

Pace Environmental Law Review

Volume 22
Issue 1 *Spring 2005*

Article 6

April 2005

Drug Problem: Environmental Solution

Lisa Scanga

Follow this and additional works at: <https://digitalcommons.pace.edu/pelr>

Recommended Citation

Lisa Scanga, *Drug Problem: Environmental Solution*, 22 Pace Env'tl. L. Rev. 151 (2005)

DOI: <https://doi.org/10.58948/0738-6206.1139>

Available at: <https://digitalcommons.pace.edu/pelr/vol22/iss1/6>

This Article is brought to you for free and open access by the School of Law at DigitalCommons@Pace. It has been accepted for inclusion in Pace Environmental Law Review by an authorized administrator of DigitalCommons@Pace. For more information, please contact dheller2@law.pace.edu.

Drug Problem: Environmental Solution

LISA SCANGA¹

The goal of this paper is to highlight the impact of illegal drugs on the environment; the interrelated aspects of criminal law and environmental law as they apply to illegal drugs; and the effectiveness of using environmental solutions aimed at redressing the current drug problem.

The “Meth Monster” was once known on sight. It rode a motorcycle and wore a leather jacket which displayed gang “colors.” Now it drives expensive sports cars and sport utility vehicles. It resides in our low income housing areas and sits comfortably in our boardrooms and country clubs. It is in our schools, our workplaces, our neighborhoods and homes. It displays no bias or preference based on age, sex, race, religion or social status. It pollutes our environment and overcrowds our jails.²

I. Introduction

This comment assesses the application of the U.S. Sentencing Guidelines to environmental crimes involving drugs as hazardous substances posing a substantial risk to human life. Relying on the case of *United States v. Layne*³ as a framework for analysis, this comment will explore the evolution of environmental issues in the criminal context as manifested through case law that regards illegal drugs as environmentally hazardous substances. It will also demonstrate how section 2D1.1(b)(5) of the Sentencing Guidelines applies to environmental crimes.⁴ This comment will outline the justification for applying the Sentencing Guidelines to offenses outside the traditional scope of criminal law.

1. J.D. Pace University School of Law, May 2005.

2. *Threat to Rural Communities From Methamphetamine Production, Trafficking, and Use: Hearing Before the House Judiciary Comm. Subcomm. on Crime*, 106th Cong. 19 (2000) [hereinafter *Threat to Rural Communities*] (prepared statement of Bill Hardin, Director, Office of the State Drug Director, Arkansas State Police), available at <http://www.house.gov/judiciary/hard0225.htm>.

3. *United States v. Layne*, 324 F.3d 464 (6th Cir.), cert. denied, 540 U.S. 888 (2003).

4. U.S. SENTENCING GUIDELINES MANUAL § 2D1.1(b)(5) (2003).

Part I will discuss the environmental impacts associated with methamphetamine production, focusing on seizures of clandestine laboratories⁵ and the subsequent roles various involved agencies play in addressing hazardous wastes left behind at the lab sites. Part II will explore the legislative history of section 2D1.1 of the U.S. Sentencing Guidelines Manual as it applies to the environment, taking into consideration the environmental initiatives shaping the formation of the Guidelines, as well as the effectiveness of section 2D1.1 in its application. Part III analyzes case law on the subject, using *Layne* as a framework for analysis, in an attempt to demonstrate how courts apply the Guidelines. This section will also assess whether the intended results of application are achieved after interpretation by the courts. Part IV considers the effectiveness of legislation aimed at imposing environmental responsibility on those convicted of conduct punishable under traditional criminal law based upon resulting harmful environmental effects.

Using environmental initiatives to combat illegal drug manufacturing serves as a strong deterrent in stopping what Congress has determined to be a “methamphetamine epidemic in America.”⁶ Often, policy decisions concerning illegal drugs focus on the criminal context only. Environmental impacts are overlooked—or overshadowed—by the harms illicit drugs can cause to people, neighborhoods, and society in general. By viewing illegal drugs as the hazardous substances they are, and enabling courts to factor into sentencing the harmful environmental impacts of illegal drug manufacturing, section 2D1.1(b)(5) appears to be a useful method of deterrence.

II. Relevant Environmental Impacts of Methamphetamine Production

In September of 2000, the Senate reported a “surge in methamphetamine use” due to “organized Mexican crime groups . . . becoming increasingly successful in their distribution of the drug by providing the resources for clandestine labs within the United

5. A methamphetamine laboratory is defined as follows: “A clandestine laboratory is an illicit operation with a sufficient combination of apparatus and chemicals that either has produced or could produce methamphetamine.” National Drug Intelligence Center (NDIC), *National Drug Threat Assessment 2001: The Domestic Perspective*, at <http://www.usdoj.gov/ndic/pubs/647/meth.htm> (Oct. 2000). The definition provided is that of a meth lab, not of a clandestine lab.

6. H.R. REP. NO. 106-878(I), at 22 (2000).

States as well as bringing methamphetamine across our borders.”⁷ In addition to the health and public safety concerns associated with illicit drug use, manufacturing methamphetamines also poses great environmental hazards.

The chemical components of methamphetamine are volatile and combustible; mishandling of even small amounts of these chemicals can result in fires and explosions.⁸ Since methamphetamine is manufactured from volatile chemicals, the process invariably results in toxic wastes and by-products, which include chemicals such as lye, red phosphorus, hydriodic acid, and iodine.⁹ “For every one pound of methamphetamine that is produced, approximately five pounds of toxic and often lethal waste products may be left behind at the laboratory site, or disposed of in rivers, kitchen sinks, or sewage systems in an effort to conceal evidence of illegal manufacturing.”¹⁰

Additionally, chemical reactions resulting from the manufacturing process may produce toxic vapors that permeate into a building’s walls, carpet, plaster, or wood surfaces.¹¹ This complicates the clean-up process and poses ongoing health risks to those who may live or work in these buildings both at the present time, as well as in the future.¹² Toxic vapors resulting from the manufacturing process may also be vented outside, harming those who live or work nearby.¹³ The problems associated with methamphetamine production are further complicated when the chemicals are stored at off-site locations, for example, in rental lockers.¹⁴ Improper ventilation and temperature controls at off-site locations may add to the potential for fire, explosion, and human exposure.¹⁵

Aside from the immediate dangers of fire and explosion, methamphetamine production in clandestine laboratories poses serious environmental hazards as well. Soil and water contami-

7. S. REP. NO. 106-404 (2000).

8. H.R. REP. NO. 106-878(I), at 22.

9. *Facing the Methamphetamine Problem in America: Hearing Before the House Comm. on Gov’t Reform Subcomm. on Criminal Justice, Drug Policy and Human Res.*, 108th Cong. 7 (2003) [hereinafter *Facing the Methamphetamine Problem in America*] (testimony of Rogelio E. Guevara, Chief of Operations, Drug Enforcement Agency).

