

8-1-1986

Environmental Law

North Carolina Law Review

Follow this and additional works at: <http://scholarship.law.unc.edu/nclr>Part of the [Law Commons](#)

Recommended Citation

North Carolina Law Review, *Environmental Law*, 64 N.C. L. REV. 1330 (1986).Available at: <http://scholarship.law.unc.edu/nclr/vol64/iss6/6>

This Article is brought to you for free and open access by Carolina Law Scholarship Repository. It has been accepted for inclusion in North Carolina Law Review by an authorized administrator of Carolina Law Scholarship Repository. For more information, please contact law_repository@unc.edu.

The Hazardous Chemicals Right-to-Know Act: Letting the Public Know What's Next Door

Public attention has recently focused on the presence of hazardous chemicals in industries and businesses. The December 1984 tragedy in Bhopal, India, in which a leak of methyl isocyanate gas caused at least two thousand deaths and thousands of injuries, demonstrates the disastrous results that may occur when hazardous chemicals are released in an unsuspecting community.¹ The United States has had its share of toxic mishaps as well. A recent study indicates that at least 6928 accidents involving toxic chemicals have occurred during the last five years, killing more than 135 people, injuring nearly 1500, and forcing the evacuation of at least 217,457.²

North Carolina has not escaped from problems associated with the release of hazardous chemicals into the environment. A 1982 fire at the Baxter-Harris warehouse in Charlotte ignited chemicals and produced a "cloud of poisonous smoke" that forced 1300 people to evacuate.³ Hundreds of East Durham residents were evacuated from their homes in 1983 when a cloud of butyl acetate was released into the atmosphere from a nearby chemical recycling plant.⁴ In

1. Elmer-Dewitt, *What Happened at Bhopal*, TIME, Apr. 1, 1985, at 71; Work, *Inside Story of Union Carbide's India Nightmare*, U.S. NEWS & WORLD REP., Jan. 21, 1985, at 51.

2. Diamond, *Toxic Chemicals Spilled at 5-a-Day Rate—Study*, Durham Morning Herald, Oct. 3, 1985, at 1A, col. 2. The study, which the Environmental Protection Agency commissioned in response to the Bhopal incident, included a partial list of toxic spills occurring in the United States since 1980. The draft of the report, dated September 1985, states that the spills and emissions occurring in the last 5 years averaged 5 per day, totaling 420 million pounds of chemicals. One of the study's consultants estimated that the actual number of spills in the United States was two and one-half to three times higher than that reported. *Id.*

Toxic discharges and emissions affecting communities have been frequent. Institute and South Charleston, West Virginia, for example, have recently gained notoriety for chemical emissions from Union Carbide facilities located in those communities. See Taylor, *Chemical Leaks Show Holes in U.S. Safeguards*, U.S. NEWS & WORLD REP., Aug. 26, 1985, at 32. A leak of a highly poisonous carcinogen and a pesticide ingredient resulted in 149 Institute residents seeking medical treatment. Two days later 1000 gallons of sulfuric acid and brake fluid components were accidentally discharged from a Union Carbide plant in nearby South Charleston. *Id.* Similar incidents have occurred nationwide. See, e.g., *id.* (fire and fumes from derailed train forced 250 residents of three rural Arizona towns to evacuate; forklift accident at a New Jersey dye plant resulted in the release of 3000 gallons of toxic oil into city's sewers forcing 100 families to evacuate; 5000 gallons of rocket fuel and corrosive waste leak from a tank trunk forced 300 families of a Virginia suburb to flee; leaking nitric acid at a Metuchen, New Jersey, chemical plant forced 1000 plant workers and residents to evacuate); Durham Morning Herald, Sept. 5, 1985, at A9, col. 3 (2000 people evacuated and classes cancelled at four nearby schools when hydrochloric acid leaked from a galvanizing plant at Canton, Ohio); Durham Morning Herald, Sept. 3, 1985, at A2, col. 6 (fumes from chemical warehouse fire forced 300 residents to evacuate, sending 14 persons to the hospital).

3. Morrill, *Right-to-Know Law May Void Stronger Local Fire Rules*, The Charlotte Observer, Aug. 24, 1985, at A1, col. 1. In 1959 an explosion at a chemical plant injured 13 firemen when water from fire hoses came in contact with metallic sodium which reacts violently with water. The unsuspecting firemen were unaware of the sodium's presence. *Id.* Consequently, Charlotte adopted an ordinance requiring the identification of hazardous substances and later adopted other regulations, apparently providing Charlotte with North Carolina's first right-to-know law. See *id.*; *infra* notes 105-109 and accompanying text.

4. Morrill, *supra* note 3; see Jeffries, *Investigators Hope to Discover Why Fumes Overcame Protected Officers*, The News and Observer, (Raleigh, N.C.) Mar. 12, 1983, at C1, col. 1; Jeffries, *Toxic Vapor Released at Durham Company*, The News and Observer, (Raleigh, N.C.) Mar. 11, 1983, at D1, col. 5. A punctured chemical drum at Armageddon Chemical Company leaked butyl acetate

response to incidents such as these, the North Carolina General Assembly enacted the Hazardous Chemicals Right to Know Act (the Right-to-Know Act) in July 1985.⁵ The Right-to-Know Act provides emergency personnel, health care professionals, and the general public access to information about hazardous chemicals used or stored by North Carolina employers.

This Note examines the public's newly acquired right-to-know. It discusses the public's right prior to the enactment of the Right-to-Know Act,⁶ considers how the Act alters current public access to hazardous chemical information, and analyzes the Act's potential problem areas. The Note concludes that the Right-to-Know Act represents a balance between the public's need for hazardous chemical information and the employer's right to protect confidential business information. By allowing public access to this information, the Act is a step in the right direction. However, to help the general public understand and prepare adequately for the risks and consequences of hazardous chemical leaks, the Act should be amended to allow greater public access to information about hazardous chemical emissions and discharges.

Prior to the Right-to-Know Act no statewide legislation gave the public broad access to information about hazardous chemicals stored, used, or produced by employers. Only certain members of the community, namely employees of the facilities themselves and firefighters, had access to such information.

Fire officials in North Carolina have the right to obtain limited knowledge concerning hazardous chemicals under local fire codes, which generally are based on either the National Fire Protection Association or the American Insurance Association national fire codes.⁷ These codes contain provisions that pro-

and a cloud of the chemical drifted into the surrounding neighborhood. Ambulance personnel at the scene reported that the concentration of butyl acetate, was high enough to damage lungs. *Id.* This incident sparked community interest in the right-to-know concept. Durham subsequently enacted a local right-to-know bill. See *infra* notes 105-109 and accompanying text.

5. Hazardous Chemicals Right to Know Act, ch. 775, 1985 N.C. Sess. Laws 869 (codified at N.C. GEN. STAT. §§ 95-173 to -218 (1985)).

The impetus behind right-to-know legislation has been succinctly stated by one federal court:

Since World War II the number of available chemicals has grown extraordinarily, there being approximately 50,000 different chemicals used in industry. Many of these are hazardous. Exposure to these hazardous substances can take place in the plant where they are used or processed; the community can be exposed through emission in the air, through accidental leakage from the plant or through lawful and unlawful disposal outside the plant. Exposure can and does result in debilitating or fatal illness, particularly cancer, lung ailments, sterility and birth defects.

