

CHEMICAL CONTROLS

Summary

The extraction of pseudoephedrine from over-the-counter pharmaceutical preparations for use as a precursor chemical in the manufacture of methamphetamine became an even greater concern in 2004. These preparations can be purchased at retail with little difficulty in sufficient quantities to manufacture drugs in small “mom and pop” laboratories. Since they fall under an exemption under international counternarcotics conventions, the preparations can also be traded in large quantities, in excess of legitimate requirements, and diverted to use in large-scale laboratories. The National Synthetic Drug Action Plan issued in October 2004 identified and made recommendations to address this major problem.

The explosive growth in Afghan opium poppy cultivation has emphasized the importance of denying Afghan traffickers the precursor chemicals they require to convert opium to heroin. Current conditions in Afghanistan, porous borders, and a tradition of smuggling make this a difficult task, but concerned governments are working together to identify the sources and methods traffickers use to obtain chemicals in order to stop the supplies.

Traffickers continue to shift their procurement of the key cocaine and heroin chemicals, potassium permanganate and acetic anhydride, to countries not participating in Operations Purple and Topaz, the multilateral tracking operations designed to prevent diversion of these chemicals, re-emphasizing the importance of expanding participation in the operations

Background

Chemicals are essential to the manufacture of narcotic drugs, either for the processing of coca and opium into cocaine and heroin respectively, or as an integral component in the case of synthetic drugs. Only marijuana, of all 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 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, as a strategy to prevent a crime, requires the examination of proposed commercial chemical transactions, the large majority of which are legitimate, to identify and stop those liable to diversion to illicit drug manufacture. Chemical producers and traders must provide transaction details to their national authorities. In the case of export transactions, at least a portion 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, the information exchange and the decision-making must be rapid.

Governments approach chemical control from different perspectives. 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 and law enforcement measures in support of chemical control, they may unwittingly undermine this effective counternarcotics strategy. Trade ministries can also reinforce the reluctance of companies to provide information that needs to be shared with other governments for fear that 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.

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 identifying diversion attempts. The law enforcement component provides the capability to apprehend criminals seeking to divert chemicals, and to track back cases of successful diversion.

All countries having commerce in precursor and essential chemicals—exporting, trading, transit, and importing—must exchange information to prevent their diversion throughout the transaction chain and to investigate successful diversions. 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.

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

The need for chemical control has been internationally recognized. 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 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 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.

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 1988 UN Drug Convention and national legislation and regulations provide the framework for chemical control. They do not provide the mechanisms for the multilateral information exchange required for their successful implementation. The United States and other governments use the annual meetings of the UN Commission on Narcotic Drugs (CND) to forge agreement on information exchange mechanisms and to highlight emerging chemical control concerns.

The CND is also used to focus international attention on 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 International Drug Control Program, 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 April 2003, CND members reviewed progress in achieving the ten-year goals and objectives established by the UNGASS and reaffirmed their commitment to meeting them.

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. It also importantly provides for the exchange of information on chemical transactions with third countries.

Informal, voluntary arrangements targeting specific chemicals or classes of chemicals are proving invaluable in facilitating control of the chemicals included in the 1988 UN Convention. They allow countries to exchange information rapidly in support of chemical control operations. By focusing on “choke point” chemicals, these arrangements allow authorities to concentrate resources on denying traffickers chemicals that are difficult to substitute in the drug production process without adverse impacts on product quality and the expense and ease of drug manufacture. The three major current operations are Operation Purple tracking trade in potassium permanganate, a key cocaine precursor chemical, Operation Topaz tracking trade in acetic anhydride, a key heroin precursor chemical, and Project Prism, concentrating on stricter tracking of trade in the chemicals and equipment required to manufacture synthetic drugs. The International Narcotics Control Board plays a central coordinating role in the operations

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. In a few cases, traffickers will manufacture chemicals, when diversion is successfully curbed through effective enforcement. The exploitation of non-prescription drugs containing easily extractable pseudoephedrine is becoming a major source of that key chemical used in the illicit manufacture of methamphetamine. The following are some of the more common diversion and other methods used to obtain chemicals.

