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ESTABLISHING A FLOOR: MINIMUM REMEDIATION REQUIREMENTS FOR METH LABS

CHELSEA BOBO*

INTRODUCTION

Imagine your next door neighbor is baking a cake. However, pretend this is no ordinary cake. The ingredients that go into it are highly toxic. Once combined and cooked, they have the potential to explode or cause a fire. Oddly enough, your neighbor wears long sleeves and a respiratory mask because the baking fumes irritate his skin and cause harm when inhaled. You might, understandably, be concerned about how your neighbor's baking habits will affect the environment in which you live. You would be especially worried if you discovered leftover noxious batter dumped in the backyard. Even if your neighbor moves, you might wonder whether you should tell the new tenants about the toxic process that occurred in that house.

Unfortunately, when it comes to the local production of methamphetamine ("meth"), this scenario is more real life than hypothetical. Meth is a highly addictive synthetic drug that can be made by "[a]nyone who can read A meth maxim is that anyone who can bake a cake can make meth. Unlike cocaine or heroin, a suburban 15-year-old can make it."¹ When it comes to drugs it is difficult to imagine a more nightmarish problem for communities and local law enforcement than meth production and use. Another factor that makes this drug such a serious threat is the extremely harmful effect of meth production on the environment. "[M]ethamphetamine is fundamentally different from other drugs regulated by [state law] because the harms relating to methamphetamine stem not only from the distribution and use of the drug, but also from

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¹ Aaron R. Harmon, *Methamphetamine Remediation Research Act of 2005: Just What the Doctor Ordered for Cleaning up Methfields—or Sugar Pill Placebo?*, 7 N.C. J.L. & TECH. 421, 425 n.9 (2006) (quoting Chris Hamilton, *Home Meth Labs Leave Toxic Trail—More Meth Labs Are Being Found in Minnesota, Endangering People and the Environment*, DULUTH NEWS TRIB., Mar. 2, 2004 at 1A, available at 2004 WLNR 3196254 (internal citations omitted)).

the manufacture of the drug.”² Meth cooking occurs in every state, yet less than half of the states have legislation that addresses meth lab remediation.³ Federal legislation that addresses meth production focuses on the crime rather than cleanup.⁴ Yet clearly every property where meth is cooked needs to be cleaned up and restored to a certain level of environmental safety. Ideally, the optimal meth lab remediation process would take into account cost, cleanup effectiveness, acceptable levels of contamination, and collaboration between governments and communities. The federal government should articulate minimum requirements for methamphetamine lab remediation.

Part I of this Note first examines the scope of meth production in the United States and then looks at the environmental impact of unremediated meth labs to see whether the harm is severe enough to warrant federal interference in the cleanup process. A subset of the environmental impact argument takes into account the negative effects a damaged environment impose on public health and resources. Part II traces the government response to environmental problems of meth, both on the federal and state levels. Parts III and IV of this Note delve into the supporting and opposing arguments for the suggestion that the federal government ought to establish minimum remediation rules and standards for the states to comply. Part V of this Note proposes policies that could remedy the anemic federal and state response to the environmental harm of unremediated meth labs.

I. BACKGROUND

A. *Scope of Methamphetamine Production in the United States*

1. A Threat that Touches Every State

“According to National Drug Threat Survey (“NDTS”) 2006 data, 38.8% of state and local law enforcement officials nationwide report

² Note, *Cooking Up Solutions to a Cooked Up Menace: Responses to Methamphetamine in a Federal System*, 119 HARV. L. REV. 2508, 2511 (2006) [hereinafter *Cooking Up Solutions*] (quoting Methamphetamine Control and Community Protection Act, Pub. Act 94-556, § 5, 2005 Ill. Legis. Serv. 2726, 2726 (West) (to be codified at 720 ILL. COMP. STAT. 646/5)).

³ See *Cleanup, Remediation, or Demolition of Methamphetamine Houses*, 0070 9: 50 STATE STATUTORY SURVEYS: ENVIRONMENTAL LAWS: POLLUTION, Oct. 2009.

⁴ See, e.g., Controlled Substances Act, 21 U.S.C. §§ 801–904 (2006); Combat Methamphetamine Epidemic Act of 2005, Pub. L. No. 109-177, §§ 701–756, 120 Stat. 256 (2006); Combat Methamphetamine Enhancement Act of 2010, Pub. L. No. 111-268, 124 Stat. 2847 (2010).

methamphetamine as the greatest drug threat to their areas, a higher percentage than for any other drug.”⁵ More so than most other drugs, meth has the potential to spread anywhere and reach new populations in the United States. “[It] has no target population [and] is easily available to anyone, regardless of the user or their socio-economic or cultural background.”⁶ Meth production and use is stereotypically associated with a handful of “heartland” states.⁷ Yet, meth lab incidents (operations involving labs, dump sites, and chemical and glass equipment) have been uncovered in every state in the last ten years.⁸ While it is true that lab seizures in states like Missouri and Tennessee far outnumber lab seizures in other parts of the United States,⁹ it is also pertinent to note that law enforcement in these states proactively focuses on the issue of meth production,¹⁰ which conceivably leads to a higher frequency of methamphetamine lab busts. This raises questions about states that lack law enforcement strategies tailored to address the problem of meth production. Do states with low numbers of lab busts actually have fewer incidents of meth production or are the low numbers merely disguising deficiencies in law enforcement strategies? This is important from an environmental perspective because meth labs that slip through enforcement cracks cannot be remediated or demolished.

2. A National Epidemic

According to the Drug Enforcement Administration (“DEA”), eighty percent of the meth sold in the United States comes from Mexico.¹¹ Putting aside the issue of unreported and unaddressed meth sites, what we do know about meth production in the United States can either undercut

⁵ COMMUNITY ORIENTED POLICING SERVS., U.S. DEP’T OF JUSTICE, THE METHAMPHETAMINE SUMMIT: A PROCESS IN COLLABORATION AND DECISION MAKING (Heidi Deutch ed., 2011) [hereinafter METHAMPHETAMINE SUMMIT], available at http://cops.usdoj.gov/files/RIC/Publications/e041119351_2011meth-summit.pdf.

⁶ *Id.* at 4.

⁷ Jim Salter, *National Meth Lab Busts up in 2011*, WASH. TIMES, Feb. 22, 2012 [hereinafter *National Meth Lab Busts up in 2011*], available at <http://www.washingtontimes.com/news/2012/feb/22/national-meth-lab-busts-2011/?page=all>.

⁸ *Methamphetamine Lab Incidents, 2004–2012*, DRUG ENFORCEMENT ADMIN., <http://www.justice.gov/dea/resource-center/meth-lab-maps.shtml> (last visited Feb. 1, 2014).

⁹ *Id.*

¹⁰ *National Meth Lab Busts up in 2011*, *supra* note 7.

¹¹ Jim Salter, *Mexico Drug Cartels Flood Cheap Meth into U.S.*, THE HUFFINGTON POST (Oct. 11, 2012, 3:16 PM), http://www.huffingtonpost.com/2012/10/11/mexico-drug-cartels-meth_n_1957378.html [hereinafter *Mexico Drug Cartels*].

or support an argument for increasing the federal government's presence in meth lab cleanup. According to the Drug Enforcement Agency, there were 13,390 reported Meth lab seizures last year.¹² On one hand, this number is not particularly troublesome. First, it has decreased significantly from 2004, when there were 23,829 lab busts.¹³ Second, it is important to note that statistically, meth is not as prevalent in the United States as other drugs. For example, in 2008 methamphetamine and other amphetamines comprised only 6.5% of admissions to publicly funded substance abuse treatment programs, behind marijuana, heroin, and cocaine.¹⁴ Is the impact of meth production and use large enough to justify the resources the federal government would have to employ to formulate and enforce meth cleanup standards? One might argue the time and money ought to instead be spent on illegal drugs that have an impact on a larger number of people.¹⁵

On the other hand, 13,390 meth lab seizures represents a figure that can support a call for federal government cleanup standards.¹⁶ Statistics show that the meth problem is not going away.¹⁷ Indeed, the past five years show an upward trend in the production of meth.¹⁸ Is it enough to change the status quo when it comes to meth remediation? Once again we run into the problem of government resources in light of the larger impact of other drugs. There are a couple counter-arguments to the waste-of-government-resources criticism. First, because unremediated and

¹² *Methamphetamine Lab Incidents*, *supra* note 8.

¹³ *Id.*

¹⁴ *DrugFacts: Treatment Statistics*, NAT'L INST. ON DRUG ABUSE, <http://www.drugabuse.gov/publications/drugfacts/treatment-statistics> (last updated Mar. 2011).