[C]ommunities surrounding industrial complexes do not know the nature of chemical vapor to which they are exposed nor do they know the possible hazards which exposure entails. Public health officials cannot advise them because they, too, quite often do not have the necessary information. While some industrial concerns go to great pains to educate and inform both their employees and public officials of the chemical substances in their plants, others do not. Lacking such cooperation there was little that public officials could do to protect citizens from the existence of harmful substances.

N.J. State Chamber of Commerce v. Hughey, 600 F. Supp. 606, 609-10 (D. N.J. 1985), *aff'd in part and rev'd in part*, 774 F.2d 587 (3d Cir. 1985).

6. The Right-to-Know Act became effective May 25, 1986. Hazardous Chemicals Right to Know Act, ch. 775, § 2, 1985 N.C. Sess. Laws 869, 877.

7. The National Fire Prevention Association and the American Insurance Association have produced extensive fire codes. Most cities, towns, and villages adopt one of these codes as a basis for

vide fire officials with the authority to inspect premises for "the purpose of ascertaining and causing to be corrected any conditions liable to cause fire, [or] endanger life from fire."⁸

Furthermore, both fire codes provide procedures that deal specifically with hazardous chemicals.⁹ These procedures, however, deal with hazardous chemicals only from a "fire hazard" or "firefighting" perspective. Those who use, store, or produce highly toxic material are required to take special precautions.¹⁰ Permits must be obtained from local fire departments for the storage or handling of designated amounts of hazardous substances and for any amount of "highly toxic material or poisonous gas."¹¹ A "highly toxic material," however, is narrowly defined as a material "so toxic to man as to afford an unusual hazard to life and health *during fire fighting operations*."¹² Therefore, a substance that does not create an unusual hazard during firefighting operations although posing a great hazard in other settings or circumstances, such as an accidental leakage, would not qualify as a highly toxic material and would not require a permit or special storage. The Right-to-Know Act substantially increases fire department officials' access to hazardous chemical information.¹³

Employees also have been entitled to information regarding the hazardous substances with which they work.¹⁴ In accordance with the federal Occupa-

their local code. Interview with Joseph Robertson, Fire Marshall of Chapel Hill, N.C., in Chapel Hill (Sept. 18, 1985).

8. FIRE PREVENTION CODE § 1.4.a (Am. Ins. Ass'n 1976). Similar authority is provided by the other major code. See NFPA FIRE PREVENTION CODE § 1-3.4.1 (Nat'l Fire Protection Ass'n Inc. 1982).

9. See FIRE PREVENTION CODE § 20.1 to -15 (Am. Ins. Ass'n 1976); NFPA FIRE PREVENTION CODE § 3-9 (Nat'l Fire Protection Ass'n Inc. 1982).

10. Such materials must be separated from other chemicals. FIRE PREVENTION CODE § 20.11 (Am. Ins. Ass'n 1976). Combustible and flammable substances must be stored in a room or compartment that is separated from all other areas and that has a high fire resistance. *Id.* Warning signs posted at such areas stating the nature and the location of the materials also are required. *Id.*

11. *Id.* § 20.3.a (permit required for storage or handling of 55 gallons or more of corrosive liquids, 50 pounds or more of oxidizing materials, 10 pounds or more of organic peroxides, 500 pounds or more of nitromethane, 1000 pounds or more of ammonium nitrate including fertilizers, and any amount of poisonous gas).

Before a fire official authorizes the issuance of a permit, the applicant may be required to submit in writing reports from an approved laboratory designating the physical and chemical properties of the substances on the permit and evidence that the proposed practices are in accordance with nationally recognized practices. *Id.* § 20.3.c. In addition, the permittee may have to certify that no undue hazard to life or property is posed by the chemicals and submit a statement regarding the qualifications, experience, and knowledge of the supervisor of the operations that use the material. *Id.* Permits must be kept on the facility's premises for police or fire department inspection. *Id.* § 1.9.d.

12. *Id.* § 20.2.c.

13. See *infra* note 51.

14. The North Carolina standard governing such disclosure now includes all North Carolina employers and employees with these exceptions: Domestic workers; persons in farming operations with ten or fewer employees, excluding operations that maintain labor camps; federal government employees; employees protected by the Atomic Energy Act of 1954 and amendments, by the Federal Mine Safety and Health Act of 1977, by the Federal Railroad Safety Act of 1970, and by the Federal Safety Appliance Act; and employees engaged in maritime operations. N.C. Dep't of Labor, North Carolina Department of Labor Changes to the Hazard Communication Standard [13 NCAC 7C.0101(a)(99)] Statement 1-2 (June 27, 1985). Employees covered by the standard include all "worker[s] employed by an employer in a workplace . . . who may be exposed to hazardous chemicals under normal operating conditions or foreseeable emergencies, including but not limited to production workers, line supervisors, and repair or maintenance personnel." *Id.* at 6. Employers are

tional Safety and Health Act of 1970,¹⁵ North Carolina has an approved state plan that vests administrative and enforcement authority for all matters relating to occupational safety and health in the North Carolina Department of Labor.¹⁶ The North Carolina Commissioner of Labor must adopt and promulgate occupational safety and health rules¹⁷ which, under conditions for state approval, must be at least as effective as the counterpart federal standards.¹⁸ Consequently, on February 1, 1984, North Carolina adopted by reference the federal Hazard Communication Standard,¹⁹ which requires that chemical manufacturers and importers evaluate chemicals and communicate any hazards associated with the chemicals to employers and employees in the manufacturing sector.²⁰ Currently, North Carolina requires employers to

maintain accurate records of employee exposure to potentially toxic materials [or] harmful physical agents which are required to be monitored or measured [and] provide employees or their representatives with an opportunity to observe such monitoring or measuring, and to have access to the records thereof [E]ach employee [shall] have access to such records as will indicate his own exposure to toxic materials Each employer shall promptly notify any employee who has been or is being exposed to toxic materials . . . at levels which exceed those prescribed by an applicable safety and health standard . . . and

defined under the standard as persons engaged in a business, or a governmental unit, in which chemicals are either used or produced for use or distribution. *Id.*

The date when employers must comply with the standard varies according to the type of employer and the particular requirements of the standard. Chemical manufacturers and importers now must label containers of hazardous chemicals leaving the facility, and they must provide material safety data sheets with their shipments. *Id.* at 8. Distributors now must be in compliance with all provisions of the standard. *Id.* Manufacturing employers listed in Standard Industrial Code Nos. 20-39 and state and local governments must comply by May 25, 1986, while all other employers must comply by May 25, 1987. *Id.*

15. Occupational Safety and Health Act of December 29, 1970, Pub. L. No. 91-596, 84 Stat. 1590 (1970-1971) (codified as amended at 29 U.S.C. § 651-678 (1982)).