- 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 one country, 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 or re-packaged and sold as non-controlled chemicals. In this case, diversion takes place at the manufacturer or distributor level. Poor controls that permit the initial diversion, coupled with the inability of enforcement officials to determine the true nature of the chemicals, permit 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 insist that exports of controlled chemicals be only to countries that have in place viable, countrywide regulatory systems.
- New drugs (“designer drugs”) are developed that have physical and psychological effects similar to controlled drugs, but which can be manufactured with non-controlled chemicals.
- Traffickers manufacture the controlled chemicals they require from unregulated raw materials, a costly and difficult process.
- Traffickers extract chemicals, particularly pseudoephedrine, from pharmaceutical preparations. The 1988 UN Convention does not control pharmaceutical preparations, allowing them to be traded internationally without regard to legitimate requirements unless exporting and importing countries impose such controls.

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.

2004 Chemical Diversion Control Trends and Initiatives

The surge in Afghan opium cultivation and the problem of synthetic drug abuse were the major factors impacting chemical control in 2004, while on-going programs to prevent the diversion of cocaine and heroin chemicals continued unabated.

Preventing the diversion of precursor chemicals used to process Afghan opium into heroin is complicated by the lack of an administrative structure in the country to regulate chemicals, and porous borders in the region that facilitate smuggling. Since there are no legitimate requirements for a key heroin chemical, acetic anhydride, in Afghanistan, international attention has focused on preventing this chemical from reaching the country. The feasibility of backtracking acetic anhydride seized in Afghanistan heroin laboratories to its manufacturer is being explored. And the UN Office of Drugs

and Crime is conducting USG-supported chemical training programs in the Central Asian states to better prevent the diversion of chemicals in those countries that can be smuggled into Afghanistan. On a broader level, Operation Topaz, the multilateral acetic anhydride tracking initiative, is being used to stem the diversion of the chemical from legitimate international commerce.

Synthetic drug chemicals present a different challenge. Cocaine and heroin are dependent on coca and opium as their basic raw materials. Both are grown in relatively restricted areas, coca primarily in Colombia and other Andean Region countries, and opium poppy in Afghanistan and Burma. Their manufacture usually takes place near the source of the coca or opium.

Synthetic drug manufacture does not have these constraints. It requires no plant raw materials and can be accomplished in small labs wherever the chemicals are available. Furthermore the quantities of chemicals required are smaller (1.5 kilograms of ephedrine and other chemicals can produce 1 kg of amphetamine, or approximately 30,000 street doses). One of the most serious emerging problems is the extraction of sufficient ephedrine and pseudoephedrine from non-prescription medications to manufacture significant quantities of amphetamine and methamphetamine. This is done in large-scale laboratories, primarily on the U.S. West Coast and in Northern Mexico, and in small-scale laboratories that are spreading throughout the U.S.

The major source countries for potassium permanganate and acetic anhydride participate in Operations Purple and Topaz. However, traffickers continue to evade the reach of these initiatives by turning to non-participating 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 as Afghanistan regains its position as the world's largest opium producer, with about 75 percent of the global production.

The Road Ahead

Multilateral procedures for controlling the most important precursor and essential chemicals have been developed. The objective now is to make them work more effectively. The most pressing elements are improving information exchange, expanding participation in existing operations, stemming the flow of heroin chemicals to Afghanistan, and addressing the problem created by traffickers using non-prescription drugs as a source of synthetic drug chemicals.

Information exchange is the key to effective chemical control. To improve information exchange, the misconception that sharing commercial information in regulatory and law enforcement channels can compromise it and cause commercial disadvantage needs to be dispelled. Expanded participation in Operations Purple and Topaz and Project Prism, is the best way to achieve this. It also closes a gap in the system whereby traffickers obtain their chemicals from non-participating countries. Information on proposed transactions needs to be more widely shared, beyond the bilateral exchanges between exporter and importer to expand the intelligence available to identify suspect transactions, and to prevent traffickers from shopping among potential suppliers.