¹⁵ For example, in 2011 the drug marijuana boasted 18.1 million current (past-month) users in sharp contrast to the drug methamphetamine, which only garnered 439,000 users. *DrugFacts: Nationwide Trends*, NAT'L INST. ON DRUG ABUSE, <http://www.drugabuse.gov/publications/drugfacts/nationwide-trends> (last updated Dec. 2012). *But see* NAT'L DRUG INTELLIGENCE CTR., U.S. DEP'T OF JUSTICE, No. 2011-Q0317-001, NATIONAL DRUG THREAT ASSESSMENT 2011 4 (2011) [hereinafter NATIONAL DRUG THREAT ASSESSMENT 2011], available at <http://www.justice.gov/archive/ndic/pubs44/44849/44849p.pdf> ("According to the [2010] National Drug Threat Survey, crack cocaine and ice methamphetamine are the drugs that most often contribute to crime"). *See also* Jack Healy, *Voters Ease Marijuana Laws in 2 States, but Legal Questions Remain*, N.Y. TIMES, Nov. 8, 2012, at P15, available at <http://www.nytimes.com/2012/11/08/us/politics/marijuana-laws-eased-in-colorado-and-washington.html>.

¹⁶ *See National Meth Lab Busts up in 2011*, *supra* note 7.

¹⁷ NATIONAL DRUG THREAT ASSESSMENT 2011, *supra* note 15, at 3 ("High levels of methamphetamine production in Mexico, along with increasing small-scale domestic production, have resulted in increasing methamphetamine availability").

¹⁸ *See Methamphetamine Lab Incidents*, *supra* note 8.

improperly remediated meth labs impose various cleanup, health, and property value costs on communities in any event, the wisest policy is to ensure those costs have the most effective environmental results.¹⁹ The second counter-argument hinges on the idea that while few things take precedence to taxpayers' hard-earned money, many people would argue the environment should be on that list of things.²⁰ In this respect, remediating the environmental effects of meth production and use ought to take precedence over the more prevalent drugs, considering the nightmarish havoc just one meth lab site can wreck on the environment and surrounding community.

B. Impact of Unremediated Methamphetamine Production

1. Environment

The toxic chemicals and fumes involved in meth production cause property, water, and other environmental damage.²¹ "Meth production releases numerous chemical byproducts, such as volatile organic compounds, acids, bases, and metals, in addition to meth itself."²² With typical ingredients ranging from starting fluid, paint thinner, freon, acetone, anhydrous ammonia, iodine crystals, red phosphorous, brake cleaner, drain cleaner, battery acid, reactive metals, to cold tablets containing pseudoephedrine,²³ it is not difficult to trust the claim by experts and officials that a pound of meth generates over five pounds of hazardous waste.²⁴

From a property perspective, one of the most frustrating aspects of meth production is that practically anyone can do it.²⁵ The chemicals and

¹⁹ METHAMPHETAMINE SUMMIT, *supra* note 5, at 8.

²⁰ ECOAMERICA, THE AMERICAN CLIMATE & ENVIRONMENTAL VALUES SURVEY 6 (2011).

²¹ OFFICE OF INSPECTOR GEN., EPA, REP. NO. 11-P-0708, EPA PROGRESS ON THE 2007 METHAMPHETAMINE REMEDIATION RESEARCH ACT 1 (2011) [hereinafter EPA PROGRESS ON THE 2007 METHAMPHETAMINE REMEDIATION RESEARCH ACT], *available at* <http://www.epa.gov/oig/reports/2011/20110927-11-P-0708.pdf>.

²² *Id.*

²³ Dallas Whitmill, *Meth Labs: Your Neighborhood Hazardous Waste Facility*, ENVTL. PRAC., June 2010, at 188, *available at* <http://www.terracon.com/wp-content/uploads/2011/03/Perspectives-from-the-Field-Meth-Labs.pdf>.

²⁴ OFFICE OF BROWNFIELDS CLEANUP AND REDEVELOPMENT, EPA, No. 560-F-05-232, METH-FIELDS: BROWNFIELDS FUNDING AND TECHNICAL ASSISTANCE TO ADDRESS CLANDESTINE DRUG LABS (2005), *available at* http://epa.gov/brownfields/policy/methlab_brochure.pdf.

²⁵ Harmon, *supra* note 1, at 424 (noting that "unlike most drugs, methamphetamine can be easily produced at home using materials that can be purchased at a local hardware store or Wal-Mart.").

materials can be attained from local pharmacies and hardware stores, and the cooking process learned from websites and books.²⁶ This means that small “mom and pop” meth laboratories are found in everyday locations such as houses, apartments, hotel rooms, commercial facilities, trucks, and other ordinary places.²⁷ Unsurprisingly, the individuals who are producing meth rarely take informed precautions to minimize the environmental damage, and as a result, properties and dwelling places become unfit for habitation.²⁸ This seems especially troubling because the damage is not contained to the immediate area where the meth is cooked.²⁹ Waste and by-product residue are often dumped, buried, or simply abandoned.³⁰ Toxic fumes escape the immediate area of their creation and seep into surrounding walls, flooring, furniture, air ducts, and items with a high potential for human contact.³¹ In other words, surrounding peoples and properties may absorb the damage inflicted by the fumes and chemicals involved in the creation of meth.³²

Another disturbing environmental consequence of meth labs concerns water sources. A convenient method of dumping the chemical waste and by-product of meth production is to simply flush it down toilets and sinks, and pour it into rivers and streams.³³ Waste that is unceremoniously dumped on the ground can seep into the soil and disturb underground

²⁶ See DANA HUNT ET AL., METHAMPHETAMINE USE: LESSONS LEARNED 23–24 (Abt Associates, Inc, 2005), available at <https://www.ncjrs.gov/pdffiles1/nij/grants/209730.pdf>.

²⁷ Michael A. Nesteroff, *Meth Labs: An Environmental Bad Dream for Property Owners, Tenants, and Neighbors*, WASH. STATE BAR NEWS, Jan. 2007, at 12, 13, available at http://www.wsba.org/News-and-Events/Publications-Newsletters-Brochures/NWLawyer/~media/Files/News_Events/Publications/Bar%20News/2007%20Full%20Issues/200701JanuaryBarNews.ashx.

²⁸ *Id.*

²⁹ OFFICE OF COMMUNITY ORIENTED POLICING SERVS., U.S. DEP'T OF JUSTICE, METHAMPHETAMINE INITIATIVE: FINAL ENVIRONMENTAL ASSESSMENT 57 (2003) [hereinafter METHAMPHETAMINE INITIATIVE: FINAL ENVIRONMENTAL ASSESSMENT], available at <http://www.cops.usdoj.gov/files/ric/Publications/e05031969.txt>.

³⁰ EPA PROGRESS ON THE 2007 METHAMPHETAMINE REMEDIATION RESEARCH ACT, *supra* note 21, at 1.

³¹ *Id.*

³² METHAMPHETAMINE INITIATIVE: FINAL ENVIRONMENTAL ASSESSMENT, *supra* note 29, at 57 (“Surface soils in the area surrounding the house and backyard area are assumed to be contaminated by previously released hazardous waste: however, baseline concentrations in soil are assumed not to represent an acute hazard or immediate danger to life or health.”).

³³ *About Meth*, ARIZONA ATTORNEY GENERAL, <https://www.azag.gov/meth> (last visited Feb. 1, 2014).

water systems.³⁴ Thus, the damage can spread beyond the immediate property where the meth is cooked and the adjacent properties that absorb the initial environmental effects. When meth waste hits water sources, the scope of the effects seem particularly bleak considering the fact that the basic groups that rely on uncontaminated water include wild and aquatic animals, livestock, and human communities.

The potential for other forms of environmental damage is exacerbated by evolving cooking methods. For example, the “shake and bake” manufacturing method typically condenses the entire process into a soda bottle,³⁵ bestowing an alarming level of portability on the toxic waste.³⁶ In fact, one meth maker was apprehended “shopping for supplies at a local Walmart while he was actively cooling methamphetamine in his backpack.”³⁷ The portable nature of the “shake and bake” method gives manufacturers more options of where to dump their meth by-product, threatening to spread the environmental damage even further.³⁸

2. Health, Safety, and Resources

The effects of unremediated meth production sites on the environment pose risks to the health, safety, and resources of American communities. Quite simply, in addition to being prone to fire and explosions,³⁹ the toxic and volatile nature of the fumes and chemicals involved in meth production can cause injury or death if inhaled or touched.⁴⁰ Chemical residue left behind causes chemical burns, respiratory problems, and cold and flu-like symptoms.⁴¹ Chronic or high exposure, in some cases,

³⁴ See Whitmill, *supra* note 23, at 188 (“If a meth lab in a rural setting uses septic systems and drinking-water wells, these drinking-water sources may become contaminated, thereby presenting significant exposure risk to nearby residents.”).