16. See 29 U.S.C. § 667(a), (b), (c)(2) (1982). States have the power to assume responsibility for the development and enforcement of standards provided that state standards are as effective as federal standards. *Id.* § 667(c)(2). When applicable to products distributed or used in interstate commerce, such standards must be required by "compelling local conditions" and cannot "unduly burden interstate commerce." *Id.*

17. N.C. GEN. STAT. § 95-131 (1985).

18. See *supra* note 16. When a new federal standard is promulgated by the United States Secretary of Labor, the standard is automatically adopted in North Carolina unless the Commissioner of Labor promulgates a State standard as effective as the federal counterpart. N.C. GEN. STAT. § 95-131(a) (1985).

19. N.C. Dep't of Labor, North Carolina Department of Labor Changes to the Hazard Communications Standard [13 NCAC 7C.0101(a)(99)] Statement (June 27, 1985). Commissioner of Labor John C. Brooks amended the adopted standard on June 27, 1985, with the effective date of June 27, 1985. *Id.* at 1.

20. See 29 C.F.R. § 1910.1200 (1985). The standard requires that containers of hazardous chemicals be labelled and that health, safety, and hazard information, as well as a training program for employees, be provided. *Id.* § 1910.1200(a)(1). The standard also provides employers with the opportunity to claim trade secret protection and thereby withhold from employees access to information including the specific identity of protected chemicals. *Id.* § 1910.1200(i). Such information is available to health care professionals treating the employees and to the assistant secretary. *Id.* The United States Court of Appeals for the Third Circuit recently held that denying access to employees and their collective bargaining representatives was unwarranted, however, and instructed the Secretary of Labor to review the restriction. *United Steelworkers of Am. v. Auchter*, 763 F.2d 728, 742-43 (3d Cir. 1985).

shall inform any employee who is being thus exposed of the corrective action being taken.²¹

Employees, like firefighters, therefore had a right to obtain hazardous chemical information prior to the enactment of the Right-to-Know Act.

Before the passage of the Right-to-Know Act the general public had to rely on limited and inconvenient methods to determine what chemicals were present at nearby businesses and to obtain health and safety information concerning these chemicals. First, the public could use the North Carolina public records statute²² to obtain information that the chemical users, producers, or storers provided to the appropriate state agencies.²³ Second, the public could attempt to receive information about the chemicals at a particular facility from the employer, employees, or health professionals treating employees. Last, the public could obtain hazardous chemical information pursuant to the discovery process in preparation for a trial or hearing.²⁴ These measures, however, have disadvantages that have severely limited their effectiveness.

Facilities give hazardous chemicals information to state agencies pursuant to state law. For example, under North Carolina's environmental laws, "persons"²⁵ are generally required to obtain permits from the Environmental Management Commission (EMC)²⁶ before they can emit or discharge substances into the air or water in contravention of a standard or limitation established for that particular source of emission or discharge.²⁷ The EMC must be provided a report "setting forth the volume and characteristics of wastes discharged or air contaminants emitted daily or such other period of time as may be specified."²⁸ Discharges, emissions, and subsequent effects on the environment also must be monitored and reported to the EMC.²⁹ In addition, EMC personnel have the authority to conduct investigations of facilities and require reports or statements regarding air or water pollution sources.³⁰ Such investigations usually result in

21. N.C. GEN. STAT. § 95-143(c) (1985).

22. *Id.* §§ 132-1 to -9 (1981).

23. See generally Comment, *Public Access to Government-held Records: A Neglected Right in North Carolina*, 55 N.C.L. REV. 1187 (1977) (analysis of public records statute); Note, *Public Access to Public Records in North Carolina: The Key to Good Government*, 60 N.C.L. REV. 853 (1982) (analysis of public records statute in context of several state agencies and their access policies).

24. See N.C. GEN. STAT. § 1A-1, Rule 26 (Supp. 1985). "Parties may obtain discovery regarding any matter, not privileged, which is relevant to the subject matter involved in the pending action . . ." *Id.* § 1A-1, Rule 26(b)(1).

25. A person is defined as an individual, firm, partnership, association, public or private institution, municipality, political subdivision, government agency, or private or public corporation. See N.C. GEN. STAT. §§ 130A-290(12), 143-213(14), 143-215.77(13) (1983 & Supp. 1985).

26. The EMC, in conjunction with the North Carolina Department of Natural Resources and Community Development, was established to "administer federally mandated programs of environmental management and to qualify to accept and administer funds from the federal government for such programs." N.C. GEN. STAT. § 143-211 (1983). Consequently, the EMC has the "power and duty to promulgate rules and regulations to be followed in the protection, preservation, and enhancement of the water and air resources of the State." N.C. GEN. STAT. § 143B-282 (1983 & Supp. 1985). For a description of the powers of the EMC, see *id.* § 143B-283.

27. N.C. GEN. STAT. §§ 143-215.1, .108 (1983 & Supp. 1985).

28. *Id.* § 143-215.65 (1983).

29. *Id.* § 143-215.66.

30. *Id.* § 143-215.3(a)(2) (Supp. 1985).

the EMC investigator filing a report as well. All the permits, records, and reports required by the EMC probably qualify as public records and thus should be available for public inspection.³¹ Presumably, an individual could discover characteristics about a facility's discharges and emissions through use of these records.

The public's access to this information under the public records statute, however, is limited in several ways. First, if the facility can show that disclosure of records, reports, information, or any particular part thereof, other than effluent or emission data, would divulge methods or processes entitled to trade secret protection, the information would not be released to the public.³² Second, all information gathered by the EMC must be related to effluent or emission limitations or standards.³³ Thus, if no effluent, water quality, or emission standards governed a particular chemical, its discharge or emission would not have to be reported. Third, a facility obtains a permit only for those discharges and emissions it intends to make. Therefore, numerous hazardous chemicals on-site may not be mentioned in the permit even though they could be released accidentally into the environment. Also, the public's ability to inspect a permit usually would not provide hazard and safety information regarding these substances. Similar limitations exist if the public attempts to examine EMC records and reports regarding a facility's compliance with the Oil Pollution and Hazardous Substances Control Act,³⁴ the Department of Human Resources' records and reports submitted by facilities in accordance with solid waste management requirements,³⁵ or information submitted by facilities to various federal agencies under the Freedom of Information Act.³⁶

31. See *id.* §§ 132-1, -6 (1981). All "documents, papers, letters . . . or other documentary material, regardless of physical form or characteristics, made or received pursuant to law or ordinance in connection with the transaction of public business by any agency of North Carolina government" are public records. *Id.* § 132-1.

32. "Any records, reports or information obtained . . . shall be available to the public except that upon a showing satisfactory to the Environmental Management Commission by any person that records, reports or information or particular part thereof (other than effluent or emission data) . . . if made public would divulge methods or process entitled to protection as trade secrets." N.C. GEN. STAT. § 143-215.3 (a)(2)(ii) (Supp. 1985). Information that qualifies as a trade secret is also entitled to protection under the Right-to-Know Act. See *infra* notes 75-95 and accompanying text.

