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NOTES & COMMENTS

THE CHEMICAL DIVERSION AND TRAFFICKING ACT OF 1988: STOPPING THE FLOW OF CHEMICALS TO THE ANDEAN DRUG CARTELS

Karen L. Bland*

INTRODUCTION

In 1982, the Reagan administration declared a "war on drugs."¹ The Bush administration has assumed control of this war, implementing its own strategy to combat this nation's largest threat.² Bush's strategy, which aims at reducing the supply of illegal drugs entering the United States,³ focuses on the flow of cocaine from the Andean countries of

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1. See Murphy, *Drug Diplomacy and the Supply-Side Strategy: A Survey of United States Practice*, 43 VAND. L. REV. 1259, 1262 (1990) (discussing the drug policy of the United States since 1982). President Reagan declared this war during a national radio address on October 3, 1982. *Id.*; see also Wisotsky, *Exposing the War on Cocaine: The Futility and Destructiveness of Prohibition*, 1983 WISC. L. REV. 1305, 1306-07 (1983) (describing Reagan's plan as involving more law enforcement, stricter laws, and more personnel).

2. See Murphy, *supra* note 1, at 1262-64 (discussing the Anti-Drug Abuse Amendments of 1988). These amendments continue to focus on a supply-oriented policy by increasing supply-side funding. *Id.*; see also Skolnick, *A Critical Look at the National Drug Control Strategy*, 8 YALE L. & POL'Y REV. 75, 75 (1990) (analyzing the drug policy of the United States under the Bush administration). The Bush administration published its policy in *The National Drug Control Strategy* in September 1989. *Id.* Under this strategy, Bush proposed a \$1.2 billion dollar federal drug budget. *Id.*

For seventy-five years, however, the Government has used a supply oriented strategy. Cloud, *Cocaine, Demand, and Addiction: A Study of the Possible Convergence of Rational Theory and National Policy*, 42 VAND. L. REV. 726, 726 (1989). Cloud explains that, although the methods of implementing the anti-supply policy have differed, the strategies have remained the same. *Id.* The strategies have included crop eradication, interdiction, and criminal prosecution of drug offenders. *Id.*

3. See *supra* notes 1-2 and accompanying text (discussing the background of the supply-oriented policy).

Colombia, Bolivia, and Peru.⁴ This strategy has sought to curtail cocaine production by incarcerating the Andean producers and destroying their drug assets, implicating total Andean blame for the cocaine problem.⁵ In 1988, however, Congress recognized that American demand for drugs was also responsible for this problem.⁶

In 1987, the Drug Enforcement Agency (DEA)⁷ and the Central Intelligence Agency (CIA)⁸ submitted reports to Congress that described

4. Murphy, *supra* note 1, at 1260 n.4. In 1988, experts estimated that Colombia, Bolivia, and Peru cultivated approximately 520,000 acres of coca. Gorriti, *How to Fight the Drug War*, THE ATLANTIC MONTHLY, July 1989, at 70; see also *Cocaine 1980* (F. Jeri ed. 1980) (presenting national reports from Bolivia and Peru analyzing the sociological aspects of coca production in this Andean country).

5. See Gorriti, *supra* note 4, at 72-74 (describing United States foreign relations with the Andean countries and explaining the drug policy of the United States based on these relations). Gorriti argues that because Peru, Bolivia, and Colombia constitute low-priority nations in United States foreign policy, the United States blames these countries for the cocaine problem. *Id.* at 74. If the foreign nation is poor, the United States can exert even more pressure on the foreign nation. *Id.*

On February 15, 1990, President Bush met with the Presidents of Bolivia, Colombia, and Peru. *The Andean Summit Meeting, February 15, 1990: Hearing Before the House Select Comm. on Narcotics Abuse and Control*, 101st Cong., 2d Sess. 31 (1990) [hereinafter *Summit*] (testimony of Bernard Aronson, Asst. Sec. of State for Inter-American Affairs). These leaders discussed the possibility of a consorted drug strategy and the need to share the blame for the drug problem. *Id.* President Bush promised greater recognition of the need to reduce demand, and the Andean Presidents promised to strengthen their efforts against the drug cartels. *Id.* But see, Black, *Cartagena High: Bush's Relations with Colombia on the Drug Smuggling Problem*, THE NATION, Feb. 26, 1990, at 260 (criticizing the Bush administration's continued insensitivity to the Andean nation's economic and political problems).

6. See Cloud, *supra* note 2, at 728-29 (describing the Anti-Drug Act of 1988 as aimed at reducing United States demand). The 1988 Act included measures dedicated to drug treatment and education. Murphy, *supra* note 1, at 1264 n.29. The 1988 Act also directed fifty percent of the annual drug budget toward demand efforts. *Id.* at 1263; see also Sullivan, "User-Accountability" Provisions in the Anti-Drug Act of 1988: *Assaulting Civil Liberties in the War on Drugs*, 40 HASTINGS L.J. 1223 (1989) (criticizing the 1988 Act for violating constitutional rights); *infra* note 119 and accompanying text (discussing the ambiguity of the United States government's commitment under the 1988 Act).

7. See McBride, *U.S. Chemicals Used to Process Illicit Drugs*, THE Christian Sci. Monitor, July 27, 1988, at 3 (describing the chemical export problem). The DEA study indicated that the United States exports ninety-five percent of the chemicals used to produce cocaine. *Id.* at 3. The DEA also reported that, in 1987, the drug cartels used forty-seven percent of the 10,000 tons of methyl ethyl ketone (MEK), acetone, and ether to produce cocaine. Andreas, *Cocaine Chemistry: Importing Drugs to Ourselves*, THE NEW REPUBLIC, Nov. 20, 1989, at 14.

8. See McBride, *supra* note 7, at 3 (reporting that the CIA reports indicated that, since 1983, American exports of chemicals exceeded the required amounts for legitimate purposes); Andreas, *supra* note 7, at 14 (presenting CIA data that indicated shipments of MEK, acetone, and toluene increased 125 percent, although industrial activity only rose fifteen percent).

the United States' role in the cocaine problem.⁹ The reports demonstrated that ninety-five percent of the chemicals used to produce cocaine originate in the United States.¹⁰ The DEA and CIA investigations revealed that American chemical manufacturers sell these chemicals to buyers in cocaine-producing countries.¹¹ Although the sales may constitute legitimate transactions, drug cartels in cocaine-exporting countries eventually gain control of the chemicals.¹² Congress, in an effort to address the problem of diversion, enacted the Chemical Diversion and Trafficking Act of 1988 (CDTA).¹³ As part of the Anti-Drug Abuse Amendments of 1988,¹⁴ the CDTA regulates the import and export of chemicals that are vital to the production of illegal drugs.¹⁵ Although the CDTA applies worldwide, Congress primarily intended to prevent the diversion of the chemicals to producers of cocaine in the Andean region.¹⁶

9. See *supra* notes 7-8 and accompanying text (articulating the conclusions of the DEA and CIA reports). But see, *CMA Defends Industry on Drug Charges*, Chem. Mktg. Rep., Feb. 12, 1990, at 3 (expressing the industry's view that the DEA has incorrectly blamed the chemical industry for the diversion problem).

10. See *supra* notes 7-8 and accompanying text (describing the DEA and CIA reports). David Westrate, the Assistant Administrator of the DEA has stated, "the United States is by far the largest exporter of chemicals to Latin America. . . ." *The Flow of Precursor Chemicals and Assault Weapons from the United States into the Andean Nations: Hearing Before the House Select Comm. on Narcotics Abuse and Control*, 101st Cong., 1st Sess. 96 (1989) (statement of David Westrate) [hereinafter *Precursor Chemicals*]. MEK, ether, and acetone are the chemicals which have caused the DEA the greatest concern. *Id.* at 97. Reports indicate that, in 1986, the Andean countries received 80 percent of MEK and 90 percent of acetone from the United States. *Id.*

11. See Jehl, *Cocaine Has a Made in the U.S.A. Label*, L.A. Times, Dec. 5, 1989, at 1, col. 1 (describing the distribution and shipment of these chemicals); see also McBride, *supra* note 7, at 3 (discussing the difficulty in determining who will be the actual end-user of the manufactured chemicals).

12. *Id.*

13. 21 U.S.C. § 801 (1990). The CDTA regulates the importation and exportation of precursor and essential chemicals. *Id.* The CDTA defines "precursor chemicals" as chemicals used in the manufacturing of a controlled substance. 21 U.S.C. § 802(34) (1990). The CDTA defines "essential chemicals" as those chemicals used as "a solvent, reagent, or catalyst" in the manufacturing of a controlled substance. 21 U.S.C. § 802(35). The CDTA defines "regulated person" as anyone who "manufactures, distributes, imports or exports a listed chemical." *Id.* § 802(38).

14. 21 U.S.C. § 801 et. seq. (1990).

15. *Id.*

16. *Id.* Under the Act, regulated persons must notify the DEA of any sale of a listed chemical fifteen days before the transaction is complete. 21 U.S.C. § 971 (1990). The DEA then investigates the prospective purchaser of the chemicals. *Id.* § 971(c)(1). If the Attorney General finds reasonable grounds for suspecting that the shipment will be diverted, the DEA may suspend the sale. *Id.* § 971(c)(1). The CDTA also requires regulated persons to notify the DEA of any suspicious behavior on the part of a prospective buyer. 21 C.F.R. § 1310.05 (1990). "Suspicious behavior" includes requests for "extraordinary" amounts of the chemicals, an "uncommon method of payment" or

As the United States and other nations¹⁷ have learned more about the cocaine industry, chemical diversion has gained international attention.¹⁸ The United Nations Convention Against Narcotic Drugs and Psychotropic Substances¹⁹ indicates that preventing diversion is one method of destroying the cocaine industry.²⁰ The CDTA, therefore, serves as model legislation for other countries to join in this effort.²¹ The CDTA reflects both a shift in the United States' drug policy and a view of the need for collective international action.²² For these reasons, the CDTA's success has significant relevance to the universal goal of winning the war against drugs.²³

This Comment examines the CDTA in this international context. Part I discusses the background leading to the CDTA's enactment. Part II analyzes the CDTA's implementation. Because Congress intends the CDTA to serve as a model for other nations, this analysis includes a discussion of both domestic and international issues relating to the CDTA. Part III compares the CDTA to a similar regulation proposed by the Organization of American States (OAS). Part IV offers recommendations for achieving the CDTA's objectives.

I. BACKGROUND

A. THE SUPPLY-SIDE STRATEGY

In recent years, the American public has become increasingly distressed with the destruction that drugs have caused in the United

any other circumstance that gives the regulated person a reason to suspect the purchase. 21 U.S.C. § 830(b) (1990).

The CDTA imposes criminal liability on any person who knowingly or intentionally imports or exports a listed chemical, or reasonably believes that a listed chemical will be used to produce illegal drugs. *Id.* § 960.

17. See *infra* notes 219-220 and accompanying text (describing the 1988 United Nations Convention Against Narcotic Drugs and Psychotropic Substances).

18. Murphy, *supra* note 1, at 1264 (discussing the United Nations Convention Against Narcotic Drugs and Psychotropic Substances). The Convention encouraged member states to adopt legislation regarding money laundering, extradition, and police training. *Id.* at 1264 n.32; see also *infra* notes 219-220 and accompanying text (assessing the United Nations Convention's proposal to control chemical exports and imports).

19. See *infra* notes 219-220 and accompanying text (discussing the objectives of the United Nations Convention Against Narcotic Drugs and Psychotropic Substances).

20. See *Summit supra* note 5, at 34 (discussing President Bush's proposed strategy).

21. See *U.S. Chemical Exports to Latin America: Hearing Before the Subcomm. on Foreign Commerce and Tourism of the Senate Comm. on Commerce, Science, and Trans.*, 101st Cong., 2d Sess. 1 (1990) (opening statement by Sen. Bryan) [hereinafter *U.S. Chemical Exports*] (reviewing the CDTA since its enactment).

22. *Id.*

23. *Id.*

States.²⁴ The drug problem has led to increased violence in homes, on the streets, and in neighborhoods.²⁵ The problem has also threatened public health as drug addiction has infiltrated all levels of society.²⁶ Consequently, the public views cocaine as the greatest threat to our society.²⁷ Because the cocaine industry represents a trade phenomenon,²⁸ the commercial aspect of the cocaine problem constitutes the source of this threat.²⁹ There exists, on the one side, the American demand for cocaine, and, on the other side, the supply of cocaine to satisfy this demand.³⁰ Ideally, the resolution of the cocaine problem would entail efforts to eliminate both the supply and demand sides of the equation.³¹

In 1989, the Bush administration announced its drug policy.³² Labeled the "supply-side strategy," this policy concentrates on four methods to eliminate the supply of cocaine.³³ These methods include:

24. Murphy, *supra* note 1, at 1261; see Skolnick *supra* note 2, at 76-79 (discussing the sociological aspects of drug abuse). Drug abuse has led to increasing public health problems. Cloud, *supra* note 2, at 732. Addicts require medical treatment and injection of cocaine has generated the spread of AIDS. *Id.*

25. See Morgenthau, *Children of the Underclass*, NEWSWEEK, Sept. 11, 1989, at 16 (describing the sociological impact of drugs in inner-city neighborhoods).

26. See Wisotsky, *supra* note 1, at 1309 (describing the typical cocaine user as upper-class and white); Cloud, *supra* note 2, at 733 (explaining that the introduction of "crack" cocaine has caused further public concern because people of all economic backgrounds can afford the drug).

27. Murphy, *supra* note 1, at 1261 (indicating that in a 1988 national poll, 87 percent of the Americans surveyed considered drug trafficking as a serious problem in this country). This poll also demonstrated that Americans support supply-oriented strategies rather than demand-oriented strategies. *Id.*; see also Gorriti, *supra* note 4, at 76 (concluding that American public opinion toward the Andean region must change before the United States government can implement a successful drug control strategy).

28. See Gorriti, *supra* note 4, at 70-72 (describing the economic factors of the drug trade). Gorriti indicates that between 1980-1988, the supply of cocaine increased from 40 to 400 metric tons. *Id.* Due to this glut in supply, wholesale prices decreased from \$50,000 to \$10,000. *Id.*

29. *Id.* at 71. Gorriti estimates that Americans spend \$50 billion a year on drugs, including \$20 billion on cocaine alone. *Id.* Gorriti characterizes the drug traffickers as "primitive but efficient capitalists" responding to this demand. *Id.*

30. See *supra* notes 28-29 and accompanying text (listing the figures of American demand and Andean supply of cocaine).

31. See Skolnick, *supra* note 2, at 115 (recommending a successful strategy that takes into account the sociological nature of the drug problem).