10. H.R. REP. NO. 106-878(I), at 22.

11. Anna S. Vogt, *The Mess Left Behind: Regulating the Cleanup of Former Methamphetamine Laboratories*, 38 IDAHO L. REV. 251, 252 (2001).

12. *See id.*

13. *Id.* at 265.

14. *Id.*

15. *Id.* at 257-58.

nation are likely to result from careless or intentional dumping by the laboratory operator, spills of chemical on the floor, or disposal of waste in bathtubs, sinks, toilets, roads, creeks, and grounds surrounding the laboratories.”¹⁶ The resulting soil and water contamination, if unnoticed for a significant period of time, can have potentially widespread, dangerous effects.

Clean-up of a clandestine drug laboratory site is often an unpredictable, costly, and time-consuming task. Those engaged in the process must be prepared for the worst because the seizure of any given clandestine lab can yield amounts of waste ranging from a few pounds to several tons.¹⁷ Since many of the chemicals found at clandestine lab sites are reactive, explosive, corrosive, and toxic, the danger is compounded when law enforcement officers lack adequate training.¹⁸ It is imperative that law enforcement agents involved in the clean-up of methamphetamine labs receive specialized training to deal with the hazards associated with clandestine labs. This includes “training in appropriate health and safety procedures and in the use of personal protective equipment.”¹⁹

When a clandestine methamphetamine laboratory is seized, the clean-up process must be conducted according to rigorous federal standards and regulations. For example, federal regulations that establish standards for generators of hazardous waste require the generator to comply with all applicable EPA regulations in ensuring proper cleanup and disposal.²⁰ Dealing with hazardous wastes left behind at abandoned or seized clandestine labs has become the responsibility of the Drug Enforcement Agency (“DEA”). Pursuant to statute, the “DEA, along with the state and local law enforcement agencies, becomes the ‘generator’ of hazardous waste when clandestine drug laboratories are seized.”²¹

16. *Id.* at 261.

17. Drug Reform Coordination Network, *Methamphetamine: A Growing Domestic Threat—Clandestine Laboratories, Health Hazards/Hazardous Waste and Materials Encountered at Laboratory Sites*, at <http://www.druglibrary.org/SCHAFFER/dea/pubs/meth/threat.htm#problem> (last visited Sept. 28, 2004).

18. *Id.*

19. *Id.* See also *Threat to Rural Communities*, *supra* note 2, at 16 (prepared statement of George Cazenavette, Special Agent in Charge, New Orleans Division Office, DEA) (stating “[b]ecause of the possibility of explosions and direct contact with toxic fumes and hazardous chemicals, law enforcement officers who raid clandestine drug labs are now required to take special hazardous materials (HAZMAT) handling training.”).

20. See 40 C.F.R. § 262.10 (2004).

21. *Facing the Methamphetamine Problem in America*, *supra* note 9, at 8.

In order to ensure compliance with federal regulations and conduct clean-ups in an environmentally safe manner, the DEA established a Hazardous Waste Cleanup Program.²² The program involves use of private companies that specialize in hazardous waste removal, in an effort to promote safety, efficiency, and cost-cutting.²³ Associated clean-up costs of meth "labs have been reduced several hundred dollars per response [and] [b]etween 1992 and 2002, . . . [e]ven though the number of cleanups has increased by 1,700 percent, the average cost per cleanup has continued to decrease since DEA first began using contractor services in the early 1990s."²⁴ These costs, however, are still substantial and not all state and local governments receive adequate funding.²⁵

Sufficient financial resources are imperative for local governments dealing with methamphetamine lab seizures. From ensuring adequate specialized training for law enforcement personnel, to implementing proper cleanup practices, funding often determines effectiveness at the state and local level. When funding, either directly to the states or to the DEA, is inadequate or non-existent, local efforts at combating methamphetamine production are undermined. For example, in the year 2000,

Congress . . . changed the distribution method of COPS [Community Oriented Policing Services] monies. Unlike in past years, funding provided by the Congress through the COPS methamphetamine program in FY 2000 will be distributed directly to *select* state and local law enforcement organizations throughout the country instead of to DEA for necessary training and cleanup services.²⁶

The *select* state and local law enforcement organizations referred to are known as High Intensity Drug Trafficking Areas

22. *Id.*

23. *Id.* at 7-8. "Often, the value of the contaminated property is less than the cleanup costs and owners simply walk away from their investments leaving the cleanup costs to the state or local governments." *Id.*

24. *Id.* at 8. According to testimony given before the Committee, "the average cost per cleanup is \$1,900, down from \$3,300 in FY 2002." *Id.*

25. See Michelle Bradford, *U.S. Denies Funds for State Meth Cleanup; Officials Mull Options*, ARK. DEMOCRAT-GAZETTE, Mar. 25, 2000, at http://www.kci.org/meth_info/sites/ark_drug%20cleanup.htm. In 2000, Arkansas was not deemed by Congress to be one of the nation's fifteen "hot spots" for methamphetamine, even though the state led the country in methamphetamine lab seizures the previous year, leaving officials "scrambling" for funds. *Id.*

26. *Threat to Rural Communities*, *supra* note 2, at 16 (prepared statement of George Cazenavette, Special Agent in Charge, New Orleans Division Office, DEA).

("HIDTA"), and those areas will receive priority in federal funding in accordance with the law.²⁷

The Anti-Drug Abuse Act of 1988 authorized HIDTA programs and is administered by the Office of National Drug Control Policy.²⁸ In order "[t]o qualify as a HIDTA an area must: (i) [b]e a major center of illegal drug production, manufacturing, importation, or distribution; (ii) [h]ave state and local law enforcement agencies already engaged; (iii) [h]ave a harmful impact on other areas of the country; and (iv) [r]equire a significant increase in federal resources."²⁹ Since most domestic methamphetamine producers work from clandestine labs located in rural areas,³⁰ not all state and local governments will qualify for HIDTA prioritized funding. Arguably, this preference in funding detracts from local law enforcement's ability to effectively deal with their methamphetamine problem, and also limits the amount of assistance the DEA can realistically afford them.