The two-way nature of information exchange needs to be emphasized. In too many cases 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.

Stopping diversion of precursor chemicals is an important element of the National Synthetic Drugs Action Plan, issued in October 2004. The extraction of precursor chemicals from pharmaceutical preparations is a specific target. Sales of many of these preparations are controlled in some, but not all other countries. Furthermore, the 1988 UN Drug Convention has been generally interpreted to exclude pharmaceutical preparations from its requirements. This makes developing an international consensus in support of better controls difficult. However, there are things that can be done. Mindful of the extraction of precursor chemicals from pharmaceutical products, countries can be urged to apply the full provisions of article 12 of the 1988 UN Convention to monitor exports of pharmaceutical preparations containing ATS precursor chemicals. Moreover, governments can urge manufacturers to develop formulations of these pharmaceuticals that make it more difficult to extract ATS precursor chemicals. More importantly, major exporting countries for these pharmaceutical products must be urged to use some rule of reason in authorizing exports to regions where illicit methamphetamine production is surging, and where the population density could not realistically justify the quantities being shipped.

These issues will continue to be major themes in our policy dialogue with international partners in chemical control. The problem of misuse of pharmaceutical preparations will be stressed at the March 2005 UN Commission on Narcotic Drugs and will be included in our regular bilateral contacts.

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.

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. 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 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

Argentina has an advanced chemical industry that manufactures almost all the chemicals necessary for cocaine and heroin manufacture. Many of these are liable to smuggling into neighboring Bolivia. Cocaine manufacture has also increased in Argentina using smuggled cocaine base, indicating domestic precursor chemical diversion. 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 Secretariat for the Prevention of Drug Addiction and Narcotics Trafficking (SEDRONAR).

During 2004, SEDRONAR implemented its own computer database that allows cross checking of registrants, and hired additional personnel to analyze the data. More on-site inspections of chemical operators were conducted during 2004 than ever before, resulting in a record number of civil sanctions against rouge chemical operators.

From November 2003 until October 2004, the DEA-funded Northern Border Investigations seized 54,910 kilograms of precursor chemicals. While down considerably from the previous period, the seizures indicate that chemical diversion remains a serious problem.

Argentina needs to enhance its legal provisions to provide a real deterrent to chemical diverters. The current Argentine chemical control legislation does not appropriately address civil and criminal sanctions against firms and/or individuals who violate the established chemical control regulations. Existing legislation only sanctions violations that are carried out within 100 kilometers of the northern border. SEDRONAR has submitted legislation that will give it the power to issue severe civil penalties to firms that violate chemical control

regulations. The legislation has been reviewed by the Chamber of Representatives and is awaiting approval by the Senate

Argentina is a participant in Operation Topaz and Operation Seis Fronteras. Argentine authorities willingly share chemical control information with U.S. authorities. The Government of Argentina has requested that the USG designate a Diversion Investigator to assist in improving chemical controls and conducting operations.

Brazil

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

Brazilian law requires registration with the Federal Narcotics Police of all producers, transporters and distributors of precursor chemicals. In August 2003, the Justice Ministry issued a regulation to prevent the manufacture of illegal drugs that requires the control of approximately 150 chemicals. Any person or company involved in the purchase, transportation, or use of these chemicals must have a certificate of approval of operation, real estate registry and other documents issued by the Federal Police. Companies are required to keep records and submit audits and reports on a monthly basis. The chemical section of the Drug Enforcement Division of the Federal Police has the authority to add or delete chemicals to the list of chemicals under control.

Brazil borders the three major cocaine-producing countries, Colombia, Peru and Bolivia, making Brazilian chemicals liable for diversion from the domestic market and smuggling across remote borders into these countries. There are indications of cocaine labs on Brazilian territory for processing coca and partially processed cocaine smuggled from these countries into cocaine HCL, using domestically diverted chemicals. Securing these borders is a major challenge to Brazilian authorities.

