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The EPA's Proposed Phase-III Expansion of the Toxic Release Inventory (TRI) Reporting Requirements: Everything and the Kitchen Sink

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NOTES AND COMMENTS

The EPA's Proposed Phase-III Expansion of the Toxic Release Inventory (TRI) Reporting Requirements: Everything *and* the Kitchen Sink

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As the Toxic Release Inventory (TRI) program continues to expand, we must ask if it is headed in the right direction.

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This article is dedicated in memory of Arthur and Lenora Grady, my grandparents, who started me on my lifelong love of reading and learning. In addition, I thank Dr. Kelly Rankin and Ray Merrell, who encouraged me in the study of environmental sciences, Linda Doucette-Ashman, Esq. and Dr. William Goldfarb, Esq., who introduced me to the study of environmental law, my friends at Pace University School of Law, and my co-workers at Cytec Industries Inc., especially Rick Tabakin, who helped me select this paper topic, and "Hawk Eye" Karen Koster, Esq. for donating her red ink to my many drafts.

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I. Introduction

This Comment examines the Environmental Protection Agency's (EPA's) proposed expansion of the Toxic Release Inventory (TRI) reporting requirements under section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986.¹ The TRI program, under the directive of the EPA, provides information to the public about chemicals released into the environment by certain industrial facilities.² On October 1, 1996, the EPA issued an Advanced Notice of Proposed Rulemaking (ANPR), announcing its intent to expand the TRI reporting requirements to include "materi-

1. EPCRA § 313, 42 U.S.C. § 11,023 (1997).

2. *See id.*

als accounting” (MA) data elements.³ This proposed expansion is the last step in the EPA’s three-tiered expansion of the TRI program.⁴

MA is a system of analysis that tracks the flow of chemicals through a facility’s many processes in order to provide interested parties a full understanding of how chemicals are used at the facility.⁵ MA data is described by the EPA as both qualitative and quantitative information regarding how a facility uses chemicals throughout its processes.⁶ In its simplest terms, MA tracks the lifecycle of a chemical through the facility, from raw material to product.

Industrial facilities currently reporting under the TRI program adamantly oppose the addition of MA reporting requirements because they believe that the scope of MA reporting is unjustifiably extensive.⁷ MA reporting would require regulated industries to report the amounts of TRI-regulated chemicals coming into the facility, the amounts transformed into products and wastes, and the resulting amounts leaving the facility.⁸ In other words, *regulated* facilities would be required to report “everything *and* the kitchen sink.”⁹

On the other hand, environmental advocacy groups have constantly pushed for the dissemination of more information

3. See Addition of Reporting Elements; Toxic Chemical Release Reporting; Community Right-to-Know Part II, 61 Fed. Reg. 51,322 (1996).

4. See *id.*

5. See EPA, OFFICE OF POLLUTION PREVENTION AND TOXICS, ISSUES PAPER #3 30 (1996) [hereinafter EPA’s ISSUES PAPER #3]. The terms “materials accounting” and “chemical use accounting” are used interchangeably. See *id.* For the sake of clarity and consistency, this Comment will exclusively use the term “material accounting” (MA). MA reporting is discussed in greater detail in Part III.A.1 of this Comment.

6. See 61 Fed. Reg. at 51,324.

7. See EPA, OFFICE OF POLLUTION PREVENTION AND TOXICS, ISSUES PAPER #2 6 (1995) [hereinafter EPA’s ISSUES PAPER #2].

8. See 61 Fed. Reg. at 51,324.

9. The author of this Comment has used this phrase to highlight the expansiveness of the proposed scope of MA reporting requirements. Indeed, even a facility’s kitchen sink (assuming it is connected with a lead pipe) would be available public information under MA reporting. Lead is a TRI-reportable chemical under EPCRA. See Chemicals and Chemical Categories to which this Part Applies, 40 C.F.R. § 372.65 (1997).

through the TRI program since its inception.¹⁰ These groups support the collection of MA data because they believe there are gaps in the current reporting requirements.¹¹ These perceived gaps in the current program have inspired congressional response proposing to expand the TRI program; often, this activity is referred to as the "right-to-know *more*" initiative.¹² It is understandable that environmental advocacy groups support expanding the TRI program: the current program is considered extremely successful by industry, environmental groups, and the EPA. For example, reported toxic chemical emissions have decreased over 40% since 1988.¹³ However, as the opening quote of this Comment suggests, it is important to evaluate whether the EPA's Phase-III expansion is an appropriate and needed expansion.

The purpose of the TRI program is to track chemical releases within communities, so citizens are aware of health and safety risks from the chemicals released within their communities.¹⁴ The EPA's proposal to collect MA data would fundamentally change the current TRI program from a program tracking chemical releases within communities into a program requiring information from a facility about *how* the facility *uses* chemicals *within* its industrial processes.¹⁵ Moreover, this fundamentally different program being proposed by the EPA lacks any clear statutory authority.¹⁶ The

10. See Jacqueline M. Warren, *Problems Encountered with Confidentiality Bars on Toxic Substances Disclosure Imposed by Federal Environmental Statutes*, 2 N.Y.U. ENVTL. L. J. 292, 299 (1993).

11. See EPA's ISSUES PAPER #3, *supra* note 5, at 3.

12. For example, in 1992, "Right-to-Know More" bills were introduced by Senator Lautenberg in the Senate, see S. 2123, 102nd Cong. (1992), and by Congressman Silorski in the House, see H.R. 2880, 102nd Cong. (1992). Neither of the bills were enacted; however, EPA's commitment to the expansion of the TRI program can be interpreted as part of this "right-to-know more" initiative. See generally 61 Fed. Reg. at 51,322.

13. See *Toxic Chemical Releases Drop 8.6 Percent in 1994*, EPA Report Says, Chem. Reg. Rep. (BNA) 1 (June 28, 1996).

14. See EPCRA § 313, 42 U.S.C. § 11,023 (1997).

15. See 61 Fed. Reg. at 51,324 (emphasis added).

16. EPA's authority to expand the TRI to include MA data is not clear and has been raised as a serious issue by numerous groups in opposition to the Phase-III expansion. See CHEM. MANUF. ASS'N., SECOND DRAFT OF CMA COMMENTS ON EPA'S ANPRM ON TRI PHASE 3 EXPANSION 22 (1996) [hereinafter

original intent of TRI reporting was to track risk-related releases and waste generation.¹⁷ Now the EPA desires to use TRI reporting to understand how chemicals are used by industry.¹⁸ This Comment advocates that the collection of MA data is an unjustified, fundamental change in the TRI program that is not in harmony with the intent or purpose of EPCRA.

Information enthusiasts may cheer the release of more information; however, three issues must be addressed before the TRI reporting requirements can be fundamentally changed. First, an appropriate balance between the public's right to information versus private intellectual property rights must be determined. Second, the expansion must be in harmony with the original purpose of EPCRA's TRI program, which was to provide the public with meaningful information regarding the risk from chemicals released within their community.¹⁹ Third, the EPA must obtain legal authority to collect MA data. This Comment addresses these three issues and concludes that the proposed expansion is not in harmony with the intent or purpose of the EPCRA TRI program, nor does it provide sufficient intellectual property protection for reporting facilities. Furthermore, this Comment suggests that the EPA should focus its attention on improving the public's understanding of the currently collected information before hastily collecting more data.

Part II of this Comment contains background information on EPCRA and the TRI program since its first reporting year in 1987. Part II.A introduces the Community Right-to-Know provision of EPCRA and explains the events, as well as the idealistic beliefs, that motivated Congress to enact this provision. The specific reporting requirements and the EPA's continuous expansion of these requirements are discussed in

CMA COMMENTS]. See *infra* Part IV.A of this Comment for a detailed analysis on EPA's alleged authority for its proposed Phase-III expansion.

17. See Sidney M. Wolf, *Fear and Loathing about the Public Right to Know: The Surprising Success of the Emergency Planning and Community Right-to-Know Act*, 11 J. LAND USE & ENVTL. L. 217, 219 (1996) [hereinafter Wolf].

18. See 61 Fed. Reg. at 51,324.

19. See *infra* Part II.A for a discussion of the original intent and purpose of EPCRA's TRI reporting.

Part II.B. How TRI data is used, and by whom, is also discussed in this section. Part II.C discusses the fundamentals of Confidential Business Information (CBI) and Phase-III's potential harm to CBI.

Part III discusses the EPA's October 1, 1996 ANPR and the political pressures the EPA faces in trying to complete this Phase-III expansion of the TRI program. MA and the existence of other MA data collection programs, such as the Massachusetts and New Jersey "pilot" programs are explained in Part III.A. Part III.B highlights the Clinton Administration's desire to expand the TRI program.

Part IV contains a critical analysis of the EPA's proposed expansion, focusing on the three issues previously mentioned. Specifically, Part IV.A discusses whether the proposed expansion is in harmony with the intent and purpose of EPCRA and whether the EPA has statutory authority for the collection of MA data. Part IV.B discusses the usefulness of MA data for the purposes of the TRI program. Finally, Part IV.C discusses whether the EPA's proposal provides sufficient protection of intellectual property rights owned by reporting facilities.