33. N.C. GEN. STAT. § 143-215.3(a)(2)(i) (Supp. 1985).

34. This environmental law provides that the EMC can investigate discharges of oil or hazardous substances into water or on land in close proximity to water. *Id.* §§ 143-215.77(4), -.79 (1983). Presumably, any reports or records made as a result of these investigations would be available for public inspection. These reports, however, are subject to confidential business information status that may render them inaccessible to the general public if related to a secret process, device, or method of manufacture. *Id.* § 143-215.80. Furthermore, even if these reports could be accessed, while they would be helpful in ascertaining substances discharges, they would not disclose identity of all on-site chemicals. In addition, the quantity of the chemical discharged must reach a threshold level before the EMC can act, and the statute provides numerous exceptions to its coverage. See *id.* § 143-215.7(4).

35. Solid waste management facilities must obtain an operating permit from the Department of Human Resources (DHR). *Id.* § 130A-294(4) (Supp. 1985). Such permits require identification and listing of hazardous wastes and ground and surface water monitoring. 10 N.C. ADMIN. CODE §§ 10G.0300, .0600 (1985). Although such records submitted to DHR could be accessed via the public records statute, all confidential business information is excluded from public disclosure. See N.C. GEN. STAT. § 130A-304 (Supp. 1985) (broad definition of confidential business information).

36. See generally 40 C.F.R. §§ 2.100-.309 (1985) (U.S. Environmental Protection Agency's policy of disclosure under various environmental laws); NORTH CAROLINA LEGISLATIVE RESEARCH

The public also may acquire information through fire department records that qualify as public records. Fire codes generally permit public inspection of fire department reports on fires that occur at facilities storing or using hazardous chemicals.³⁷ The information contained in these reports, however, may be limited. These reports are compiled after a fire occurs; for planning purposes, the public needs to be aware of chemicals that pose health and safety risks before a fire occurs. In addition, fire reports may include information concerning only those chemicals involved in the fire. Public examination of permit applications completed by facilities for storage of chemicals could provide additional, albeit limited, information concerning what chemicals are present and, health and safety data.³⁸ No language in the fire codes, however, specifically authorizes public inspection, and an employer's claim of confidentiality or trade secret would foreclose any possible public inspection of the permit or information submitted to the fire chief.³⁹

In addition to problems likely to be encountered in accessing data from environmental and fire records, any attempt to use the North Carolina Public Records Act to obtain information concerning hazardous chemicals would have several drawbacks. The person desiring to inspect such records usually must travel to the location where the records are stored. Also, the inspection is conducted under supervision and only during business hours.⁴⁰ In addition, an agency may not have compiled the desired type of record. For example, although the North Carolina Department of Labor requires employers to provide employees access to information regarding exposure to toxic materials, the Department itself never has compiled a record containing such information for public inspection.⁴¹

Another method traditionally available to the public in attempting to obtain information about hazardous chemicals at a particular facility is through inquiries directed to the employer, employees, or health care providers. In the absence of any statutory requirements compelling disclosure, however, the employer is under little obligation to divulge such information.⁴² Employees might

COMMISSION, HAZARDOUS SUBSTANCES LABELLING AND IDENTIFICATION, REPORT TO THE 1985 GENERAL ASSEMBLY OF NORTH CAROLINA, at E31-E42 (1985) (a description of information related to chemicals that is collected by pertinent federal agencies) [hereinafter cited as NORTH CAROLINA RESEARCH COMMISSION]; LATOVICK, *Protection for Trade Secrets under the Toxic Substances Control Act of 1976*, 13 U. MICH. J.L. REF. 329 (1980) (discussion of EPA's disclosure of information submitted under the Toxic Substances Control Act); McFarity and Shapiro, *The Trade Secret Status of Health Safety Information: Reforming Agency Disclosure Policies*, 93 HARV. L. REV. 837 (1980) (discussion of determination of what data should be publically disclosed by the Food and Drug Administration and by the EPA under the Freedom of Information Act).

37. See FIRE PREVENTION CODE § 1.8 (Am. Ins. Ass'n 1976).

38. See *supra* notes 11-13 and accompanying text.

39. See FIRE PREVENTION CODE § 20.3.c (Am. Ins. Ass'n 1976) (reports concerning chemicals or processes may be limited to the confidential use of the fire chief).

40. See N.C. GEN. STAT. § 132-6 (1981). "Every person having custody of public records shall permit them to be inspected and examined at reasonable times and under his supervision." *Id.*

41. Interview with Charles Jeffress, N.C. Assistant Commissioner of Labor, in Raleigh, N.C. (Sept. 25, 1985).

42. In response to the publicity created by toxic chemical leaks and spills, however, industry has been more willing to disclose information about hazardous chemicals and health and safety data to the public. See *infra* note 81 and accompanying text.

not disclose information about hazardous chemical conditions because they fear employer retaliation or an employer action against the employee for misappropriation of a trade secret.⁴³ In addition, the employee might be bound by a confidentiality agreement with his or her employer not to disclose such information. These agreements, generally seen in the context of covenants not to compete, consistently have been upheld by the courts.⁴⁴

An attempt by the public to obtain information from a health care provider who treats facility employees also becomes problematic. An employer can require that the health care provider agree in writing not to disclose information that constitutes a trade secret.⁴⁵ Furthermore, a health care provider, like an employee, can be liable for misappropriation of a trade secret.⁴⁶ Therefore, confidentiality agreements and possible penalties for misappropriation decrease the health care provider's willingness to disclose information to the public.

Finally, a member of the public is entitled to information regarding toxic chemicals, including specific identification of hazardous chemicals, if he or she has filed suit against a particular facility. Such information can be obtained through the discovery process⁴⁷ if relevant to the trial.⁴⁸ The court may limit the scope of available information, however, by issuing protective orders that preserve the confidentiality of trade secrets.⁴⁹ Furthermore, the use of discovery

43. See *Funchion v. Somerset Knitting Co.*, 158 F. Supp. 57 (M.D.N.C. 1958) (former employee abused confidential relationship with employer by disclosing a trade secret); N.C. GEN. STAT. § 66-153 (1985) (providing employer with misappropriation action against employee who discloses trade secret information).

44. See, e.g., *Harwell Enterprise v. Heim*, 276 N.C. 475, 173 S.E.2d 316 (1970) (granting injunctive relief to prevent former employee from disclosing trade secrets); *Kadis v. Britt*, 224 N.C. 154, 29 S.E.2d 543 (1944) (covenant not to compete made to protect trade secrets upheld); *Travenol Laboratories, Inc. v. Turner*, 30 N.C. App. 686, 228 S.E.2d 478 (1976) (employee has duty not to disclose trade secrets and confidential information); *Forrest Paschal Mach. Co. v. Milhollen*, 27 N.C. App. 678, 220 S.E.2d 190 (1975) (covenant not to compete valid); cf. *Wilmer, Inc. v. Liles*, 13 N.C. App. 71, 185 S.E.2d 278 (1971) (lack of employee's access to trade secrets was a factor in court's refusal to uphold a covenant not to compete), *disc. review denied*, 280 N.C. 305, 186 S.E.2d 178 (1972). See generally A. VALIULIS, COVENANTS NOT TO COMPETE: FORMS, TACTICS, AND THE LAW 372 (1985) (listing North Carolina cases); Note, *Injunctive Russian Roulette and Employment Noncompetition Cases*: *A.E.P. Industries, Inc. v. McCure*, 63 N.C.L. REV. 222 (1984) (examining North Carolina case law upholding covenants not to compete).