32. *Id.* at 75. Skolnick explains that Bush's strategy expands the annual drug budget to include stricter law enforcement programs. *Id.* at 76.

33. *Id.* at 76. See also Gorriti, *supra* note 4, at 72 (describing the government's policy directed at crop eradication and law enforcement); Murphy, *supra* note 1, at 1262 (explaining that drug policy in legislation has directed funding toward crop eradication and law enforcement); Cloud, *supra* note 2, at 726 (listing the contours of the supply-side strategy).

(1) United States foreign aid;³⁴ (2) increased military involvement in the cocaine-producing countries;³⁵ (3) stricter law enforcement;³⁶ and (4) crop eradication.³⁷

1. *United States Foreign Aid*

The harsh economic conditions of the Andean countries encourage Andean dependence on foreign aid to sustain a level of relative economic stability.³⁸ This dependence on foreign aid permits the Bush administration to use a technique called "aid leveraging"³⁹ as part of its supply-side strategy.⁴⁰ The Foreign Assistance Act,⁴¹ which embodies aid-leveraging principles, authorizes the President to suspend monetary aid to countries that fail to implement the United States anti-drug strategies.⁴² Through aid leveraging, the United States implicitly coerces the Andean nations by conditioning aid based on the country's adoption of such strategies.⁴³

In the Anti-Drug Abuse Amendments of 1988 (1988 Amendments), Congress sanctioned aid leveraging as a tool in Bush's drug policy.⁴⁴ The 1988 Amendments advocate the suspension of financial assistance to Colombia, Bolivia, and Peru if these countries fail to deter the co-

34. Murphy, *supra* note 1, at 1266; *see infra* notes 38-49 and accompanying text (discussing foreign aid as a tool in the supply-side strategy).

35. Murphy, *supra* note 1, at 1277; *see infra* notes 50-62 and accompanying text (discussing military presence in the Andean region).

36. Skolnick, *supra* note 2, at 88; *see infra* notes 63-70 and accompanying text (discussing criminal prosecution for drug offenses).

37. Murphy, *supra* note 1, at 1270; *see infra* notes 71-83 and accompanying text (discussing the government's crop eradication endeavors).

38. *See* Wisotsky, *supra* note 1, at 1341-42 (describing the economic conditions in Bolivia and Peru). In 1979, Bolivia had an annual GNP of \$390. *Id.* at 1341; *see also* Gorriti, *supra* note 4, at 71 (listing 1985 GNP of Colombia at \$1,586 and Peru's 1988 GNP at \$900).

39. *See* Murphy, *supra* note 1, at 1262 (defining "aid leveraging" as a technique in which the government suspends monetary aid).

40. *Id.* at 1266-67 (explaining the use of aid leveraging in the supply-side strategy). Under the current aid leveraging system, the President must certify that the country has adopted law enforcement strategies. *Id.* at 1266.

41. 22 U.S.C. § 2413 (1990).

42. *Id.* Under the certification system, a country will lose aid if it has not enacted a drug control agreement with the United States that addresses eradication, law enforcement, and interdiction. Murphy, *supra* note 1, at 1267 n.45.

43. Murphy, *supra* note 1, at 1267 n.45. Although Bush has shown a greater understanding of the Andean nation's economic burden, aid leveraging continues to be a diplomatic tool. *Summit*, *supra* note 5, at 32.

44. Murphy, *supra* note 1, at 1266. Under the 1988 Amendments, the President must certify that the recipient country has strived to achieve the goals set out by the United States. *Id.* A country may also lose monetary assistance if it lacks an international agreement with the United States that shows its commitment to the United States drug agenda. *Id.*

caine industry within their borders.⁴⁵ The United States may also suspend aid if a country's methods are unsuccessful⁴⁶ or if a country implements the methods in a manner that conflicts with the United States standards.⁴⁷ Some commentators suggest that aid leveraging violates international law because this monetary coercion interferes with the nations' right to sovereignty.⁴⁸ Aid leveraging potentially forces the Andean governments to adopt strategies adverse to their national interests based on the need to receive American-sponsored monetary aid.⁴⁹

2. Increased Military Involvement

Although President Bush is opposed to using military tactics to fight the drug war,⁵⁰ he has, nonetheless, increased the presence of American military personnel in the Andean region.⁵¹ The defense agencies assign various responsibilities to the military personnel.⁵² These responsibilities include training of native military troops,⁵³ assistance to the troops in coca plantation raids,⁵⁴ and assistance to the DEA, CIA, and Fed-

45. *Id.*

46. See Murphy, *supra* note 1, at 1267 (describing the criteria for decertification of economic assistance). To determine a country's certification status, the executive considers "cooperation" with drug control efforts and results from these efforts. *Id.* President Reagan also considered violence, insurgency, and economics that may have affected results. *Id.* Congress has indicated its displeasure with these criteria. *Id.*

47. *Id.*

48. *Id.* at 1268-70. The foreign governments contend that under this aid leveraging system, the United States government dictates their domestic policies. *Id.* These governments also criticize the system for its unequal treatment among different countries. *Id.*

49. *Id.*; see also Gorriti, *supra* note 4, at 74 (stating that during periods of political and economic instability, the Andean leaders succumb more easily to United States economic pressure). Gorriti explains that Bolivia agreed to Operation Blast Furnace, a raiding operation, after the United States had cut \$7.2 million in aid. *Id.*

50. Friedman, *Secret Directive Guides Antidrug War*, *Newsday*, Sept. 7, 1989, at 15. President Bush has declared that he will not deploy military troops unless the countries request such action. *Id.*

51. Murphy, *supra* note 1, at 1277. See Friedman, *supra* note 50, at 15 (describing the increased use of military personnel to aid in intelligence gathering).

52. Murphy, *supra* note 1, at 1282. In 1989, Bush authorized the deployment of military advisors to Colombia, Peru, and Bolivia. *Id.* at 1286. These advisors train the native troops in raiding tactics. *Id.* In 1989, there were 100 military personnel assigned to the Andean region. *Id.* The military personnel serve as advisors who train native troops as combat troops. *Id.* The United States has also sent \$65 million worth of military equipment to Colombia. *Id.*

53. *Id.*

54. *Id.* In Bolivia, military personnel aided the raiding of coca plantations. This venture, labelled Operation Blast Furnace, involved the raiding of six or seven coca plantations. *Id.* at 1284. Operation Blast Furnace, however, failed to achieve great success, for the venture did not reduce the amount of cocaine imported into the United States. *Id.*; see Gorriti, *supra* note 4, at 74 (explaining how Bolivia's President, Paz Estenssoro was coerced into accepting the venture); Brinkley, *Bolivians Deny They*

eral Bureau of Investigations (FBI) in gathering intelligence information on the drug cartels.⁵⁵

Military involvement in the Andean region has generated controversy among lawmakers.⁵⁶ Congress has questioned the United States military's authority to act when the United States is not at war in the region.⁵⁷ Consequently, the military may not function under its independent authority and skill.⁵⁸

Congress has attempted to address this controversy by authorizing military personnel to perform certain activities.⁵⁹ These activities include searches, seizures, and arrests, conditioned upon local law enforcement consent.⁶⁰ The evidence of increased military personnel in the Andean region,⁶¹ however, indicates the Bush administration's intent to advocate greater latitude for the military personnel.⁶² Military

Asked U.S. to Send Troops to Help in Raids, N.Y. Times, July 20, 1986, at 1, col. 2 (reporting the controversy surrounding Operation Blast Furnace).

55. Murphy, *supra* note 1, at 1284. The Anti-Drug Abuse Amendments of 1988 declared the drug trade as a national security threat. *Id.* To address this threat, Congress authorized the use of the military in reconnaissance missions, interception of aircraft, and surveillance of drug traffickers. *Id.* See Friedman, *supra* note 50, at 15 (discussing the Bush administration's plan to increase intelligence gathering through the military under Bush's national security directive signed in 1989).

56. See Murphy, *supra* note 1, at 1281-86 (discussing congressional amendments to the Posse Comitatus Act which prohibits the military from engaging in law enforcement activities). The Posse Comitatus Act originally limited the military's activities in the United States. *Id.* at 1281. As military units became involved in raids of coca plantations, Congress sought to clarify the extraterritorial application of the Act. *Id.* at 1283-84. In 1988, Congress amended the Act to broaden the military's authority in the Andean region. *Id.* at 1284. This expansion permits the military to engage in interdiction activities. *Id.* The invasion of Panama has further complicated the legality of the military's actions. *Id.* at 1287; see also Note, *Not Fit for Sea Duty: The Posse Comitatus Act, The United States Navy and Federal Law Enforcement at Sea*, 31 WM. & MARY L. REV. 445 (1990) (discussing the Act as applied to the Navy within the context of the current "war on drugs").

57. See Murphy, *supra* note 1, at 1279-80 (describing the controversy surrounding military involvement in the Andean region).

58. *Id.* at 1279. United States domestic law restricts the military from engaging in foreign arrests. *Id.* Congress subsequently modified this restriction to permit military personnel to assist rather than actually conduct foreign arrests. *Id.* at 1281. Since 1989, however, this sentiment has changed to an affirmative strategy of strengthening military authority in the Andean region. Friedman, *supra* note 50, at 15. Bush has indicated that he would not be adverse to using air strikes in this region. *Id.*

59. See *supra* note 56 and accompanying text (discussing amendments to the Posse Comitatus Act).

60. Murphy, *supra* note 1, at 1281.

61. See *supra* note 52 and accompanying text (explaining military presence in the Andean region). The United States government planned to send 200 additional troops to the region by 1990. Murphy, *supra* note 1, at 1286.

62. See Friedman, *supra* note 50, at 15 (indicating Bush's stance on the military's role in the anti-drug campaign).

involvement becomes even more significant in light of stricter law enforcement.

3. Law Enforcement

To curb the supply of cocaine, the Bush administration has actively pursued a policy of stricter law enforcement for drug offenses within the United States.⁶³ Under this policy, drug offenders receive harsher penalties for convictions.⁶⁴ This policy applies to both United States citizens and foreign nationals.⁶⁵

To enforce these laws against foreign nationals, the government works to bring foreign citizens within United States borders.⁶⁶ The State Department negotiates the extradition of foreign nationals.⁶⁷ In some cases, the DEA has received the cooperation of the foreign local police to bring the foreign citizen under United States jurisdiction.⁶⁸

63. Skolnick, *supra* note 2, at 75. Bush's National Drug Control Strategy proposed \$1.5 billion for law enforcement. *Id.* In 1990, Bush proposed an additional \$400 million aimed at strengthening law enforcement mechanisms. *Id.* at 75-76.

64. See Murphy, *supra* note 1, at 1290 (explaining the use of extradition treaties to facilitate the prosecution of a drug trafficker found in another territory).

65. *Id.*

66. *Id.* The Government brings these foreign nationals within United States territory through various methods. *Id.* These strategies include the negotiation of both extradition treaties and mutual legal assistance treaties. *Id.* The Government also uses the military to apprehend drug traffickers. *Id.* at 1289.

67. Murphy, *supra* note 1, at 1290. Extradition treaties permit the United States to obtain jurisdiction over foreign nationals so that they can be prosecuted in United States courts. *Id.* To successfully gain jurisdiction over the foreign national, however, the foreign country must, like the United States, prohibit the criminal conduct. *Id.* at 1290-91. For this reason, the United States has encountered difficulty in gaining jurisdiction over drug traffickers in order to prosecute them for certain drug offenses. *Id.* at 1291; see also Bernholz and Herman, *International Extradition in Drug Cases*, 10 N.C.J. INT'L L. & COMM. REG. 353 (1985) (discussing legal principles of extradition treaties as applied to foreign drug offenders).

Since 1979, the United States has focused its extradition efforts on Colombia. Murphy, *supra* note 1, at 1292. The Supreme Court of Colombia has subsequently declared extradition unconstitutional following the violent murders of several Colombian government officials. *Id.* Although President Virgilio Barco issued an executive order permitting the extradition of Colombian nationals in 1989, this decree has not resulted in the prosecution of leading members of the Colombian drug cartels. *Id.* at 1294.

68. See Bassiouni, *Unlawful Seizure & Irregular Rendition Devices as Alternatives to Extradition*, 7 VAND. J. TRANS. L. 25 (1973) (assessing the United States government's use of alternative means to secure the jurisdiction of foreign citizens). With cooperation of foreign local police, the United States has gained jurisdiction over Juan Ramon Matta-Ballesteros and Rene Martin Verdugo-Urquidez. Murphy, *supra* note 1, at 1295. The executive justifies these alternative methods on the basis of terrorism precipitated by the drug cartels. *Id.*

The United States Departments of State and Justice have also abducted foreign citizens from their territories. *Law Makers Criticize FBI Kidnap Policy*, Chicago Tribune, Nov. 9, 1989. For example, DEA agents were accused of abducting Verdugo-Urquidez

Through stricter law enforcement, the Bush administration intends to decrease the supply of cocaine by creating a deterrent effect.⁶⁹ The Bush administration believes that once members of the drug cartel become cognizant of potential criminal prosecution under stricter American penalties, the drug cartels will alter their illegal activities.⁷⁰

4. Crop Eradication

Crop eradication⁷¹ has produced the most controversy under the supply-side strategy.⁷² In the early 1980s, the United States government implemented its crop eradication plan by raiding the coca plantations and manually setting the coca crops on fire.⁷³ The United States intended to dramatically handicap the cartels by destroying the coca plantations.⁷⁴ The plan, however, failed to provide the intended results.⁷⁵

to prosecute him for his connection in the murder of a DEA agent, Kiki Camarena. *United States v. Verdugo-Urquidez*, 856 F.2d 1214 (9th Cir. 1988), *rev'd*, 494 U.S. 259 (1990). Commentators have criticized abduction as violative of both international and domestic law. *See* Murphy, *supra* note 1, at 1296-1300 (analyzing the legal issues that parties have raised in United States courts in kidnapping cases).