In order to combat the growing methamphetamine problem, the DEA has developed a "methamphetamine strategy."³¹ This strategy includes:

targeting and building cases against the major methamphetamine traffickers based in Mexico, and against their surrogates operating in the United States today; assisting state and local law enforcement agencies in making cases against methamphetamine manufacturers and traffickers working in the United States; *partnering with state and local law enforcement to assist with training and laboratory clean-up*; and controlling the precursor chemicals necessary for methamphetamine production in Mexico and the United States.³²

27. Consolidated Appropriations Resolution, 2003, Pub. L. No. 108-7, 117 Stat. 11, 446 (2003). In February 2003, \$57,132,000 was appropriated by Congress "for policing initiatives to combat methamphetamine production and trafficking and to enhance policing initiatives in 'drug hot spots.'" *Id.* at 64. In January of 2004, President Bush also signed a bill appropriating \$54,050,000 for methamphetamine through COPS funding. COPS, *Fiscal Year 2004 Funding for COPS*, at <http://www.cops.usdoj.gov/default.asp?Item=160> (last visited Sept. 28, 2004).

28. U.S. Drug Enforcement Administration, *High Intensity Drug Trafficking Areas*, at <http://www.usdoj.gov/dea/programs/hidta.htm> (last visited Sept. 28, 2004).

29. *Id.*

30. *Threat to Rural Communities*, *supra* note 2 at 13 (prepared statement of George Cazenavette, Special Agent in Charge, New Orleans Division Office, DEA).

31. *Id.* at 15.

32. *Id.* (emphasis added).

The DEA recognizes that it has been assigned a predominant role in fighting the methamphetamine epidemic. Specifically, the agency is responsible in large part, for the environmental aspects of methamphetamine production. However, the ability of the DEA to restore the environment to its original state, even with the assistance of private companies, is sometimes limited. For example, local police in Oklahoma recently discovered an old dump site that had large amounts of chemicals and materials used in the manufacture of methamphetamine.³³ Officials reported the dumpsite was thought to contain "toxic waste from approximately 200 methamphetamine lab operations."³⁴ Although the DEA subsequently conducted a cleanup operation to dispose of the hazardous waste, the "DEA is not equipped to cleanup the contaminated soil or assess any potential problems associated with contaminated water in the area."³⁵ It is shortcomings like these, however, that endanger the health and welfare of the public. While the operator of the methamphetamine lab can be arrested and jailed, and the DEA can hire private companies to cleanup sites, much of the environmental damage attributed to methamphetamine production is often overlooked.

Furthermore, whether the seizure is of a small "mom and pop"³⁶ lab or a superlab,³⁷ size is often irrelevant in terms of the danger associated with the raid.³⁸ "The smaller labs are usually more dangerous than the larger operations because the cooks are generally less experienced chemists who often have little regard for the safety issues that arise when dealing with explosive and poisonous chemicals."³⁹ Size, however, does play a role in determining cleanup costs.⁴⁰ Greater amounts of toxic chemicals are often found at the larger production laboratories and correspondingly have greater associated hazardous waste disposal charges.⁴¹

33. *Facing the Methamphetamine Problem in America*, *supra* note 9, at 7.

34. *Id.*

35. *Id.*

36. Vogt, *supra* note 11, at 266.

37. NDIC, *National Drug Threat Assessment 2003: Methamphetamine, Domestic Production* (Jan. 2003), at <http://www.usdoj.gov/ndic/pubs3/3300/meth.htm#Production>. Superlabs can "produce 10 or more pounds of methamphetamine in one production cycle."

38. *Threat to Rural Communities*, *supra* note 2, at 15 (prepared statement George Cazenavette, Special Agent in Charge, New Orleans Division Office, DEA).

39. *Id.*

40. *Id.*

41. *Id.*

Thus, it has been demonstrated that the effects of methamphetamine use and production endanger not only addicts, but also families of addicts, and those who may or may not live in drug-infested areas. Inexperienced "cooks" can injure, or kill, themselves and others in the vicinity of the lab, which is most likely a home, apartment, or motel room.⁴² Further, the toxic chemicals and by-products left behind after production are harmful to anyone who may be in the vicinity. Moreover, the general population is at risk of substantial harm due to the fact that environmental implications associated with manufacturing methamphetamine are often concealed and the effects can be far reaching. When local law enforcement agencies are not adequately equipped to deal with the implications associated with a methamphetamine lab seizure, the dangers are magnified. Therefore, it is important to ensure effective site management; primarily, with sufficient federal funding; and secondly, with DEA assistance available to state and local law enforcement.

III. Legislative History

U.S. Sentencing Guidelines Manual section 2D1.1⁴³ applies to individuals convicted of traditional criminal offenses with the addition of punishment for conduct that poses substantial risk of harm to human life or the environment. The section was created by the legislature "to address 'the directive in section 102 (the 'substantial risk directive') of the Methamphetamine and Club Drug Anti-Proliferation Act of 2000.'"⁴⁴ This act, later referred to as the Methamphetamine Anti-Proliferation Act of 2000 (the "Act"),⁴⁵ was designed to enhance the manner in which law enforcement and the judiciary are permitted to combat and control methamphetamine use and production in the United States. Specifically, pursuant to section 3611(c) of the Act, the legislature intended that the

United States Sentencing Commission . . . ensure that the sentencing guidelines for offenders convicted of offenses described in subsection (a) reflect the heinous nature of such offenses, the

42. See NDIC, *Oklahoma Drug Threat Assessment: Methamphetamine, Production* (Oct. 2002), at <http://www.usdoj.gov/ndic/pubs2/2286/meth.htm>.

43. U.S. SENTENCING GUIDELINES MANUAL § 2D1.1 (2003).

44. *United States v. Layne*, 324 F.3d 464, 469 (6th Cir.), *cert. denied*, 540 U.S. 888 (2003). (quoting U.S. SENTENCING GUIDELINES MANUAL app. C (2003 & Supp., amendment 608 2001)).