45. 29 C.F.R. § 1910.1200(i)(3), (4) (1985). "The health professional and the employer . . . [may] agree in a written confidentiality agreement that the health professional will not use the trade secret information for any purpose other than health need(s) asserted and agree not to release the information . . ." *Id.* § 1910.1200(i)(3)(v). Also, "the confidentiality agreement . . . may restrict the use of the information to the health purposes indicated . . . [and] may provide for appropriate legal remedies in the event of a breach of the agreement, including stipulation of a reasonable pre-estimate of likely damages." *Id.* § 1910.1200(i)(4)(i), (ii). Such confidentiality or nondisclosure agreements have been upheld. See, e.g., *United Steelworkers of Am. v. Auchter*, 763 F.2d 728, 742-43 (3d Cir. 1985).

46. See N.C. GEN. STAT. § 66-1522 (1985) (broad definition of "person" for trade secret liability purposes); *infra* note 52.

47. See N.C. GEN. STAT. § 1A-1, Rule 26(a) (Supp. 1985) (methods of discovery).

48. See, e.g., *Carvel Corp. v. Lefkowitz*, 106 Misc. 2d 284, 291, 431 N.Y.S.2d 609, 614-15 (N.Y. Sup. Ct. 1979) (disclosure of trade secrets is permitted during trial if essential to ascertain the truth); N.C. GEN. STAT. § 1A-1, Rule 26(b)(1) (Supp. 1985).

49. See *Harrington Mfg. Co. v. Powell Mfg. Co.*, 26 N.C. App. 414, 216 S.E.2d 379 (advocating protection of trade secrets in pre-trial discovery process), *disc. review denied*, 288 N.C. 242, 217 S.E.2d 679 (1975); N.C. GEN. STAT. § 1A-1, Rule 26 (1983).

to obtain access to specific chemical information is undesirable due to the expense of litigation and time considerations.

With the enactment of the Right-to-Know Act, the North Carolina General Assembly responded to these problems of public access and to growing public concern about the possibility of toxic chemical accidents and the long term effects of exposure to low levels of toxic substances. The general assembly ratified the Act on July 17, 1985, after negotiations and compromise between the State Senate and House of Representatives.⁵⁰ The Act provides three groups with access to pertinent health and safety information from a facility using hazardous chemicals. These three groups are fire chiefs or fire marshalls,⁵¹ health care providers,⁵² and the general public.⁵³ The Right-to-Know Act, however, prevents the public from acquiring information directly from the fire chief, the fire marshal, other public safety officials, or from health care providers without the employer's permission.⁵⁴ The scope of the Act, the kind of information that will

50. Hazardous Chemicals Right to Know Act, ch. 775, § 2, 1985 N.C. Sess. Laws 869, 877 (codified at N.C. GEN. STAT. §§ 95-173 to -218 (1985)). Some state officials wanted to limit public disclosure to information given by police and fire departments in emergency situations. See *The News & Observer*, (Raleigh, N.C.) July 12, 1985, at A12, col. 1. (North Carolina Governor James Martin, a former chemistry professor, spoke against the right-to-know proposals, claiming they were the product of a "small group of people who want to create a chemophobia.") Two days before the vote House and Senate members were deadlocked; the Senate demanded preemption of local ordinances, disclosure of information to fire departments only if requested by the departments, and disclosure to the public only if the person requesting access provided his or her name and promised in writing to use the information only for the purposes agreed upon. See *id.* July 13, 1985, at A8, col. 1. Compromises were reached, however, and the bill was approved in the House 101 to 8 and 43 to 0 in the Senate. See *id.* July 16, 1985, at P1, col. 1.

51. The Right-to-Know Act requires an employer using or storing hazardous chemicals to provide to the local fire chief the name and phone number of a company representative to be contacted in case of emergency. N.C. GEN. STAT. § 95-194(a) (1985). If the municipality has a population greater than 10,000, the employer must provide the fire chief with a Hazardous Substances List (HSL); if the population is less than 10,000, the employer must inform the chief of the availability of the HSL. Updates are required as necessary. *Id.* § 95-194(a), (b). Furthermore, the fire chief may obtain a Material Safety Data Sheet for any chemical on the HSL, *id.* § 95-194(d), and may conduct on-site inspections upon request. *Id.* § 95-194(c).

If the fire chief so requests, the employer also must provide an emergency response plan detailing evacuation and emergency procedures in the event of hazardous chemical emission or discharge. *Id.* § 95-194(e). If the employer submits such a plan, the fire chief must hold the plan in confidence; unpermitted disclosure is punishable as a misdemeanor. *Id.* § 95-194(f), (g). The emergency response plan or any portion thereof can be disclosed only to personnel responsible for preplanning emergency response, police, medical, or fire activities. *Id.* § 95-194(f). The Right-to-Know Act does not provide the public with the right to participate in the development of the plan or preplanning activities.

52. In emergency situations in which the specific chemical identity is necessary for emergency treatment, the employer must disclose such information to the treating health care provider. *Id.* § 95-198(a). As soon as circumstances permit, the employer can require that the provider sign a confidentiality agreement. *Id.* In nonemergency situations, if the health care professional provides in writing to the employer a statement of medical need for chemical information entitled to trade secret protection, the employer must provide the information and can require that the health care provider first sign a confidentiality agreement. *Id.* § 95-198(b).

53. On written request to an employer, any person, after identification and a statement of purpose for the request, is entitled to a list of all the chemicals on the Hazardous Substances List being used or stored by the employer, the approximate amount of each chemical present, and a Material Safety Data Sheet for each chemical if requested. *Id.* § 95-208(a). The employer can refuse access by claiming trade secret protection. *Id.* § 95-197; see *infra* notes 75-95 and accompanying text. Such a claim can be adjudicated by the Commissioner of Labor. N.C. GEN. STAT. § 95-208(b) (1985).

54. N.C. GEN. STAT. §§ 95-194(f), -194(g), -197(a), -197(b) (1985). The public thus cannot use

be available to the public, the limits placed on access to information (including prescribed penalties for access beyond these limits), and the mechanisms provided for enforcement are of particular importance.

The public's access to information depends on the scope of the Right-to-Know Act. The greater the scope of facilities and hazardous substances covered by the Act, the greater the potential for public access. Chemical manufacturers and distributors are covered by the Act,⁵⁵ as are most employers.⁵⁶ The Act defines an "employer" as a person engaged in business who has employees, including the State and its political subdivisions.⁵⁷ The definition excludes an individual whose employees are domestic workers or casual laborers hired to work at the individual's residence, retail food or trade establishments,⁵⁸ laboratories, and farming operations employing ten or fewer full-time employees.⁵⁹

The public's access to information is also greatly influenced by the Act's definition of a "hazardous chemical" as "any element, chemical compound or mixture of elements and/or compounds which is a physical hazard or health hazard."⁶⁰ Two requirements determine whether a particular chemical represents a physical or health hazard. First, if scientific tests show that the chemical possesses certain toxic properties, it will fall within the Act's coverage.⁶¹ Second, if the chemical appears in certain established lists of hazardous chemicals, it will be classified automatically as hazardous.⁶² Thus, the Act's designation can be described as a performance standard: all chemicals meeting the func-

a backdoor approach to obtain information; it must rely on the Right-to-Know Act's provisions specifically providing for public access.