³⁵ Michael Polkabila, *The New Shake & Bake or “One Pot” Methamphetamine Synthesis Method*, BIOMAX ENVTL. LLC (Apr. 26, 2012), <http://www.biomaxenvironmental.com/the-new-shake-bake-or-one-pot-methamphetamine-synthesis-method/>.

³⁶ See *id.*

³⁷ *Id.*

³⁸ See, e.g., Susan Saulny, *With Cars as Meth Labs, Evidence Litters Road*, N.Y. TIMES, Apr. 15, 2010, at A17, available at <http://www.nytimes.com/2010/04/15/us/15meth.html>.

³⁹ NATIONAL DRUG THREAT ASSESSMENT 2011, *supra* note 15, at 5 (“NSS data show that there were 171 explosions or fires at methamphetamine production sites in 2009, compared with 101 in 2008; in the first 9 months of 2010, there were 160 explosions or fires.”).

⁴⁰ See *About Meth*, *supra* note 33.

⁴¹ EPA PROGRESS ON THE 2007 METHAMPHETAMINE REMEDIATION RESEARCH ACT, *supra* note 21, at 2 (“Chronic exposure to residual, dangerous, and hidden chemicals can cause serious health problems, such as cancer; damage to the brain, liver, and kidneys; birth defects; and reproductive problems such as miscarriages.”).

can cause death.⁴² Meth labs pose a threat to the health of present, future, and surrounding property occupants,⁴³ especially where children are involved.⁴⁴ Other at-risk groups include first responders and law enforcement officials.⁴⁵

Meth production not only poses a danger to the health and safety of individuals, but it also imposes significant costs on various groups. A single meth lab is estimated to cost \$25,000 to clean up.⁴⁶ A 2005 RAND survey indicated that the economic cost of meth use in the United States reached \$23.4 billion in 2005.⁴⁷ While the price of meth site remediation affects individuals, communities, federal, state, and municipal governments, the financial burden falls primarily on the shoulders of the owner of the property where the meth is manufactured.⁴⁸ In a world where property owners are not always responsible for the production or use of meth

⁴² *Cleaning Up Hazardous Chemicals at Former Meth Labs*, WIS. DEP'T HEALTH SERVS., <http://www.dhs.wisconsin.gov/eh/chemfs/fs/methclnup.htm> (last updated Oct. 2006) ("Short-term exposures to high concentrations of chemical vapors that may exist in a functioning meth lab can cause severe health problems or even death.").

⁴³ *Id.*

⁴⁴ *See, e.g.*, OFFICE OF NAT'L DRUG CONTROL POLICY, U.S. DEP'T OF JUSTICE, NATIONAL SYNTHETIC DRUGS ACTION PLAN 22 (2004), *available at* https://www.ncjrs.gov/ondcpubs/publications/pdf/national_synth_drugs.pdf (observing that "[i]n 2003, more than 3,000 children were found on site during law enforcement actions related to clandestine methamphetamine laboratories nationwide. Forty-one of these children were reported injured and one child was killed by explosions or fires at 26 clandestine methamphetamine labs."); *see* NATIONAL DRUG THREAT ASSESSMENT 2011, *supra* note 15, at 5 ("According to NSS, the number of children injured at methamphetamine production sites increased from 4 in 2005 to 11 in 2009, while 14 children were injured from January through September 2010.").

⁴⁵ *See* NATIONAL DRUG THREAT ASSESSMENT 2011, *supra* note 15, at 5 ("In the first 9 months of 2010, 41 law enforcement officials were injured" at methamphetamine sites).

⁴⁶ METHAMPHETAMINE SUMMIT, *supra* note 5, at 8:

This figure accounts only for cleaning up the residual contamination—which is limited to the removal of the chemicals and glassware—and the remediation of property. This figure doesn't take into account the cost of providing the necessary law enforcement, environmental experts, public health, and social service providers that are often required to close and remediate a meth lab.

Id.

⁴⁷ RAND DRUG POLICY RESEARCH CENTER, THE ECONOMIC COST OF METHAMPHETAMINE USE IN THE UNITED STATES iii (2009), *available at* http://www.rand.org/pubs/monographs/2009/RAND_MG829.pdf (qualifying the \$23.4 billion figure by noting that "[g]iven the uncertainty in estimating the costs of meth use, this study provides both a lower-bound estimate of \$16.2 billion and an upper-bound estimate of \$48.3 billion.").

⁴⁸ *See Cleanup, Remediation, or Demolition of Methamphetamine Houses*, *supra* note 3.

on their property,⁴⁹ the ideal cost burden balance is a hotly debated issue beyond the scope of this Note.⁵⁰

However serious the meth-related concerns for community health, safety, and cost, it may not be clear how relevant these topics are to an argument for environmental intervention on the part of the federal government. It is simple to point out that the first three problems largely stem from the environmental harm of unremediated labs. At the very least, this causation ought to be considered. Federal legislation, properly contemplated, would take into account the damage caused or prevented “down the stream” by each action or non-action. Perhaps the levels of damage unregulated meth remediation stands to inflict on the health, safety, and resources of local communities can be held up as persuasive factors for why the federal government ought to pass a national minimum for meth cleanup standards.

II. RESPONSE TO THE ENVIRONMENTAL HARM OF METH PRODUCTION

A. *Federal Response*

The federal approach to the meth epidemic largely overlooks the harm of meth production and leaves the burden of cleaning up unremediated meth labs to the states and property owners. This is because the United States government tends to focus on the crimes associated with meth rather than the cleanup that needs to take place once a meth lab is discovered. Technically, federal authority umbrellas over meth cleanup standards via two executive agencies—the DEA⁵¹ and the Environmental

⁴⁹ See, e.g., Shaila Dewan & Robbie Brown, *Illnesses Afflict Homes with a Criminal Past*, N.Y. TIMES (July 13, 2009), <http://www.nytimes.com/2009/07/14/us/14meth.html> (perceiving some meth lab property owners as victims, including “low-income elderly people whose homes are surreptitiously used by relatives or in-laws to make meth, and landlords whose tenants leave them with a toxic mess.”).

⁵⁰ See generally Ronald G. Aronovsky, *Federalism and CERCLA: Rethinking the Role of Federal Law in Private Cleanup Cost Disputes*, 33 *ECOLOGYL.Q.* 1 (2006); Thomas J. Braun, *Cleaning Up the Comprehensive Environmental Response, Compensation, and Liability Act*, 58 *FED. LAW.* 54 (2011); Michael V. Hernandez, *Cost Recovery or Contribution?: Resolving the Controversy over CERCLA Claims Brought by Potentially Responsible Parties*, 21 *HARV. ENVTL. L. REV.* 83, 135 (1997).

⁵¹ The DEA primarily oversees law enforcement operations. See *DEA Mission Statement*, U.S. DRUG ENFORCEMENT ADMIN., <http://www.justice.gov/dea/about/mission.shtml> (last visited Feb. 1, 2014).

Protection Agency (“EPA”)⁵²—and various pieces of legislation.⁵³ The work of these organizations and legislations can be divided into three categories: preventing the production of meth, allocating funds for meth lab remediation, and issuing meth cleanup guidelines.⁵⁴ Ultimately, what little the federal government does have to say about remediation methods and levels is too piecemeal to adequately address the environmental damage that stems from meth production.

1. Preventing the Production of Meth by Regulating the Distribution of Meth and Precursor Chemicals

Federal regulations that address the meth epidemic along with the enforcement efforts of the DEA focus on preventing and punishing the crimes associated with the drug, rather than articulating or enforcing meth lab remediation standards. Methamphetamine is a Schedule II drug under the Controlled Substances Act (“CSA”),⁵⁵ which expresses the federal policy of classifying and regulating drugs that can be dangerous or addictive.⁵⁶ The structure of the CSA reflects an objective of preventing the “illegal importation, manufacture, distribution, and possession and improper use”⁵⁷ of drugs and substances that are otherwise useful in healthcare or pharmaceutical settings. To achieve this objective in relationship to meth and other Schedule II substances, the CSA focuses

⁵² The Environmental Protection Agency is responsible for issues relating to chemicals and the environment. *See Our Mission and What We Do*, EPA, <http://www2.epa.gov/about-epa/our-mission-and-what-we-do> (last visited Feb. 1, 2014) [hereinafter *Our Mission and What We Do*].