45. *Layne*, 324 F.3d at 469.

need for aggressive law enforcement action to fight such offenses, and the extreme dangers associated with unlawful activity involving amphetamines, including: (1) the rapidly growing incidence of amphetamine abuse and the threat to public safety that such abuse poses; (2) the high risk of amphetamine addiction; (3) the increased risk of violence associated with amphetamine trafficking and abuse; and (4) the recent increase in the illegal importation of amphetamine and precursor chemicals.⁴⁶

Since its creation, section 2D1.1 has been amended twice to address the "substantial risk directive," which "instructs the Commission to amend the federal sentencing guidelines with respect to any offense relating to the manufacture, attempt to manufacture, or conspiracy to manufacture amphetamine or methamphetamine in (1) the Controlled Substances Act, 21 U.S.C. §§ 801-90; (2) the Controlled Substances Import and Export Act, 21 U.S.C. §§ 951-71; or (3) the Maritime Drug Law Enforcement Act, 46 U.S.C. App. §§ 1901-04."⁴⁷ In addition, the amendments have made consideration of environmental impact a mandatory component of the application of sentencing.⁴⁸ In furtherance of the legislature's intent, and since "the Act did not define 'substantial risk of harm,' the Sentencing Commission (in the form of an emergency amendment) provided factors to be considered in determining whether a substantial risk of harm was posed."⁴⁹ The emergency amendment set forth relevant factors in commentary to determine whether an offense created a substantial risk of harm founded on case law that interpreted "substantial risk of harm."⁵⁰ These factors include:

- (i) [t]he quantity of any chemicals or hazardous or toxic substances found at the laboratory, or the manner in which the chemicals or substances were stored[;]
- (ii) [t]he manner in which hazardous or toxic substances were disposed, and the likelihood of release into the environment of hazardous or toxic substances[;]
- (iii) [t]he duration of the offense, and the extent of the manufacturing operation[;]
- and (iv) [t]he location of the [amphetamine or methamphetamine] laboratory (e.g., whether the

46. Methamphetamine Anti-Proliferation Act of 2000, Pub. L. No. 106-310, 114 Stat. 1101 (2000).

47. U.S. SENTENCING GUIDELINES MANUAL app. C, amend. 620 (2001).

48. See e.g., *Layne*, 324 F.3d at 469; U.S. SENTENCING GUIDELINES MANUAL § 2D1.1, cmt. n.20(A) (2003).

49. 324 F.3d at 471 (quoting U.S. SENTENCING GUIDELINES MANUAL app. C, (2003 & Supp., amend. 608 (2001))).

50. U.S. SENTENCING GUIDELINES MANUAL app. C, amend. 620 (2001).

laboratory is located in a residential neighborhood or a remote area), and the number of human lives placed at substantial risk of harm.⁵¹

According to commentary provided in the amendment, the four factors were "identified by the Commission to assist the courts in defining the meaning of 'substantial risk of harm' for offenses related to the production and trafficking of precursor chemicals and the manufacture of amphetamine and methamphetamine."⁵² Originally, the sentencing guidelines listed the four factors as criteria the court "may" consider in determining whether a substance constituted a substantial risk of harm.⁵³ Amended in November 2001, the Legislature deleted "may" and substituted "shall," thereby requiring the court to weigh the four factors in their analysis.⁵⁴ By requiring the court to take into consideration the effects of methamphetamine manufacturing on the environment, the Sentencing Commission reinforced the notion that environmental harm associated with illegal drug manufacture, use, and trafficking will not be tolerated.

Section 2D1.1 also applies to conduct in violation of the Resource Conservation and Recovery Act ("RCRA"),⁵⁵ the Federal Water Pollution Control Act,⁵⁶ and the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"),⁵⁷ among other federal statutes.⁵⁸

RCRA is an environmental management statute that delegates to the Environmental Protection Agency ('EPA') the development and implementation of a 'cradle to grave' regulatory system overseeing the treatment, storage, and disposal of hazardous waste. Section 6928(d), to which the Guidelines refer, criminalizes a range of activities related to the unlawful generation, transportation, storage, treatment, and disposal of a 'hazardous waste' identified or listed under RCRA.⁵⁹

51. U.S. SENTENCING GUIDELINES MANUAL § 2D1.1, cmt. n.20(A) (2003).

52. U.S. SENTENCING GUIDELINES MANUAL app. C, amend. 620 (2001).

53. *Id.*

54. *Id.*

55. 42 U.S.C. § 6928(d) (2000).

56. 33 U.S.C. § 1319(c) (2000).

57. 42 U.S.C. § 9603(b) (2000).

58. U.S. SENTENCING GUIDELINES MANUAL § 2D1.1, cmt. n.19 (2003).

59. *United States v. MacDonald*, 339 F.3d 1080 (9th Cir. 2003) (citations omitted).

Criminal sanctions under the environmental statutes are most frequently imposed pursuant to RCRA.⁶⁰ This may be due to the broad range of activity criminalized pursuant to the statute. Also, “[t]he ‘knowing’ conduct prohibited under RCRA is subject to a lesser burden of proof than traditional crimes because environmental crimes are health and welfare statutes designed to protect the public.”⁶¹ Specifically, RCRA provides criminal penalties for knowingly transporting or causing to be transported any hazardous waste without a permit; knowingly filing false material or destroying material required by compliance with the statute; and knowingly endangering the life of another in the process of transporting, treating, storing, or disposing of hazardous waste.⁶²

If sentence enhancement does “not account adequately for the seriousness of the environmental harm or other threat to public health or safety (including the health or safety of law enforcement and cleanup personnel) . . . an upward departure may be warranted.”⁶³ In addition to increased sentences, individuals engaged in the manufacture of methamphetamine will be held accountable for cleanup costs under a statute calling for “mandatory restitution” of clandestine laboratory sites.⁶⁴ Pursuant to the statute,

[t]he court, when sentencing a defendant convicted of an offense . . . involving the manufacture of amphetamine or methamphetamine, shall—(1) order restitution . . . (2) order the defendant to reimburse the United States, the State or local government concerned . . . for the costs incurred . . . for the cleanup associated with the manufacture of amphetamine or methamphetamine . . . and; (3) order restitution to any person injured as a result of the offense⁶⁵

Thus, whenever methamphetamine or amphetamine production is involved, a court must factor into their determination of punishment any environmental cleanup costs associated with the manufacture, as well as harm to individuals and property. When controlled substances other than methamphetamine or ampheta-

60. Omar Saleem, *Killing the Proverbial Two Birds With One Stone: Using Environmental Statutes and Nuisance to Combat the Crime of Illegal Drug Trafficking*, 100 DICK. L. REV. 685, 702 (1996) (citing Donald M. Eldridge, *The Champion*, 13 NAT'L ASS'N OF DEFENSE LAWYERS 5 (Apr. 1994)).