69. Skolnick, *supra* note 2, at 91.

70. *Id.* These law enforcement methods, however, will arguably only provide incentives for other drug traffickers to become more efficient. *Id.* at 92. Skolnick views this phenomenon as "survival of the fittest." *Id.* at 84.

71. *See* Wisotsky, *supra* note 1, at 1335-36 (describing the historical background of the crop eradication plan). Crop eradication is a method by which coca crops are destroyed. *Id.* at 1335.

72. *See* Massing, *Coke Dusters*, THE NEW REPUBLIC, Jan. 30, 1989, at 22 (assessing the success of the current crop eradication strategies). The crop eradication controversy stems from the economic conditions of the Andean nations. Gorriti, *supra* note 4, at 71. The cocaine industry is the most profitable export in the Andean region. *Id.* For example, in 1982, Bolivia exported cocaine worth \$1 billion more than all its legal exports. *Id.* The industry employs approximately 1.5 million people. *Id.* Consequently, some commentators view crop eradication as threatening the unstable economies of these countries, creating more poverty. *Id.* Congressional studies have demonstrated that coca eradication would create massive unemployment and currency devaluation in the Andean countries. Murphy, *supra* note 1, at 1272; *see also*, Wisotsky, *supra* note 1, at 1342-45 (concluding that because of the economic ties to coca cultivation, crop eradication constitutes an infeasible method of destroying the cocaine industry). Each year Bolivia earns \$1.6 billion and Peru earns \$850 million in foreign exchange from cocaine. *Id.* at 1345.

73. Massing, *supra* note 72, at 22. The Reagan administration first proposed crop eradication by burning the coca crops. *Id.* The government implemented its manual eradication programs by sending DEA agents to aid Andean police in raiding the plantations. *Id.*; *see supra* note 54 (discussing Operation Blast Furnace).

74. *Id.*

75. Massing, *supra* note 72, at 22. In 1987, when the government focused on the manual eradication programs, the raids resulted in the destruction of only 875 acres of Peruvian coca. *Id.*; *see* Murphy, *supra* note 1, at 1270-71 (explaining the government's crop eradication policies in the Andean region); Joyce, *Snorting Peru's Rain Forest*,

The Bush administration now proposes eradication by aerial spraying of chemicals.⁷⁶ Scientific evidence has demonstrated that certain chemicals⁷⁷ and herbicides⁷⁸ could effectively destroy the coca plants.⁷⁹ These chemicals, however, pose an environmental threat to the Andean region.⁸⁰ Environmentalists warn that the chemicals would destroy wildlife and vegetation in the area.⁸¹ Environmentalists have also presented evidence of the carcinogenic effect of some of the chemicals.⁸² Consequently, both the Andean governments and American environmentalists actively oppose crop eradication as a strategy of the drug war.⁸³

INT'L WILDLIFE, May/June 1990, at 22 (discussing the crop eradication program as applied to Peru and its environmental effect on the Peruvian rain forest); Wisotsky, *supra* note 1, at 1338 (explaining that eradication efforts will offer little success because the production of cocaine is so expansive).

76. Massing, *supra* note 72, at 22. Due to the difficulty of reaching the coca plantations, the government proposed aerial spraying as a more effective eradication strategy. *Id.* In 1974, the Environmental Protection Agency approved a commercially-manufactured chemical, "Spike." *Id.* Spike proved to be effective in destroying the coca plant. *Id.* The introduction of Spike engendered opposition from environmentalists who claimed that the chemical posed a serious environmental threat to the Andean region. *Id.* Environmentalists argued that, in addition to killing coca, Spike would kill other vegetation and wildlife. Murphy, *supra* note 1, at 1273. Although the State Department continues to advocate aerial spraying of Spike, environmentalists have succeeded in arresting its use. Massing, *supra* note 72, at 23. Currently, the Andean governments refuse to approve the spraying of Spike, further fueling the controversy. *Id.*; see Joyce, *supra* note 75, at 23 (indicating that, in facing this opposition, the Bush administration has authorized funding to research the existence of alternative herbicides to use in crop eradication).

77. See Massing, *supra* note 72, at 22 (explaining the circumstances which led to the use of chemical spraying).

78. *Id.* The Government was encouraged by the use of glyphosate, an herbicide used on marijuana. *Id.* Although glyphosate was ineffective in destroying coca, the government was "elated" when Eli Lilly introduced Spike. *Id.*

79. See *supra* note 76-78 and accompanying text (discussing use of chemicals and herbicides to destroy coca crops). Faced with the controversy generated by chemical spraying, the Bush administration has funded a research program for the introduction of coca-eating caterpillars. Joyce, *supra* note 75, at 23.

80. See *supra* note 76 and accompanying text (assessing Spike's environmental impact in the Andean region).

81. *Id.*

82. Murphy, *supra* note 1, at 1273.

83. See Massing, *supra* note 72, at 22-23 (presenting environmentalists' reaction toward the use of Spike). The Andean governments actively oppose the use of herbicides. *Id.* at 23. Bolivia has passed a law which prohibits the use of herbicides. *Id.* In 1982, Peru also outlawed coca eradication. Wisotsky, *supra* note 1, at 1345-46. The Andean governments desire a method of eradication which would avoid the economic consequences of destroying coca plants. Joyce, *supra* note 75, at 23.

B. CRITICISM OF THE SUPPLY-SIDE STRATEGY

Commentators criticize the supply-side strategy for various reasons.⁸⁴ One criticism stresses the United States' insensitivity to the cocaine industry's economic impact on the Andean countries.⁸⁵ Cocaine exportation provides billions of dollars to these countries.⁸⁶ The cocaine industry also provides jobs to the poor, enabling them to survive in a poverty-stricken environment.⁸⁷ The harsh economic conditions in the Andean countries have permitted the cocaine industry to permeate these countries' economies.⁸⁸ Commentators, therefore, argue that strategies such as aid leveraging and crop eradication cause more harm than benefit.⁸⁹ The United States strategy burdens the foreign governments with the choice between losing monetary assistance from the United States or producing greater economic instability within their borders.⁹⁰

84. See *infra* notes 85-115 and accompanying text (reiterating the criticisms of the supply-side strategy).

85. See Gorriti, *supra* note 4, at 71-72 (describing the relationship between Andean economies and the cocaine industry). The Andean countries earn more money from the illegal export of cocaine than legal exports, including sugar and coffee. *Id.* at 71. Furthermore, the cocaine industry employs a vast number of persons. *Id.* The cocaine industry employs approximately 350,000 Bolivian, 200,000 Peruvian, and 400,000 Colombian peasants on coca plantations throughout the region. Murphy, *supra* note 1, at 1272, n.74. See also *supra* note 72 (discussing economic impact of the cocaine industry); and Wisotsky, *supra* note 1, at 1343-46 (explaining why crop eradication is unsuccessful).

86. See *supra* note 85 and accompanying text (presenting data to demonstrate the profits from the cocaine industry).

87. See Wisotsky, *supra* note 1, at 1341-42 (discussing the socio-economic dependence on coca cultivation). Coca cultivation is "the only source of subsistence" for the peasants in the Andean region. *Id.* at 1342.

88. See *supra* notes 85-87 and accompanying text (describing the economic dependence on the cocaine industry).

89. Gorriti, *supra* note 4, at 75. Until the United States government adopts a strategy that strengthens the Andean economies, all other drug efforts will fail. *Id.*

Commentators label the United States' aid leveraging as "big stick diplomacy." Murphy, *supra* note 1, at 1267. "Big stick diplomacy" engenders Andean resentment toward the United States, that leads the people to support drug traffickers. *Id.* at 1350. Additionally, aid leveraging fails to achieve its intended results because it results in greater incentives to drug traffickers. *Id.* Because law enforcement keeps cocaine prices high, the drug traffickers are more likely to sustain trafficking activities. *Id.* Commentators also criticize aid leveraging for its arbitrary and indiscriminate application among countries. *Id.*

90. See Gorriti, *supra* note 4, at 74 (stating that the Andean leaders believe their role is to subsidize the United States drug policy because of the disproportionate cost and sacrifice to the Andean countries as compared to the United States); Murphy, *supra* note 1, at 1305-06 (explaining the consequences of the supply-side strategy).

Commentators also argue that the supply-side strategy imposes a political "no-win" situation on the foreign leaders.⁹¹ The Andean populace is generally nationalistic.⁹² The Andean people believe that the United States is interfering in a problem that requires independent resolution by the Andean governments.⁹³ This resentment of American influence presents the Andean leaders with potential political upheaval if the leaders choose to ignore their nationals and comply with United States demands.⁹⁴ For example, a Peruvian revolutionary group, Sendero Luminoso (Shining Path), uses Andean nationalism and resentment toward the United States as a conduit to gain popular support.⁹⁵ Shining Path presents itself as the guardian of the Peruvian peasants' concerns.⁹⁶ Because crop eradication threatens the peasants' economic conditions, Shining Path violently opposes crop eradication efforts.⁹⁷ Shining Path increasingly has gained Peruvian support as a result of its opposition to crop eradication.⁹⁸ The rise of Shining Path is exemplary of how the supply-side strategy threatens the political stability of the Andean region.⁹⁹

91. See *infra* notes 92-99 and accompanying text (assessing the supply-side strategy's impact on the political stability in the Andean region).

92. See Murphy, *supra* note 1, at 1305 (discussing Andean attitudes toward the United States).

93. See *id.* (stating that strategies such as crop eradication, abduction of foreign nationals, and the presence of military personnel in the region have fueled Andean resentment toward United States interference); *U.S. Chemical Exports*, *supra* note 21, at 28 (statement of Rennselaer W. Lee, III, Global Advisory Services) (stating that the military presence in the Andean region will engender the Andean populace to resist adoption of United States strategies).

94. Gorriti, *supra* note 4, at 72. By submitting to United States demands, the Andean governments have alienated their constituents, encouraging the formation of insurgency groups. *Id.* Consequently, the Andean governments must combine their anti-drug and counter-insurgency measures. *Id.*

95. Joyce, *supra* note 75, at 22. Since 1980, the guerilla revolutionary group, Shining Path, has established itself as the guardian of the Peruvian peasants working on the coca plantations. *Id.* While forcing the replacement of coca cultivation, Shining Path represents a political obstacle to the Peruvian government's efforts to maintain control, because it furthers forest destruction in order to maintain its "popular revolution." *Id.* See *U.S. Chemical Exports*, *supra* note 21, at 33 (statement of Rennselaer W. Lee, III, Global Advisory Services) (examining the Shining Path's role in shaping Peru's anti-cocaine policies).

96. Joyce, *supra* note 75, at 22.

97. See Gorriti, *supra* note 4, at 74 (noting Shining Path's opposition to the use of the herbicide Spike on the coca fields of the Peruvian Upper Huallaga Valley).

98. *Id.*

99. See, Wisotsky, *supra* note 1, at 1345-46 (assessing the Andean political instability and crop eradication efforts); Murphy, *supra* note 1, at 1305 (explaining the Andean response to the supply-side strategy); and Gorriti, *supra* note 4, at 72, 74 (analyzing the impact of the supply-side strategy on the Andean political economy).

Commentators also question the United States' authority to implement the supply-side strategy under international legal principles.¹⁰⁰ The enforcement of strategies such as military involvement and domestic prosecution of foreign nationals raises potential conflicts under extraterritorial jurisdiction principles.¹⁰¹ International law prohibits a nation from interfering with another nation's sovereign powers.¹⁰² This prohibition also extends protection to foreign nationals.¹⁰³ International law, therefore, restricts American military personnel from engaging in activities that would abrogate Andean law enforcement rules and procedures.¹⁰⁴ Methods other than extradition conflict with international principles when the United States implements them without the foreign government's consent.¹⁰⁵ Although the objectives of the supply-side strategy may be permissible, the implementation of the strategy raises issues of international legality that the United States government should address.¹⁰⁶

100. See Murphy, *supra* note 1, at 1307 (maintaining that the supply-side strategy ignores international legal consequences). Murphy argues that the United States disregards international law in implementing programs such as crop eradication, military involvement, and foreign prosecution. *Id.* at 1307. Murphy also contends that the supply-side strategy leads to violations of human rights. *Id.* Murphy concludes, finally, that the international law violations rooted in this policy will impact on American domestic law because the United States courts will have to protect the rights of foreign citizens. *Id.*

101. *Id.* See generally *Predictability and Comity: Toward Common Principles of Extraterritorial Jurisdiction*, 98 HARV. L. REV. 1310 (1985) (assessing the United States actions under extraterritorial principles and offering solutions on how the United States can conform its activities to these principles).

102. See *Declaration on Principles of International Law Concerning Friendly Relations and Co-operation Among States in Accordance with the Charter of the United Nations*, U.N. GAOR (25th Sess., Supp. 28) U.N. Doc. A/8028 (1970) (granting every State an "inalienable right" to choose its political, economic, social, and cultural system, without interference in any form from another state). *Id.*

103. See RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW OF THE UNITED STATES § 432 (2) (1986) (prohibiting a state from enforcing its criminal law in another state without that state's consent). This section also prohibits, without consent, the abduction of a foreign citizen for prosecution in the abducting state's territory. *Id.* at comment c. See also Bernholz and Herman, *supra* note 67, at 354 (explaining the principles of "double criminality" and "specialty" under extradition principles). Double criminality requires the conduct to be illegal in both states. *Id.* Specialty requires the requesting state to prosecute the foreign citizen only for the crime for which the citizen was extradited. *Id.*; *supra* note 68 and accompanying text (exposing the United States' practice of abduction to obtain jurisdiction over foreign citizens).

104. See *supra* note 101-03 and accompanying text (discussing prohibitions under international law).

105. See *supra* note 103 and accompanying text (analyzing the practice of abduction under international law).

106. See *supra* note 100 and accompanying text (presenting Murphy's view of the supply-side strategy in light of international legal principles).