⁵³ *See, e.g.*, Controlled Substances Act, 21 U.S.C. §§ 801–904 (2006); Combat Methamphetamine Epidemic Act of 2005, Pub. L. No. 109-177, §§ 701–756, 120 Stat. 256 (2006); Combat Methamphetamine Enhancement Act of 2010, Pub. L. No. 111-268, 124 Stat. 2847 (2010).

⁵⁴ *See, e.g.*, Combat Methamphetamine Epidemic Act of 2005 §§ 701–756; METHAMPHETAMINE SUMMIT, *supra* note 5; EPA, VOLUNTARY GUIDELINES FOR METHAMPHETAMINE LABORATORY CLEANUP (2013), available at http://www.epa.gov/osweroe1/meth_lab_guidelines.pdf.

⁵⁵ Controlled Substances Act, 21 U.S.C. § 812(b)(2)(A)–(C) (2006). Schedule II classification indicates that meth (1) “has a high potential for abuse,” (2) “may lead to severe psychological or physical dependence,” and (3) “has a currently accepted medical use in treatment in the United States.” *Id.*

⁵⁶ *Id.* § 801(1)–(7) (stating Congress’s finding that the drugs included in the Controlled Substances Act “have a substantial and detrimental effect on the health and general welfare of the American people.”).

⁵⁷ *Id.* § 801(2).

primarily on restricting distribution.⁵⁸ In practice this means making meth and certain ingredients involved in meth manufacture prescription-only. As a result of these CSA restrictions “numerous alternative synthetic routes have developed in response to governmental attempts to regulate methamphetamine precursor materials” and “due to the myriad recipes available in the public domain, small-volume, largely untrained producers are responsible for an increasing share of the underground supply of methamphetamine.”⁵⁹

Monitoring and controlling access to precursor chemicals is an innovative solution to the growing problem of methamphetamine production. Specific to the goal of preventing individuals from manufacturing meth, the federal government passed the Combat Methamphetamine Epidemic Act of 2005 (“CMEA”), which regulated over-the-counter sale of certain ingredients used in meth production,⁶⁰ and the Combat Methamphetamine Enhancement Act of 2010, which required regulated retail sellers to submit certification of compliance to the Attorney General.⁶¹ For example, returning all products that contain pseudoephedrine to a prescription-drug status has proven especially effective.⁶²

Oregon did this more than four years ago, enabling the state to eliminate smurfing and nearly eradicate meth labs.⁶³ Some experts argue the United States government ought to implement an international version of the Oregon rule to attack foreign super labs, such as those found in Mexico.⁶⁴ The federal government’s use of aggressive laws that

⁵⁸ *Id.* § 801(3)–(4).

⁵⁹ Zachary R. Gates, *Obeying the “Speed” Limit: Framing the Appropriate Role of EPA Criminal Enforcement Actions Against Clandestine Drug Laboratory Operators*, 13 PENN. ST. ENVTL. L. REV. 173, 177 (2005).

⁶⁰ See Combat Methamphetamine Epidemic Act of 2005, Pub. L. No. 109-177, §§ 701–756, 120 Stat. 256 (2006).

⁶¹ See Combat Methamphetamine Enhancement Act of 2010, Pub. L. No. 111-268, 124 Stat. 2847 (2010).

⁶² See *Pre and Post Pseudoephedrine Control Oregon Meth Lab Incident Statistics*, OR. ALLIANCE FOR DRUG ENDANGERED CHILDREN, <http://www.oregondec.org/OregonMethLabStats.pdf> (last updated Nov. 8, 2013) (demonstrating that meth lab incident data from July 2006, when Oregon adopted a rule making all pseudoephedrine products prescription-only, to January 2013 “reflects a 97% reduction.”).

⁶³ *Id.*

⁶⁴ Rob Bovett, *Meth Epidemic Solutions*, 82 N.D. L. REV. 1195, 1214 (2006) (advocating the provision of “the international community with the tools and support necessary to quickly and efficiently shut down all gaps that develop in the international flow of ephedrine and pseudoephedrine, to ensure that those two key precursors do not feed the ‘super labs’ of drug cartels.”).

limit meth manufacturers' access to precursor chemicals, however, is minimal. "Although the federal government may have taken a conservative and incremental position on domestic precursor chemical regulation, it has been in the vanguard on aggressively sentencing those trafficking in methamphetamine."⁶⁵

In addition to being the primary enforcement mechanism of the CSA⁶⁶ and that legislation's objective of limiting improper distribution,⁶⁷ the DEA oversees various efforts aimed at detection, prosecution, and punishment of the manufacture, distribution, and illegal use of methamphetamine.⁶⁸ In fact, the DEA's role in the federal response to the meth epidemic leans heavily on dealing with the individuals who commit meth-associated crimes under state and federal laws.⁶⁹ While the DEA has little involvement in the cleanup phase of lab busts, it is only fair to note that preventing and discouraging the manufacture of meth in the first place through prosecution and punishment of meth trafficking is arguably the best way to eliminate environmental harm. Yet, it is safe to say that in general federal involvement in addressing drug issues has more to do with the crime than the cleanup.⁷⁰

2. Allocating Funds for Meth Lab Remediation

Community Oriented Policing Services ("COPS"), an agency of the Department of Justice, has awarded millions of federal dollars to assist state and local law enforcement in combating the meth epidemic.⁷¹ In 2010, the DEA used \$19.2 million of the large COPS grant to assist states and local agencies with meth lab remediation and disposal.⁷² Financial

⁶⁵ *Cooking Up Solutions*, *supra* note 2, at 2518.

⁶⁶ See *DEA Mission Statement*, *supra* note 51.

⁶⁷ See Controlled Substances Act, 21 U.S.C. §§ 801–904 (2006).

⁶⁸ See *DEA Mission Statement*, *supra* note 51.

⁶⁹ See *id.*; *Federal Trafficking Penalties*, U.S. DRUG ENFORCEMENT ADMIN., <http://www.justice.gov/dea/druginfo/ftp3.shtml> (last visited Feb. 1, 2014).

⁷⁰ Jennifer Wieman, *Meth Labs: "Cooking" Up Environmental Disaster*, 15 MO. ENVTL. & POL'Y REV. 127, 147 (2007) (explaining that "[t]his emphasis can be seen in a fiscal comparison: the 2008 Drug Control budget has been identified at roughly \$12.9 billion dollars, while the EPA budget request is \$7.2 billion.").

⁷¹ *Methamphetamine Conference*, COMMUNITY ORIENTED POLICING SERVS., <http://www.cops.usdoj.gov/Default.asp?Item=210> (last visited Feb. 1, 2014).

⁷² Teresa Lostroh, *Meth Labs Multiply as Cleanup Dollars Shrink*, ABCNEWS.COM (Apr. 4, 2011), <http://abcnews.go.com/US/local-governments-short-cash-meth-lab-cleanups/story?id=13267940&singlePage=true>.

assistance for lab cleanup can be crucial, especially in counties that are cash-strapped or possess a burdensome number of labs that need to be remediated. Unfortunately, the welcome help of this federal money cannot be counted on from year to year. The last two years have seen federal budget cuts remove funding for meth lab cleanup entirely, only to restore some money at the last minute.⁷³

3. Issuing Cleanup Guidelines

Unsurprisingly, EPA represents federal involvement that treads closest to the actual issue of meth lab remediation.⁷⁴ EPA classifies contaminated sites as either Superfund sites or Brownfields.⁷⁵ The difference between the two boils down to whether the federal government “is or plans to be involved in cleanup efforts.”⁷⁶ The burden of remediating contaminated sites characterized as Brownfields usually falls on the states.⁷⁷ Unfortunately, the plight of unremediated meth labs is the plight of the Brownfield, since meth labs are generally “too small to warrant federal intervention.”⁷⁸ Consequently, EPA rarely contributes federal resources to meth lab cleanup efforts.⁷⁹ In 2007, after evaluating several findings pertinent to the problem of unremediated meth labs,⁸⁰ Congress passed a bill that upped EPA’s involvement in the question of meth lab remediation methods and standards. The Methamphetamine Research Act of 2007 required EPA to develop voluntary health-based cleanup guidelines

⁷³ See Chris Cato, *Meth Lab Cleanup Running Low*, WSPA.COM (Feb. 13, 2012, 7:50 PM), <http://www.wspa.com/story/21505794/meth-lab-cleanup-money-running-low>; Ed Enoch, *Restored Meth Funding Helps Police in Cleanup*, WRBL NEWS 3 (Nov. 30, 2011, 7:56 PM), <http://www.wrbl.com/story/21336798/restored-meth-funding-helps-police-in-cleanup>.

