-mile wide exclusion zone for acetic anhydride along its border with Burma.

During the first eleven months of 2005, Burmese seizures of precursor chemicals remained essentially the same as 2004. Over this period, authorities seized 112 kilograms of ephedrine and 14,143 liters of other precursor chemicals.

Latin America

Bolivia

Because Bolivia does not have a large chemical industry, most of the chemicals required for illicit drug manufacture come from abroad, either smuggled from neighboring countries or

imported and diverted. A priority for Bolivian counternarcotics policy is the interception of smuggled chemicals, the destruction of the smuggling organizations, and the prevention of diversion. In 2005, 583,490 liters of liquid chemicals used in drug manufacture (acetone, diesel, ether, etc.) 312,296 metric tons of solid chemicals (sulfuric acid, bicarbonate of soda, etc.) were seized.

Bolivia's professional chemical interdiction program is led by the Special Group for Investigations of Chemical Substances (GISUQ), an elite group within the Bolivian counternarcotics police. The weak Bolivian Directorate of Controlled Substances (DGSC), a civilian agency, is responsible for registering and tracking industrial chemicals, including drug precursors. In 2005, a UN Office of Drugs and Crime-supported project provided a computerized registration database for both the DGSC and GISUQ. With Embassy and DEA assistance, GISUQ has obtained real-time access to the system.

Bolivian traffickers have sought to adapt to GISUQ interdiction programs by substituting inferior chemicals and recycling. GISUQ's strategy now focuses more aggressively on sulfuric acid and sodium bicarbonate, which are difficult to substitute in Bolivia.

Bolivia is a party to the 1988 UN Drug Convention, and has the legal framework for implementing its chemical control provisions. Bolivia participates in chemical control initiatives such as Operation PH-7 (national) and Operation Seis Fronteras (multilateral), and cooperates closely with U.S. officials. DEA has a Diversion Investigator assigned to its La Paz office.

Colombia

Some of the chemicals required for the illicit manufacture of cocaine and heroin in Colombia are domestically produced and diverted and the remainder must come from abroad. They are either imported into the country with valid import licenses and subsequently diverted or smuggled in from neighboring countries, Brazil, Ecuador and Venezuela. There have been reports of large quantities of chemicals reaching Colombia that originated in China and transited Mexico. Chemical traffickers and clandestine laboratories are also using noncontrolled chemicals to replace controlled chemicals that are difficult to obtain. Some chemicals are recycled.

A major problem in Colombian chemical control continues to be the system for issuing import permits. These are not reliable proof that the legitimate end-use for the chemicals has been verified prior to issuance. The Colombian National Police Chemical Special Investigative Unit (SIU) focuses on both regulatory inspections and criminal investigations. The goal of the SIU is to dismantle large-scale precursor trafficking organizations.

Colombia is a party to the 1988 UN Drug Convention and has chemical control laws meeting or exceeding its requirements. Colombia participates in Operation Cohesion and Operation Seis Fronteras. DEA has a Diversion Investigator assigned to its Bogotá office.

Peru

Peru produces some precursor chemicals used in cocaine production and others are imported and diverted or smuggled into the country. Cocaine base was once considered the traditional form of coca product produced and trafficked in Peru. However, in 2005, as evidenced by multi-ton seizures, cocaine HCL rapidly became the principal product of Peruvian drug trafficking. This requires additional chemicals, particularly potassium permanganate.

In 2005, the Peruvian National Police (PNP) Chemical Investigations Unit successfully executed operations against Peruvian companies suspected of diverting chemicals from legitimate use. The PNP also participated with neighboring countries and the U.S. in the regional chemical control program, Operation Seis Fronteras, during which the PNP seized a record amount of 122 metric tons of various precursors. Peru, Colombia and Brazil also have a border cooperation agreement that targets illegal border activity, including trafficking in drugs and precursor chemicals.

Peru is a party to the 1988 UN Drug Convention and has laws meeting its chemical control provisions. U.S. and Peruvian authorities cooperate closely in chemical control. In addition to Operation Seis Fronteras, Peru also participates in Operation Cohesion.