The primary criticism of the supply-side strategy concerns its continued funding.¹⁰⁷ Commentators point to the aforementioned factors and argue that the focus on supply forces the Andean nations to sacrifice political and economic stability while the United States sacrifices little.¹⁰⁸ In addition, the commentators point to the reduction in the price of cocaine¹⁰⁹ as evidence of the strategy's lack of success.¹¹⁰ Some recommend that the United States government focus on the demand-side of the drug trade, rather than continuing to fund supply-side efforts.¹¹¹ They urge the government to appropriate funding for addiction prevention,¹¹² drug treatment,¹¹³ and educational programs.¹¹⁴ These recommendations reflect the commercial aspect of the drug trade and recognize the dependence of supply on demand.¹¹⁵

107. See Gorriti, *supra* note 4, at 75-76 (arguing that the Bush administration should redirect its funding to provide foreign-debt relief to the Andean countries that would enable them to strengthen their economies without relying on the cocaine industry); Murphy, *supra* note 1, at 1307-1309 (concluding that the United States is financially incapable of continued funding of its supply-side strategy in light of the political and economic obstacles to the strategy); Wisotsky, *supra* note 1, at 1307 (maintaining that the supply-oriented policy toward reducing the cocaine market is more costly than beneficial).

108. See Gorriti, *supra* note 4, at 74 (suggesting that the United States has taken advantage of the Andean countries' weaknesses in order to impose its policies); Black, *supra* note 5, at 260 (criticizing the Cartagena drug summit as failing to alter United States' understanding of the Andean drug problem).

109. Skolnick, *supra* note 2, at 84. Skolnick reports that since the Reagan administration initiated the supply-side strategy in 1982, the street price of cocaine has dropped 80 percent. *Id.*

110. *Id.* Skolnick explains that the price reduction of cocaine causes an increase in demand that stimulates the supply. *Id.*

111. See *id.* at 102 (arguing that the supply-side strategy fails to account for the sociological aspect of the drug problem). Skolnick proposes a demand-oriented strategy which focuses on public health, including treatment, counseling, education, and other social problems. *Id.* at 108-115. These programs include the provision of employment and educational opportunities for youth in urban areas, better developed treatment programs, and the promotion of public health values. *Id.* at 108-115. Skolnick argues that such a drug policy would achieve better results than the supply-side strategy achieves. *Id.* at 115.

112. *Id.* at 109-110.

113. *Id.*

114. *Id.* at 110-111.

115. *Id.* at 84. Skolnick argues that the United States' drug policy has failed to achieve success because the government has ignored the principle that "demand generates supply." *Id.*; see also Cloud, *supra* note 2, at 817-18 (maintaining that current legislation will fail to reduce the demand for cocaine, because the government still favors supply-side law enforcement measures and insufficiently allocates resources on the demand side to alter conditions creating the demand).

A demand-oriented policy, however, would require the United States to acknowledge its share of the blame for the cocaine problem.¹¹⁶ The United States would impliedly admit that its failure to affirmatively formulate drug prevention programs has exacerbated the sociological and health problems associated with cocaine use.¹¹⁷ Although the Anti-Drug Abuse Amendments of 1988 appropriated funding for drug abuse prevention,¹¹⁸ they do not guarantee that the government will sincerely re-direct its efforts.¹¹⁹ The CDTA, however, demonstrates a slight shift in the government's endeavors.¹²⁰ The CDTA addresses a problem that undeniably requires the government's attention.¹²¹ If the CDTA produces successful results, opportunity may arise for greater commitment to a demand-oriented policy.¹²² The nature of the chemical export problem, and Congress' attempt to address that problem, indicates the potential for a re-directed drug policy.

C. THE CHEMICAL EXPORT PROBLEM

Laborers for the drug cartels must process the coca plant¹²³ in order

116. See Skolnick, *supra* note 2, at 115 (presenting the underlying message of a demand-oriented policy). Skolnick insists that a demand-side policy would recognize the nexus between drugs and socio-economic disadvantages. *Id.*

117. *Id.*

118. See *id.* at 75 (stating that in September 1989 Bush proposed \$451 million for drug treatment and education); Cloud, *supra* note 2, at 728-29 (presenting the congressional intent of the 1988 amendments as an attack on the demand for illegal drugs); and Sullivan, *supra* note 6, at 1223-25 (discussing the political atmosphere leading to the enactment of the 1988 Act).

119. See Murphy, *supra* note 1, at 1263-64 (stating that, although the 1988 Amendments increased demand-side funding for treatment programs, the actual funding for Fiscal Year 1989 failed to meet the proposed goals). Murphy contends that the 1988 Amendments constitute a mere gesture toward a demand-oriented drug policy. *Id.* at 1264.

120. See *id.* at 1264 (addressing the government's efforts directed toward regional cooperation in combatting the drug problem).

121. See *supra* notes 7-11 and accompanying text (describing the chemical export problem).

122. See *supra* notes 111-116 and accompanying text (discussing the demand-oriented policy).

123. See Sandagorda, *Coca Production in Bolivia* in COCAINE 1980, *supra* note 4, at 166 (F.R. Jeri ed. 1980) (describing the features of the coca plant). Sandagorda explains that the coca plant varies in size and growth depending on the ecological environment in which it is grown. *Id.* Because of the plant's adaptability, coca cultivation is used extensively as a form of income. Ramirez, *Coca Production in Peru* in COCAINE 1980, *supra* note 4, at 202. In the Andean region, coca is also used for medicinal purposes. Carter, *Traditional and Changing Patterns of Coca Use in Bolivia* in COCAINE 1980, *supra* note 4, at 160. Natives have also historically chewed the coca plant as a cultural tradition. *Id.*; see also Wisotsky, *supra* note 1, at 1340 (explaining that coca is part of the Andean culture and traditions).

to produce cocaine.¹²⁴ This process, which requires mixing the coca with various chemicals,¹²⁵ can serve legitimate industrial purposes.¹²⁶ Because the Andean countries do not manufacture these chemicals, they import them from the United States and Western Europe.¹²⁷

By raiding coca plantations, the DEA has found evidence that the chemicals used in the production of cocaine originate primarily in the United States.¹²⁸ Although the chemicals serve legitimate purposes,¹²⁹

124. See *U.S. Chemical Exports*, *supra* note 21, at 5-6 (statement of Gene Haislip, Deputy Asst. Admin., DEA) (describing the steps involved in producing cocaine).

125. *Id.* The chemicals used in this process include MEK, ethyl ether, and acetone. *Id.*

126. See *id.* at 37-47 (statement of John Rutledge, Exxon Chemical Co.) (discussing the legitimate uses of MEK). MEK is a common solvent used in paint, lube oil, and magnetic tapes. *Id.* at 39. The other chemicals which the CDTA regulates are used in detergents, varnishes, perfumes, medicines, and fiberglass. *Precursor Chemicals*, *supra* note at 10, at 165 (statement of John R. Hess, President, Nat'l Assoc. of Chemical Distributors). Because of these varied legitimate uses, representatives of the chemical industry stress that the chemicals' commercial traits classify these chemicals as commodities. *Id.*

127. *U.S. Chemical Exports*, *supra* note 21, at 8 (statement of Gene Haislip, DEA). The Federal Republic of Germany supplied 3,679 metric tons of acetone, MEK, and toluene to Colombia in 1987. *Id.* at 15. Total European exports of MEK rose from 70 to 5,000 metric tons between 1982 and 1987. *Id.* But see, Quinn, *Scrambling to Cut the Cocaine/Chemicals Connection*, *CHEMICAL WEEK*, Jan. 4, 1989, at 44 (citing a CIA report which indicated that the amount of European exports of precursor chemicals is relatively small compared to American exports).

European exportation of precursor chemicals has sparked a desire among both lawmakers and the chemical industry to encourage the European Community to adopt chemical control laws. *U.S. Chemical Exports*, *supra* note 21, at 12-16 (statement of Haislip); see *European Action Needed to Curb Flow of Drug-Related Chemicals*, 7 Int'l Trade Rep. (BNA) 182 (1990) (reporting on the recent concern for the increase in European exportation of precursor chemicals).

In response to this concern, on February 21, 1990, Senator McConnell introduced the International Chemical Control Act of 1990. S. 2152, 101st Cong., 2d Sess., 136 CONG. REC. 1371 (1990). The bill authorized the Attorney General to enter into international agreements to limit the flow of precursor chemicals to the Andean region. *Id.* Senator McConnell advocated the use of trade sanctions to encourage compliance with these agreements. *Id.* at 1372. On August 3, 1990, the Senate approved a resolution urging the European Community's Council of Ministers to impose controls on the exportation of precursor chemicals. S. Res. 320, 101st Cong., 2d Sess., 136 CONG. REC. 12192 (1990).

On May 30, 1990, the European Economic Commission proposed a chemical control plan based on the U.N. Convention in June 1989. *International Developments*, Chem. Reg. Rep., June 8, 1990, 388 (BNA). The EEC has yet to officially adopt the program. *Id.* The EEC's plan, however, fails to regulate MEK, invoking criticism from the chemical industry. See Sternberg, *EC: Too Soft on Hard-Drug Chemicals*, *CHEMICAL WEEK*, June 13, 1990, at 18 (discussing the DEA's view of the European Economic Community's less stringent chemical control plan because it neglects to include all chemicals used to make cocaine).

128. *Id.* In February 1989, a raid on a Colombian cocaine laboratory confiscated chemical containers marked with the logos of Dow Chemical and Union Chemical companies. Andreas, *Cocaine Chemistry*, *THE NEW REPUBLIC*, Nov. 20, 1989, 12, 14.

the DEA and CIA have presented data to demonstrate that the quantity of chemicals exported to the Andean region exceeds the amount needed for legitimate use.¹³⁰ Despite the American chemical industry's challenge of the data's accuracy,¹³¹ the evidence indicates that the drug cartels are indeed able to secure control of the chemicals.¹³²

Reports reveal different methods by which chemicals are diverted.¹³³ American chemical manufacturers sell chemicals to various parties, including: (1) "representatives" who work directly for drug cartels;¹³⁴ (2) "front companies" which also work for cartels;¹³⁵ and, (3) legitimate foreign national companies.¹³⁶ Diversion can also occur during the dis-

Investigations also reveal that Exxon and Shell export the largest amount of MEK to the Andean region. Jehl, *supra* note 11, at 1.

129. See *supra* note 126 and accompanying text (examining the legitimate uses of the regulated chemicals).

130. *U.S. Chemical Exports*, *supra* note 21, at 9 (statement of Haislip). The CIA report also indicated that it would be impossible for legitimate economic activity in the Andean region to require the amount of chemicals exported to the area. Jehl, *supra* note 11, at 1.

131. See *U.S. Chemical Exports*, *supra* note 21, at 39 (statement of John Rutledge, Exxon Chemical Co.) (disagreeing with the CIA's findings). Exxon claims that its company exports 12-13 metric tons of MEK to Colombia, consistent with Columbian legitimate demand. *Id.* Exxon also specifically refuted the data regarding Exxon chemical shipment as reported in the Jehl article. *Id.* at 43-46; *Precursor Chemicals*, *supra* note 10, at 187-189 (testimony of the Chemical Manufacturers Association (CMA)) (using United States Department of Commerce data, CMA reported that exported amounts of MEK to Colombia have remained stable since 1986, in contrast to the DEA figure of a 500 percent increase). CMA claimed that the DEA presented inaccurate figures by analyzing percentage increases rather than export volumes. *Id.* at 176. Consequently, CMA concluded that United States' shipment of chemicals has not created the current chemical problem. *Id.* at 191.

132. See Quinn, *supra* note 127, at 45 (reporting that, in 1988, the Colombia National Police confiscated 232,970 gallons of acetone, 215,045 gallons of ether, 124,959 gallons of sulfuric acid and 667 tons of potassium permanganate from cocaine laboratories); *supra* note 128 and accompanying text (reporting the confiscation of 154,000 gallons of ether and acetone marked with American chemical company logos). These figures demonstrate that, despite the chemical industry's contention, the drug cartels have successfully gained control over massive amounts of chemicals. Quinn, *supra* note 126, at 44.

133. See *infra* notes 134-140 and accompanying text (detailing the various methods of chemical diversion).

134. See Larmer, *Chemical Pipeline: From US to Latin America to US*, *The Christian Sci. Monitor*, Oct. 23, 1989, at 3 (narrating the story of Frank Torres, convicted of smuggling chemicals to Colombia).

135. See Jehl, *supra* note 11, at 1 (documenting that the "front companies" pose as legitimate businesses, such as a paint company, then ship the chemicals to the cocaine laboratories). A DEA investigation exposed such a company which the Medellin cartel "wholly owned." *Id.*; See also *U.S. Chemical Exports*, *supra* note 21, at 10 (statement of Haislip) (detailing results of DEA investigations which revealed the non-existence of companies or corporate officers connected with cocaine producers).

136. See Jehl, *supra* note 11, at 20 (discussing a chemical shipment from Exxon Chemical Company having received proper DEA approval).

tribution stage of a legitimate transaction with a foreign company.¹³⁷ An individual responsible for transporting the chemicals may receive additional compensation for transporting the chemicals to a coca plantation rather than delivering them to the legitimate purchaser.¹³⁸ Another method by which drug cartels divert chemicals is by paying individuals to switch the shipping barrels¹³⁹ or to syphon the chemicals.¹⁴⁰ These various methods demonstrate the complexity of the diversion process.¹⁴¹

Amidst the concern over the supply-side strategy, Congress enacted the CDTA to address the diversion problem.¹⁴² The CDTA regulates the exportation of those chemicals that the drug cartels may use to produce cocaine.¹⁴³ For several years prior to the CDTA's enactment, the government was aware of the chemical export problem, yet it failed to regulate chemical exports.¹⁴⁴ The CDTA signals the government's

137. See Jehl, *supra* note 11, at 1 (explaining the shipment trail from the United States to the Andean region). Jehl reports that 70 percent of the chemical shipments depart from Houston and enter Colombia at the ports of Barranquilla and Cartagena. *Id.* at 19. From the ports, the chemicals are transported by trucks to specific destinations. *Id.* Jehl reports that diversion occurs within this transportation stage through the syphoning of chemical tanks. *Id.* See also *U.S. Chemical Exports*, *supra* note 21, at 9 (statement of Haislip) (stating that diversion occurs in the distribution stage even if the chemicals enter legitimate ports with legitimate permits).