Brazil continues to support and participate in international initiatives targeting chemical diversion, such as Operations Purple and Topaz, and Project Prism. It also participates in Operation Seis Fronteras, a regional exercise involving Argentina, Brazil, Colombia, Ecuador, Peru, Venezuela, and DEA to concentrate counternarcotics law enforcement efforts on chemical control. The USG supports Operation Seis Fronteras and a chemical control task force in the port of Santos.

Brazil has established procedures under which records of transactions in precursor and essential chemicals can be made available to other countries' law enforcement authorities. The 1995 bilateral U.S./Brazil Counternarcotics Agreement provides the formal basis for information sharing with U.S. authorities. DEA has a Diversion Investigator assigned to its Brasilia office.

For two years ending December 2004, Brazil chaired the OAS-CICAD experts working group on precursor chemicals. Brazil hosted two meetings of that group in Brasilia.

Canada

Canada is a transit and producer country for precursor chemicals and over-the-counter drugs used to produce synthetic drugs, particularly methamphetamine. The chemical most widely used for this purpose is pseudoephedrine, a regulated chemical included in Table 1 of the 1988 UN Drug Convention. Other precursor chemicals available in Canada used in synthetic drugs manufacture include ephedrine, sassafras oil, piperonal and gamma butyrolactone. Canada is a party to the 1988 UN Drug Convention.

New Canadian regulations strengthening the chemical control provisions of the Controlled Drug and Substances Act came into force on January 9, 2003. The new regulations provide for control of the 23 chemicals listed in the 1988 UN Drug Convention, and for the proper licensing of companies in order to import, export, produce, or distribute controlled chemicals. The agency with primary responsibility for implementing the new regulations is Health Canada, but lead enforcement responsibility lies with the Royal Canadian Mounted Police. At the request of Health Canada, DEA sent a Diversion Investigator and a Program Analyst in early 2003 to advise on U.S. experience in implementing chemical controls. Since the new regulations went into effect, the amount of Canadian-sourced pseudoephedrine discovered in clandestine U.S. methamphetamine laboratories has decreased significantly.

Cooperation between U.S. and Canadian law enforcement agencies is excellent. Canadian law enforcement agencies share available information on chemical transactions with U.S. law enforcement. In 2004, DEA and the RCMP led a joint investigation, Operation Brain Drain, targeting Canadian bulk ephedrine distributors and their U.S. associates, as well as U.S.-based Mexican methamphetamine manufacturers and distributors. The operation resulted in 90 arrests, including five major traffickers, and the seizure of 2,735 pounds of ephedrine and nearly 1.7 million ephedrine pills.

Mexico

Mexico has major chemical manufacturing and trading industries that produce, import or 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.

Chemical diversion, however, does occur. In September, Colombia reported the seizure of 18,000 kilograms of the cocaine chemical potassium permanganate that originated in Mexico. In June, Mexican authorities reported the theft of approximately 3,500 kilograms of pseudoephedrine powder from Mexico City International Airport.

Mexico is a good example of the problem created by traffickers using non-prescription pharmaceuticals containing easily extractable pseudoephedrine as a source of this precursor for the manufacture of methamphetamine. In 2004, Mexico took steps combat this situation, including limiting the importation of pseudoephedrine and ephedrine to 3 tons per transaction, limiting distribution of pseudoephedrine and ephedrine combination pharmaceuticals exclusively to pharmacies, and establishing a moratorium in the approval of new products containing more than 240 milligrams of pseudoephedrine.

Another significant step taken by Mexico in 2004 was the designation and training of several prosecutors by the Attorney General's Office to handle diversion cases. These prosecutors have been instrumental in leading investigations referred to it. They work well with the Commission Federal Para la Prevencion de Riesgos Sanitarios (COFEPRIS), the agency responsible for regulating chemicals, and with U.S. counterparts.

U.S. and Mexican authorities cooperate in law enforcement. A formal mechanism for cooperation is the U.S.-Mexico Bilateral Chemical Control Working Group, but day-to-day contact is handled by the DEA Country Office, notably by two Diversion Investigators posted to Mexico City. In 2004, Mexican authorities conducted, in coordination with DEA, several controlled deliveries that resulted in the seizure of three shipments originating in Hong Kong totaling approximately 16.5 million 60 mg tablets of pseudoephedrine. Mexico participates in the multilateral chemical control initiatives, Operations Purple and Topaz and Project Prism.