Part V concludes that the EPA's proposed Phase-III expansion is not consistent with the intent or purpose of EPCRA and that the EPA lacks statutory authority for the collection of MA data. In addition, this Comment concludes that the collection of MA data is not useful for purposes of the TRI program and jeopardizes the intellectual property rights of reporting facilities.

II. Background

A. EPCRA's Community Right-to-Know Provision, Section 313

For those unfamiliar with the constantly increasing environmental jargon, the phrase "right-to-know" is a generic term applied to a variety of laws and policies addressing the disclosure of chemical hazard information to populations at

risk.²⁰ In the context of this Comment, "right-to-know" refers to section 313 of EPCRA. EPCRA's purposes are twofold: (1) to provide the public with information about toxic chemicals released in their communities and (2) to establish emergency planning and notification procedures for communities.²¹ The purpose of releasing this information is to understand the risks from chemical releases and to prepare local communities for an emergency response if ever an accident involving these regulated chemicals were to occur.

1. The Grassroots Movement

Community right-to-know started as a strong grassroots movement in which citizens demanded that information be provided to communities regarding toxic chemical releases.²² This grassroots movement was fueled by community members who witnessed tragic environmental chemical accidents such as the one in Bhopal, India,²³ and Love Canal in Niagara Falls, New York.²⁴ The fear that similar tragic events

20. See Gary Rischitelli, *International Environmental Law Symposium Essay: Developing a Global Right to Know*, 2 ILSA J. INT'L & COMP. L. 99, 109 (1995).

21. See EPCRA § 301-313, 42 U.S.C. §§ 11,001-11,023 (1997). See also ENVIRONMENTAL LAW INSTITUTE, COMMUNITY RIGHT-TO-KNOW DESKBOOK 5 (1988).

22. See Wolf, *supra* note 17, at 217.

23. See *id.* In 1984, in Bhopal, India, a chemical plant exploded releasing methyl isocyanate gas which killed 2000 people. See Steven J. Christiansen & Stephen H. Urquhart, *The Emergency Planning and Community Right to Know Act of 1986: Analysis and Update*, 6 BYU J. PUB. L. 235 (1992). The Bhopal tragedy was a major catalyst for the enactment of EPCRA; in fact, in less than two years following the tragedy, EPCRA was enacted. See *id.*

24. Love Canal, a toxic waste disposal site, has become the foremost example of the extreme hazards that can occur from improper management and disposal of toxic waste. See Book Note, *1984 Survey of Books Relating to the Law*, 82 MICH. L. REV. 849 (1984) (reviewing ADELIN GORDON LEVINE, LOVE CANAL: SCIENCE, POLITICS, AND PEOPLE (1982)). Love Canal, an empty canal that was originally excavated in the 1990s for hydroelectric power, was used as a toxic waste dump from 1942 through 1953 by the Hooker Chemical Corp. See *id.* Over 21,000 tons of used chemicals were dumped in the canal. See *id.* Once full, the canal—that is now land—was sold by Hooker Chemical Corp. to the Niagara Falls school board for one dollar. See *id.* Poor land planning resulted in a school, as well as residential housing, being built on this land. See *id.* As one could predict, the presence of these underlying chemicals soon became apparent when sludge seeped into basements and emitted toxic fumes. See *id.* By

could happen in *their* backyard motivated community members to start questioning exactly what was happening in their backyard.²⁵

EPCRA codified the goal of the community grassroots movement by giving the EPA the authority to gather toxic chemical release information and to disseminate this information to the public.²⁶ This information, the TRI, is derived from annual reports submitted to the EPA by regulated industries.²⁷ These reports, called Form Rs, contain the total annual amount of toxic chemicals directly released to air, water, or land by the regulated facilities.²⁸ The EPA compiles these annual reports into an inventory, the TRI, and makes the information available to the public.²⁹

Under EPCRA, the EPA was required to make TRI information accessible through an on-line database system.³⁰ The EPA has met this mandate³¹ by incorporating the TRI database into the National Library of Medicine's Toxicology Data Network (TOXNET), an on-line computerized database system, and more recently, access via the Internet.³² Provid-

the late 1970s, over 500 families were evacuated and \$20 million spent in emergency funding to rectify this disaster. *See id.*

25. *See* Wolf, *supra* note 17, at 217.

26. *See* EPCRA § 313, 42 U.S.C. § 11,023 (1997).

27. *See id.*

28. *See id.*

29. *See id.*

30. *See id.* § 313(j), 42 U.S.C. § 11,023(j).

31. EPA has more than fulfilled its duty regarding public access to TRI information. For example, EPA provides telephone assistance service for use of the TRI database. *See* EPA, *Accessing and Using Toxic Release Inventory Data* (visited Sept. 30, 1997) <<http://www.epa.gov/opptintr/tri/tri/access.htm>>. This service includes the TRI-US Service, in which specialists provide information about the TRI and access to the various data formats. *See id.* Additionally, there is an EPCRA Hotline toll free number (800) 424-9346 that provides regulatory, policy, and technical assistance to interested parties in response to questions concerning EPCRA. *See id.* EPA has also developed other databases and electronic bulletin boards, in addition to those previously mentioned. *See id.* One database is TRI-FACTS, which provides information related to health and ecological effects and safety and handling information for TRI chemicals. *See id.*

32. *See* Bradley P. Hartman, *Database Review: Toxic Chemical Release Inventory Database*, 1 ENVTL. L. 941 (1995). TOXNET is a compilation of computer files containing information regarding the toxicology of hazardous

ing the public with access to chemical release information on-line was revolutionary; however, the most utilized form of the TRI information is the EPA's annually published reports.³³ The annual reports provide an analysis and comparison of the TRI data, year-by-year, and include a summary of the total releases and transfers of the TRI-regulated chemicals, the geographic distribution of the TRI releases and transfers, the industrial patterns of releases and transfers, and information regarding the interstate/intrastate transportation of wastes.³⁴ The first Form Rs were submitted on July 1, 1988, and have since been annually reported.³⁵ Typically, there is a two-year lag between the time regulated facilities submit their annual toxic release information and the EPA's publication of its report.³⁶

2. "Information is the Fountainhead of Democracy"³⁷

Thomas Jefferson advocated that citizens who were provided with timely and accurate information, would make informed decisions and take the necessary actions to improve the communities in which they lived and worked.³⁸ The supporters of EPCRA believed in this Jeffersonian idealism, agreeing that the dissemination of chemical release information would empower concerned citizens.³⁹ The EPA sup-

chemicals. *See id.* TRI data can be accessed through the Internet. EPA's TRI Home Page is at <<http://www.epa.gov/opptintr>>.

33. *See id.*

34. *See* EPCRA § 313, 42 U.S.C. § 11,023.

35. *See id.* § 313(a), 42 U.S.C. § 11,023(a).

36. Due to the numerous facilities reporting releases, a time lag occurs between the collection of the TRI Forms and the subsequent compilation and dissemination of a report to the public. For example, in the 1995 reporting year, over 21,000 facilities filed over 73,000 TRI forms. *See* EPA, 1995 TRI Public Data Release Overview (visited Sept. 30, 1997) <<http://www.epa.gov/opptintr/tri/pdr95/drover01.htm>>.

37. *See* Robert W. Shavelson, *EPCRA, Citizen Suits and the Sixth Circuit's Assault of the Public's Right-to-Know*, 2-FALL ALB. L. ENVTL. OUTLOOK 29 (1995) [hereinafter Shavelson].

38. *See* Eyler Robert Coates, Sr., *Thomas Jefferson on Politics & Government* (visited Oct. 5, 1997) <http://pages.prodigy.com/J/E/S/jefferson_quotes/jeff0750.htm>.

39. *See* 137 CONG. REC. E2516-04 (daily ed. July 11, 1991) (extension of remarks by Rep. Sikorski introducing the Community Right-to-Know-More Act of

ported this approach because in its experience, the release of information motivated citizens to demand reduction of risks in their community.⁴⁰ One cannot argue that the release of information in today's electronic information age has not brought significant results.⁴¹ For example, the most recent TRI data published in 1995 shows a decline of 5% in reported TRI chemical releases from the prior year.⁴² In addition, since reporting began in 1988, overall toxic releases have declined by 44.1%.⁴³

It is also difficult to argue that the release of information in the form of "stark naked numbers" does not prompt action.⁴⁴ When the first TRI reports were published in 1988, corporate officials were shocked by the total amount of toxic chemicals released by their companies each year.⁴⁵ These "stark naked numbers" shocked consumers as well as stockholders and each began to hold companies accountable: consumers, through purchasing decisions based on environmental responsibility, and shareholders, through voting and/or selling their shares.⁴⁶ Environmental issues are

1991). See also *Risky Business: OSHA's Hazard Communication Standard, EPA's Toxic Release Inventory, and Environmental Safety*, 22 E.L.R. 10,440 (1992) [hereinafter *Risky Business*].