138. See Quinn, *supra* note 127, at 44-46 (describing the black market for exported chemicals).

139. *Id.* at 44-46. Canisters are sometimes refilled with lower quality chemicals. *Id.* A Chemists Association report noted that one laboratory produced ether in a distillery for sugar cane alcohol and repackaged it in a reputable firm's barrels for sale to cocaine producers. *Id.*

140. *Id.* The article quotes a U.S. Embassy spokesperson in Bogata who admits it is difficult to prevent the siphoning off of acetone while in transit so that the final consignee receives a shipment of water. *Id.*

141. See *supra* notes 134-140 and accompanying text (describing various chemical diversion methods).

142. See, e.g., Jehl *supra* note 11, at 1 (discussing the United States' response to the DEA investigations of chemicals found in Andean cocaine laboratories); Quinn, *supra* note 127, at 45-46 (explaining the United States and Latin American efforts to control the flow of chemicals to the Andean region); McBride, *supra* note 7, at 3 (presenting views of the CDTA from governmental officials and industry representatives); Andreas, *supra* note 128, at 14 (demonstrating the DEA's view of the ability to hinder the accessibility of the chemicals as a method to handicap the cocaine industry).

143. 21 U.S.C. § 801 (1988); see *supra* notes 13-16 and accompanying text (explaining the regulatory process under the CDTA).

144. See Larmer, *supra* note 134, at 3 (narrating the Frank Torres story). In 1984, Frank Torres went to a New Jersey chemical company and ordered 200 tons of ether. *Id.* Mr. Torres paid for this order in cash. *Id.* Informed of this sale, the DEA tracked the chemical shipment to a cocaine laboratory in Tranquilandia, Colombia. *Id.* Mr. Torres subsequently received a five-year sentence for smuggling these chemicals. *Id.*

The DEA has noted its awareness of the chemical export situation, yet admitted that without congressional authority, it was powerless to tackle the problem. Andreas, *supra*

new willingness to share in the burden of the drug trade.¹⁴⁵ Unlike the supply-side strategy, the CDTA places a greater burden on the United States.¹⁴⁶

II. IMPLEMENTATION OF THE CDTA

A. DOMESTIC ISSUES

1. Jurisdiction

The DEA has already presented data to indicate that, since the CDTA's enactment, the DEA has successfully prevented the diversion of chemical shipments.¹⁴⁷ This success, however, may inaccurately portray the CDTA's effect.¹⁴⁸ An analysis of the CDTA's implementation demonstrates the existence of significant flaws in the legislation.

The DEA possesses sole jurisdiction under the CDTA.¹⁴⁹ The Attorney General delegated authority to the DEA to promulgate rules and regulations to implement the CDTA.¹⁵⁰ The Attorney General also granted oversight authority to the DEA to enforce the CDTA.¹⁵¹ These responsibilities include reviewing reports,¹⁵² conducting investigations,¹⁵³ and imposing criminal liability as the CDTA mandates.¹⁵⁴

note 128, at 14; see Quinn, *supra* note 127, at 44 (describing the DEA's efforts since the late 1970s to control chemical shipments to the Andean region).

145. See *U.S. Chemical Exports*, *supra* note 21, at 2 (opening statement by Sen. Bryan) (indicating government's desire to stop the flow of chemicals used to produce cocaine); Narcotics: Threat to Global Security, Remarks by Secretary Baker before U.N. Special Session on Narcotics, Feb. 20, 1990 *reprinted in* 1 U.S. Dept. of State Dispatch 15 (1990) (describing the United States drug policy).

146. See Quinn, *supra* note 127, at 44-46 (citing the chemical industry's belief that the CDTA obstructs legitimate business causing the American industry to lose its profit-making opportunities in the chemical trade industry).

147. See *U.S. Chemical Exports*, *supra* note 21, at 13-15 (statement of Haislip) (stating that since the CDTA's enactment, the DEA denied "regular customer status" to 61 foreign companies). The DEA also suspended two chemical shipments. *Id.* at 8. But see McBride, *supra* note 7, at 3 (observing the chemical industry's view of the difficulty inherent in regulating the trade of these chemicals).

148. See *infra* notes 149-237 and accompanying text (noting potential problems with the CDTA's implementation).

149. 21 U.S.C. § 971 (1988). Although the CDTA's language grants authority to the United States Attorney General, the DEA has enforcement jurisdiction. 21 C.F.R. § 1310 (1990); see *Precursor Chemicals*, *supra* note 10, at 98-99 (statement of Westrate, DEA) (detailing the DEA's preparatory actions to initiate the CDTA's implementation); *U.S. Chemical Exports*, *supra* note 21, at 8-10 (statement of Haislip) (assessing the DEA's performance in enforcing the CDTA).

150. 54 Fed. Reg. 31,657 (1989).

151. *Id.*

152. *Id.*

153. See *supra* note 149 and accompanying text (describing DEA responsibilities under the CDTA).

154. *Id.*

Unless exempted,¹⁵⁵ regulated persons¹⁵⁶ must notify the DEA within fifteen days of any regulated transaction¹⁵⁷ that involves a listed chemical.¹⁵⁸ The DEA then investigates the purchaser of the chemicals to determine whether the purchaser is legitimate.¹⁵⁹ If the DEA finds that the purchaser does not exist, or suspects that the drug cartels may divert the shipment of chemicals, the DEA may suspend the sale.¹⁶⁰ Furthermore, the DEA has jurisdiction to inspect and review the records¹⁶¹

155. 21 U.S.C. § 971(b)(1) (1990). This exemption applies to regular customers. *Id.* The CDTA defines a "regular customer" as one "with whom the regulated person has established a business relationship." 21 U.S.C. § 802(37) (1990).

156. 21 U.S.C. § 802 (38) (1990). The CDTA defines a "regulated person" as one who "manufactures, distributes, imports or exports a listed chemical. . ." *Id.* See also *infra* note 197 and accompanying text (noting that the definition of a "regulated person" includes companies in the pharmaceutical industry).

157. 21 U.S.C. § 971 (1988). The CDTA defines a "regulated transaction" as "a distribution, receipt, sale, importation or exportation of a threshold amount . . . of a listed chemical." *Id.* § 802(39)(a). The CDTA exempts from regulation transactions involving lawful domestic distribution of the chemicals. *Id.* § 802(39)(a)(i)-(v).

The notice requirements also mandate regulated persons to report "extraordinary circumstances" such as an unusual method of payment or a request for large quantities of a listed chemical. 21 C.F.R. § 1310.05 (1990). A regulated person must also report the loss or disappearance of a chemical shipment. *Id.* The CDTA requires submission of these reports based on the regulated person's suspicion that the chemical will be used for illegal purposes. *Id.* To reinforce this obligation, the CDTA imposes criminal liability for any individual who "knowingly or intentionally" engages in a regulated transaction with "reasonable cause to believe" that the chemicals will be diverted. 21 U.S.C. § 841(d)(2) (1988). But see Quinn, *supra* note 127, at 44 (explaining that cash payment does not ordinarily invoke suspicion as most companies pay cash for their orders).

This standard of criminal liability raises an issue regarding the regulated person's reporting obligations. 21 U.S.C. § 960(d)(1) - (2) (1988). The DEA has demonstrated that the cocaine producers receive massive amounts of diverted chemicals. See *supra* notes 126-132 and accompanying text (discussing the amount of American manufactured chemicals found in the Andean region and various diversion methods). Given this evidence, the CDTA potentially requires regulated persons to report all transactions involving listed chemicals to avoid liability under the CDTA. 21 U.S.C. § 830(b)(1) (1988).

158. 21 U.S.C. § 971 (1990); see *infra* notes 183-185 and accompanying text (delineating the CDTA's regulation of the listed chemicals).

159. 21 U.S.C. § 971(c)(1) (1990). The CDTA also requires the regulated person to perform a preliminary investigation of the buyer to establish the purchaser's identity. 21 C.F.R. § 1310.07 (1990). The regulated person should perform this "good faith" inquiry by using an international telephone listing, international chemical directories, or the foreign embassy's commercial attache. *Id.*

160. 21 U.S.C. § 971(c)(i) (1990). Although the DEA has no formal review procedure to suspend chemical shipments, the DEA considers certain factors in its decision. *U.S. Chemical Exports*, *supra* note 21, at 10 (statement of Haislip). The DEA has suspended shipments or denied regular customer status upon finding that: (1) the purchasing company is non-existent; (2) the company's corporate officers work within a drug cartel; or (3) the company's owner is a DEA fugitive. *Id.*

161. 21 C.F.R. § 1310.04(d) (1990).

which the CDTA requires the regulated persons to maintain.¹⁶² The DEA's considerable expertise in the narcotics industry, justifies its jurisdiction under the CDTA.¹⁶³ Nevertheless, the problems that the DEA has encountered may diminish the value of its expertise.¹⁶⁴

The lack of human resources to review the export applications presents an obstacle for the DEA.¹⁶⁵ Both representatives of the chemical industry and DEA officials suggest that the DEA has insufficient resources to adequately review the applications, as the CDTA requires.¹⁶⁶ The DEA suggests that lack of funding has exacerbated this shortage.¹⁶⁷

The required investigations also present problems for the DEA.¹⁶⁸ The investigations require the DEA to check the legitimacy of the purchasers.¹⁶⁹ DEA agents must travel to the Andean region¹⁷⁰ where the dangerous environment contributes to the difficulty of investigations.¹⁷¹

162. 21 U.S.C. § 830 (1988). The CDTA requires regulated persons to maintain records concerning precursor chemicals for four years. 21 U.S.C. § 830(a)(1)(A) (1988). The regulated persons must maintain records of essential chemicals for two years. *Id.* § 830(a)(1)(B). The regulated persons must keep the records at their regular place of business. 21 C.F.R. § 1310.04(c) (1990).

163. See Wisotsky, *supra* note 1, at 1352-57 (describing the DEA as a law enforcement arm that prosecutes drug traffickers). In 1973, the Government established the DEA as the principal agency in charge of implementing the United States drug policy. *Id.* at 1352. Since 1973, the DEA has had enforcement jurisdiction under various statutes that involve illegal drug activity. *Id.* at 1354.

164. See *infra* notes 165-179 and accompanying text (delineating the problems that the DEA faced in implementing the CDTA).

165. *U.S. Chemical Exports*, *supra* notes 21, at 8-9. The DEA has indicated that it has "very limited resources" with which to efficiently enforce the CDTA. *Id.* at 8. The DEA has also admitted that it has limited expertise in dealing with the chemical industry. *Id.*

166. *Id.* See *Precursor Chemicals*, *supra* note 10, at 169-70 (statement of John Hess) (denouncing the record-keeping requirement as too voluminous to assure DEA's effective enforcement of the CDTA); Quinn, *supra* note 127, at 44 (furnishing the chemical industry's view that the DEA will "end up with rooms full of this information and nobody to look at it").

167. See *supra* note 165 and accompanying text (explaining the problems which the DEA has encountered since the CDTA's enactment); *U.S. Chemical Exports*, *supra* note 21, at 84 (statement of Peter Andreas, Institute for Policy Studies) (assessing the DEA's performance).

168. *U.S. Chemical Exports*, *supra* note 21, at 9 (statement of Haislip). Due to the unstable environment of the Andean region, the DEA has encountered difficulties in investigating foreign companies. *Id.* The DEA has indicated that such investigations endanger its employees. *Id.*

169. 21 U.S.C. § 971 (1990); see *supra* note 160 and accompanying text (discussing the investigatory process under the CDTA).

170. *Id.*

171. *Id.*

The agents may face life-threatening situations in their attempt to secure background information on the foreign companies.¹⁷²

Furthermore, the nature of the CDTA requires expertise in chemicals and commerce.¹⁷³ To determine the suspicious nature of a chemical shipment, the DEA must know the quantities that customarily are required for legitimate use.¹⁷⁴ The DEA must also possess the capacity to determine suspicious methods of transportation and distribution.¹⁷⁵ The DEA has admitted its limited expertise in these areas.¹⁷⁶ Without expertise in the chemical trade industry, the DEA may inadvertently approve chemical shipments that the drug cartels may successfully divert.¹⁷⁷ The CDTA's success in preventing diversion depends on the efficient and adequate review of the export applications and investigations.¹⁷⁸ The problem of the DEA's limited resources suggests the need for Congress to re-evaluate DEA's sole jurisdiction under the Act.¹⁷⁹

2. Regulated Chemicals

The CDTA operates to control the export of designated chemicals.¹⁸⁰ Amending the Controlled Substances Act,¹⁸¹ the CDTA regulates chemicals that the drug cartels may exploit for illegal purposes.¹⁸² The CDTA classifies the chemicals as "precursor"¹⁸³ or "essential"¹⁸⁴ depending on the chemical's role as either a direct substance or a solvent

172. See *Latin America's Lebanon*, NEWSWEEK, Sept. 11, 1989, at 31 (reporting the violence and terrorism that the drug cartels have generated in the Andean region).

173. See *Precursor Chemicals*, *supra* note 10, at 169 (stressing the DEA's need to understand the globally-competitive nature of the chemical industry in order to be able to effectively regulate the chemicals' exportation).

174. *Id.*

175. *Id.*

176. See *supra* note 165 and accompanying text (construing the DEA's limited expertise in the chemical industry).

177. *Id.*

178. See *Precursor Chemicals*, *supra* note 10, at 179-85 (testimony of CMA) (expressing CMA's concerns with DEA's implementation of the CDTA); *Id.* at 172-73 (statement of John Hess) (presenting the Nat'l Assoc. of Chemical Distributors' conclusion regarding the effectiveness of the CDTA); *U.S. Chemical Exports*, *supra* note 21, at 7-8 (statement of Gene Haislip) (presenting DEA's view of the CDTA).

179. See *supra* notes 165-173 and accompanying text (observing DEA's performance in implementing the CDTA).

180. See *supra* note 13 and accompanying text (citing the regulated chemicals under the CDTA).

181. 21 U.S.C. § 801 (1990).

182. 21 U.S.C. § 830 (1990); see *U.S. Chemical Exports*, *supra* note 21, at 3 (opening statement of Sen. Rockefeller) (reiterating the CDTA's background).