⁷⁴ VOLUNTARY GUIDELINES FOR METHAMPHETAMINE LABORATORY CLEANUP, *supra* note 54, at 4.

⁷⁵ *Types of Contaminated Sites*, EPA, <http://www2.epa.gov/enforcement/types-contaminated-sites> (last updated May 14, 2013).

⁷⁶ *Id.*

⁷⁷ The EPA expressly names the parties responsible for contaminated sites characterized as Brownfields: state and tribal response programs and state voluntary cleanup programs. *Id.*

⁷⁸ Harmon, *supra* note 1, at 428.

⁷⁹ *See id.*

⁸⁰ See Methamphetamine Remediation Research Act of 2007, Pub. L. No. 110-143, § 2, 121 Stat. 1809 (2007). Findings included (1) a lack of standardized measures for evaluating the success of a meth lab remediation; and (2) significant levels of contamination are commonly found in closed meth labs. *Id.*

to ensure former meth lab sites are safe and free from contamination.⁸¹ The only cleanup guidelines issued by EPA that are specific to environmental damage caused by meth production are voluntary.⁸²

In the absence of national legislation regulating remediation methods and levels, federal efforts fail to adequately address the environmental damage that stems from meth production; instead, the United States government leaves this burden on the states.

B. *State Response*

The lack of federal legislation regulating remediation methods and levels has hardly led to a comprehensive response by each and every state to the environmental problems posed by meth production. Less than half of the states have legislation that addresses meth lab remediation.⁸³ Several obstacles stand in the way of their crafting meaningful cleanup methods and uniform remediation levels: the domestic increase and rapid spread of meth production,⁸⁴ the tendency for state and local law enforcement groups to focus on capturing the criminals and prosecuting the crime,⁸⁵ the multiprong collaborative structure of the cleanup process, and the lack of data relating to the health and environmental effects of meth production and effective cleanup methods and levels.⁸⁶ These obstacles may also explain why lab remediation procedures, methods, and levels vary between the states that do have meth regulations on the books.

1. Remediation Process: A Multigroup Collaboration

In the wake of a meth lab discovery, “[m]aking a former meth lab site safe for reoccupation requires two basic efforts: 1) removal of the

⁸¹ *Id.* § 3.

⁸² See VOLUNTARY GUIDELINES FOR METHAMPHETAMINE LABORATORY CLEANUP, *supra* note 54.

⁸³ See *Cleanup, Remediation, or Demolition of Methamphetamine Houses*, *supra* note 3.

⁸⁴ See METHAMPHETAMINE SUMMIT, *supra* note 5, at 6 (comparing the “geographic growth of the methamphetamine epidemic” to the “spread of a powerful and resistant virus.”).

⁸⁵ Patricia Stanley, *The Combat Methamphetamine Epidemic Act: New Protection or New Intrusion?*, 39 TEX. TECH L. REV. 379, 421 (2007) (noting that “[t]he war on methamphetamine [is] being waged by law enforcement” (quoting Thomas C. Albus, *Legal Battles in Missouri’s War on Methamphetamine*, 59 J. MO. B. Mar./Apr. 2003, at 60)).

⁸⁶ See Harmon, *supra* note 1, at 427 (arguing that “[s]tates vary widely when it comes to cleanup standards, in part because of the lack of data to help state legislatures and agencies create health-based cleanup levels for contractors and property owners to properly remediate affected areas.”).

gross contamination by law enforcement; and 2) remediation of interior structures and surrounding land, surface waters, and groundwater.”⁸⁷ As a result, the majority of the remediation burden falls on state, local, and tribal enforcement groups, independent contractors, and the individual property owner.

First responders to the scene of meth manufacture usually include local police or firefighters.⁸⁸ Because the remediation process cannot commence until after the criminal-investigation phase has concluded,⁸⁹ first responders often face hazards at the contaminated sites that necessitate the use of respirators and other protective gear.⁹⁰ The first step in the remediation process involves posting notice that a property is contaminated, removing persons and property from the site, and securing the hazardous area from public and private access.⁹¹ In the states that have meth remediation legislation, these responsibilities fall on either law enforcement groups,⁹² departments or officers of health,⁹³ departments of environmental issues,⁹⁴ or a combination of these.⁹⁵ The next step in meth lab remediation, the cleanup phase, requires coordination between the overseeing government authority,⁹⁶ the independent contractor who removes the hazardous waste and contaminated items and restores the property, and the property owner, who usually bears ultimate responsibility for cleanup costs.⁹⁷ The inclusion of the property owner in

⁸⁷ *Remediating Methamphetamine Laboratories*, 27 NO. 6 HAZARDOUS WASTE CONSULTANT 1.6 (Aspen Publishers 2009).

⁸⁸ Diane McFadden et al., *Occupational Health Hazard to First Responders from Clandestine Methamphetamine Labs*, 17 J. ADDICTIONS NURSING 169, 169 (2006), available at http://www.hawaii.edu/hivandaids/Occupational_Health_Hazards_to_First_Responders_from_Clandestine_Methamphetamine_Labs.pdf.

⁸⁹ See VOLUNTARY GUIDELINES FOR METHAMPHETAMINE LABORATORY CLEANUP, *supra* note 54, at 4.

⁹⁰ See McFadden et al., *supra* note 88, at 171–72.

⁹¹ See VOLUNTARY GUIDELINES FOR METHAMPHETAMINE LABORATORY CLEANUP, *supra* note 54, at 8–9.

⁹² See, e.g., ARIZ. REV. STAT. ANN. § 12-1000(A)(3) (2012).

⁹³ See, e.g., CAL. HEALTH & SAFETY CODE § 25400.17 (West 2006).

⁹⁴ See, e.g., ARK. CODE ANN. § 8-7-1403(b)(1) (West 2012).

⁹⁵ See *Cleanup, Remediation, or Demolition of Methamphetamine Houses*, *supra* note 3.

⁹⁶ See, e.g., CAL. HEALTH & SAFETY CODE §§ 25354.5, 25400.35 (West 2010). In California, for example, the Department of Toxic Substances Control dictates what standards and procedures the contractor or property owner must use to restore the property while the local health officer actually interacts with the contractor or property owner to evaluate whether those standards and procedures are met. *Id.*

⁹⁷ See VOLUNTARY GUIDELINES FOR METHAMPHETAMINE LABORATORY CLEANUP, *supra* note 54, at 4, 8–9, 12, 23.

the multigroup collaboration system is a result of limited funding and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (“CERCLA”).⁹⁸ A portion of this federal legislation makes property owners liable for “all costs of removal or remedial action incurred by the United States Government or a State.”⁹⁹ Some states impose additional responsibilities on property owners, including notification of law enforcement,¹⁰⁰ prevention of entry of unauthorized persons,¹⁰¹ or disclosure upon sale or lease,¹⁰² among others.¹⁰³ When it comes to remedying the environmental harms of meth production, there are pros and cons to the multicollaborative approach. On one hand, it enables diversification and specialization for the parties (with the exception of the property owner) at every phase of the process.¹⁰⁴ This arguably achieves better results. On the other hand, the more agencies, organizations, and individuals involved the more the potential for discrepancies in funding and methodology.¹⁰⁵

2. Remediation Methods

The states that do possess legislation that addresses the aftermath of a contaminated site discovery vary in their policies regarding key issues, including notification and disclosure requirements and cleanup practices,¹⁰⁶ among others.¹⁰⁷ In addition to law enforcement and health

⁹⁸ See Nesteroff, *supra* note 27, at 14–15 (CERCLA “impose[s] strict joint and several liability on the owner or operator of a facility from which a release of hazardous substance occurs. Many of the chemicals used in meth production fall within the definition of a ‘hazardous substance’ under CERCLA Almost any place where meth is made can constitute a ‘facility’”).

⁹⁹ 42 U.S.C. § 9607(a)(4)(A) (2006).

¹⁰⁰ See, e.g., ARK. CODE ANN. § 8-7-1403 (2012); NEB. REV. STAT. § 71-2433 (2012).

¹⁰¹ See, e.g., NEB. REV. STAT. § 71-2434 (2012); COLO. REV. STAT. ANN. § 25-18.5-103 (West 2013).

¹⁰² See, e.g., CAL. HEALTH & SAFETY CODE § 25400.45 (West 2007); MINN. STAT. § 152.0275 (2013); MONT. CODE ANN. § 75-10-1305 (2013); N.H. REV. STAT. ANN. § 477:4-g (2013).

¹⁰³ See METHAMPHETAMINE SUMMIT, *supra* note 5, for an in-depth comparison between the responsibilities states impose on property owners.

¹⁰⁴ *Id.* at 13–14, 16–17.