The United States

The United States manufactures and/or trades in all 23 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 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, and 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.

The U.S. has had a leadership role in the design, promotion and implementation of cooperative multilateral chemical control initiatives. It co-chairs the steering committee for Operations Purple; it is on the steering committee for Operation Topaz 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 a large and developed chemical industry and is a major producer of acetic anhydride, potassium permanganate, ephedrine, and pseudoephedrine, all chemicals on Table 1 of the 1988 UN Drug Convention. 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. Several provinces, including Yunnan (which shares a border with Burma), have more stringent controls than called for in the convention. In 2004, Zhejiang Province, one of the largest chemical producing areas in China, announced strict controls over precursor chemicals, requiring special approval from two offices with dual oversight to ship these products.

The Chinese Public Security Bureau maintains a small 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 remains a significant source country for chemicals diverted worldwide for the illicit production of cocaine, heroin, methamphetamine, and Ecstasy. The country lacks the infrastructure to monitor adequately its large chemical production capacity and its international trade in chemicals.

U.S. and Chinese cooperation in chemical control is good, within the limits of Chinese capabilities. China is a participant in Operations Purple and Topaz, 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.

India

India's large chemical industry manufactures a wide range of chemicals, including the precursor chemicals acetic anhydride, ephedrine, 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-2propanone, 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 Operations Purple and Topaz and Project Prism. India co-chairs the steering committee for Operation Topaz.

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. This includes the ten new Member States, expanding these regulations into Eastern Europe. The European Council approved new 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, 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.

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 Operations Purple and Topaz, 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 used in illicit drug manufacture. 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. The 1994 code was amended in 2002, and a regulation for criminalizing violations of the EU chemical regulations was adopted.

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 Police and German Customs Police have a very active Joint Precursor Chemical Unit, based in Wiesbaden, devoted exclusively to chemical diversion investigations. A total of 34 cases involving precursor chemicals were investigated in 2003. Authorities prevented the export of eighteen tons of precursors chemicals.

Germany has been in the forefront of international cooperation in chemical control. It developed and promoted the concept that led to Operation Purple and co-chairs its Steering Committee. Germany was one of the leaders in the organization of Operation Topaz and is now actively participating in its implementation. It strongly supports Project Prism. 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 one day 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 is a major chemical trading country. There are large chemical storage facilities, and Rotterdam is the world's busiest port. These combine to make the country attractive to criminals seeking chemicals for illicit drug manufacture.

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. Trade in precursors is governed by the 1995 Act to Prevent Abuse of Controlled Substances. The law seeks to prevent the diversion of chemicals to illicit drug manufacture. Violations of the law can lead to prison sentences (maximum of six years), and fines (up to 50,000 Euros), or asset seizures. The Fiscal Information and Investigative Service and the Economic Control Service oversee implementation of the law.

The Netherlands supports and participates in multilateral chemical control initiatives such as Operations Purple and Topaz. It is taking an active role in Project Prism, and it hosted an important organizational meeting for the project in December 2002. The Netherlands and the U.S. (DEA) have co-chaired Project Prism's Chemicals Working Group since its inception in 2002.

Large quantities of Ecstasy are manufactured in the Netherlands. The government has taken a pro-active stance in meeting this threat. It concluded that many of the important precursor chemicals used in local Ecstasy manufacture came from China. The joint participation of the Netherlands and China in Project Prism resulted in their signing a memorandum of understanding on October 22, 2004 governing the sharing of information regarding shipments of precursor chemicals to prevent their diversion from licit trade.

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

Major Drug Countries

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

Asia

Afghanistan

Afghanistan is the world's largest opium grower. There are labs in Afghanistan capable of processing the opium to opiates in all forms, from morphine base to fully refined white heroin.

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 the 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 the bulk are smuggled through the Central Asian States, the Persian Gulf and Pakistan, after being diverted elsewhere.