40. See *Risky Business*, *supra* note 39, at 10,440.

41. See *id.*

42. See EPA, 1995 TRI Public Data (visited Sept. 30, 1997) <http://www.epa.gov/opptintr/tri/pdr95/drover01.htm>.

43. See *Hazardous Substances: Toxic Chemical Releases Drop 8.6 Percent in 1994, EPA Report Says*, Chem. Reg. Daily (BNA) 1 (June 28, 1996). Since 1988, releases into air have declined by more than 40%; releases into waterways 73%; releases to land 41%; and use of underground injection has declined by 51%. See *id.*

44. The author of this Comment has used the phrase "stark naked numbers" to describe the revealing nature of publicly disclosed chemical release information. These total amounts can be very revealing, so revealing that industry has been "embarrassed into action." See Mary Beth Regan, *An Embarrassment of Clean Air*, Bus. Wk., May 31, 1993, at 34. For example, Monsanto Company was embarrassed into action by the first TRI reports showing Monsanto Company to be a top air polluter. See *id.* The vice-chairman of Monsanto Company at the time stated, "[w]e knew the numbers were high, and we knew the public wasn't going to like it." See *id.* As a result, when the TRI numbers were publicly released, Monsanto promised to reduce its releases of TRI chemicals by 90% by 1992. See *id.*

45. See Shavelson, *supra* note 37, at 29.

46. See *id.*

very important in today's economic market; in fact, negative publicity prompts corporations to take action to decrease emissions of chemicals. These factors, combined with publicly available TRI data, create motivation for companies to reduce toxic releases to avoid negative publicity.⁴⁷ This release of information creates accountability that promotes efforts to improve environmental performance, yet allows flexibility in finding solutions.⁴⁸ This is the success of the TRI program, changing behavior without costly "command and control" regulations.

It is not surprising that the EPA considers the TRI program to be one of its most effective tools for environmental improvement.⁴⁹ Much of the TRI program's success can be attributed to Congress' recognition that citizens play a critical role in supplementing the EPA's enforcement.⁵⁰ Through the years, it became painfully clear to Congress that citizens are an integral part of enforcing environmental laws, so much so that Congress included citizen suit provisions in nearly every major environmental legislation passed since 1970, including EPCRA.⁵¹

47. See *CMA Advises Firms to Go Beyond Compliance with Title III Mandates to Avoid Problems*, 18 Env't Rep. (BNA) 1327 (Sept. 11, 1987). CMA advised its industry members that if the chemical industry could not explain to the public its TRI data, the public would demand stricter environmental legislation. See *id.* at 1328.

48. See EPA's ISSUES PAPER #3, *supra* note 5, at 18.

49. For example, the chemical industry reported that total TRI chemical releases from 1988 to 1995 decreased by 488 million pounds. See EPA, 1995 *Public Data Release Overview* (visited Sept. 30, 1997) <<http://www.epa.gov/opptintr/tri/pdr95/drover01.htm>>. In addition, federal facilities that began reporting in 1994 reported a two million-pound reduction from the previous year. See *id.*

50. See Shavelson, *supra* note 37, at 29.

51. See *id.* See also, e.g., EPCRA § 326, 42 U.S.C.A. § 11,046 (1997); Clean Water Act § 505, 33 U.S.C. § 1265 (1997); Toxic Substances Control Act § 20, 15 U.S.C. § 2619 (1997); Endangered Species Act § 11(g), 16 U.S.C. § 1540(g) (1997).

B. TRI Reporting Requirements

1. The Form R

Section 313 of EPCRA is arguably the most important provision of the statute because it requires facilities to report total releases, or “stark naked numbers.” Section 313(a) of EPCRA requires regulated facilities to file annual reports containing four specific data elements listed in section 313(g) for each regulated chemical manufactured, processed, or otherwise used at the facility in amounts above the statutorily set threshold levels.⁵² The facility is required to annually report the total amounts of TRI-regulated chemicals released into the air, surface water, and soil as well as any transfers of these chemical to offsite locations.⁵³

Facilities submit their chemical release information on the Form R. The Form R requires the following information: the facility name and the toxic chemical manufactured, processed, or used at the facility; the amount of toxic chemicals released offsite and any onsite waste treatment; and source reduction and recycling activities.⁵⁴ As discussed in

52. *See* EPCRA § 313(g), 42 U.S.C. § 11,023(g). The four data elements regulated facilities are required to report are:

- (i) Whether the toxic chemical at the facility is manufactured, processed, or otherwise used, and the general category or categories of use of the chemical.
- (ii) An estimate of the maximum amounts (in ranges) of the toxic chemical present at the facility at any time during the preceding calendar year.
- (iii) For each waste stream, the waste treatment or disposal methods employed, and an estimate of the treatment efficiency typically achieved by such methods for that waste stream.
- (iv) The annual quantity of the toxic chemical entering each environmental medium.

See id.

53. *See* EPCRA § 313(g)(1)(C)(iii)-(iv), 42 U.S.C. § 11,023(g)(1)(C)(iii)-(iv). Offsite locations are defined as public sewers or waste treatment, storage or disposal facilities. *See id.* Additionally, the reported information must specify the destination of the offsite transfer. *See id.*

54. *See* EPCRA § 313(g), 42 U.S.C. § 11,023(g). In 1990, the Pollution Prevention Act (PPA) expanded TRI reporting requirements by requiring reporting of onsite and offsite transfers, as well as source reduction, recycling and waste minimization efforts by the facility. *See* PPA § 6602-6610, 42 U.S.C. §§ 13,101-

Part III.A of this Comment, the EPA's proposed MA collection would dramatically expand the current four reporting requirements to include information about the facility's entire process.

The first Form Rs were collected in 1988 for 1987 releases.⁵⁵ Facilities have since been required to submit their Form Rs by July 1st of the current year for the prior year's releases.⁵⁶ Currently, more than 20,000 facilities file annual TRI reports.⁵⁷ Once the EPA collects the information, it must make the TRI available in a computer database.⁵⁸ The TRI database was the first federally required computerized database that publicly released the amounts of toxic chemicals released into each environmental media (i.e. air, water, land).⁵⁹ Utilization of the computerized TRI database is discussed in more detail in Part II.B.3 of this Comment.

2. TRI-Regulated Industries and Chemicals

A facility is required to report its chemical releases if it is a manufacturer with a Standard Industrial Classification (SIC) code 20 through 39,⁶⁰ employs ten or more full-time workers,⁶¹ and manufactures, processes, imports or otherwise uses TRI-regulated chemicals above yearly threshold amounts.⁶²

13,109 (1997). Additionally, the PPA removed EPCRA's original one-time accidental release exclusion. *See id.*

55. *See* EPA, *Toxics Release Inventory: Community Right-to-Know* (visited Oct. 5, 1997) <<http://www.epa.gov/opptintr>>.

56. *See* EPCRA § 313(a), 42 U.S.C. § 11,023(a).

57. *See* EPCRA: *Proposed Rule on TRI Chemical Use Data Requirements Slated for Late 1997*, Nat. Env't. Daily (BNA) 1 (Dec. 4, 1996).

58. *See* Wolf, *supra* note 17, at 230 n.67.

59. *See id.* at 230.

60. *See* EPCRA § 313(b)(1)(A), 42 U.S.C. § 11,023(b)(1)(A). SIC codes numbers 20 through 39 are predominately manufacturing facilities. For example, SIC code number 20 indicates a manufacturer of tobacco products and SIC code number 25 indicates a manufacturer of furniture and fixtures. *See id.* The reporting requirements only apply to SIC codes for facilities which manufacture, process or use toxic chemicals. *See id.* § 313(b)(1)(B), 42 U.S.C. § 11,023(b)(1)(B).

61. *See id.* § 313(b)(1)(A), 42 U.S.C. § 11,023(b)(1)(A).

62. *See id.* § 313(f)(1), 42 U.S.C. § 11,023(f)(1). The TRI reportable yearly threshold amounts are listed in Thresholds for Reporting, 40 C.F.R. § 372.25

"Toxic chemical," for purposes of TRI reporting, is defined in section 313(c) of EPCRA as chemicals that are listed in 40 C.F.R. § 372.65.⁶³ The frequent additions and deletions from the list are first published in the Federal Register and subsequently codified at 40 C.F.R. § 372.65. The EPA has the authority to add or delist chemicals through its rulemaking process.⁶⁴ Additionally, any citizen can petition the EPA to add or delist chemicals on the list.⁶⁵ Presently, there are approximately 647 chemicals and 22 chemical categories listed as TRI-reportable chemicals.⁶⁶ Since the inception of TRI reporting, the number of listed TRI chemicals has increased from 329 to 647.⁶⁷

Chemicals are added to the TRI-reportable chemical list if the EPA determines that the chemical causes, or can reasonably be anticipated to cause, any of three problems: (1) significant adverse human health effects beyond the boundaries of the plant; (2) cancer, birth defects, serious or irreversible reproductive dysfunctions, neurological disorders, heritable genetic mutations, or other chronic effects, whether they occur inside or outside the boundaries of the plant; or (3) significant adverse effects on the environment.⁶⁸ The EPA's decision to list or delist a chemical must be based on generally accepted scientific principles or laboratory tests.⁶⁹

3. Utilization of TRI Data: Uses and Misuses

The varied and numerous uses of TRI data are probably far more than Congress or the EPA had ever envisioned when passing EPCRA. Although the TRI program began as a program to inform communities of local emissions, TRI data has

(1997). *See also* Alternate Threshold and Certification, 40 C.F.R. § 372.27 (1997).