¹⁰⁵ See *id.* at 8, 19, 23, 27; *Cleanup, Remediation, or Demolition of Methamphetamine Houses*, *supra* note 3.

¹⁰⁶ See *Cleanup, Remediation, or Demolition of Methamphetamine Houses*, *supra* note 3.

¹⁰⁷ See THE NATIONAL ALLIANCE FOR MODEL STATE DRUG LAWS, COMMON THEMES ADDRESSED REGARDING PROPERTIES WHERE CONTROLLED SUBSTANCE LABORATORIES ARE FOUND (2008), available at <http://www.namsdl.org/library/7C38A757-1C23-D4F9-74CBF7EB3F5A5BC1/> (last updated Sep. 19, 2008). Additional inconsistencies between state remediation policies emerge in posting requirements, establishment of registries

authorities, the public at large possesses a stake in the equation when it comes to identifying properties and dwellings that harbored meth manufacture operations. Unfortunately, most states fail to impose a duty to disclose on owners of property where meth cooking has occurred.¹⁰⁸ “[A]lthough several states have addressed the duty of property owners to disclose the past use of their property as a methamphetamine lab, the duties imposed have quite different levels of strictness.”¹⁰⁹ For example, while the state of Arkansas only requires the owner to notify law enforcement,¹¹⁰ the state of California requires the owner to both notify and disclose.¹¹¹ A California property owner who fails to meet either of these requirements is “subject to civil penalties.”¹¹² In states with lax or nonexistent disclosure duties, property buyers and renters face severe disadvantages.¹¹³

Few states express an opinion on what practices property owners and contractors ought to employ to best remediate a contaminated site.¹¹⁴ Among the states that do, conforming to cleanup methods ranges from adhering to “best practices”¹¹⁵ to “enumerated actions”¹¹⁶ that may or may not be established by a board of health. In fact, some of the statutes that address the issue of remediation practices simply suggest that the state health authorities may “promulgate rules establishing the acceptable process,”¹¹⁷ while others require that the state health authorities develop rules related to cleanup.¹¹⁸ These gaps in meth remediation methods raise two concerns: first, that contaminated properties are not being properly

or databases, effects on property titles, remediation contractor requirements, demolition in lieu of remediation, property owner liability, property use restrictions, and sampling or testing procedures.

¹⁰⁸ See *Cleanup, Remediation, or Demolition of Methamphetamine Houses*, *supra* note 3.

¹⁰⁹ *Cooking Up Solutions*, *supra* note 2, at 2515.

¹¹⁰ ARK. CODE ANN. § 8-7-1403 (2012).

¹¹¹ CAL. HEALTH & SAFETY CODE § 25400.45 (West 2007).

¹¹² *Id.*

¹¹³ See David Barer, *Cleaning Up Meth Labs in Texas: It's a Dirty Job, and Nobody Has to Do It*, STATEIMPACT TEXAS (Oct. 2, 2012, 11:23 AM), <http://stateimpact.npr.org/texas/2012/10/02/cleaning-up-meth-labs-in-texas-its-a-dirty-job-and-nobody-has-to-do-it/>, for an interview with a Texas tenant who recently discovered his apartment was a former meth lab.

¹¹⁴ See METHAMPHETAMINE SUMMIT, *supra* note 5, at iii, 5, 12, 22–23, 27; see also *Remediating Methamphetamine Laboratories*, *supra* note 87, at *1.7.

¹¹⁵ See, e.g., ARIZ. REV. STAT. ANN. § 12-1000 (2012).

¹¹⁶ *Cleanup, Remediation, or Demolition of Methamphetamine Houses*, *supra* note 3; see also COLO. REV. STAT. § 38-35.7-103.

¹¹⁷ *Cleanup, Remediation, or Demolition of Methamphetamine Houses*, *supra* note 3. See, e.g., IDAHO CODE ANN. § 6-2604 (2005); NEB. REV. STAT. § 2434 (2006).

¹¹⁸ See, e.g., WASH. REV. CODE § 64.44.070 (2009); VA. CODE ANN. § 32.1-11.7 (2013); UTAH CODE ANN. § 19-6-906 (2013).

restored in the states that do not have cleanup procedure requirements; and second, that the cleanup procedures issued by state health authorities are not the best practices when it comes to effective remediation.

3. Remediation Levels

In addition to the lack of consensus on remediation methods, the states seem to disagree on what the minimum remediation standards should be.¹¹⁹ One theory as to why states vary so widely when it comes to cleanup standards focuses on the “lack of data to help state legislatures and agencies create health based cleanup levels for contractors and property owners to properly remediate affected areas.”¹²⁰ According to a 2005 congressional staff report on methamphetamine abuse:

Even if a clean-up is undertaken, it is not clear ‘how clean is clean.’ . . . [T]here are no health-based standards for what constitutes ‘clean’ from contamination of methamphetamine itself or for the combinations of ‘brewing’ chemicals that are specific to meth production. Without such a standard it is impossible to determine what is clean and safe after a property has been used as a meth production facility.¹²¹

Some states have established standards for what constitutes “clean and safe.”¹²² For example, while California would consider a former meth production site with less than 1.5 micrograms of methamphetamine per 100 square centimeters acceptable,¹²³ Colorado could not sign off on any site with more than 0.5 micrograms of methamphetamine per 100 square centimeters.¹²⁴ Meanwhile, Arizona, Indiana, and Utah are the only states

¹¹⁹ See THE NATIONAL ALLIANCE FOR MODEL STATE DRUG LAWS, STATE FEASIBILITY-BASED STANDARDS (2008) [hereinafter STATE FEASIBILITY-BASED STANDARDS], available at <http://www.namsdl.org/library/80C05418-1C23-D4F9-74AF7EFE43761A50/>, for a general overview of the variance among states regarding acceptable levels of methamphetamine, ephedrine, pseudoephedrine, volatile organic compounds, lead, mercury, phosphorus, iodine, and corrosives.

¹²⁰ Harmon, *supra* note 1, at 427.

¹²¹ STAFF REP. TO MR. GORDON, H.R. COMM. ON SCIENCE, METHAMPHETAMINE ABUSE: THE SEARCH FOR SOLUTIONS 8–9 (2005).

¹²² See *Remediating Methamphetamine Laboratories*, *supra* note 87, at *1.7 (stating that “[a]s of June 2009, 22 states require or recommend that meth labs be cleaned to meet quantitative meth remediation standards.”).

¹²³ CAL. HEALTH & SAFETY CODE § 25400.16 (West 2010).

¹²⁴ COLO. CODE REGS. § 1014-3:7.1 (2013).

that exhibit a concern over unacceptable levels of ephedrine and pseudo-ephedrine.¹²⁵ Ultimately, the issue of proper and effective remediation methods and levels depends on the availability of evidence-based and research-guided information.¹²⁶ While EPA has published a document with research-based remediation suggestions,¹²⁷ it is doubtful whether states feel compelled to conform their remediation methods and levels to the voluntary guidelines.

III. ESTABLISHING A FLOOR: SUPPORTING ARGUMENTS

As discussed above, the compelling facts surrounding the environmental problem of meth labs suggest the federal government should outline minimum requirements for remediation methods and levels. This call for action stems from the irreversible environmental harm caused by unremediated meth labs; the threat to human populations all across the United States; and inadequate and contradicting responses by both the state and federal governments. Specifically, the call for a response of action from the United States government rests on several arguments: First, meth production is not a purely local matter; second, meth lab remediation ought to be an extension of United States drug policy; and finally, regulating cleanup methods and levels is a proper role for EPA.

A. *Meth Production Is Not a Purely Local Matter*

Characterizing an unremediated lab as a “local problem” overlooks the larger scope and environmental harm of meth production. The small scale “mom and pop” nature of meth labs in the United States, especially compared to the mass meth production operations found in Mexico,¹²⁸ hardly incentivizes a nationally unified response. Geographic stereotypes of meth use hinder the individual states’ response to the problem. Often state legislators and officials are prone to characterize the

¹²⁵ See STATE FEASIBILITY-BASED STANDARDS, *supra* note 119.

¹²⁶ See VOLUNTARY GUIDELINES FOR METHAMPHETAMINE LABORATORY CLEANUP, *supra* note 54, at 6 (noting that EPA issued voluntary remediation guidelines in part because of the need to consolidate existing research. The resulting report noted that “[b]ecause state . . . approaches to cleaning up meth labs vary, there are sometimes differences in recommended practices or techniques. This variance in opinion indicates a need for further research.”).

¹²⁷ *Id.* at 5.