55. See *id.* § 95-174(a), (d).

56. See *id.* §§ 95-191(a), -192(b), -194, -195(c), -196, -197, -198, -208.

57. *Id.* § 95-174(f). Chemical manufacturers and distributors can qualify as employers.

58. The excluded establishments must provide the fire chief with the name and phone number of a knowledgeable representative to contact in an emergency. *Id.* § 95-194(a)(i). The Right-to-Know Act does not exclude the repair and processing areas of such establishments. *Id.* § 95-216.

59. *Id.* § 95-216.

60. *Id.* § 95-174(k). The Right-to-Know Act adopted the North Carolina Department of Labor's definition found in the Hazard Communication Standard. The Department of Labor had adopted the federal Hazard Communication Standard by reference. See *supra* note 19 and accompanying text. The Right-to-Know Act's definition of a hazardous chemical is thus the same as that found in the federal standard. See 29 C.F.R. § 1910.1200(c), (d)(3) (1984). However, the Act excludes hazardous substances transported in interstate commerce, products intended for personal consumption by employees in facilities, any food and food and color additives, or drug or cosmetic as defined in the Federal Food Drug and Cosmetic Act, distilled spirits, tobacco, untreated wood products, and medicine used in patient care in health facilities. N.C. GEN. STAT. § 95-216 (1985).

61. Chemical manufacturers and importers must determine if chemicals produced or imported are hazardous by considering available scientific evidence and by conducting scientific tests if necessary. See 29 C.F.R. § 1910.1200(c), (d), app. A-B (1985). Allowing "regulated parties, such as chemical manufacturers, who possess an economic interest in avoiding such a determination" to conduct such tests has been the target of much criticism. Susser, *The OSHA Standard and State "Right-to-Know" Laws: The Preemption Battle Continues*, 10 EMPLOYEE REL. L.J. 615, 621-22 (1985).

62. 29 C.F.R. § 1910.1200(d)(3) (1985). A chemical is hazardous if it is listed in subpart Z of 29 C.F.R. § 1910 or the latest American Conference of Governmental Industrial Hygienists' edition of *Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment*. *Id.* § 1910.1200(d)(3)(i)-(iii). Also, the compilation of carcinogens or potential carcinogens contained in the *Annual Report on Carcinogens*, which the National Toxicology Program publishes, or findings by the International Agency for Research on Cancer can qualify a chemical as a health hazard. See *id.* § 1910.1200(c).

tional definition of hazardous or toxic are included, as well as an established "floor" of chemicals automatically designated as hazardous.⁶³

Public access is also influenced by the type of information available under the Act. The Act provides that "[a]ny person in North Carolina may request in writing from the employer a list of chemicals used or stored at the facility."⁶⁴ In response to such a request, an employer, at cost, must furnish a list that contains all chemicals included on the Hazardous Substances list, the class of each chemical, and a Material Safety Data Sheet (MSDS) for each chemical for which an MSDS is available and requested.⁶⁵ The employer may also disclose additional information if he or she desires.⁶⁶

The public's right to obtain hazardous chemical information, however, is subject to certain limitations. A person making a request must indicate his or her name and address and must state the purpose of the request.⁶⁷ If the em-

63. See NORTH CAROLINA RESEARCH COMMISSION, *supra* note 36, at D-6; Comment, *Workers' Right-to-Know About Chemical Hazards in the Workplace: A Proposed Model Uniform Right-to-Know Act and a Critical Look at Cincinnati's Right-to-Know Ordinance*, 10 N. KY. L. REV. 427, 430-37 (1983). This dual standard avoids the problems that arise when only the performance standard or floor list is used. See NORTH CAROLINA RESEARCH COMMISSION, *supra*, at D-6 to D-8.

If the Act adopted only a floor list, it would be insufficient. Although such an adoption probably would ease the burden of a state agency or employer in determining which chemicals are hazardous, it is difficult to locate a list that is neither "grossly over-inclusive nor under-inclusive." See Comment, *supra*, at 432. Floor lists often have been prepared for a limited purpose. *Id.* at 433. For example, OSHA Subpart Z was developed as a list of hazardous air contaminants; the list, therefore, specifies substances determined to be hazardous only if present in sufficient concentrations in the workplace atmosphere. *Id.* New York's employee right-to-know law adopts the National Institute of Occupational Safety and Health's list of hazardous chemicals which, "by its own text, was not intended to suggest that each of the 33,000 chemicals [listed are] hazardous." O'Reilly, *Right to Know: Cincinnati's More Righteous, Less Knowing Experiment*, 52 U. CIN. L. REV. 337, 358 (1983) (table salt on NIOSH hazardous substances list). Also, if the Act adopted a list to define hazardous chemicals, the list would have to be amended frequently as more chemicals become designated as physical or health hazards, and controversy would arise over why certain substances were included and others were not. See NORTH CAROLINA RESEARCH COMMISSION, *supra*, at D-6.

If the Act relied solely on a performance standard to define hazardous chemicals, other problems would arise. Because chemical manufacturers, distributors, and employers would have to compile and analyze hazard information, an initial lag time would develop with few chemicals officially designated as hazardous. Such a delay could severely limit the availability of public information on many hazardous materials.

By comparison, the Right-to-Know Act's hazard determination process allows for certainty by providing a floor of substances covered, and it provides for flexibility by enabling the pool of hazardous chemicals to be updated as chemicals are tested and evaluated. Information concerning a wider variety of hazardous chemicals is thus available.

64. N.C. GEN. STAT. § 95-208(a) (1985).

65. *Id.* The Hazardous Substances List, produced and maintained by the employer, includes a compilation of each hazardous chemical used or stored in quantities of 55 gallons or 500 pounds or more; the list consists of the chemical or common name, the approximate range of quantity present, and the area in the facility where each chemical is usually stored and under what temperature and pressure. *Id.* § 95-191(a).

The "class" of each chemical designates the approximate range of quantity present: Class A includes quantities less than 55 gallons or 500 pounds; Class B includes quantities between 55 gallons to 550 gallons, and between 550 pounds and 5000 pounds; Class C includes quantities between 550 and 5500 gallons, and between 5000 and 50,000 pounds; and Class D includes quantities greater than 5500 gallons or 50,000 pounds. *Id.* § 95-191(a)(1)-(3).

For a discussion of the Material Safety Data Sheets, see *infra* notes 113-118 and accompanying text.