61. *Id.* at 702.

62. 42 U.S.C. § 6928(d),(e) (2000).

63. U.S. SENTENCING GUIDELINES MANUAL § 2D1.1, cmt. n.19 (2003).

64. *Id.*

65. 21 U.S.C. § 853(q) (2000).

mine are involved, the costs "should be considered by the court."⁶⁶ In addition to criminal punishment, imposing civil penalties for producing, trafficking, possessing, and using methamphetamine or other illegal substances serves as a more powerful deterrent than jail time alone. Furthermore, restitution serves not only to punish the offender economically, but also attempts to make the individual, or general public, whole again by compensating them for their loss. Whether the loss be in the form of individual physical harm, property damage, or harm to the environment, restitution directly addresses those concerns.

The provision for an extreme upward departure resulted from the Sentencing Commission's subsequent amendment to section 2D1.1, which involved "careful analysis of recent sentencing data, including its own intensive study of methamphetamine offenses, information provided by the Strategic Intelligence Section of the Drug Enforcement Administration concerning recent methamphetamine trafficking levels, dosage unit size, price, and drug quantity."⁶⁷ Those findings, coupled with the rise in methamphetamine use, prompted the Sentencing Commission to amend the then current version of section 2D1.1 by providing an upward departure in sentencing, to be used in the discretion of the court. Further, it is clear from the notes to the amendment that the Sentencing Commission also considered the harmful environmental effects of methamphetamine use and production. Specifically, the Guidelines state:

[I]n response to the directive in section 303 of the Act, this amendment provides an enhancement of two levels, with an invited upward departure in more extreme cases, for environmental violations occurring in association with an illicit manufacturing or other drug trafficking offense [Also,] in response to evidence of a recent, substantial increase in the importation of methamphetamine and precursor chemicals used to manufacture methamphetamine, the amendment provides an enhancement of two levels directed at such activity.⁶⁸

This portion of the amendment is most interesting from an environmental perspective, in that spills, contaminations, or other environmental violations resulting from manufacturing or trafficking methamphetamine will result in an automatic sentence

66. U.S. SENTENCING GUIDELINES MANUAL § 2D1.1, cmt. n.19 (2003).

67. U.S. SENTENCING GUIDELINES MANUAL app. C, amend. 555 (2003).

68. *Id.*

enhancement of two levels, with the invitation for an "upward departure in more extreme cases."⁶⁹ Thus, based on the legislative directive, harm to the environment is a recognized evil associated with methamphetamine use, production, and trafficking. The fact that courts may take into consideration the severity of the environmental violation in sentencing, and in their discretion choose to impose an upward departure above the two-level increase, demonstrates two important points. First, that the legislature recognizes the severity of methamphetamine production as it relates to the environment and secondly, by increasing the punishment for environmental violations in furtherance of a crime, the legislature recognizes the deterrence benefits associated with an upward departure in extreme cases.

In addition to federal statutes allowing for upward departures in extreme cases, many states have begun to charge those convicted of manufacturing methamphetamine in the presence of children with felony child abuse in addition to the violation of 21 U.S.C. section 841(a)(1).⁷⁰ Since the majority of "mom and pop"⁷¹ lab sites are located in homes, children are often present and subjected to harmful chemicals, fumes, and increased risk of danger.⁷²

[I]n March 2002 Los Angeles County Sheriff's deputies found four children who were begging for food in their neighborhood in Diamond Bar, California. The deputies found that the children had been left alone in their home, which had no food, water, or electricity. The children led the deputies to a methamphetamine laboratory in the family's garage. The children frequently were present at the laboratory because they were being homeschooled in the same garage.⁷³

Acknowledging the effectiveness and flexibility of the Sentencing Guidelines, and in response to concerns for child safety, the "DEA encourages regional U.S. Attorney's, when applicable, to utilize the enhanced sentencing guidelines promulgated as directed in

69. *Id.*

70. 21 U.S.C. § 841(a)(1) (2000); See NDIC, *Information Bulletin: Children at Risk* (July 2002), at <http://www.usdoj.gov/ndic/pubs1/1466/#Related>.

71. Vogt, *supra* note 11, at 266.

72. *Facing the Methamphetamine Problem in America*, *supra* note 9, at 8. Mr. Guevara testified before the Committee that "[i]n 2002, over 2,000 children were present during the seizure of clandestine laboratories nationwide. Twenty-two of those children encountered were reported injured and two were killed." *Id.*

73. NDIC, *supra* note 70.

the 'Children's Health Act of 2000.'⁷⁴ Where methamphetamine operations are a threat to minors this legislation provides severe penalties to manufacturers.⁷⁵ Aside from an enhanced sentence for environmental violations, producers of methamphetamine are also punished for resulting harm to minors, further boosting the deterrence factor of section 2D1.1.

IV. Analysis of Caselaw

Application of section 2D1.1(b)(5) of the U.S. Sentencing Guidelines⁷⁶ was an issue of first impression for the court in *Layne*, "as neither this Court nor any of our sister circuits have addressed its application."⁷⁷ Indeed, after *Layne* was decided in April 2003, several cases in other circuits concerning the application of sentence enhancements under the U.S. Sentencing Guidelines § 2D1.1(b)(5) were decided.⁷⁸ As in *Layne*, many of those cases also resulted in rigorous and systematic application of the Sentencing Guidelines.

Both parties agree on the facts in *Layne*.⁷⁹ The defendants had been in the process of manufacturing methamphetamine in their apartment, using the ephedrine reduction method when police executed a warrant to search the premises.⁸⁰ In the course of conducting a search, "officers recovered various items, including flammable and toxic chemicals commonly used during the cooking process."⁸¹ Evidence established that the defendants had been operating this methamphetamine lab for at least two weeks.⁸² "The apartment was located in a densely settled area" and it was fur-

74. *Facing the Methamphetamine Problem in America*, supra note 9, at 8 (referring to U.S. SENTENCING GUIDELINES MANUAL § 2D1.1(b)(5)(C) which provides for a six level increase if the offense created substantial risk of harm to the life of a minor).