183. 21 U.S.C. § 802 (1990); see *supra* note 13 and accompanying text (defining precursor chemicals); and 21 C.F.R. § 1310.02 (1990) (designating specifically those chemicals classified as precursor chemicals); 21 C.F.R. § 1310.04(f)(1) (listing the threshold amounts of the chemicals under which the regulatory scheme is invoked).

in the manufacturing process.¹⁸⁵ The classification of these chemicals has led to criticism of the CDTA.¹⁸⁶

The CDTA designates the chemicals as controlled substances¹⁸⁷ despite their capacity for industrial use.¹⁸⁸ The CDTA groups these chemicals under a regulatory scheme that includes opiates,¹⁸⁹ amphetamines,¹⁹⁰ and other narcotic drugs.¹⁹¹ The chemical industry, while accepting the need to address the diversion problem,¹⁹² disagrees with the CDTA's classification scheme.¹⁹³ Representatives of the chemical in-

184. 21 U.S.C. § 802 (1990); *see supra* note 13 and accompanying text (defining essential chemicals); 21 C.F.R. § 1310.02 (1990) (designating specifically those chemicals classified as essential chemicals); and *Id.* at § 1310.04(f)(2) (listing the threshold amount of essential chemicals under which the regulatory scheme is invoked).

185. 21 U.S.C. § 802 (1990). The CDTA also distinguishes between the classified chemicals through the requirements with which regulated persons must comply. *Id.* § 830(a)(1)(A)-(B). Regulated persons must maintain records of regulated transactions involving precursor chemicals for four years and essential chemicals for two years. 21 C.F.R. § 1310.04 (1990). Furthermore, the threshold amounts for acetone, MEK, and toluene are inapplicable to the regulatory scheme. 21 C.F.R. § 1310.04 (f)(2)(iii) (1990). Consequently, the CDTA regulates acetone, MEK, and toluene in all transactions regardless of the amount involved. *Id.* The different regulatory standard for these chemicals reflects the DEA's concern regarding the massive exports of these chemicals. *See supra* note 7 and accompanying text (listing the amounts of these chemicals which are exported to the Andean region).

186. *See infra* notes 193-197 and accompanying text (demonstrating the chemical industry's criticism of the chemical classification scheme).

187. 21 U.S.C. § 802 (1990). The CDTA amends the Controlled Substances Act to include the regulation of the listed precursor and essential chemicals. *Id.* § 802 (34), (35).

188. McBride, *supra* note 7, at 3. McBride explains that ether is used as an anesthetic. *Id.* MEK, acetone, and toluene are solvents used in a variety of industrial substances, including paint, chloroform, saccharine, acids, dyes, and perfumes. *Id.* *See supra* note 126 and accompanying text (outlining other legitimate purposes for the regulated chemicals).

189. 21 U.S.C. § 812(c)(a) (1990). Schedule I under the Controlled Substances Act regulates 44 opiates that include various chemical compounds of these opiates. *Id.*

190. 21 U.S.C. § 812(c)(c) (1990). This section of the Controlled Substances Act regulates chemical compounds which have hallucinogenic effects. *Id.*

191. 21 U.S.C. § 812 (1988). Generally, the Controlled Substances Act regulates any and all chemical compounds and materials that have stimulant, hallucinogenic, and addiction-forming effects. *Id.*

192. *See Precursor Chemicals*, *supra* note 10, at 177 (testimony of CMA) (expressing the chemical industry's acceptance of its role in eliminating the diversion of chemicals to the drug cartels); and *U.S. Chemical Exports*, *supra* note 21, at 37 (statement of John Rutledge, Exxon Chemical Company) (restating Exxon's commitment to supporting the CDTA's enforcement).

193. *See Precursor Chemicals*, *supra* note 10, at 164-65, 169 (statement of John R. Hess, Nat'l Assn. of Chemical Distributors) (stressing the nature of the regulated essential chemicals as being an international commodity which Congress must consider in order to effectively achieve its goals); *Precursor Chemicals*, *supra* note 10, at 185 (testimony of CMA) (recommending the re-classification of the listed chemicals under a uniform system which the chemical industry uses).

dustry stress the legality of the chemicals,¹⁹⁴ contending that the chemicals constitute commodities rather than narcotic drugs.¹⁹⁵ These representatives fear that the CDTA's classification symbolically labels the manufacturers as accomplices in the cocaine industry.¹⁹⁶

A second criticism of the CDTA's categorical scheme concerns the potential overregulation of some of the chemicals. The Food and Drug Administration (FDA) controls some of the chemicals under its regulation of the pharmaceutical industry.¹⁹⁷ The CDTA now labels the chemicals as controlled substances, subjecting the chemicals to the DEA's jurisdiction as well.¹⁹⁸ The pharmaceutical industry has expressed its concern with the burden posed by this dual-regulatory procedure.¹⁹⁹ The pharmaceutical industry must comply with the FDA's regulations.²⁰⁰ The CDTA subjects the pharmaceutical industry to the record-keeping and notice requirements that the DEA mandated.²⁰¹ The pharmaceutical industry, therefore, must adhere to both agencies' regulations to avoid liability.²⁰² Consequently, Congress may need to amend the CDTA's classification scheme to prevent the potential overregulation and stigma that the CDTA may generate.

194. *Precursor Chemicals*, *supra* note 10, at 164-65, 169.

195. *Id.*

196. *Id.*

197. See Treinish, *The Chemical Diversion and Trafficking Act: The Impact on the Finished Pharmaceutical Industry*, 45 Food Drug Cosm. L. Rep. (CCH) 109 (March 1990) (explaining the CDTA's regulation of pharmaceuticals included in its regulatory scheme). The Federal Food, Drug, and Cosmetic Act regulates chemicals used to manufacture pharmaceuticals for medicinal purposes. 21 U.S.C. § 301 (1982). The CDTA specifically exempts from regulation those chemicals under the regulatory scheme of the Federal Food, Drug, and Cosmetic Act. 21 U.S.C. § 802 (39)(A)(iv) (1988). The article, however, construes this exemption as inapplicable to receipt of a listed chemical under the CDTA. Treinish, *supra*, at 110. The article also explains that the CDTA regulates machinery typical to the pharmaceutical industry. *Id.* Consequently, the pharmaceutical industry is subject to regulation by both the FDA and the DEA. *Id.* at 109.

198. See *supra* notes 16, 149 and accompanying text (assessing the DEA's jurisdiction under the CDTA).

199. See *supra* note 197 and accompanying text (analyzing the CDTA's regulation of the pharmaceutical industry).

200. *Id.* The CDTA regulates the pharmaceutical industry under the "regulated persons" definitions. Treinish, *supra* note 197, at 109.

201. *Id.* at 109. Pharmaceutical companies must review their records to ensure that they comply with the CDTA's requirements. Treinish, *supra* note 197, at 110-11.

202. See *supra* notes 197, 200-201 and accompanying text (assessing the CDTA's regulation of the pharmaceutical industry).

3. Regulation of Chemical Exporters

The CDTA's implementation poses other problems.²⁰³ One such problem concerns the fifteen-day notice requirement.²⁰⁴ The CDTA requires regulated persons to notify the DEA of a regulated transaction.²⁰⁵ The notice must include specific information regarding the quantity of chemicals sold,²⁰⁶ the names and addresses of each party to the transaction,²⁰⁷ and methods of transportation and distribution.²⁰⁸ Regulated persons must also demonstrate proof of the purchaser's identity.²⁰⁹ Chemical industry representatives contend that the notice requirement burdens the industry's commercial interests.²¹⁰ The representatives claim that preparation of the necessary documents requires more than the allocated fifteen-day period.²¹¹

A second problem concerns "regular customer status."²¹² The DEA may grant regular customer status to purchasers with whom the ex-

203. See *infra* notes 204-217 and accompanying text (discussing the CDTA's notice requirement and regular customer exemption).

204. See *supra* note 16 and accompanying text (explaining the fifteen-day notice requirement). Representatives of the chemical industry disagree with this notice requirement. Quinn, *supra* note 127, at 44. The representatives believe that such a delay in completing an order would encourage the purchaser to buy the desired chemicals elsewhere. *Id.* The representatives fear the loss of their profits to other international chemical suppliers. *Id.*

205. 21 U.S.C. § 971(b)(1) (1990).

206. 21 C.F.R. § 1310.06(a)(3) (1990).

207. 21 C.F.R. § 1310.06(a)(4) (1990).

208. 21 C.F.R. § 1310.06(a)(4) (1990).

209. 21 C.F.R. § 1310.07. See *supra* note 159 and accompanying text (discussing the regulated persons' obligation to demonstrate proof of identity of the chemical purchaser).

210. See *Precursor Chemicals*, *supra* note 10, at 203 (statement of William Davis, Valley Solvent Company) (assessing the adverse impact of the fifteen-day notice requirement imposed on regulated persons); *supra* note 204 and accompanying text (criticizing the CDTA's notice requirement).

211. See *supra* note 210 (examining the fifteen-day notice requirement).

212. 21 U.S.C. § 802(36) (1990). The CDTA defines a "regular customer" as one with whom the regulated person has an "established business relationship." *Id.* Upon enactment of the CDTA, regulated persons had thirty days in which to provide the DEA with a list of customers for approval as "regular customers." 21 U.S.C. § 971(6). Within sixty days, the CDTA required the DEA to review the lists, granting regular customer status after investigating the companies. *Id.* The CDTA exempts transactions with regular customers from the fifteen-day notice requirement, unless the DEA notifies the regulated person otherwise. 21 U.S.C. § 971(b)(1)-(2).

A representative of the chemical industry has criticized the DEA's approval procedure. *Precursor Chemicals*, *supra* note 10, at 182-83. This representative asserted that the DEA failed to grant approval to customers of some companies who complied with the sixty-day review opportunity. *Id.* at 183. Consequently, the CDTA now treats these companies as new customers, subjecting them to the fifteen-day notice requirement. *Id.* The chemical industry representative pointed to this procedure as another way in which the CDTA burdens legitimate business. *Id.* at 179.

porter has formed prior business relations.²¹³ By granting this status, the DEA exempts the exporter from the notice requirement in future transactions with the regular customer.²¹⁴

This regular customer status may produce a weak link in the CDTA's regulatory process.²¹⁵ Although the exemption purportedly functions to alleviate the burden on legitimate business, the complexity of the diversion problem suggests that the drug cartels may use the exemption to divert the chemicals from regular customers.²¹⁶ The drug trade fosters corruption.²¹⁷ Consequently, regular customers may unintentionally provide chemicals to the drug cartels through corrupt employees who receive compensation for relinquishing the chemicals to the drug cartels.²¹⁸ This analysis of the CDTA's domestic implementation indicates an area that may become problematic to the CDTA's enforcement. The problems become more pronounced upon examining the CDTA's implementation under international law.

B. INTERNATIONAL ISSUES

On December 19, 1988, the United Nations adopted the Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances

213. See *supra* note 212 and accompanying text (delineating the regular customer approval procedure under the CDTA).

214. *Id.*

215. 21 U.S.C. § 971(b)(1).

216. See *supra* notes 134-140 and accompanying text (indicating the various methods by which diversion occurs).

217. See e.g., *U.S. Chemical Exports*, *supra* note 21, at 31-32 (describing how the cocaine industry has permeated the Andean society, encouraging corruption among governmental officials); Gorriti, *supra* note 4, at 72 (explaining that the economic influence that the cocaine industry has exerted in the Andean region is the primary cause of corruption); and Skolnick, *supra* note 2, at 87-88 (discussing the potential for corruption in federal agencies and law enforcement efforts in implementing Bush's drug policy).

The drug trade has even generated corruption within the DEA. Berke, *Corruption in Agency Called Crippler of Inquiries and Morale*, N.Y. Times, Dec. 17, 1989, at A1. DEA officials explain that the vast amount of money that agents handle acts as an enticement to stressed agents who receive little compensation for their dangerous activities. *Id.*

218. See *supra* notes 216-217 and accompanying text (describing how the cocaine industry encourages the diversion process and corruption). Given the evidence of the diversion process, its complexity, and the inherent corruption that the drug trade causes, it is possible that regular customers will sell chemicals to the drug cartels. Quinn, *supra* note 127, at 44. As the DEA improves enforcement, and, as a result, chemicals become subject to a black market, the potential for this will increase. See *id.* (concluding that in a black market, the chemicals would become more valuable than the cocaine).

(the Convention).²¹⁹ The Convention included a proposal for participating nations to institute legislation to regulate the import and export of chemicals used to produce narcotic drugs.²²⁰ The Convention reflects the growing recognition of the need to resolve the chemical export problem through international efforts.²²¹ Although Congress enacted the CDTA prior to official adoption of the Convention, Congress intended to promote an international effort by proposing the CDTA as model legislation.²²² Within this context, the CDTA's international legal implications are relevant to its validity as model legislation.

1. Jurisdictional Issues

The CDTA imposes criminal liability on any person who intentionally or knowingly imports or exports a listed chemical, or reasonably believes that the drug cartels may divert and use a regulated chemical to produce illegal drugs.²²³ The CDTA primarily regulates exporters and importers within the United States; statutory language does not limit criminal liability to United States citizens and commercial enti-

219. *United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances*, U.N. Doc. E/CONF.82/15 (1988) [hereinafter *Convention*]. This Convention represented the culmination of the United Nations' historical efforts to combat drug trafficking. See *Secretary General's Report on International Campaign Against Traffic in Drugs*, U.N. Doc. A/39/194 (1984) (outlining the United Nations' efforts to achieve universal enforcement of laws proscribing drug trafficking); Innis, *The U.N. Convention Against Illicit Traffic in Narcotic Substances and Psychotropic Substances*, 37 FED. B. NEWS & J. 118 (1990) (detailing the events leading to the Convention).

Forty-three States signed the Convention. Innis, *supra*, at 119. The Senate gave its advice and consent on November 29, 1989, to the Narcotics Convention. *Id.* The Convention purported to furnish a legislative framework with which participating states would adopt stricter laws against drug trafficking. *Convention*, at 4. The Convention also urged States to join in an international effort against the drug trade. *Id.* As of February 21, 1990, only four states had ratified the Convention. 136 CONG. REC. S1372 (daily ed. Feb. 21, 1990) (statement of Sen. McConnell).

220. *Convention*, *supra* note 219, at 18. Article 12 of the Convention requires parties to adopt measures that prevent diversion of chemicals for illegal purposes. *Id.* The suggested measures include international monitoring of trade, provision of specific information regarding imports and exports, and use of competent authorities to seize chemicals. *Id.* at 20. The Convention lists twelve chemicals, including acetone and ethyl ether, that states should regulate. *Id.* at 32.