¹²⁸ METHAMPHETAMINE SUMMIT, *supra* note 5, at 10–11.

issue as another state's or region's problem.¹²⁹ Yet, the "local problem" of meth labs is not confined by region or state borders. Once again, cooking occurs in every state.¹³⁰ As meth production methods become less stationary and more portable, operations will inevitably cross state lines, bringing into the new state and leaving in the old a trail of contamination. While maintaining the health, safety, and resources of a community is traditionally thought of as a purely local matter,¹³¹ the history of environmental legislation suggests significant support for the belief that the federal government ought to assume a larger role in protecting and preserving the environment.¹³² Justifications for federal regulation of meth lab remediation, however, do not fit neatly under the two theories often used to explain why the United States government ought to regulate environmental quality.

1. Market-Failure Justifications for Federal Involvement in Meth Lab Remediation

The popular TV show *Breaking Bad* follows the downward spiral of Walter White, a chemistry teacher who enters the lucrative world of meth cooking.¹³³ Although in manufacturing meth Mr. White is perpetuating drug addiction in his community, he views this criminal activity as both a craft and a business. In the minds of some viewers this meticulous approach partially redeems his involvement. In reality, however, meth cooking does not represent a business or an industry that any state government wishes to protect or encourage. And as previously discussed, the costs of cleaning up a meth lab fall on either property owners or the government.¹³⁴ This poses a challenge to one version of the market-failure theory, which posits that given a choice to pass environmental regulation, states will "race to the bottom" in order to avoid raising

¹²⁹ *Id.* at 22.

¹³⁰ See *Methamphetamine Lab Incidents*, *supra* note 8.

¹³¹ See *Cooking Up Solutions*, *supra* note 2, at 2522.

¹³² See, e.g., National Environmental Policy Act of 1969, 42 U.S.C. § 4321 (2006); Clean Air Act, 42 U.S.C. § 7401 (2006); Clean Water Act, 33 U.S.C. § 1251 (2006); Endangered Species Act of 1973, 16 U.S.C. § 1531 (2006). *But see* Jonathan H. Adler, *The Fable of Federal Environmental Regulation: Reconsidering the Federal Role in Environmental Protection*, 55 CASE W. RES. L. REV. 93 (2004) (arguing that environmental protections work better when handled by state and local governments).

¹³³ *This Week's Cover: Buckle up for the End of 'Breaking Bad,'* ENT. WEEKLY (Sept. 4, 2013, 12:00 PM), <http://popwatch.ew.com/2013/09/04/this-weeks-cover-buckle-up-for-the-end-of-breaking-bad/>.

¹³⁴ See *supra* Part II.B.1.

compliance costs for businesses.¹³⁵ The absence of a legitimate business in the meth equation seems to remove the protect-and-encourage-businesses incentive that theoretically discourages states from passing environmental regulations. And at first glance, it makes little sense for states to eliminate strict cleanup standards in order to protect or encourage owners who engage in or allow meth production on their property. Nonetheless, a simple way to use the “race to the bottom” theory as a justification for federal intervention lies in recognizing that in light of the fragile condition of government budgets, and the pressing concerns of other non-environmental issues, the state and local governments have very little incentive to invest the money and effort required to regulate meth lab remediation methods and contamination levels.

An alternative version of the market-failure theory occurs in “situations in which pollution emanates from one jurisdiction but imposes ill effects within another.”¹³⁶ Considering the more local nature of meth lab contamination, this justification for federal regulation seems a stretch. However, as meth manufacture methods become more and more mobile¹³⁷ the argument that environmental harm stemming from one state is being imposed on other states grows stronger. This supports a call for federal action on this issue.

2. Public Choice Justification for Federal Involvement in Meth Lab Remediation

In addition to market-failure justifications, federal involvement in local meth lab remediation standards might also rest on the public choice theory that it is possible for an interest group to create a demand for federal action in the realm of a certain environmental concern. As with market-failure justifications, it is important to acknowledge that meth remediation regulation does not fit perfectly into the public choice justification for federal involvement. One reason this is so lies in the reality that meth lab remediation rarely hits the issue radar of national environmental interest groups. Further, interest groups that specialize in issues associated with meth usually focus more on prevention and treatment of drug addiction rather than the environmental concerns of lab

¹³⁵ Scott R. Saleska & Kirsten H. Engel, “Facts Are Stubborn Things”: An Empirical Reality Check in the Theoretical Debate over the Race-to-the-Bottom in State Environmental Standard-Setting, 8 CORNELL J.L. & PUB. POL’Y 55, 55 (1998).

¹³⁶ Jonathan Remy Nash, *The Illusion of Devolution in Environmental Law*, 38 URB. LAW. 1003, 1005–06 (2006).

¹³⁷ See HUNT ET AL., *supra* note 26.

cleanup. As discussed earlier, the irreversible environmental harm caused by unremediated meth labs, the threat to human populations all across the United States, and the inadequate and contradicting government responses indicate that a demand for federal action already exists. The question remains: in the absence of an interest group explicitly making a demand for federal action on this issue, should the United States government nevertheless act to rectify gaps and standardize the methods and levels of meth lab remediation?

B. Meth Lab Remediation Is an Extension of U.S. Drug Policy

Addressing the environmental impact of the manufacture of a drug like meth may be construed as an extension of United States drug policy. As previously discussed, federal involvement in combating illegal drugs began with the CSA,¹³⁸ which was passed under the rationale that preventing interstate and international trafficking of drugs was a proper exercise of Congress's power to regulate matters of commerce.¹³⁹ By monitoring and restricting access to meth ingredients, both the CSA and the CMEA demonstrate federal involvement in the pre-stages of meth manufacture.¹⁴⁰ Similarly, cleanup of meth labs could fold into the comprehensive drug regulation scheme. If the federal government has chosen to regulate the distribution of precursor chemicals, intervening before the crime of meth cooking has even occurred, it ought to consider extending its authority to the post-stages of meth manufacture and use: namely, remediation.

Indeed, the DEA has already ventured into the territory of meth remediation. It offers, for example, an online register listing clandestine laboratories in every state,¹⁴¹ and a handbook of lab cleanup guidelines that was updated as late as 2005.¹⁴² The DEA claims cleaning up contaminated labs is "beyond the expertise of law enforcement," yet promises it is "committed to working with states and local agencies, as well as other

¹³⁸ See *supra* Part II.A.1.

¹³⁹ See generally 21 U.S.C. § 801(3) (2006); *Gonzales v. Raich*, 545 U.S. 1 (2005).

¹⁴⁰ See 21 U.S.C. § 801 (1006); Combat Methamphetamine Epidemic Act of 2005, Pub. L. No. 109-177, §§ 701–756, 120 Stat. 256 (2006).

¹⁴¹ *National Clandestine Laboratory Register*, DRUG ENFORCEMENT ADMIN., <http://www.justice.gov/dea/clan-lab/clan-lab.shtml> (last visited Feb. 1, 2014).

¹⁴² See generally DRUG ENFORCEMENT ADMINISTRATION, U.S. DEPT OF JUSTICE, GUIDELINES FOR LAW ENFORCEMENT FOR THE CLEANUP OF CLANDESTINE DRUG LABORATORIES (2005), <http://justice.gov/dea/resources/img/redbook.pdf> (the "redbook" guidelines were developed and published in cooperation with the EPA and the U.S. Coast Guard.).

experts in the field of public health, to ensure that the contamination found at illegal drug laboratories is properly handled.”¹⁴³ Contrary to the DEA’s belief that issuing cleanup guidelines “accomplish[es] that goal,”¹⁴⁴ the gaps and inconsistencies apparent in the overall response to unremediated labs suggests that the contamination is not being properly handled.

C. *Meth Lab Remediation Is an Extension of U.S. Environmental Policy*

Regulating cleanup methods and contamination levels during the meth remediation process is a proper role for EPA. From a broad perspective, EPA exists to “ensure that . . . all Americans are protected from significant risks to human health and the environment where they live, learn and work.”¹⁴⁵ In accomplishing this goal EPA, among other things, is involved in conducting research, writing regulation, and enforcing minimum levels of environmental quality.¹⁴⁶ When it comes to the issue of meth manufacture, American communities need EPA engagement in the meth remediation gaps simply because such gaps result in significant risks to health and environment. Actions needed include more research conducted on remediated and unremediated meth labs;¹⁴⁷ regulation that establishes the best methods for actual cleanup activities; and enforcement of baseline levels of meth contamination.

IV. ESTABLISHING A FLOOR: COUNTER-ARGUMENTS

The counter-argument that the status quo ought to be preserved can rely on numerous assertions: that the environmental impact of unremediated meth labs is a local matter, that allowing states to choose whether to have minimum remediation standards does not undermine environmental interests, and that gaps in the remediation process will, with time, work themselves out in the various states.