75. *Id.*

76. At the time of conviction, § 2D1.1(b)(5) was known as § 2D1.1(b)(6). As this case came to court on appeal, the decision refers to the Sentencing Guidelines as they existed at the time of conviction. For purposes of clarity and continuity, this section will be referred to hereinafter as it currently stands, § 2D1.1(b)(5). *United States v. Layne*, 324 F.3d 464, 467 (6th Cir.), cert. denied, 540 U.S. 888 (2003).

77. *Layne*, 324 F.3d at 468.

78. See e.g., *United States v. Simpson*, 334 F.3d 453 (5th Cir. 2003); *United States v. Florence*, 333 F.3d 1290 (11th Cir. 2003); *United States v. MacDonald*, 339 F.3d 1080 (9th Cir. 2003); *United States v. Massey*, 79 FED App. 832 (6th Cir. 2003).

79. *Layne*, 324 F.3d at 466.

80. *Id.* at 466-67. The ephedrine reduction method of manufacturing methamphetamine involves the use of numerous dangerous and toxic chemicals, and creates, as byproducts, toxic gases, which are carcinogenic when inhaled.

81. *Id.* at 267.

82. *Id.*

ther established that the defendants themselves used methamphetamine while operating the laboratory, making the operation more dangerous.⁸³ At the time the search was conducted, “[d]efendants had reached the stage of the process during which toxic, carcinogenic phosphine or phosgene gas is produced, but had not yet reached the final stage of the manufacturing process during which hydriodic gas, which is also toxic, is produced.”⁸⁴

Defendants were subsequently charged with conspiracy to attempt to manufacture methamphetamine in violation of 21 U.S.C. section 841(a)(1), and 21 U.S.C. section 846.⁸⁵ Two of the defendants plead guilty and the district court later held a sentencing hearing to consider the defendants’ objections to the application of section 2D1.1(b)(5)(B).⁸⁶ The district court concluded that section 2D1.1(b)(5)(B) applied since “the offense committed by [the] Defendants involved the operation of a methamphetamine laboratory that created a substantial risk of harm to human life”⁸⁷ Based on a variety of factors, the district court sentenced each defendant to serve eighty-seven months of imprisonment followed by three years of supervised release, as required under section 2D1.1(b)(5)(B).⁸⁸ The defendants appealed their sentences, arguing that the district court erroneously found the methamphetamine lab they operated posed a substantial risk of harm to human life or the environment, thereby incorrectly applying section 2D1.1(b)(5)(B).⁸⁹

“Whether the district court properly found the existence of a substantial risk of harm to human life or the environment within the meaning of [section 2D1.1(b)(5)(b)] is a mixed question of law and fact, and, as such, it is subject to *de novo* review.”⁹⁰ Using the

83. *Id.*

84. *United States v. Layne*, 324 F.3d 464, 467 (6th Cir. 2003).

85. *Id.*

86. *Id.* U.S. SENTENCING GUIDELINES MANUAL § 2D1.1(b)(5)(B) (2003) states: “If the offense (i) involved the manufacture of amphetamine or methamphetamine; and (ii) created a substantial risk of harm to (I) human life other than a life described in subdivision (C); or (II) the environment, increase by 3 levels. If the resulting offense level is less than level 27, increase to level 27.”

87. *Layne*, 324 F.3d at 467.

88. *Id.* at n.1 (noting that based on the Sentencing Guidelines, defendants could have received a sentence ranging from seventy-seven to ninety-six months imprisonment).

89. *Id.* at 466. The defendants also challenged the constitutionality of U.S. SENTENCING GUIDELINES MANUAL § 2D1.1(b)(5)(B) under the Fifth Amendment and Eighth Amendment.

90. *Id.* at 468 (citing *United States v. Georgia*, 279 F.3d 384, 386-87 (6th Cir. 2002)).

four factors provided by the Sentencing Commission to determine whether the conduct of the defendants in producing methamphetamine posed substantial risk of harm to human life or the environment, the Court of Appeals determined that the district court did not err in finding the methamphetamine lab in this case posed such a risk, thus correctly triggering application of section 2D1.1(b)(5)(B).⁹¹

Under the first factor, "Quantity of Chemicals or Hazardous or Toxic Substances and Manner of Storage,"⁹² the Court of Appeals relied on the district court's findings in concluding "the inherent danger of the chemicals found in [defendant's] apartment militates in favor of applying [section 2D1.1(b)(5)(B)] here."⁹³ Specifically, the court took notice of the fact that the defendants employed the ephedrine reduction method, which requires a heat source and use of various toxic and flammable chemicals.⁹⁴ In addition to the danger posed by the volatility of the chemicals found in defendant's apartment, the manufacturing process itself produces noxious gases and other dangerous by-products, posing serious risk to those who inhale them.⁹⁵ Furthermore, the court found that "the quantity of these chemicals was the amount necessary to manufacture a couple of ounces of methamphetamine," and that the chemicals "were not stored."⁹⁶ Throughout the defendants' apartment there were both full and empty chemical containers.⁹⁷ Thus, the court reasoned, application of section 2D1.1(b)(5)(B) was supported by analysis under the first factor.⁹⁸

The Sentencing Commission promulgated the second factor, "Manner of Disposal and Likelihood of Release into Environment," because the chemicals used in manufacturing methamphetamine are inherently dangerous and "in laboratories such as this one, the methamphetamine producers usually dispose of waste through drains in the apartment."⁹⁹ In this case, however, the court did not find clear evidence that this occurred, and thus was unable to

91. See *id.* at 470-71.

92. *Id.*

93. *United States v. Layne*, 324 F.3d 464, 470 (6th Cir. 2003).

94. *Id.*

95. *Id.* at 471.

96. *Id.* at 470.