63. *See* EPCRA § 313(c), 42 U.S.C. § 11,023(c).

64. *See id.* § 313(d)(1), 42 U.S.C. § 11,023(d)(1).

65. *See id.* § 313(e)(1), 42 U.S.C. § 11,023(e)(1).

66. *See* 40 C.F.R. § 372.65 (listing the current TRI reportable chemicals).

67. *See id.* In November 1994, EPA added 286 chemicals to the list of TRI reportable chemicals. *See* Addition of Certain Chemicals Toxic Community Release Reporting; Community Right-to-Know, 59 Fed. Reg. 61,432 (1994).

68. *See* EPCRA § 313(d), 42 U.S.C. § 11,023(d).

69. *See id.*

been utilized by environmental advocacy groups, the EPA, and the media to identify the need for changes to environmental regulations.⁷⁰ The EPA has used TRI data in its pollution prevention efforts, identifying pollution prevention priorities and correspondingly allocating its technical and financial resources.⁷¹ Database compilations, such as the EPA's Envirofacts database, have been created which allow users to query all reported TRI releases from 1987-1995.⁷² The query returns facility information as well as chemical reports that tabulate air emissions, surface water discharges, releases to land, underground injections, and transfers to off-site locations.⁷³ Searches can be customized by selecting from options including facility name, geographic location, standard industrial classification, and chemical names, allowing a user to determine the impacts of chemical releases in particular geographic areas.⁷⁴

A few other unanticipated and unconventional uses of TRI data includes the creation of the "Green Index," a state-by-state comparison of the Nation's environmental health, completed by researchers at the Institute for Southern Studies, which ranks the fifty states' environmental quality according to a sum of 256 indicators ranging from air and water pollution, transportation efficiency, and congressional leadership as well as "forests, fish and fun."⁷⁵ TRI data has also been used to determine if members of racial or ethnic minor-

70. See Eric M. Falkenberry, *The Emergency Planning and Community Right-to-Know Act: A Tool for Toxic Release Reduction in the 90's*, 3 BUFF. ENVTL. L. J. 1, 20-21, 26 (1995) [hereinafter Falkenberry].

71. See *id.* at 23-25. For example, in 1991, EPA announced its 33/50 Clean Air Act program which encouraged industries to voluntarily reduce emissions by 33% and 50% by 1992 and 1995 respectively. See *id.*

72. See EPA, *TRI Query Form* (visited Oct. 4, 1997) <http://www.epa.gov/enviro/html/tris/tris_query.html>.

73. See *id.*

74. See *id.* See also *EPCRA: Proposed Rule on TRI Chemical Use Data Requirements Slated for Late 1997*, Nat. Env't. Daily (BNA) 1 (Dec. 4, 1996).

75. See *Focus - Rankings: The "Green Index" Rates the States*, Greenwire, (American Political Network) 1 (Aug. 12, 1991). For example, the 1992 Green Index ranked the top three "green" states as Oregon (1), Maine (2), and Vermont (3), and the bottom three ranked states as Arkansas (48), Louisiana (49), and Alabama (50). See *id.*

ity groups, or persons of low-income, are being exposed to higher levels of toxic chemical releases as compared to non-minority members.⁷⁶ Finally, a number of states use the TRI data for tax and fee programs that charge for waste generation and chemical releases.⁷⁷

However, the most important use of TRI data clearly is the annual publication of "stark naked numbers," which motivates industry response, often in the form of promises to voluntarily reduce their toxic chemical emissions.⁷⁸ The publication of annual emissions data also enables environmental advocacy groups to successfully verify facilities' emissions for compliance with federal and state release permits and influence members of Congress to tighten or enact national and state pollution reduction legislation.⁷⁹

As successful as the utilization of TRI data has been, it has been subject to misuse.⁸⁰ The media is often seduced by TRI total numbers and release media blitzes that take the information out of context, and ultimately present an inaccurate picture of the actual public risk from chemicals.⁸¹ For example, the National Wildlife Federation releases its annual Toxic 500 list, which identifies the 500 "worst" polluters in the United States.⁸² Oversimplifications, such as the Toxic 500 list, are misuses of TRI data that result in an inaccurate

76. See Wolf, *supra* note 17, at 306. This research is called "environmental justice analysis." See *id.*

77. See *EPA Regulatory Impact Analysis for TRI Expansion Seriously Flawed*, CMA Charges, Chem. Regul. Daily 2 (BNA) (Apr. 15, 1994). Sixteen states require TRI reporters to pay fees based on pounds used at the facility. See *id.* For example, Massachusetts charges a base rate of \$1850 plus \$1100 per chemical reported. See *id.*

78. For example, the success of EPA's 33/50 program, which asked all industries subject to EPCRA's TRI reporting requirements to voluntarily reduce seventeen of the chemicals listed on the TRI database, can be accredited to the publication of "stark naked numbers." See Falkenberry, *supra* note 70, at 24-25.

79. See *id.* at 20-21, 26.

80. See Lynn L. Bergeson & Lisa M. Campbell, *Toxic Release Information May Be Misused Against You*, CORP. LEGAL TIMES, Oct. 19, 1995, at 1 (EPA's release of TRI data is followed by reports of environmental groups, which name the facilities and provide their own "spin" on the content of the report).

81. See Falkenberry, *supra* note 70, at 25-26.

82. See *id.*

communication of the risks to communities from chemical releases.

Despite the great utility of TRI data, the TRI program has serious hurdles it must overcome. For example, nearly 40% of all regulated facilities have failed to file the required Form R reports.⁸³ Additionally, TRI data is inherently suspect due to the fact that each regulated facility estimates its own chemical releases.⁸⁴ Without resources available to verify this information or standardization of methods of estimating releases, there are serious limitations to the accuracy of the TRI data.⁸⁵

The EPA recently engaged in an onslaught of litigation in an effort to show non-reporters the seriousness of not reporting their TRI releases. In November of 1995, a Denver furniture manufacturing facility that was caught not filing its TRI report agreed to pay a \$26,960 penalty in addition to spending a minimum of \$255,400 to install air pollution controls.⁸⁶ More recently, in June of 1996, the EPA assessed over \$2 million in penalties and announced a nationwide enforcement initiative against forty-seven companies that did not report under the TRI reporting requirements.⁸⁷

C. Confidential Business Information (CBI)

1. Intellectual Property Rights Protection

Regulated facilities support the current TRI program and agree that great strides have been made in reducing emissions since its inception in 1987.⁸⁸ However, one overriding concern that regulated facilities raise with regard to

83. See Shavelson, *supra* note 37, at 31.

84. See Falkenberry, *supra* note 70, at 30.

85. For example, actual formaldehyde emissions, at a California factory owned by Louisiana-Pacific, revealed that the facility had only reported half the volume of their releases in 1989. See Gary D. Bass & Alair MacLean, *Enhancing the Public's Right-to-Know about Environmental Issues*, 4 VILL. ENVTL. L. J. 287, 301 (1993).

86. See EPCRA: Denver Furniture Maker Slapped with \$26,960 Fine for not Filing TRI Reports, Chem. Reg. Daily (BNA) 1 (Nov. 7, 1995).

87. See EPA Cites 42 Companies for Failure to Provide Data on Toxic Chemical Releases, Env'tl. News (EPA) 1 (July 15, 1996).

88. See CMA COMMENTS, *supra* note 16, at 2.

the EPA's proposed Phase-III expansion is the potential loss of CBI to competitors, both in the United States and abroad.⁸⁹ Information has become one of the most important assets of the United States economy.⁹⁰ In fact, losses to domestic businesses from foreign economic espionage total nearly \$100 billion per year.⁹¹

Recognizing that industrial espionage presents a serious threat to the international competitiveness of United States companies,⁹² President Clinton reported to Congress that "[m]any collectors take advantage of competitive information that is legally and openly available in the United States. . . . [a]nd use this information for its own worth in their business competition."⁹³ In addition, President Clinton made clear the importance of protecting CBI by signing the Economic Espionage Act of 1996, which strengthens the protections against theft or misuse of CBI.⁹⁴

The broad term CBI refers to business-related information that provides its holder a commercial advantage because it is not widely known to competitors or to the general public.⁹⁵ CBI can consist of formulas, patterns, price codes, customer lists, economic studies, and other business-related information that a company keeps confidential.⁹⁶ In the cur-

89. See *id.* at 50.

90. See *id.*

91. See *id.* at 51 (citing Statement of FBI Director Louis J. Freeh Before the Senate Select Committee on Intelligence and Senate Committee on Judiciary, Subcommittee on Terrorism, Technology and Government Information 8 (Feb. 28, 1996)).

92. See Peter J. G. Toren, *The Prosecution of Trade Secrets Thefts Under Federal Law*, 22 PEPP. L. REV. 59 (1994) [hereinafter Toren].