¹⁴³ *Id.* at 3 (“In developing the DEA Clandestine Drug Laboratory Cleanup Program, EPA and DEA acknowledged that residual cleanup of contaminated sites was beyond the expertise of law enforcement.”).

¹⁴⁴ *Id.*

¹⁴⁵ *Our Mission and What We Do*, *supra* note 52.

¹⁴⁶ *Id.*

¹⁴⁷ VOLUNTARY GUIDELINES FOR METHAMPHETAMINE LABORATORY CLEANUP, *supra* note 54, at 6.

A. *Meth Remediation Is a Purely Local Matter*

Intuitively, the environmental impact of unremediated meth labs may seem nothing more than a local issue. Under this argument congressional legislation could be considered overreach and improper federal interference. Yet, legislative and administrative history supports the idea that environmental regulation is not purely local but also an issue of national importance. The establishment of the EPA by the Reorganization Plan Number 3 suggests that America values federal environmental protection.¹⁴⁸ Indeed, promoting the enhancement of the environment has expressly been a key United States policy since 1969, when the National Environmental Policy Act (“NEPA”) was passed.¹⁴⁹ Some might argue that granting states a choice in whether to pass meth remediation legislation does not cause environmental interests to be undermined.¹⁵⁰ Yet, if given a choice whether to participate in regulating environmental interests, states may engage in a “race to the bottom” in order to cut costs.¹⁵¹ Even if remediation itself ought to be a core function of state and local government, the federal government still might establish minimum cleanup standards.

B. *Let the Gaps Work Themselves Out*

One counter-argument proposal involves accepting the current meth remediation status quo and letting the gaps between state policies work themselves out. This argument rests on a variety of assumptions: that the states’ failure to adopt adequate meth remediation laws does not necessitate federal meth remediation laws,¹⁵² and that state solutions are more effective than federal environmental regulation.¹⁵³ Perhaps the most compelling argument for this position lies in the fact that state budgets may be too stretched right now to implement or support meth lab remediation legislation. Proponents for the status quo might further point out that since no two states are identical, each state needs to have

¹⁴⁸ Reorganization Plan No. 3 of 1970, 35 Fed. Reg. 15,623 (Oct. 6, 1970).

¹⁴⁹ See 42 U.S.C. § 4321 (2006) (declaring the purpose of NEPA is “[t]o declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man.”).

¹⁵⁰ See Richard L. Revesz, *Federalism and Environmental Regulation: A Public Choice Analysis*, 115 HARV. L. REV. 553, 555 (2001).

¹⁵¹ See Saleska & Engel, *supra* note 135, at 55–56.

¹⁵² See Adler, *supra* note 132, at 94, 108.

¹⁵³ *Id.*

the flexibility to fashion solutions unique to its own situation. The ability to customize is essential, especially in the context of budget cuts and a poor economy.

However, an across-the-board minimum remediation standard is not an issue states need flexibility to customize. Clean is clean. Many states accept federal funds to combat the meth problem.¹⁵⁴ This suggests they should also accept and conform to minimum remediation standards.

V. METH REMEDIATION STRATEGY PROPOSALS

A. *Require States to Make Pseudoephedrine a Prescription Drug*

Combating the present existence and future growth of domestic meth labs and the environmental havoc they wreak will involve limiting citizen access to certain precursor chemicals. As one scholar argues, “encouraging more states to make pseudoephedrine a prescription drug, or at a minimum adopt the full Oklahoma rule. If the purity of drug cartel meth continues to decline, there will be even more incentive for group smurfing and small toxic meth labs.”¹⁵⁵ Looking forward, preventing domestic meth production may require the government to keep an eye on evolving methods of cooking and adjust anti-smurfing laws accordingly.¹⁵⁶ The “shake and bake” method of meth manufacture requires small, legal quantities of pseudoephedrine.¹⁵⁷ Ultimately, the most effective strategy to counteract the environmental harm caused by contaminated labs lies in discouraging and preventing the manufacture of meth in the first place.¹⁵⁸

B. *Make EPA Voluntary Guidelines Mandatory*

In order to address the discrepancies between contaminated lab cleanup practices among the states the United States government should

¹⁵⁴ See COMMUNITY ORIENTED POLICING SERVS., U.S. DEP’T OF JUSTICE, 2010 COPS METH-AMPHETAMINE INITIATIVE GRANT OWNER’S MANUAL (2010), available at http://cops.usdoj.gov/pdf/meth-tech2010/e061023290-METH-GOM_102810.pdf.

¹⁵⁵ Bovett, *supra* note 64, at 1213.

¹⁵⁶ See Raphael S. Nemes, *Shake and Bake: The Meth Threat and the Need to Rethink 21 U.S.C. § 841(c)(2)*, 88 WASH. U. L. REV. 993, 1014 (2011).

¹⁵⁷ *Id.* at 999 (“Using pseudoephedrine purchased at stores in legal amounts by so-called ‘smurfs,’ methamphetamine users are able to create their own addictive product on their own ‘at nearly any location.’”).

¹⁵⁸ See *supra* Part II.A.1.

consider making the EPA guidelines,¹⁵⁹ or an updated version thereof,¹⁶⁰ mandatory. Allowing adoption of vital cleanup practices to be voluntary undermines meth remediation reform.¹⁶¹ In the end, an anemic federal cleanup practice policy will fail to adequately remediate meth labs in communities across the United States.

C. *Set Minimum Contamination Levels for Hazardous Waste and Chemical Residue*

Finally, the federal government should consider setting minimal acceptable levels for certain types of contamination. First, this policy should include the elimination of hazardous waste and contaminated items such as clothes or furniture. Secondly, this policy should include caps on the presence of the most harmful chemical residues, including methamphetamine,¹⁶² ephedrine, pseudoephedrine, volatile organic compounds,¹⁶³ lead,¹⁶⁴ mercury,¹⁶⁵ phosphorous, iodine, and corrosives.¹⁶⁶

CONCLUSION

The federal government should establish a national floor for methamphetamine lab remediation. These requirements should include

¹⁵⁹ See VOLUNTARY GUIDELINES FOR METHAMPHETAMINE LABORATORY CLEANUP, *supra* note 54, at 4.

¹⁶⁰ EPA PROGRESS ON THE 2007 METHAMPHETAMINE REMEDIATION RESEARCH ACT, *supra* note 21 (suggesting that an update of the *Voluntary Guidelines for Methamphetamine Laboratory Cleanup* is long overdue).

¹⁶¹ See Harmon, *supra* note 1, at 473 (“[V]oluntary adoption of the guidelines ultimately developed by the EPA is a serious deficiency.”).

¹⁶² See Nesteroff, *supra* note 27, at 14 (indicating the standard acceptable level for methamphetamine hovers around 0.1 micrograms of meth residue per 100 square centimeters).

¹⁶³ See, e.g., *An Introduction to Indoor Air Quality (IAQ): Volatile Organic Compounds (VOCs)*, EPA, <http://www.epa.gov/iaq/voc.html> (last updated July 9, 2012) (“VOCs include a variety of chemicals, some of which may have short- and long-term adverse health effects.”).

¹⁶⁴ See, e.g., *Learn About Lead: What Is Lead?*, EPA, <http://www2.epa.gov/lead/learn-about-lead#lead> (last updated July 22, 2013) (stating that lead “can be toxic to humans and animals causing . . . health effects.”).

¹⁶⁵ See, e.g., *Mercury: Basic Information*, EPA, <http://www.epa.gov/mercury/about.htm> (last updated July 9, 2013) (“Exposures to mercury can affect the human nervous system and harm the brain, heart, kidneys, lungs and immune system.”).

¹⁶⁶ EPA, HAZARDOUS WASTE CHARACTERISTICS: A USER-FRIENDLY REFERENCE DOCUMENT 5 (2009), available at <http://www.epa.gov/osw/hazard/wastetypes/wasteid/char/hw-char.pdf> (noting that “[c]orrosive wastes are acids or bases (pH less than or equal to 2, or greater than or equal to 12.5) and/or are capable of corroding metal containers, such as storage tanks, drums, and barrels.”).

strict regulation of precursor chemicals, certain mandatory cleanup practices, and minimum contamination levels for hazardous waste and chemical residue. The status quo has failed to prompt over half of the states to address the environmental problem of contaminated meth labs.¹⁶⁷ Ideally, every property where meth is cooked needs to be cleaned up and restored to a certain level of environmental safety.

¹⁶⁷ VOLUNTARY GUIDELINES FOR METHAMPHETAMINE LABORATORY CLEANUP, *supra* note 54, at 7.