97. *Id.*

98. *Id.*

99. *United States v. Layne*, 324 F.3d 464, 470 (6th Cir. 2003).

determine the manner of disposal nor the likelihood of release into the environment.¹⁰⁰

Upon consideration of the third factor, "Duration of the Offense and Extent of the Manufacturing Operation," the court found that the defendants ran this methamphetamine lab for at least two weeks, possibly even longer.¹⁰¹ In addition, the district court concluded there was evidence to suggest the defendants had manufactured several batches of methamphetamine.¹⁰² Although the court found that this laboratory was typical of similar setups, in that there was nothing "extraordinary" about its operation, the court determined that the third factor also "mitigates in favor of application of [section 2D1.1(b)(5)(B)], which was designed to address the inherent dangers of methamphetamine manufacturing."¹⁰³

Applying the fourth factor devised by the Sentencing Commission in determining whether the defendants' laboratory posed a substantial risk of harm to human life or the environment, "Location of the Laboratory and the Number of Human Lives Placed at Substantial Risk of Harm," the court determined that in this instance, the defendants' conduct did pose such risk.¹⁰⁴ The laboratory at issue was located in an apartment, which was part of a larger complex, within an eight-unit structure.¹⁰⁵ While the defendants manufactured methamphetamine, the other units in the complex were occupied.¹⁰⁶ In addition, the court found that an elementary school was located nearby, and a creek that empties into the Tennessee River ran through the complex.¹⁰⁷ The record also showed that defendant's neighbors could smell fumes, most likely the acetone, coming from his apartment.¹⁰⁸ Therefore, based on the fact that the defendant's neighbors were put at risk, the proximity of the lab to an elementary school housing children, and the location of the lab in relation to the stream, the court determined that these factors "strongly militate[] in favor of application of [section] 2D1.1."¹⁰⁹

100. *Id.*

101. *Id.* at 470-71.

102. *Id.* at 470.

103. *Id.* (citation omitted).

104. *Id.* at 471.

105. *United States v. Layne*, 324 F.3d 464, 471 (6th Cir. 2003).

106. *Id.*

107. *Id.*

108. *Id.*

109. *Id.*

Other cases exist in which defendants have appealed their enhanced sentences, arguing erroneous application of section 2D1.1. In *United States v. Massey*,¹¹⁰ the defendant argued that the district court erred when it enhanced his sentence based on section 2D1.1(b)(5)(C)¹¹¹ because the government did not offer clear and convincing evidence that his conduct “created a substantial risk of harm to the life of a minor or an incompetent. . . .”¹¹² Massey conspired with others to manufacture, with intent to distribute, methamphetamine.¹¹³ The methamphetamine was manufactured in the home of the co-conspirators, from which they also conducted a day care center.¹¹⁴ Finding “that Massey’s relevant conduct placed him squarely within the scope of this section of the Sentencing Guidelines,”¹¹⁵ and rejecting the clear and convincing evidence standard as it applies to sentence enhancements, the court upheld the sentence.¹¹⁶

In analyzing the four factors to determine whether Massey’s conduct posed a substantial risk of harm to the life of a minor, the district court found (i) “substantial amounts of hazardous or toxic substances stored”¹¹⁷ in the lab; (ii) an ongoing operation based on evidence of multiple “cooks”; and (iii) the lab was located in a home, from which a daycare center was run. Therefore “this laboratory particularly creates a substantial risk of harm.”¹¹⁸ In addition, there was testimony at Massey’s trial to show that he was present at the house on several occasions, parents often smelled strong chemical odors at the house, and one of the parents testified her child “had spoken to [one of the conspirators] through a hole in the wall.”¹¹⁹ Since the court found that Massey “was aware that children were present on the premises at various times, and that the ‘reasonably foreseeable acts and omissions’ of the [co-conspirators] in furtherance of the methamphetamine

110. *United States v. Massey*, 79 FED App. 832 (6th Cir. 2003).

111. As the provision currently stands. At the time of sentencing however, it was known as section 2D1.1(b)(6)(B).

112. U.S. SENTENCING GUIDELINES MANUAL § 2D1.1(b)(5)(C) (2003).

113. *Massey*, 79 FED App. at 833.

114. *Id.*

115. *Id.* at 832.

116. *Id.* at 836 (noting that according to *United States v. Mayle*, 334 F.3d 552, 557 (6th Cir. 2003) “as long as a sentencing factor does not alter the statutory range of penalties faced by the defendant for the crime of which he was convicted, the Supreme Court permits the factor to be found by a preponderance of the evidence.”).

117. *Id.*

118. *Id.*

119. *United States v. Massey*, 79 FED App. 832, 834 (6th Cir. 2003).

manufacturing operation would expose those children to a substantial risk of harm,"¹²⁰ the Court of Appeals held that application of section 2D1.1 was proper in this case.¹²¹

V. Effectiveness of Legislation

The argument has been made that environmental law and criminal law intersect.¹²² Illegally manufacturing methamphetamine undoubtedly jeopardizes public safety by posing increased risk of harm to human life. Mixing dangerous chemicals, resulting explosions, and use of the end product all factor into the harm methamphetamine production has on human life. As a result, 18 U.S.C. section 841(a)(1) criminalizes production of controlled substances in an attempt to discourage individuals from engaging in dangerous conduct.¹²³ Most penal laws and criminal sanctions are based on deterrence - to discourage individuals from committing crimes against society. In addition, criminal law is founded on the need to keep the population safe from conduct society deems dangerous, immoral, or imprudent.

Similarly, environmental law also serves to keep society safe and protect human life. RCRA, for example, requires only that one knowingly act, not that one knowingly violate the statute.

'[K]nowledge' under environmental statutes is defined in a manner which allows for both public safety concerns and greater criminal enforcement powers by the state. In sum, under RCRA, both the government and private citizens may proceed against a [clandestine drug laboratory] processor for lack of a hazardous waste permit, posing an imminent and substantial danger to the public, improper recordkeeping, and 'knowingly' violating RCRA.¹²⁴

It can be argued that environmental statutes offer more opportunities to convict those who manufacture methamphetamine and dispose of the byproducts illegally. For example, pursuant to CERCLA, "facility"¹²⁵ "is more broadly defined . . . [as] any natu-

120. *Id.* at 837.

121. *Id.*

122. See Saleem, *supra* note 60 at 686 (positing "that environmental degradation and illegal drugs are connected, and that combating one problem will address the other").

123. 18 U.S.C. § 841(a)(1) (2000).