93. See CMA COMMENTS, *supra* note 16, at 51 (citing ANNUAL REPORT TO CONGRESS ON FOREIGN ECONOMIC COLLECTION AND INDUSTRIAL ESPIONAGE 18 (1995)).

94. See Economic Espionage Act of 1996, Pub. L. No. 104-294, Oct. 11, 1996, 110 Stat. 3488 (1996) (codified at 18 U.S.C. §§ 1831-1839 (1997)). It is interesting to note President Clinton's support for ensuring protection against the loss of CBI, yet in the same year President Clinton has supported the expansion of the TRI program to include MA data which would put CBI at risk. See Part III.B for a discussion of the Clinton Administration's support for the EPA's expansion to the TRI program.

95. See generally Toren, *supra* note 92.

96. See RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939).

rent economic market, often referred to as the "information age," CBI has never been more integral to survival in business.⁹⁷ The protection of intellectual property rights is one of the most important international trade issues facing United States businesses today.⁹⁸ The great need for adequate intellectual property protection is best summarized in the words of Judge Richard Posner of the Seventh Circuit: "the future of the nation depends in no small part on the efficiency of industry, and the efficiency of industry depends in no small part on the protection of intellectual property."⁹⁹

Information regarding business operations must be kept confidential in order to ensure a competitive position in the market.¹⁰⁰ This information, called intellectual property, encompasses many distinct, yet related doctrines of law, such as patent, copyright, trademark, unfair competition, and trade secrets.¹⁰¹ The common thread weaving through these legal doctrines is that the law strives to protect the intangible investment in creativity, intellect, or labor by giving the creator a property right in this information.¹⁰² The owner of CBI has a property right, commonly called a trade secret, in its business-related information because the information provides the entity a commercial advantage and is not widely known to competitors or the general public.¹⁰³

97. See Letter from Gary L. Griswold, President, *Intellectual Property Owners*, to Administrator, Carol M. Browner, *Environmental Protection Agency* (Dec. 30, 1996) (on file with the *Pace Environmental Law Review*) [hereinafter Griswold Letter to Browner].

98. See Toren, *supra* note 92, at 59-60.

99. See *Rockwell Graphic Systems, Inc. v. DEV Indus., Inc.*, 925 F.2d 174, 180 (7th Cir. 1991).

100. One of the most famous trade secrets is the process for manufacturing the syrup that is used in the Coca-Cola drink. See *Coca-Cola Bottling Co. v. Coca-Cola Co.*, 269 F. 796, 799, 805 (3d Cir. 1920). The Third Circuit in 1920 granted trade secret protection to Coca-Cola Co., because it had continuously maintained this process as a trade secret since it first produced its soda in 1892. See *id.*

101. See generally ROBERT A. CHOATE & WILLIAM H. FRANCIS, *CASES AND MATERIALS ON PATENT LAW: ALSO INCLUDING TRADE SECRETS - COPYRIGHT - TRADEMARKS* (2d ed. 1981).

102. See RESTATEMENT (FIRST) OF TORTS § 757 (1939).

103. See *id.*

Trade secrets are a unique and extremely delicate property right as compared to other forms of intellectual property.¹⁰⁴ For example, trade secrets are different from patents because patents provide a period during which the patent owner can exclude others from using the invention.¹⁰⁵ Unlike the patent owner, a trade secret owner does not possess a governmental grant to exclude others from infringing upon its right.¹⁰⁶ Instead, the trade secret owner's property right is based on protection of the secret.¹⁰⁷ Thus, trade secrets are an extremely delicate property right because any disclosure of the trade secret, whether intentional or inadvertent, can destroy the trade secret.

However, the mere fact that business information is confidential does not automatically entitle it to trade secret protection.¹⁰⁸ The key to determining which information is entitled to trade secret protection can be found in the Uniform Trade Secrets Act¹⁰⁹ (UTSA) and the Restatement (First) of Torts, section 757.¹¹⁰ It is difficult to estimate how

104. See W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 130, at 1022-23 (5th ed. 1984).

105. See *id.*

106. See *id.*

107. See *id.*

108. See *Littlejohn v. BIC Corp.*, 851 F.2d 673, 685 (3d Cir. 1988) (holding business information which is confidential, yet does not meet the requirements for trade-secret protection, will not be given any protection).

109. See Uniform Trade Secrets Act 1, 14 U.L.A. § 438 (1985). The Uniform Trade Secrets Act defines a trade secret as:

information, including a formula, pattern, compilation, program, device, method, technique, or process that:

- (i) derives independent economic value, actual or potential, from not being generally known to, and
- (ii) not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

See *id.*

110. According to the Restatement, the following factors must be considered in determining whether information is a trade secret:

- (1) the extent to which the information is known outside of the business;
- (2) the extent to which it is known by employees and other involved in the business;

many trade secrets exist because, by their very nature, trade secrets exist only if kept secret.¹¹¹ Although it is difficult to assess the economic value of trade secrets, they are critical to the U.S. economy.¹¹² CBI was recognized as a valuable property right in *Ruckelshaus v. Monsanto Company*.¹¹³ There, the Supreme Court held that intellectual property rights, such as trade secrets, are protected by the Takings Clause of the Fifth Amendment of the United States Constitution.¹¹⁴

2. Phase-III's Potential Harm to Businesses

The EPA's proposed Phase-III expansion has been criticized because it would require manufacturers to report information previously withheld as confidential under the Toxic Substances Control Act (TSCA).¹¹⁵ Facilities that would be required to report MA data fear that CBI will be easily obtained by competitors.¹¹⁶ Publication of facility-specific and company-specific operation information through MA report-

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- (3) the extent of measures taken by an owner to guard the secrecy of the information;
 - (4) the value of the information to the owner and to his competitors;
 - (5) the amount of effort or money expended in developing the information; and
 - (6) the ease or difficulty with which the information could be properly acquired or duplicated by others.

RESTATEMENT (FIRST) OF TORTS, § 757 cmt. b (1939).

111. See Griswold Letter to Browner, *supra* note 97.

112. See *id.*

113. See *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 991-99 (1984). See also *Carpenter v. United States*, 484 U.S. 19, 26 (1987) (holding confidential business information is property).

114. See *Ruckelshaus*, 467 U.S. at 1001-02. The Fifth Amendment of the U.S. Constitution provides, in part: "No person shall be . . . deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation." U.S. CONST. amend. V.

115. TSCA §§ 1-412, 15 U.S.C. §§ 2601-2692 (1997).

116. See CMA COMMENTS, *supra* note 16, at 52. An additional, related concern that industry has regarding submitting CBI is EPA's ability to ensure adequate security for the information. See CHEM. MANUF. ASS'N, STATEMENT BY MORTON L. MULLINS, VICE PRESIDENT, REGULATORY AFFAIRS CMA 1 (1997) (on file with the *Pace Environmental Law Review*). See *id.* For example, on January 14, 1996, EPA lost track of more than 100 confidential papers containing chemical company trade secrets. See *id.* Again in November 1996, EPA acknowledged losing track of another 213 files. See *id.*

ing would make available to the public large amounts of intellectual property information. For example, volumetric information regarding a facility's production can reveal its market share and efficiency of performance. A competitor that carefully watches for changing composition or location of production may ascertain competitive strategies.¹¹⁷

Studies document that intellectual property rights are easily lost by reporting MA data.¹¹⁸ In 1993, a study performed by Kline & Co. showed that a competitor can utilize standard industry data provided by a state environmental agency to compile an accurate profile of the facility's operations.¹¹⁹ The study concluded that competitors may easily access and use CBI, at no cost, and "ride on the coattails" of others.¹²⁰

The current TRI program allows a reporting facility to seek an exemption from releasing its trade secrets; however, any withholding of CBI is limited and must be approved by the EPA.¹²¹ Regulated industries describe trade secret protection under EPCRA as "confusing, unreliable, unpredictable, and unwieldy."¹²² The EPA grants trade secret protection only if certain statutory conditions are met.¹²³ First, the withheld information must not have been disclosed to anyone other than the government or persons bound by confidentiality agreements.¹²⁴ Second, the facility submitting the information must have taken reasonable steps to protect the confidentiality of the information and intend to continue to take such measures.¹²⁵ Third, the facility cannot seek trade secret protection if it is required to disclose the information under other laws or regulations.¹²⁶ Fourth, forced disclosure must be likely to cause harm to the competitive

117. See EPA's ISSUES PAPER #3, *supra* note 5, at 21-22.

118. See *id.*

119. See *id.*

120. See *id.*

121. See EPCRA § 322, 42 U.S.C. § 11,042 (1997).

122. See Wolf, *supra* note 17, at 244.

123. See EPCRA § 322(b), 42 U.S.C. § 11,042(b).

124. See *id.* § 322(b)(1), 42 U.S.C. § 11,042(b)(1).

125. See *id.*

126. See *id.* § 322(b)(2), 42 U.S.C. § 11,042(b)(2).

position of the business.¹²⁷ Fifth, it must be unlikely that the information could be discovered through reverse engineering.¹²⁸

The burden of establishing the necessity for trade secret protection is placed upon the facility seeking to withhold the information. If the EPA determines the information does not meet the above-mentioned statutory requirements, the information must be provided.¹²⁹ An additional serious limitation to qualifying for protection of CBI under EPCRA's trade secret provisions is that only specific chemical identities may be protected as trade secrets.¹³⁰

III. The EPA's Advanced Notice of Proposed Rulemaking

A. Materials Accounting (MA)

1. Reporting "Everything *and* the Kitchen Sink"

In October 1996, the EPA released an Advanced Notice of Proposed Rulemaking (ANPR) announcing its intention to expand annual TRI data reporting to include MA data.¹³¹ This proposed expansion of the TRI program raises a number of important questions, such as (1) the purpose and utility of MA data, (2) the potential loss of CBI through reporting, as well as (3) the EPA's authority to require MA reporting.