66. N.C. GEN. STAT. § 95-208(a) (1985).

67. *Id.*

ployer fails or refuses to provide the requested information, the individual can make a written request that the Commissioner of Labor review the request. The Commissioner or a representative then may conduct an investigation and make appropriate findings.⁶⁸ Pursuant to the Commissioner's findings, either the employer or the individual requesting access can pursue an administrative hearing.⁶⁹ If the Commissioner determines that the request is valid, the facility will be ordered to disclose the names of all chemicals on the hazardous substance list that are used or stored at the facility, the approximate quantity of each chemical, and an MSDS for each chemical if available and requested by the person denied access.⁷⁰ Any administrative order given pursuant to the hearing is subject to judicial review.⁷¹

The employer may interpose three defenses to public disclosure. Public access is denied if the information requested is a hazardous substance trade secret or if the request did not comply with the procedural requirements set forth in the Act.⁷² Access is also denied "if the employer proves that the information has been requested directly or indirectly by, or in behalf of, a competitor of the employer."⁷³ In each case the burden of proof is on the employer to establish the defense.⁷⁴

Judicial interpretations of these three employer defenses to disclosure may greatly affect the Act's actual scope. Furthermore, interpretations of the provision that grants employers the right to condition disclosure on a commitment to use the information only for the purpose stated by the requester, as well as the provision that preempts local government ordinances that require disclosure, may determine whether the Right-to-Know Act ultimately provides adequate public access to information.

Under the Right-to-Know Act, an employer may successfully deny a citizen's request for information about a specific chemical if the employer proves that such information is a hazardous chemical trade secret and provides the citizen with an MSDS for the specific chemical.⁷⁵ Thus, the designation of a specific substance as a trade secret is crucial. If the criteria for qualifying as a trade secret are broadly construed, less information will be disclosed to the public. Conversely, if the definition of a trade secret is narrowly construed, more information ultimately will be made available to the public.

Not suprisingly, employers, manufacturers, and distributors desire broad protection under the trade secret information defense. North Carolina courts and the general assembly have long recognized trade secret protection as a valid defense to disclosure in North Carolina.⁷⁶ This deference afforded employers

68. *Id.* § 95-208(b).

69. *Id.*

70. *Id.* § 95-208(a), (b).

71. *Id.* § 95-208(c).

72. *Id.* § 95-208(b).

73. *Id.*

74. *Id.*

75. *Id.* § 95-208(a), (b).

76. See *supra* note 43 and accompanying text. See generally Root & Blynn, *Abandonment of*

recognizes that compelling public disclosure increases the risk that a competitor will learn vital information about the particular entity that must disclose production or process information.⁷⁷ Chemical users, storers, and producers want to keep information from their competitors, and trade secret protection serves this purpose.⁷⁸

The Right-to-Know Act defines a trade secret as

any formula, plan, pattern, device, process, production information, or compilation of information, which is not patented . . . and which is used or developed for use in the employer's business, and which gives the employer possessing it the opportunity to obtain a competitive advantage over businesses who do not possess it, or the secrecy is certified . . . as necessary for national defense purposes.⁷⁹

The chemical name and Chemical Abstracts Service (CAS) number of a particular substance also can be subject to trade secret protection.⁸⁰ Although many chemical manufacturers, users, and supporters of the industry generally

Common-law Principles: The North Carolina Trade Secrets Protection Act, 18 WAKE FOREST L. REV. 823 (1982) (compares Trade Secrets Act with common law).

77. See *New Jersey State Chamber of Commerce v. Hughey*, 600 F. Supp. 606, 615 (D.N.J. 1985) (mere disclosure of identity of chemical at a facility can result in disclosure of a trade secret to competitor; it is not necessary to know the quantity of such chemical because mere presence often constitutes the trade secret), *aff'd in part and rev'd in part*, 774 F.2d 587 (3d Cir. 1985); O'Reilly, *supra* note 63, at 373 n.265 (records show that 85% or more of requests received by the Food and Drug Administration for disclosure of technical information comes from "commercial entities seeking information about competitors from FDA files"); Comment, *supra* note 63, at 441 (required disclosure of chemical identity can seriously harm a manufacturer because it may invest large sums of money in research and development and must rely upon trade secret protection of the chemical identity or formulation of the product because patent protection is often impossible); Note, *The Reverse—FOIA Lawsuit: Routes to Nondisclosure after Chrysler*, 46 BROOKLYN L. REV. 269, 294 (1980) (private industry accounts for two-thirds of Freedom of Information Act requests); Address by Claire Boccella, Office of General Counsel for the Chemical Manufacturers Association, Right-to-Know Institute, Chapel Hill, N.C. (Sept. 26-28, 1985) (real "adversary" of a facility forced to disclose information is the competitor, not the public).

78. As a New York judge eloquently stated:

The ingenuity to conceive an idea is a unique and precious gift. The right to protect it is sacred. Its full development becomes the heartbeat of free enterprise. Initiative, ingenuity and industry must not be discouraged nor undermined if our nation is to prosper and our free society is to endure.

Carvel Corp. v. Lefkowitz, 106 Misc. 2d 284, 291, 431 N.Y.S.2d 609, 614-15 (N.Y. Sup. Ct. 1979)

79. N.C. GEN. STAT. § 95-174(m) (1985). This provision is similar to the definitions contained in the RESTATEMENT, in North Carolina's Trade Secrets Protection Act, and in the federal Hazard Communication Standard. See 29 C.F.R. § 1910.1200(c) (1985); N.C. GEN. STAT. § 66-152(3) (1985); RESTATEMENT (FIRST) OF TORTS § 757 comment b (1939). Presumably, case law interpreting these sources' trade secret definitions would be helpful when determining if a hazardous chemical trade secret exists under the Right-to-Know Act. See *infra* notes 86-90 and accompanying text.

In response to the United States Court of Appeals' holding in *United Steelworkers v. Auchter*, 763 F.2d 728 (3d Cir. 1985), OSHA has promulgated an interim rule that alters the definition of a hazardous chemical trade secret in the Hazard Communication Standard. See 45 Fed. Reg. 48,750 (1985) (to be codified at 29 C.F.R. § 1910.1200). The interim rule attempts to clarify the designation of trade secrets by

adopting the principles enunciated by the *Restatement* [of Torts], section 757, comment b, as the criteria the Agency [OSHA] will use to evaluate an employer's substantiation of a trade secret claim. OSHA is publishing, verbatim . . . section 757, comment b (1939) in a new appendix D to 29 CFR 1910.1200 [Hazard Communication Standard].

Id. at 48,753.

80. N.C. GEN. STAT. § 95-174(m) (1985).

do not object to the required disclosure of health and safety information,⁸¹ the required disclosure of specific chemical identities of substances present raises employer objections.⁸² To prove that a chemical name or CAS number is a trade secret, the Act requires employers to "establish that the identity or composition of the substance cannot be readily ascertained without undue expense by analytical techniques, laboratory procedures, or other lawful means available to a competitor."⁸³ This reverse engineering problem presents several difficulties for employers.⁸⁴

81. Although the chemical industry does not look favorably on disclosure of proprietary information, it seems to recognize that health and safety information should be disclosed to the public and that emergency planning includes public participation. See Cifelli, *Chemical Companies in a Bind*, 111 FORTUNE, April 1, 1985, at 130 (1985). Many large companies have initiated programs designed to increase public participation. See *id.*; Star, Hager, Cook, & Friday, *America's Toxic Tremors*, 106 NEWSWEEK, Aug. 26, 1985, at 18 (1985) (chemical industry has stepped up safety programs, including hotline to provide information about hazardous materials).