124. Saleem, *supra* note 60, at 704.

125. 42 U.S.C. § 9601 (2000).

ral or human made structure and 'any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located.'"¹²⁶ Thus, virtually all clandestine lab sites will fall under this category.

In proclaiming methamphetamine use and production as a national epidemic, Congress has explicitly found that "(1) methamphetamine is a dangerous drug distributed throughout the United States; [and] (2) the manufacture, distribution, and use of methamphetamine results in increased crime, damage to the environment, hazardous waste that endangers the public, expensive cleanup costs often borne by Federal, State, and local government agencies, and broken families"¹²⁷ Realizing the dangers methamphetamine use and production pose to both the population and the environment, Congress continues to introduce legislation aimed at combating the problem. For example, in November 2003, a bill was introduced in the Senate that would address the environmental cleanup concerns associated with methamphetamine production.¹²⁸ Specifically, the bill calls for the Attorney General, through the Department of Justice, or through grants to state and local governments, to provide for

(1) the cleanup of methamphetamine laboratories and related hazardous waste in units of local government and tribal governments located outside a Standard Metropolitan Statistical Area; and (2) the improvement of contract-related response time for cleanup of methamphetamine laboratories and related hazardous waste in units of local government and tribal governments located outside a Standard Metropolitan Statistical Area by providing additional contract personnel, equipment, and facilities.¹²⁹

In order to ensure its effectiveness, the bill also provides for substantial funding, authorizing an appropriation of \$20,000,000 for the fiscal year 2005 to carry out this section, in addition to amounts otherwise authorized by law.¹³⁰

Unfortunately, while the Legislature has recognized the need to crack down on a growing methamphetamine trend, and courts

126. Saleem, *supra* note 60, at 705-06 (quoting 42 U.S.C. § 9601 (9)).

127. Methamphetamine Blister Pack Loophole Elimination Act of 2003, S. 1784, 108th Cong. (2003).

128. Rural Safety Act of 2003, S. 1907, 108th Cong. (2003).

129. *Id.* §203(a).

130. *Id.* § 203(b).

are willing to implement sentence enhancements and impose mandatory restitution for environmental cleanup costs, the effectiveness of these amplified capabilities has been somewhat dulled by lack of funding.¹³¹ In January 2003, the Senate Committee on Appropriations observed methamphetamine continues to be a serious problem in the United States, and specifically, expressed concern with the growing production, trafficking, and use of methamphetamine throughout the Midwest states.¹³² As the Committee notes reflect, "the State of Missouri, which is part of the Midwest HIDTA, had the highest number of methamphetamine lab seizures in the country. The fight against methamphetamine [however,] places a tremendous burden on State and local law enforcement. Additional funding would allow Missouri to continue to target methamphetamine labs."¹³³ Thus, although law enforcement continues to seek out clandestine labs, and individuals prosecuted for violating 21 U.S.C. section 841 are severely punished (especially if death or serious bodily injury results)¹³⁴ inadequate funding may impede the environmentally protective aspects of this legislation.

Locating methamphetamine lab sites, ensuring proper cleanup of hazardous substances spilled or dumped during the manufacturing process, and subsequent testing to guarantee the safety of the environment are all major components of fighting the environmental side of a growing methamphetamine drug problem.

In states where methamphetamine production is prevalent, the environmental cost is severe. Chemicals from dumpsites contaminate water supplies, kill livestock, destroy national forest lands, and render areas uninhabitable. In California alone the cleanup of more than 2,000 methamphetamine laboratories and dumpsites cost nearly \$5.5 million during 2001. Moreover, methamphetamine laboratory fires or explosions have destroyed buildings and homes, injuring occupants and endangering neighboring residents and buildings.¹³⁵

Without adequate resources, much of the force behind stepped up efforts to combat the "methamphetamine epidemic in America"¹³⁶ will fall by the wayside. Currently, statutes exist that give law

131. See Bradford, *supra* note 25 and accompanying text.

132. S. 146, 108th Cong. (2003).

133. *Id.*

134. See 21 U.S.C. § 841(b)(1)(B)(viii) (2000).

135. *National Drug Threat Assessment 2003*, *supra* note 37.

136. H.R. 1048, 106th Cong. (2001).

enforcement, as well as the courts, powerful tools to deter methamphetamine production, use, and trafficking. Ideally, sufficient funding will serve to make measures such as sentence enhancements more effective deterrence factors. While it may be important to punish methamphetamine producers, it is equally important to protect human health and the environment from the negative effects associated with illicit drug production.

Preventive goals are theoretically preferable because once the harm is done, the cost of cleanup is prohibitive for the average . . . owner. Prevention, however, is quite a different proposition in the rural setting where the presence of CDLs tend to go undetected Prevention entails making routine inquiries into the condition of his or her property, talking to farming neighbors, and creating cooperative strategies where all neighbors look after each other's land Alliances among law enforcement, state legislation, judicial agencies, and the community at large albeit cumbersome, may be the only viable solution.¹³⁷

Relying on the courts to implement enhanced sentences for individuals who violate 21 U.S.C. sections 841 and 846 is an effective deterrent, and in turn a preventive measure. Deterrence, however, provides only one half of the solution. Giving state and local law enforcement agencies access to federal monies, as well as allowing them to benefit from the wealth of resources available through the DEA, assures a two-prong approach that is bound to be more effective. It ensures an ideal blend between the criminal law ideology and the environmental law methodology.

VI. Conclusion

Using environmental initiatives to combat illegal drug manufacturing serves as a strong deterrent in stopping what Congress has determined to be a "methamphetamine epidemic in America."¹³⁸ Often, policy decisions concerning illegal drugs focus on the criminal context only. Environmental impacts are overlooked - or overshadowed - by the harms illicit drugs can cause to people, neighborhoods, and society in general. By viewing illegal drugs as the hazardous substances they are, and enabling courts to factor into sentencing the environmental effects of illegal drug

137. Nitza E. Coleman, Comment, *After the Bust: Landowner's Liability When the Property is Used for the Manufacture of Methamphetamine*, 1 S.J. AGRIC. L. REV. 109, 132 (2003).

138. H.R. 1048, 106th Cong. (2001).

manufacturing, section 2D1.1(b)(5) appears to be both a useful method of deterrence as well as a novel, more comprehensive solution to the existing drug problem that faces America.