The EPA proposes that MA data should include the amounts of a toxic chemical entering a facility, the amounts transformed into products and wastes, and the resulting amounts leaving the facility.¹³² The EPA essentially desires to examine the details of a facility's operation in order to understand the lifecycle of the TRI-regulated chemicals.¹³³

127. See *id.* § 322(b)(3), 42 U.S.C. § 11,042(b)(3).

128. See *id.* § 322(b)(4), 42 U.S.C. § 11,042(b)(4).

129. See *id.* § 322(a)(3), 42 U.S.C. § 11,042(a)(3).

130. See *id.* § 322(a)(1)(A), 42 U.S.C. § 11,042(a)(1)(A).

131. See 61 Fed. Reg. 51,322 (1996). EPA's Phase-III expansion also plans to require the reporting of "occupational demographics" information. See *id.* These reporting requirements will not be discussed, as it is beyond the scope of this article.

132. See EPA's ISSUES PAPER #3, *supra* note 5, at Appendix 1.

133. See *id.*

Lifecycle analysis reporting begins from the start of production, in which the facility must report the initial inventory of raw materials, and continues until the chemical is in its final product form.¹³⁴ The facility is required to disclose information regarding the amounts produced, brought, consumed, and stored on-site, as well as the amounts shipped off-site in product form.¹³⁵ The completion of lifecycle reporting is a final raw material inventory account.¹³⁶

The scope of the proposed MA data reporting requirements is extensive, but the EPA believes that the TRI program is the main source of information for interested parties and that MA information will expand the public's ability to fully evaluate important environmental issues.¹³⁷ However, in the same breath, the EPA itself concedes that "it is not yet clear to what extent the inaccuracies inherent in [MA] data may limit it's [sic] usefulness," and it acknowledges that further evaluation of the potential benefits of MA data is needed.¹³⁸

Other proponents of the Phase-III expansion believe that MA will provide better data in order to achieve better pollution prevention results than the conventional TRI data.¹³⁹ Supporters of the collection of MA data believe that it will provide a comprehensive view of chemical activity and improve the quality of the data.¹⁴⁰ Additionally, proponents of the expansion believe that MA data will allow states to investigate discrepancies in reporting, target pollution prevention efforts for chemicals that are used in large volumes, and assess where technical assistance is needed for pollution reduction.¹⁴¹

134. *See id.*

135. *See id.*

136. *See id.*

137. *See* EPA, OFFICE OF POLLUTION PREVENTION AND TOXICS, ISSUES PAPER #1 2 (1994) [hereinafter EPA's ISSUES PAPER #1].

138. *See* 61 Fed. Reg. 51,322, 51,326 (1996).

139. *See* EPCRA: *More Analysis Needed Before Conclusions Can Be Drawn for TRI Materials Accounting*, Nat'l Env'tl. Daily (BNA) 1 (Apr. 12, 1996) [hereinafter EPCRA: *More Analysis Needed*].

140. *See id.*

141. *See id.*

When enacting EPCRA, Congress explicitly rejected the inclusion of MA data elements in the TRI program.¹⁴² At that time, the EPA recognized that “production volume of throughput amount of the chemical [is] information that many companies consider trade secret.”¹⁴³ In a 1990 report mandated by Congress, the National Academy of Sciences National Research Council studied the utility and feasibility of adding MA data to the current TRI program and concluded that MA data, “if collected and disseminated on a national scale without the benefit of data validation and assistance from persons with suitable expertise, would be of little use and could potentially mislead regulators and the public.”¹⁴⁴

Nonetheless, the EPA is committed to expanding the TRI program to include MA data. The EPA’s October 1996 ANPR is the last tier of a three-tiered expansion that has been active since the inception of the TRI program.¹⁴⁵ Phase-I expanded the number of TRI-reportable chemicals.¹⁴⁶ Phase-II added additional industrial sectors that are required to report¹⁴⁷ and Phase-III intends to expand the reporting requirements to include MA data.¹⁴⁸ The EPA’s strong commitment to completing Phase-III is clear from the amount of activity seen in the past year.¹⁴⁹ By way of back-

142. See H.R. CONF. REP. NO. 962, at 5106 (1986). The Senate version of what became EPCRA expressly included MA data while the House bill had no comparable provision. See *id.* This conflict was resolved by omitting MA data from section 313 reporting requirements. See *id.* Additionally, Congress recognized that “[t]he quantity of a particular chemical that is used in a chemical manufacturing process operation may constitute valuable trade secret information.” See *id.* EPA also recognized that “production volume or throughput amount of the chemical [is] information that many companies consider trade secret.” See Toxic Chemical Release Reporting; Community Right-to-Know, 53 Fed. Reg. 4500, 4516 (1988).

143. 53 Fed. Reg. at 4516.

144. See CMA COMMENTS, *supra* note 16, at 22 (citing NATIONAL ACADEMY OF SCIENCES, TRACKING SUBSTANCES AT INDUSTRIAL FACILITIES 7 (1990)).

145. See 61 Fed. Reg. 51,322 (1996).

146. See *id.*

147. See *id.*

148. See *id.*

149. For example, three public hearings regarding the ANPR have been held. The first meeting was in Boston, MA, October 16, 1996. The second was in Baton Rouge, LA, October 29-30, 1996. The third meeting was held at EPA headquarters in Washington, D.C. on December 3-4, 1996. Due to the many

ground, Phase-I of the TRI program expansion began in November 1994, when the EPA Administrator Carol M. Browner nearly doubled the list of TRI reportable chemicals from 329 to 647.¹⁵⁰ This doubling of reportable chemicals initiated litigation by the Chemical Manufacturers Association (CMA), the Troy Corporation, the National Oilseed Producers Association, and the NMP Producers Group.¹⁵¹ The United States Court of Appeals held in favor of the EPA, stating that the record relied upon by the EPA was sufficient to support the addition of these chemicals to the reporting requirements.¹⁵²

In May of 1997, the EPA issued a final rule which added seven more industrial sectors that must report TRI chemical releases.¹⁵³ These industries include: "metal mining, coal mining, electric utilities, commercial hazardous waste treatment, chemicals and allied products-wholesale, petroleum bulk terminals and plants-wholesale, and solvent recovery services."¹⁵⁴ This expansion is estimated to create reporting requirements for 6428 more entities at a cost to industry of over \$191 million for the first reporting year and over \$118 million thereafter. However, the EPA believes that this data will provide invaluable information for reducing toxic emissions.¹⁵⁵

The EPA believes that the final planned expansion to the TRI program, Phase-III, will provide important insights for emergency preparedness, a better understanding of the

issues raised at these meetings, the EPA has decided to keep the comment period open until mid-year of 1997. *See Proposed Rule on TRI Chemical Use Data Requirements Slated for Late 1997*, Nat'l Env'tl. Daily (BNA) 1 (Dec. 4, 1996).

150. *See* 59 Fed. Reg. 61,432 (1994).

151. *Troy Corp v. Browner*, Nos. 96-5188, 96-5203, 96-5204, 1997 WL 428500 (D.C. Cir. Aug. 1, 1997).

152. *See id.*

153. *See* Addition of Facilities in Certain Industry Sectors; Revised Interpretation of Otherwise Use; Toxic Chemical Release Reporting; Community-Right-to-Know, 62 Fed. Reg. 23,834 (1997).

154. *Id.* The current TRI program requires manufacturers with SIC codes 20-39 to report TRI chemical releases. *See supra* note 60 and accompanying text.