Afghanistan is a party to the 1988 UN Drug Convention and it has joined Operation Topaz, directed at controlling the heroin chemical acetic anhydride. However, it lacks the legal, regulatory and enforcement infrastructure to comply with the Convention's chemical control provisions, or to actively participate in Operation Topaz. Until the infrastructure is developed, Afghanistan will require regional cooperation to prevent the transit of chemicals for smuggling into the country.

Burma

Burma is a primary source of amphetamine-type-stimulants (ATS) in Asia, producing hundreds of millions of tablets annually, and is the world's second largest illicit opium producer, though opium poppy cultivation is decreasing. Burma does not have a significant chemical industry and does not manufacture ephedrine, pseudoephedrine, acetic anhydride, or any of the other chemicals required for ATS or heroin production. Most of the chemicals required for illicit drug manufacture are smuggled into Burma from neighboring countries.

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 Convention (caffeine and thionyl chloride) and prohibited their import, sale or use in Burma.

In January 2003, Burma held its 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. In addition, Burma is one of six countries (Burma, Cambodia, China, Laos, Thailand, and Vietnam) that are parties to the UN Office of Drugs and Crimes sub-regional action plan for controlling precursor chemicals and reducing illicit narcotics production and trafficking in the highlands of Southeast Asia.

Burmese seizures of precursor chemicals declined substantially during the first ten months of 2004. Over this period, authorities seized 183 kilograms of ephedrine, 7 gallons of acetic anhydride, and 17, 286 liters of other precursor chemicals.

Latin America

Bolivia

Bolivia does not have a large chemical industry and virtually all the chemicals required for illicit drug manufacture are smuggled in from neighboring countries. One of the continuing focuses of Bolivian counternarcotics policy is the interception of smuggled chemicals and the detection and destruction of the organizations that smuggle chemicals into the country.

Bolivia has a professional chemical interdiction program led by the Special Group for Investigations of Chemical Substances (GISUQ), an elite group within the Bolivian counternarcotics police. The historically weak Bolivian Directorate of Controlled Substances (DGSC), a civilian agency, is responsible for registering and tracking industrial chemicals, including drug precursors. 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 will obtain real-time access to the system by mid 2005. GISUQ also has sought revisions to DGSC regulations that would provide GISUQ with clearer authority to support prosecution of offenders. These draft revisions have been reviewed by the private sector, and DGSC is expected to continue consultations and finalize changes in the first quarter of 2005.

Although GISUQ has succeeded in making precursor chemicals more difficult and expensive to obtain, Bolivian traffickers have been able to adapt by substituting inferior chemicals and recycling. The average purity of Bolivian cocaine base has remained consistent over recent years: the purity of samples taken in the fourth quarter of 2003 and 2004 showed an average purity level of 73.9 percent and 73.3 percent respectively; in 2001 and 2002 the average purity level was 74 percent. GISUQ's strategy now focuses more aggressively on sulfuric acid and sodium bicarbonate, which are difficult to substitute in Bolivia.

During 2004, GISUQ continued to improve its performance. Seizures of solid precursors increased 210.8 percent, and liquid precursors rose 24.3 percent over the same period in 2003.

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

Colombia does not have the domestic capacity to produce all the chemicals required for the illicit manufacture of cocaine and heroin in the country. These chemicals 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 non-controlled 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. They 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 investigative work as opposed to regulatory inspections. 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 Operations Purple and Topaz, and Operation Seis Fronteras. DEA has a Diversion Investigator assigned to its Bogota office.

Peru

Chemicals required for illicit drug manufacture are either diverted from domestic production and legal imports, or smuggled in from neighboring countries. The Peruvian National Police

(PNP) proactively cooperate with neighboring countries and the U.S. to conduct regional chemical control operations that resulted in record seizures of over 1,200 metric tons of precursor chemicals in 2004.

The Peruvian Congress in 2004 passed a new law to better control cocaine precursor chemicals. The law will go into effect in early 2005. In February 2004, Peru, Colombia and Brazil signed 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. Peru is a strong supporter of Operation Seis Fronteras and participates in Operation Purple.