221. See *Convention*, *supra* note 219, at 1-2 (outlining the Convention's objectives).

222. See *U.S. Chemical Exports*, *supra* note 21, at 2 (opening statement of Sen. Bryan) (stating that the executive branch should encourage nations to ratify the United Nations Convention and adopt laws similar to the CDTA).

223. 21 U.S.C. § 960(d) (1990).

ties.²²⁴ The imposition of criminal liability on foreign nationals who violate the CDTA's regulations is implicit in the CDTA's language.²²⁵

International law prohibits one country from subjecting a foreign national residing abroad to its criminal laws unless the refuge state also criminalizes the conduct.²²⁶ Furthermore, unless the foreign sovereign agrees to extradite its national, the requesting state may not force the foreign citizen's physical presence within its territory.²²⁷ International legal principles, therefore, would prohibit the United States from using the CDTA to prosecute a foreign national located abroad unless the refuge state has enacted similar legislation.²²⁸ The jurisdiction issue demonstrates the need for a concerted international commitment to promulgate chemical export regulations in order to achieve greater success in eliminating the illegal exploitation of these chemicals.²²⁹

2. DEA Investigations

A second issue arises with regard to the investigations that the DEA must conduct.²³⁰ The CDTA fails to delineate the procedures the DEA must follow in investigating the purchasers of the chemical products--specifically in the case of investigations it must conduct abroad.²³¹ Likewise, the DEA has failed to institute internal standards to imple-

224. *Id.* Although the CDTA narrows the application of its regulatory scheme to regulated persons, the CDTA fails to similarly limit its application of criminal liability. *Id.* The CDTA also mandates that the DEA actively maintain a domestic and international campaign against chemical diversion. 21 U.S.C. § 872 (f) (1988). As the Bush administration's drug policy focuses on strengthening law enforcement, it is likely that foreign citizens will face prosecution under the CDTA. *See supra* note 66-68 and accompanying text (describing how the United States obtains jurisdiction over and prosecutes foreign citizens).

225. 21 U.S.C. § 960(d) (1990).

226. *See* Murphy, *supra* note 1, at 1291 (describing the principle of double criminality under international law); *International Extradition*, *supra* note 67, at 355-58 (explaining that the principle of double criminality is based on notions of individual liberty).

227. *See* Murphy, *supra* note 1, at 1291-92 (describing international legal obligations under extradition treaties).

228. *See* Murphy, *supra* note 1, at 1291-94 (discussing the extradition issues involved in the prosecution of foreign drug offenders). Article 6 of the United Nations Convention deals with this jurisdictional concern by encouraging the States to make offenses under the Convention extraditable in their treaties. *Convention*, *supra* note 219, at 11.

229. *See* *Convention*, *supra* note 219, at 1-2 (setting forth the objectives of the United Nations Convention). The preamble to the Convention demonstrates an intent to make the war on drugs an international priority. *Id.*

230. *See supra* notes 150-160 and accompanying text (discussing DEA investigations under the CDTA).

231. 21 U.S.C. § 872 (1990). The CDTA merely provides authority to maintain an active anti-diversion program. *Id.*

ment these investigations.²³² The DEA has indicated, however, that the investigations require agents to travel abroad to the purchaser's place of business to evaluate its legitimacy.²³³ International legal principles prevent the DEA from inspecting a foreign entity's books and records unless the foreign state in which the entity is located consents to the inspection.²³⁴ As the CDTA's success depends partially on these investigations, the government may need to negotiate some form of international agreement to circumvent this obstacle.²³⁵

These potential conflicts demonstrate the CDTA's insensitivity to international legal principles. The CDTA fails to address issues, such as jurisdiction, that would otherwise solidify its credibility as model legislation for an international effort. Comparing the CDTA to another chemical regulation proposal highlights the areas that Congress should address for improvement.

III. THE OAS PROPOSAL

For several years, the Organization of American States (OAS)²³⁶ has directed its efforts toward alleviating the drug trade.²³⁷ In 1986, the

232. See *U.S. Chemical Exports*, *supra* note 21, at 10 (statement of Haislip) (explaining that the DEA uses different criteria in approving shipments).

233. *Id.* at 9; see *supra* note 171-172 and accompanying text (noting the difficulties which arise from foreign investigations).

234. RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW OF THE UNITED STATES § 432(2) (1986). See *Murphy*, *supra* note 1, at 1281 (explaining the restriction which prohibits United States military and governmental officials from conducting foreign searches and seizures, but allows them to be present and assist foreign officials).

235. See *Murphy*, *supra* notes 1, at 1301-04 (discussing mutual legal assistance treaties in foreign law enforcement). Mutual legal assistance treaties (MLATs) are international agreements in which states pledge to cooperate in foreign criminal prosecutions. *Id.* at 1301. While Congress has considered MLATs as a tool in the United States drug policy, Congress has yet to ratify such a treaty. *Id.*

The DEA, however, uses MLATs to aid in its CDTA investigations. The United Nations Convention has recognized the possible role of MLATs in an international anti-drug campaign by obligating the party states to formulate such agreements. See *Convention*, *supra* note 219, at 13-15 (outlining parameters for MLATs in accordance with the Convention).

236. See DEP'T OF PUB. INFO., GEN. SECRETARIAT, THE OAS AND THE EVOLUTION OF THE INTER-AM. SYS. (1988) [hereinafter *EVOLUTION OF THE OAS*] (discussing the background and structure of the OAS). Since its inception in 1970, the OAS has functioned to promote peace and security among member-states and to promote the political, social, and economic development of member-states. *Id.* at 21-22.

237. See GEN. SECRETARIAT, OAS, INTER-AM. PROGRAM OF ACTION OF RIO DE JANEIRO AGAINST THE ILLICIT USE AND PRODUCTION OF NARCOTIC DRUGS AND PSYCHOTROPIC SUBSTANCES AND TRAFFIC THEREIN (1986) [hereinafter *PROGRAM OF ACTION*] (setting forth the OAS's drug policy). In 1986, the General Assembly of the OAS adopted a drug policy to combat the manufacture and trafficking of narcotic drugs. *Id.* at 3. This encouraged member-states to adopt measures such as education about drugs, treatment for drug abuse, and stricter law enforcement. *Id.* at 4-6.

General Assembly of the OAS²³⁸ established the Inter-American Drug Control Commission (CICAD)²³⁹ to oversee the development of the OAS drug policy.²⁴⁰ One of CICAD's specific responsibilities included the formulation of a proposal to control the importation and exportation of chemicals used to produce narcotic drugs.²⁴¹ Based upon a General Assembly resolution passed on April 20, 1990,²⁴² CICAD formulated model regulations aimed at controlling the exploitation of certain chemical products.²⁴³ Because the OAS proposal seeks to achieve the same objectives as the CDTA, a comparative analysis of the regulations enhances understanding of the CDTA's potential problems.²⁴⁴

A. REGULATED CHEMICALS

Like the CDTA, the OAS proposal lists the regulated chemicals.²⁴⁵ The proposal also distinguishes between precursor and "other" chemi-

238. See *EVOLUTION OF THE OAS*, *supra* note 236, at 22 (discussing the function of the OAS's General Assembly). The General Assembly is the supreme legislative body of the OAS and comprised of representatives from each member-state.

239. See *PROGRAM OF ACTION*, *supra* note 237, at 7-8 (recommending the establishment of the Inter-American Drug Control Commission).

240. *Id.* CICAD develops, implements, and monitors the Program of Action adopted in 1986. *Id.* CICAD also works with member-states to aid in formulating regional programs designed to combat illegal drug manufacturing and trafficking. *Id.*

241. See *Declaration and Program of Action of Ixtapa*, RM/NARCO/doc.29/90 rev. 1 (1990) [hereinafter *Declaration*] (reiterating the OAS's drug policy, encouraging adoption of the United Nations Convention, and supporting the Cartagena Summit with President Bush). The Declaration specifically directed CICAD to oversee the ratification of the United Nations Convention by member-states and to adopt chemical control laws. *Id.* at 3-4.

242. *Id.* This resolution resulted from a General Assembly conference held in Ixtapa, Mexico. *Id.* at 1. The Declaration reflects the member-states' commitment to the drug war while adhering to the necessity of restructuring the states' political and economic environment. *Id.* at 1.

243. *Model Regulations to Control Chemical Precursors and Chemical Substances, Machines and Materials*, RM/NARCO/doc.18/90 rev. 1 (1990) [hereinafter *Model Regulations*]. CICAD developed the Model Regulations as a legislative guide from which member-states could promulgate domestic legislation. *Id.* at 1. The Model Regulations contain specific recommendations regarding the manner by which member-states should implement the proposal. *Id.* at 1-9. These Regulations also furnish specific recommendations aimed at stimulating regional cooperation among member-states to assure the laws' effectiveness. *Id.* at 9-10; see also Sternberg, *Cutting Cocaine's Cord*, *CHEMICAL WEEK*, Apr. 18, 1990, at 10 (discussing the OAS's chemical control proposal).

244. See Sternberg, *supra* note 243, at 10 (noting the similarities between the requirements of the CDTA and the OAS's chemical control proposal).

245. *Model Regulations*, *supra* note 243, at 2-4. The Model Regulations list thirty-six chemicals which require regulation. *Id.* The Regulation classifies these chemicals as precursor or "other chemical products." *Id.* The Regulations recommend that member-states subject listed precursor chemicals to a licensing system and the other listed chemicals to a registration system. *Id.* at 5.

cals.²⁴⁶ Unlike the CDTA, however, the OAS proposal classifies the chemicals pursuant to a uniform system.²⁴⁷ A representative of the United States chemical industry has specifically criticized the CDTA for this shortcoming.²⁴⁸ This representative contends that the complexity of the chemical compounds necessitates a uniform classification system to assure proper compliance with the CDTA.²⁴⁹

The OAS proposal also differs from the CDTA by regulating precursor and essential chemicals in different ways (essential chemicals are "other chemical products" under the OAS plan).²⁵⁰ The OAS proposal subjects precursor chemicals to a licensing system, while it subjects the other chemical products to a registration system.²⁵¹

Under the OAS proposal, the competent authorities²⁵² issue licenses to regulated companies²⁵³ who handle precursor chemicals.²⁵⁴ The com-

246. *Id.* at 3-4. The Regulations define precursor chemicals as those substances which may be used in the "production, manufacture, preparation, importation, exportation and/or any other type of illicit transaction" involving drugs, making these chemicals essential to these processes. *Id.* at 1. The Regulations label other regulated chemicals as "other chemical products," defining these chemical products as "solvents, reagents or catalysts" used in the drug production and/or manufacturing process. *Id.* These "other chemical products" represent the equivalent of essential chemicals under the CDTA. Compare *Model Regulations*, *supra* note 243, at 1, 4 (defining and listing "other chemical products") with 21 U.S.C. § 802(35) (1990) (listing and defining "essential chemicals").

In addition to the licensing system, the Model Regulations require import and export permits for precursor chemicals. *Model Regulations*, *supra* note 243, at 7. Member states, however, may also require such permits for the other chemical products. *Id.* Like the CDTA, the Model Regulations aim to control similar chemical substances. Compare *Model Regulations*, *supra* note 243, at 3-4 (listing regulated chemicals) with 21 U.S.C. § 802(34)-(35) (defining regulated chemicals under the CDTA). The Model Regulations, however, contain a more expansive list of regulated chemicals. *Model Regulations*, *supra* note 243, at 3-4.

247. *Model Regulations*, *supra* note 243, at 2. The Model Regulations classify chemicals according to the Customs Cooperation Council Nomenclature and the Harmonized Commodity Description and Coding System. *Id.* The Regulations require the use of these systems in all documentation regarding the listed chemicals. *Id.*

248. See *Precursor Chemicals*, *supra* note 10, at 185 (testimony of the CMA) (recommending the use of the Chemical Abstract Service to classify the listed chemicals). This representative suggested that use of this system would assure better compliance with the CDTA, as the chemical industry commonly uses this system. *Id.*

249. *Id.*

250. *Model Regulations*, *supra* note 243, at 1.

251. See *supra* note 246-247 and accompanying text (evaluating the Model Regulations' regulatory scheme).

252. See *Model Regulations*, *supra* note 243, at 4 (interpreting the competent authorities to be the governmental entities responsible for implementing and enforcing the Regulations in each member-state).

253. See *Model Regulations*, *supra* note 243, at 5 (designating those entities which fall under the OAS regulatory scheme). The OAS plan regulates any entity which "produces, manufactures, prepares, imports, exports, distributes, uses, and/or engages in any other type of transaction" involving a regulated chemical. *Id.* at 5. The CDTA

petent authorities may also revoke the licenses upon a finding that the regulated companies engage in illegal acts.²⁵⁵ The OAS plan prohibits companies from engaging in transactions involving precursor chemicals without an issued license.²⁵⁶

The licensing system also assists the competent authorities to keep track of the precursor chemicals because every transaction must include a specific license number.²⁵⁷ In contrast, the registration system merely requires regulated companies to register with the competent authorities.²⁵⁸ This registration system permits the authorities to remain informed of the company's use of the other chemical products.²⁵⁹

The distinctions in this regulatory scheme reflect the need for greater regulation of precursor chemicals.²⁶⁰ The American chemical industry criticizes the CDTA for its failure to make similar regulatory distinctions between precursor and essential chemicals.²⁶¹

B. RECORD-KEEPING REQUIREMENTS

Both the CDTA and the OAS regulations require regulated companies to maintain records of transactions that involve regulated chemicals.²⁶² The records must include specific information such as the iden-

contains a similar definition of those entities that the legislation regulates. 21 U.S.C. § 802(38) (1990).

254. *Model Regulations*, *supra* note 243, at 5. The implementing entity must maintain records regarding the status of the licenses. *Id.* In addition, regulated companies must secure import or export permits. *Id.* at 7. These permits are valid for one transaction and expire either 180 or ninety days after the implementing entity has issued them. *Id.*

255. *See id.* at 9-10 (establishing criminal penalties under the Regulations).

256. *Id.* at 5.

257. *Id.* at 6.

258. *See id.* at 5 (establishing a registration system). The Regulations require registration "so that the scope and nature of the activities [of the regulated companies] conduct may be known." *Id.*

259. *Id.*

260. *See supra* note 246 and accompanying text (stating that precursor chemicals are essential to the production of narcotic drugs).