155. *EPCRA: Chemical Distributors Say Toxic Release Rules Would be Excessive and Expensive*, Chem. Reg. Daily (BNA) 1 (Aug. 21, 1996).

amounts of chemicals flowing through communities, and the quantities of toxic materials contained in products.¹⁵⁶ In addition, the EPA hopes that MA data will provide insights to pollution prevention performance.¹⁵⁷ The EPA asserts that Phase-III will provide invaluable information; however, the EPA's authority to collect MA data has been seriously questioned.¹⁵⁸

The EPA has not clearly stated under what statutory authority it intends to collect MA data. Instead, the EPA mentions numerous authorities, including the existing section 313(a) of EPCRA, which the EPA believes *may* give it authority to collect the data.¹⁵⁹ Other statutes that the EPA cites as possible authority are the Toxic Substance Control Act¹⁶⁰ (TSCA), the Clean Water Act¹⁶¹ (CWA), the Clean Air Act¹⁶² (CAA), and the Pollution Prevention Act¹⁶³ (PPA).¹⁶⁴ The EPA admits that it is unsure which statute provides legal authority; however, the EPA believes that until it "determines the course of action to follow, any discussion of specific statutory authority is premature."¹⁶⁵

2. Pilot Studies: New Jersey and Massachusetts

Two states, New Jersey and Massachusetts, have collected MA-type data in their environmental regulatory programs. In Massachusetts, MA data is required under the Toxics Use Reduction Act.¹⁶⁶ In New Jersey, MA data is required under the Worker and Community Right-to-Know Act¹⁶⁷ and the Pollution Prevention Act.¹⁶⁸ Under both state

156. See EPA's ISSUES PAPER #3, *supra* note 5, at 4.

157. See *id.*

158. See CMA COMMENTS, *supra* note 16, at 22.

159. See 61 Fed. Reg. 51,322, 51,323-24 (1996).

160. TSCA §§ 1-412, 15 U.S.C. §§ 2601-2692 (1997).

161. CWA §§ 101-607, 33 U.S.C. §§ 1251-1387 (1997).

162. CAA §§ 101-618, 42 U.S.C. §§ 7401-7671q (1997).

163. PPA §§ 6602-6610, 42 U.S.C. §§ 13,101-13,109 (1997).

164. See 61 Fed. Reg. at 51,323-24.

165. See *id.* at 51,324.

166. The Massachusetts Toxic Use Reduction Act, MASS. GEN. LAWS ANN. ch. 211 §§ 1-23 (West 1997).

167. The New Jersey Worker and Community Right To Know Act, N.J. STAT. ANN. §§ 34:5A-1 to 34:5A-31 (West 1997).

MA reporting requirements, businesses are allowed to withhold MA data as CBI; however, claims for confidentiality of the data are made in only 1% of the cases.¹⁶⁹ Industry groups state that the reasons for the low percentage of confidentiality claims are that companies are unaware of available statutory protections and equally unaware of how MA data can be used to reveal company CBI.¹⁷⁰

The regulated industries have highly criticized these state programs. For example, Jonnie Martin, corporate environmental staff, Texaco Oil, said that the TRI falls short of telling the public anything about risk or routes of exposure and claimed that another set of data only would confuse the public.¹⁷¹ She further stated that "[c]hemical use does not necessarily mean a risk to public health."¹⁷² Robert Nehring, speaking on behalf of the Massachusetts Chemical Technology Alliance (MCTA), testified that MA reporting programs in Massachusetts have done little to promote pollution prevention.¹⁷³ He stated that the EPA's Phase-III expansion "will not appreciably impact real environmental performance, and as such, is the wrong approach and should be rejected as 'much ado about little.'"¹⁷⁴ Further, Nehring urges the EPA to rethink its focus on MA collection and use resources that would be employed to collect that data to instead promote success in reductions in TRI releases.¹⁷⁵

Industry is not convinced that these state programs, which the EPA cites as models for its Phase-III expansion, are successful or contain reporting requirements as expansive as the Phase-III's MA reporting requirements. Industry representatives believe that it is premature for the EPA to recommend adding MA data to the federal TRI program

168. The New Jersey Pollution Prevention Act, N.J. STAT. ANN. §§ 13:1D-1 to 13:1D-58 (West 1997).

169. See EPA's ISSUES PAPER #3, *supra* note 5, at 22.

170. See EPA's ISSUES PAPER #2, *supra* note 7, at 6.

171. See *EPCRA: More Analysis Needed*, *supra* note 139, at 2.

172. See *id.*

173. See *EPCRA: Massachusetts Chemical Use Law Lauded But Industry Opposes National Reporting*, Chem. Regul. Daily (BNA) 3 (Oct. 18, 1996).

174. See *id.*

175. See *id.* at 4.

based on these two state programs.¹⁷⁶ However, agency representatives from both Massachusetts and New Jersey believe that MA data, combined with TRI data, will allow for a more comprehensive analysis of pollution prevention strategies.¹⁷⁷

B. The Politics are Dancing

The expansion of the TRI program has been a Clinton Administration priority since 1993.¹⁷⁸ In August 1993, President Clinton issued an executive order requiring federal facilities previously exempted from the TRI program to commence reporting toxic emissions.¹⁷⁹ In November 1994, the Clinton Administration doubled the list of TRI reportable chemicals.¹⁸⁰ In August 1995, President Clinton issued another executive order mandating companies engaging in business with the federal government to report their TRI emissions.¹⁸¹ Further, in June 1996, the Clinton Administration supported the proposal to add seven more industrial sectors to the TRI program reporting requirements.¹⁸²

The Phase-III expansion of the TRI program has had, and continues to have, significant political support. In August 1995, President Clinton directed the EPA to expedite TRI expansion efforts, stating, "I am committed to the effective implementation of this law [EPCRA] because Community-Right-to-Know protections provide a basic informational tool to encourage informed community-based environmental decision making and provide a strong incentive for businesses to find their own ways of preventing pollution."¹⁸³ Concur-

176. See *EPCRA: More Analysis Needed*, *supra* note 139, at 1.

177. See EPA'S ISSUES PAPER #3, *supra* note 5, at 17-18.

178. See EPA, *Fact Sheet on The Advance Notice of Proposed Rulemaking (ANPR) to Expand The Community Right-to-Know Program to Increase the Information Available to the Public on Chemical Use* (visited Oct. 4, 1997) <<http://www.epa.gov/opptintr/tri/trip3fa2.htm>> [hereinafter *Fact Sheet on ANPR*].

179. See Exec. Order No. 12,856, 58 Fed. Reg. 41,981 (1993).

180. See *EPCRA: More Analysis Needed*, *supra* note 139, at 61,432 where EPA issued a final rule which added 286 chemicals to TRI's reporting requirements.

181. See Exec. Order No. 12,969, 60 Fed. Reg. 40,989 (1995).

182. See 61 Fed. Reg. 33,588, 33,589 (1996).

183. See *Fact Sheet on ANPR*, *supra* note 178.

rently, in a memorandum issued to the EPA Administrator Carol Browner, President Clinton directed the EPA to develop and implement "an expedited, open, and transparent process for consideration of reporting under EPCRA on information on the use of toxic chemicals at facilities, including information on mass balance, materials accounting, or other chemical use data."¹⁸⁴

Although the Clinton Administration has supported the Phase-III TRI program expansion, proposals in the House of Representatives during the fiscal years 1996 and 1997 have attempted to block this expansion by directing the agency, via budget riders and report language, to block funds for this expansion.¹⁸⁵ In addition, an antagonistic relationship exists between the chemical industries and the EPA regarding the TRI program expansion. For example, Assistant Administrator of the EPA's Office of Pollution Prevention and Toxics, Lynn Goldman, publicly chastised chemical industry executives when the Chemical Manufacturing Association filed suit challenging Phase-I of the TRI program expansion.¹⁸⁶

IV. Analysis of the EPA's Proposed Phase-III Expansion

The EPA has received support from the Clinton Administration for its proposed Phase-III expansion due to the success of the current TRI program. However, in the midst of political support or pressure, the EPA must be careful to evaluate all issues raised by the proposed Phase-III expansion. The fundamental question that still remains is whether more information is useful, especially considering the risk of releasing CBI to the public. The analysis that follows strives to provide an answer to this question.

This part of the Comment is divided into three sections. Part A discusses the EPA's statutory authority for the pro-

184. See *id.*

185. See *Appropriations: House Panel Approves EPA Funding Bill; Expansion of Toxic Release Inventory Nixed*, Chem. Regul. Daily (BNA) 1 (June 18, 1996).

186. See Lynn Bergeson, *Old Toxins in New Bottles: EPA Reinvention Falling Short*, 6 CORP. LEGAL TIMES 13 (Jan. 1996).

posed Phase-III expansion and concludes that the EPA lacks statutory authority to collect MA data. Part B examines the utility of MA data and concludes that MA data is not useful for the purposes of EPCRA's TRI program. Part C addresses the EPA's intent to collect MA data and the serious consequences that can occur from public dissemination of MA data.

A. The EPA Lacks Statutory Authority to Collect MA Data

The EPA has the authority to collect information for the current TRI program under section 313 of EPCRA. The purpose of the TRI program has always been to track total annual chemical releases, whereas the purpose of collecting MA data is to measure the volumes of chemicals used and processed within a facility throughout the year. Therefore, without any clear statutory authority, the EPA intends to dramatically expand the original intent and purpose of the TRI program by proposing to collect MA data.¹⁸⁷

There is a clear and fundamental difference between reporting total releases of chemicals versus reporting *how* chemicals are used at facilities. An oversimplified analogy is to imagine the typical taxpayer who reports his or her total income for purposes of annual federal income tax collection. Contrast this reporting with a change in scope of reporting by the Internal Revenue Service requiring taxpayers to report *how* each dollar was spent, saved, and earned. Such a change in the *scope* of reporting can violate private rights, such as privacy or property rights.