261. *See Precursor Chemicals*, *supra* note 10, at 164-65 (statement of John Hess) (criticizing the regulation of essential chemicals). Hess argued that, because the listed essential chemicals constitute commodities, regulation of these chemicals substantially burdens legitimate businesses. *Id.* CICAD may have considered these legitimate purposes in limiting the regulation of the "other chemical product" (essential chemicals) in its Model Regulations. *See supra* notes 258-259 and accompanying text (assessing the registration system for "other chemical products").

262. *See Model Regulations*, *supra* note 243, at 5-6 (detailing the record-keeping requirements). The Model Regulations require updated documentation on the listed chemicals. *Id.* This documentation must include specific information regarding amounts manufactured, distributed, imported, exported, and lost. *Id.* These records must also specify information regarding transactions involving the listed chemicals, including specific information detailing the distribution process. *Id.*

tity of the transacting parties,²⁶³ the quantity of the chemicals involved,²⁶⁴ and the method by which the chemicals are transported.²⁶⁵

The OAS proposal requires identification of the final consignee, or end receiver, of the chemical sale.²⁶⁶ As diversion can occur in the distribution process,²⁶⁷ the identification of the consignee may aid the detection of a lost shipment.²⁶⁸ Authorities can check the legitimacy of the individual or company who receives the chemical shipment once the shipment leaves the distributor's control.²⁶⁹

Additionally, the OAS proposal also requires the import or export application to include specific information regarding the transportation of the chemical shipment.²⁷⁰ The applications must include the method of transportation,²⁷¹ point of entry,²⁷² stopover points, and final destination of the shipment.²⁷³ This information addresses the problem of diversion in the chain of distribution because the applications furnish the authorities with the information necessary to initiate investigations of lost shipments.²⁷⁴

C. OTHER DISTINCTIONS

A final distinction between the regulations concerns the OAS proposal's affirmative promotion of international cooperation.²⁷⁵ The OAS

263. *Id.* at 6.

264. *Id.*

265. *Id.*

266. *Id.*

267. *See supra* note 137 and accompanying text (describing the distribution process); and *Precursor Chemicals, supra* note 10, at 167-68 (statement of John Hess) (suggesting the need for better monitoring of the distribution process). Hess acknowledged the likelihood that diversion will occur in the distribution stage. *Id.* at 166. To remedy this problem, Hess recommended internal monitoring of supplied quantities of the chemicals to detect lost shipments. *Id.* at 167-68. Conceivably, the recommendations would require Congress to encourage internal review rather than external regulation of the chemical companies, thus alleviating the alleged burden which the CDTA imposes. *Id.*

268. *Precursor Chemicals, supra* note 10, at 167-68 (statement of John Hess).

269. *See id.* at 167-68 (statement of John Hess) (explaining how checks on the distribution procedure can aid in the prevention of diversion).

270. *Model Regulations, supra* note 243, at 6.

271. *See id.* (requiring the identification of transportation companies). The CDTA requires specific information regarding the transaction, yet the CDTA does not require such information regarding the transporting company. *See* 21 C.F.R. § 1310.06 (1990) (specifying information required in filing a report on a regulated transaction).

272. *Id.*

273. *Id.*

274. *See supra* notes 133-141 and accompanying text (discussing the ways in which diversion can occur in the distribution process).

275. *See infra* notes 276-277 and accompanying text (describing the Regulations' promotion of international efforts).

plan specifically addresses the need for international exchange of information regarding the regulated chemicals²⁷⁶ and cooperation in investigating alleged diversion.²⁷⁷ The OAS plan represents the acceptance of a consorted effort among nations to share the burden in enforcing chemical control laws.²⁷⁸ In contrast, the CDTA places the burden on the chemical industry²⁷⁹ and the DEA²⁸⁰ to work among themselves to achieve its goals.²⁸¹ The complexity of the diversion process, however, requires that both the importing and exporting nations share the burden of achieving the greatest possible success under chemical control laws.

IV. RECOMMENDATIONS

The CDTA's weaknesses demonstrate the need for improvement. First, Congress should address the problems posed by the DEA's sole jurisdiction. As discussed, the DEA lacks both the expertise and the human resources to sufficiently fulfill its responsibilities.²⁸² The DEA has pointed to the lack of funding as engendering these shortfalls. Congress may resolve these problems by providing more funds to assist the DEA with the CDTA's implementation and enforcement. An increase in funding, however, would fail to resolve the DEA's lack of expertise in the chemical trade industry.²⁸³ A more effective solution would be to delegate jurisdictional authority to another governmental agency.

276. See *Model Regulations*, *supra* note 243, at 9-10 (requiring member states to implement an international information-exchange network). The Regulations propose this information network as a method by which to eliminate diversion through regional means. *Id.*

277. *Id.* The Regulations require member states to aid other countries in investigating possible diversion of chemical products. *Id.* This provision essentially directs the states to adopt a form of Malts in accordance with the United Nations Convention. See *Convention*, *supra* note 219, at 13-15 (detailing the contents of Malts under the Convention); *supra* note 235 and accompanying text (discussing Malts in the United States' drug policy).

278. See *Model Regulations*, *supra* note 243, at 1 (presenting the purpose of the Regulations).

279. See 21 C.F.R. § 1310.07 (1990) (requiring regulated persons to conduct preliminary investigations of perspective purchasers); see also 21 U.S.C. § 872(f) (1988) (discussing the Attorney General's responsibilities in preventing chemical diversion). This section requires the United States Attorney General to maintain an active chemical diversion program, yet fails to indicate how the Attorney General should conduct this program on an international level. *Id.*

280. See *supra* note 16 (describing the DEA's obligations under the CDTA).

281. *Id.*

282. See *supra* note 165 and accompanying text (discussing DEA's limited resources).

283. See *supra* notes 176-177 and accompanying text (admitting DEA's limited chemical expertise).

Congress should consider delegating authority to the Department of Commerce's International Trade Administration (ITA). The ITA has significant expertise in trade relations.²⁸⁴ Within the ITA, the Bureau of Export Administration (BXA) can specifically aid in implementing the CDTA.²⁸⁵ The BXA currently implements and enforces export controls under the Export Administration Act.²⁸⁶ The CDTA essentially constitutes an export control of the regulated chemicals and, therefore, granting authority to the BXA would not constitute a novel delegation of authority.

Shared jurisdiction between the DEA and the BXA may improve the CDTA for various reasons. The BXA may provide greater efficiency in reviewing export applications. The BXA contains a computer network system for regulated companies to submit export applications.²⁸⁷ The computer network system permits companies to submit the required information with greater ease and efficiency.²⁸⁸ The system also assists the BXA in reviewing the information more rapidly. The chemical industry may benefit from this system. Use of the BXA's network system may reduce the transition time between submitting the chemical export application and approval of the transaction. In addition, the BXA can contribute its expertise in the chemical trade industry. The BXA currently regulates the exportation of chemicals that may be used to produce biological and chemical weapons.²⁸⁹ Consequently, the BXA has acquired expertise in chemical trade. The BXA may use this same ex-

284. See Hunt, *The Export Licensing System* in COPING WITH U.S. EXPORT CONTROLS 1990 (1990), at 13 [hereinafter EXPORT CONTROLS] (describing the function of the Bureau for Export Administration). The Bureau of Export Administration (BXA) is responsible for implementing the Export Administration Act. *Id.* The Export Administration Act permits the imposition of export controls based on national security, foreign policy, and short supply. 50 U.S.C. § 2402 (1990). Under this statutory authority, the BXA possesses jurisdiction to regulate the export of chemicals which may be used to manufacture biological and nuclear weapons. See DeVaughn, *Summary of United States Non-Proliferation Controls*, in EXPORT CONTROLS, at 321-340 (describing the implementation of export control of chemicals for national security purposes). To enforce these controls, BXA shares jurisdiction with the State Department to assure effective compliance without burdening legitimate businesses. *Id.*

285. *Id.*

286. 50 U.S.C. § 2402 (1990). See *supra* note 284 (describing the BXA's jurisdiction under the Export Administration Act).

287. See Baird, *Export Licensing: An Overview*, in EXPORT CONTROLS, *supra* note 284, at 59-60 (detailing the progress the Department of Commerce has made in expediting the export licensing procedure). The ITA has instituted a computer network which permits companies to submit applications automatically. *Id.* at 59. The ITA has also instituted procedures that have made the process more effective and compliance with the process easier. *Id.*

288. *Id.*

289. See DeVaughn, *supra* note 284, at 321-25 (describing the BXA's control of chemicals that may be used to produce biological and chemical weapons).

pertise in implementing the CDTA. Coupled with the DEA's expertise in the narcotics industry, the BXA's expertise may aid the CDTA's implementation by filling the gaps in the DEA's knowledge. Finally, BXA jurisdiction may alleviate the DEA's shortage of human resources. Congress can formulate a procedure that holds the BXA responsible for administrative duties and the DEA responsible for investigatory duties. Because the DEA may best use its expertise in investigatory tasks, such a procedure would better allocate the jurisdiction between the agencies. Consequently, shared jurisdiction with the BXA may alleviate the burden on both the DEA and the chemical industry.

Second, Congress should address the potential problems under the CDTA's classification scheme. Congress must consider the nature of the chemicals as commodities. This would entail re-classification of the chemicals and removal of the chemicals' controlled substances designation. To avoid over-regulation of the chemicals, Congress should also specify those chemicals exempted from the CDTA's regulation. Although Congress attempted to formulate this exemption,²⁹⁰ the CDTA lacks a clear indication of the specific chemicals included under the exemption. Congress can seek the aid of the pharmaceutical industry and the FDA to make this determination. Congress should also consider different methods of regulating precursor and essential chemicals. Congress may use a method similar to the method that the OAS proposes.²⁹¹ Congress should also consider instituting a uniform classification system to designate the regulated chemicals. The OAS proposal has adopted a customary classification system,²⁹² which Congress may consider adopting under the CDTA. Because the Andean countries used this system under their chemical control laws, a classification scheme used by both regions would promote greater efficiency for American and foreign companies. A uniform system may also furnish greater ease in detecting diversion, for the submitted documents would designate the chemicals under the same number. This revision of the regulations governing the chemicals would address both the problem of

290. 21 U.S.C. § 802 (39)(A)(iv) (1990). The CDTA's statutory language purportedly exempts those chemicals under the jurisdiction of the FDA. *Id.* This exemption, however, is unclear, and the CDTA continues to regulate the pharmaceutical industry. See *supra* note 197 and accompanying text (describing the dual-regulatory impact of the CDTA on the pharmaceutical industry).

291. See *supra* notes 245-247 and accompanying text (explaining the chemical classification system that the OAS adopted).

292. *Id.*

over-regulation and the problem of compliance by the chemical industry.

Third, Congress should reconsider the regular customer exemption. As discussed, the regular customer exemption may fail to prevent the drug cartels from gaining control of the exported chemicals. If Congress sincerely intends to commit itself to preventing diversion, then the exemption contradicts this congressional objective. Admittedly, the exemption represents a compromise to the chemical industry's fear of losing profits, however, Congress should take an affirmative position on the issue. Deleting the regular customer exemption would signify Congress' sincerity, while closing a possible loophole in the CDTA's implementation.

Fourth, Congress should provide clearer standards under which the DEA can deny chemical shipments.²⁹³ Although the DEA has suspended two shipments since the CDTA's enactment,²⁹⁴ these suspensions resulted from obvious indications of suspicious activity.²⁹⁵ As more countries enact similar laws, diversionary tactics will become more complex.²⁹⁶ To be successful, Congress must equip the CDTA with mechanisms to detect all forms of diversion. Congress should, therefore, seek the aid of the OAS and other agencies to provide guidance in promulgating clearer standards.

Fifth, Congress should clarify the standards for imposing criminal liability under the CDTA. Congress should determine whether the CDTA will subject foreign nationals to criminal liability, and it should consider the international legal implications of such liability. As more nations adopt chemical control laws,²⁹⁷ international law will permit prosecution of foreign nationals.²⁹⁸ Nevertheless, Congress must consider situations in which a nation fails to prohibit diversionary acts. To circumvent the international legal obstacles, Congress should consider authorizing the executive to negotiate mutual legal assistance treaties

293. See *supra* note 160 and accompanying text (noting the lack of specific criteria in reviewing applications).

294. *U.S. Chemical Exports*, *supra* note 21, at 8 (statement of Haislip).

295. *Id.*

296. See Quinn, *supra* note 127, at 44 (assessing the impact of chemical control laws on the cocaine industry); and Skolnick, *supra* note 2, at 84-85 (concluding that as law enforcement becomes stricter, the drug traffickers will become more skillful in their illegal activities).

297. See *supra* note 127 and accompanying text (noting congressional effort to use trade sanctions to encourage other countries to adopt chemical control laws and the European proposal).

298. See *supra* note 226 and accompanying text (defining principles of double criminality).

(MLATs)²⁹⁹ with unregulated countries. MLATs are international agreements in which the contracting nations agree to aid in criminal investigations and arrests. Consequently, Congress may use MLATs to enforce the CDTA against foreign nationals. MLATs may also assist the DEA investigations because the contracting governments would obligate the aid of local law enforcement agencies.

Finally, Congress should promote better international cooperation to prevent chemical diversion.³⁰⁰ Congress could seek ways to make the verification requirements easier for the chemical companies.³⁰¹ For example, Congress could encourage the establishment of an international data base that would store relevant information regarding the chemical companies. As more countries adopt similar laws, the regulated persons will face similar registration and licensing mandates. An international data base could alleviate the redundancy of completing export applications for different countries even though the applications require the same information. This international network may aid the DEA in its investigations and alleviate any potential international legal issues.

CONCLUSION

Chemical diversion is a growing international concern. The CDTA is a chemical control law through which Congress has addressed this concern. Although some areas may prove problematic, the CDTA represents an initial step in preventing the use of these chemicals for illegal means. As more nations adopt similar laws, Congress should continue to review the CDTA to ensure that the Act maintains its progressive quality, thereby strengthening its effect in destroying the cocaine industry.

299. See *supra* note 235 and accompanying text (discussing the use of mutual legal assistance treaties in implementing chemical control laws).

300. See *supra* note 127 (discussing the International Chemical Control Act of 1990 and S. Res. 320). These congressional acts are initial steps in promoting this international effort.

301. See *supra* notes 181-185 and accompanying text (discussing the ways in which the Commerce Department has changed the export licensing system).