The EPA has evaded articulating its statutory authority for the collection of MA data. Instead, it hides behind a

187. Utilizing the traditional tools of statutory construction, the first question is "whether Congress has directly spoken to the precise question at issue." *Chevron U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 842-43 & n.9 (1984). The second prong of this analysis is to determine if the intent of Congress is clear and unambiguous, and if it is, "that intention is the law and must be given effect." *Id.* at 843 n.9. If, on the other hand, the statute is silent or ambiguous with respect to a specific issue, then "the court must defer to the agency's interpretation . . . so long as it is reasonable and consistent with statutory purpose." *Ohio v. United States Dep't of the Interior*, 880 F.2d 432, 441 (D.C. Cir. 1989); see also *Chevron*, 467 U.S. at 843.

smokescreen of citations to various statutory authorities that *may* allow the EPA to collect MA data. The EPA itself acknowledges its uncertainty as to which statutory authority will allow the agency to collect MA data; nevertheless, the EPA is not presently addressing this issue. The situation the EPA is finding itself in is that it is under political pressure to collect MA data without any legal authority.

This Comment concludes that the current version of EPCRA does not provide statutory authority for the EPA to collect MA data for several reasons. First, section 313(g) of EPCRA requires regulated facilities to report specific data elements for each regulated chemical; the section does not include any reference to the type of data MA would require.¹⁸⁸ Second, the EPA was given no discretion to add this type of reporting requirement under EPCRA. Finally, the legislative history of EPCRA shows that Congress specifically rejected MA reporting.¹⁸⁹

The EPA suggests that it may use TSCA as a source of statutory authority for its Phase-III expansion. The EPA's reliance on TSCA is faulty for several reasons. First, the information subject to reporting under TSCA does not include any of the proposed MA elements. Second, TSCA only applies to manufacturers and processors of chemical substances, and is not applicable to facilities that merely use chemicals.¹⁹⁰ Finally, reliance on TSCA for statutory authority would limit the coverage and scope of data collection because of TSCA's many exclusions, such as the exclusion for pesticides and the exclusion for small manufacturers and processors of chemicals.¹⁹¹

The EPA also mentions section 308 of the Clean Water Act¹⁹² (CWA) and section 114 of the Clean Air Act¹⁹³ (CAA) as

188. *See supra* note 52.

189. *See supra* notes 142-44 and accompanying text.

190. TSCA §§ 1-412, 15 U.S.C. §§ 2601-71 (1997).

191. *See id.*

192. *See* CWA § 308, 33 U.S.C. § 1318 (1997). Section 308 of the CWA entitled, "Records and reports; inspections," is concerned with records and reports related to pollution control equipment to ensure standards under the regulations are being met. *See id.*

authoritative. The EPA has only briefly mentioned these two provisions without any further explanation. It is unlikely that these provisions provide authority to collect MA data as these sections of the respective acts address emissions and effluent record keeping and reporting requirements. The intent and purpose of these record keeping and reporting requirements is not even remotely related to the intent and purpose of MA data collection. Record keeping and reporting requirements were created to determine if violations have occurred under the respective acts, not for community right-to-know purposes. Therefore, neither section provides statutory authority for the collection of MA data under EPCRA's TRI program.

B. Speculative Utility of MA Data

The EPA has generalized about the benefits of MA data without explaining its specific value to local communities in understanding releases of chemicals in their communities. The EPA has issued vague statements regarding its need to fill in "perceived gaps" in the existing TRI program, but these "perceived gaps" in the data have not been articulated.¹⁹⁴ Rather, the EPA proposes to collect, in one sweep, information about the lifecycle of a chemical traveling through a facility without a purpose or plan as to *why* the data is needed or *how* the data will be used.

This Comment advocates that the utility of MA data is speculative at best, and further, the collection of MA data is inconsistent with the intent of EPCRA's TRI program for several reasons. First, EPCRA's purpose is to provide meaningful information regarding the risk of chemical releases in communities. Collecting massive quantities of raw data does not relate meaningful information about environmental risks to the community. The EPA has coined the phrase "what gets

193. See CAA § 114, 42 U.S.C § 7414 (1997). Section 114 of the CAA entitled, "Recordkeeping, inspections, monitoring, and entry," clearly states that its purpose is to evaluate performance with the emission standards under the act. See *id.*

194. See EPA's ISSUES PAPER #3, *supra* note 5, at 3-5.

measured, gets done.”¹⁹⁵ However, at some point in the activity of collecting massive amounts of information, there is a diminishing return. Gathering data, without first determining the utility and value of the data, is a wasteful activity. When intellectual property rights of private business are jeopardized, this is not only a wasteful activity, but a harmful one.

Second, many flaws exist in relying on MA data to indicate risk to the community concerning chemical releases. Sole reliance on chemical use data does not provide information about *risks* associated with chemical use. The EPA should focus its resources on clearly communicating the risks of chemical *releases* in communities instead of attempting to provide the public with chemical use information data that does not satisfy the purpose of the TRI.

Third, the EPA’s proposed Phase-III expansion indicates MA data will be utilized to aid facilities in reducing reliance on toxic chemicals. As the Harvard Center for Risk Analysis points out, promotion of the reduced use of toxic chemicals is not always sound public policy.¹⁹⁶ Often chemicals provide significant public benefits and are managed in ways that pose little or no threat to human health or the environment. Instead, what the EPA should study and promote is “smarter use” of chemicals; that is, efficient and safe use of toxic chemicals.

In summary, this author is not convinced that communities, or individual citizens, will benefit from the collection of MA data. The EPA has not satisfactorily explained the value or benefit that MA data will provide to the TRI program, nor how the collection of MA data meets the original intent of EP-CRA’s TRI program. Similarly, the EPA has not clearly ar-

195. See EPA’S ISSUES PAPER #1, *supra* note 137, at 2. The idea behind this phrase is that if the volume of a chemical used at a facility is measured, the facility will reduce the use of the chemical.

196. See CMA COMMENTS, *supra* note 16, at 14 (citing Letter from Dr. G. Matanoski, Dr. M. Harowell, & Dr. Hartung, *Harvard Center for Risk Analysis*, to Carol M. Browner, Administrator, *Environmental Protection Agency* (Feb. 2, 1995)).

ticulated how communities will benefit from the collection of MA data.

C. Potential CBI Losses

In many activities, a point of diminishing returns occurs; that is, the input of energy required by the activity clearly outweighs the benefits received. The EPA's plan to collect MA data is an activity of diminishing returns because MA data offers only speculatively useful information at the expense of intellectual property rights. In a competitive commercial climate, where companies must protect their CBI to maintain their market share, the EPA's proposed Phase-III expansion offers no assurance that CBI will be protected.

The proposed Phase-III expansion highlights the tension that exists between the need to protect CBI and the public's right to information about releases of toxic chemicals. The current TRI program strikes this balance without MA reporting requirements. The EPA should not crumble to the public's desire to have unlimited access to information. Instead, the EPA should only collect useful information that does not interfere with the private property rights held by companies.

The EPA's proposed Phase-III expansion also highlights the political nature of the TRI program. The Clinton Administration supports the EPA's Phase-III expansion, while simultaneously attempting to crack down on industrial espionage. A reconciliation of these conflicting administrative goals must be found. In addition, political support does not replace legal authority to fundamentally change an existing statutory program.

It is clear from the legislative history that EPCRA was only intended to provide information regarding chemical releases in local communities, not chemical use information to any individual capable of logging on the Internet. In the heat of political pressure, the EPA may be acting without thoroughly considering the consequences of releasing this type of information. It is clear from the EPA's own statements that it has not significantly addressed the potential CBI problems inherent in the Phase-III expansion.

The TRI program has unquestionably demonstrated that the public availability of environmental information motivates facilities to reduce toxic chemical releases. It has also shown that in a democratic society, information is power. However, the EPA must understand that the power of information can be misused in ways never intended by the idealistic goals of the TRI program. Before any expansion of the TRI program proceeds, the EPA should first determine the amount and type of information that reasonably meets the public's needs, and whether the release of this information will jeopardize private intellectual property rights.

In summary, the nature and importance of intellectual property rights protection has not been sufficiently addressed by the EPA in its proposed expansion of the TRI program. The serious potential for loss of CBI must be addressed before the EPA's proposal can proceed.

V. Conclusion

In evaluating the purpose of TRI program, this Comment concludes that the EPA's proposed Phase-III expansion has exceeded the original intent and purpose of EPCRA. The TRI program was created to provide meaningful information to citizens about chemical releases in their community. The proposed Phase-III expansion fundamentally differs from the original purpose of EPCRA. Requiring companies to publicly disclose MA is beyond the scope of the TRI program and jeopardizes the intellectual property rights of private businesses. This Comment agrees that the present TRI program is a success; however, expansion of the program is not appropriate without first obtaining a clear understanding of the purpose of gathering more information. Instead of expanding the TRI program, the EPA should focus its efforts on effectively and efficiently communicating risks posed to communities by chemical releases as intended by EPCRA.