The Chemical Manufacturers Association (CMA) has designed a program to provide guidance in community outreach programs and emergency response preparation for its members. Address by John Slavick, Director, Special Projects and Regional Communications, Chemical Manufacturers Ass'n, Right-to-Know Institute, Chapel Hill, N.C. (Sept. 26-28, 1985). The CMA's program should be adopted by all CMA's members by the summer of 1986. See Star, Hager, Cook, & Friday, *supra*.

The goals of the CMA's program and the Community Awareness and Emergency Response Program (CAER) are "to develop a community outreach program; provide the public with information about chemicals manufactured or used at local plants, and [to] combine chemical plant and community emergency response plans to create a coordinated approach to accidents." *CAER Promotes Chemical Awareness*, CHEMECOLOGY, Oct. 1985, at 2. Likewise, the CMA created the National Chemical Response and Information Center to "make available routine health and safety information about chemicals to the public and to provide emergency personnel with advice and assistance, if requested, during chemical emergencies." *CMA Response Center Answers Chemical Safety Questions*, CHEMECOLOGY, Oct. 1985, at 2.

In one effort to demonstrate the industry's recognition of public concern over toxic chemicals, the head of the National Institute for Chemical Studies, an organization established by the West Virginia businesses concerned with the chemical industry's image, spent two weeks with a family living next to chemical plants in Charleston, West Virginia, recording impressions of what he saw, smelled, and tasted. Durham Morning Herald, Sept. 11, 1985, at A12, col. 1.

82. See *supra* note 77 and accompanying text.

83. N.C. GEN. STAT. § 95-174(m) (1975). The Trade Secrets Protection Act specifies a similar requirement for trade secret protection. See *Id.* § 66-152(3)a (1985) (Information not "readily ascertainable through independent development or reverse engineering [analytically examining the product to determine chemical constituents and methods of production] by persons who can obtain economic value from its disclosure or use" can qualify as a trade secret.).

The RESTATEMENT designates the "ease or difficulty with which the information could be properly acquired or duplicated by others" as a factor to be considered in trade secret determinations. See RESTATEMENT (FIRST) OF TORTS, *supra* note 79, § 757 comment b.

84. These extra requirements obviously place an additional burden on the employer. Determining when a substance cannot be readily ascertained without undue expense by techniques available to a competitor could prove very difficult. The Right-to-Know Act provides no additional guidance or explanation regarding this requirement. It gives no indication of what constitutes undue expense and does not address whether the particular employer must consider all competitors, including those with vast resources and laboratories at their disposal and those without, those competitors whose facilities are similar to his or her own in terms of size, chemicals used, products made, operating budgets, and those that are not, and those competitors within the limited geographic territory, and those outside the county, state, or country. The general assembly should provide further guidance for trade secret protection of chemical identities.

New York courts have addressed the reverse engineering problem. See *Riteoff Inc. v. Contact Indus.*, 43 A.D.2d 731, 350 N.Y.S.2d 690 (N.Y. App. Div. 1973) (secret formula for spray cleaner held to be trade secret where formula could be ascertained by competitor only by very difficult and detailed chemical analysis).

Reverse engineering issues present problems because the hearing or trial may have been held *in camera*; consequently, if a court finds that a chemical identity is a trade secret, evidence regarding

To qualify as a trade secret information must be known only by the employer, the employer's licensees, the employer's employees, and certain other individuals.⁸⁵ Common knowledge does not qualify as a trade secret. The courts may determine whether particular information constitutes common knowledge by examining case law that interprets the definition of a trade secret under the North Carolina Trade Secret Protection Act⁸⁶ and by examining the Restatement of the Law of Torts.⁸⁷ The Trade Secret Protection Act requires that trade secret information "not [be] generally known," although "[t]he existence of a trade secret shall not be negated merely because the information comprising the trade secret has also been developed, used, or owned independently by more than one person, or licensed to other persons."⁸⁸ The Restatement, using more restrictive language, states that "[m]atters of public knowledge or of general knowledge in an industry" cannot be a trade secret.⁸⁹ In addition, both the Restatement and the Trade Secrets Protection Act require that the individual claiming trade secret protection must have taken reasonable measures to maintain the secret.⁹⁰ The Right-to-Know Act does not require any such protective measure, resulting in a less restrictive definition of a trade secret.

The Right-to-Know Act requires that to qualify for trade secret protection,

reverse engineering feasibility is omitted in the opinion. See *Minnesota Mining & Mfg. Co. v. Technical Tape Corp.*, 23 Misc. 2d 671, 192 N.Y.S.2d 102 (N.Y. Sup. Ct. 1959), *aff'd*, 15 A.D.2d 960, 226 N.Y.S.2d 1021 (N.Y. App. Div. 1962) (court states only that evidence presented indicated that inspection and analysis could not determine any alleged secret; thus, the opinion does not specifically reveal the factors and evidence used by the court in its determination.).

An employer making a trade secret claim should be prepared to show *in camera* how the alleged trade secret was developed, including funds spent, time spent, analytical measures used, and how difficult it would be for a competitor to use reverse engineering to identify the chemicals used and methodology in the production of a product.

85. N.C. GEN. STAT. § 95-174(m) (1985).

86. N.C. GEN. STAT. §§ 66-152 to -157 (1985). The Trade Secrets Protection Act provides the owner of a trade secret with a legal action against a person, business, or government agency who without authorization discloses the information to another. *Id.* §§ 66-152 to -154.

87. One New York court, however, has expressed doubts as to the appropriateness of using the RESTATEMENT's definition of a trade secret in circumstances when the public attempts to gain access to health and safety information because the RESTATEMENT definition, "tailored as it is to protecting businesses from breach of contract and confidence by departing employees and others under a fiduciary obligation, is ill-suited for the public law context in which Freedom of Information Act determinations must be made." *Public Citizen Health Research Group v. F.D.A.*, 704 F.2d 1280, 1289 (D.C. Cir. 1983) (citing McGarity and Shapiro, *The Trade Secret Status of Health and Safety Testing Information: Reforming Agency Disclosure Policies*, 93 HARV. L. REV. 837, 863 (1980)).

88. N.C. GEN. STAT. § 66-152 (1985).

89. RESTATEMENT (FIRST) OF TORTS, *supra* note 79, § 757 comment b.

90. See N.C. GEN. STAT. § 66-152(3b) (1985) (information must be subject to reasonable efforts to maintain secrecy); RESTATEMENT (FIRST) OF TORTS, *supra* note 79, § 757 comment b. ("substantial element of secrecy must exist," and the extent of measures taken by employer to guard secrecy of information is a factor to be considered when determining whether given information is a trade secret).

The measures taken to protect the secrecy need only be reasonable. See *E.I. duPont deNemours v. Christopher*, 431 F.2d 1012 (5th Cir. 1970) (defendant precluded from using trade secret information appropriated by hiring aerial photographer to photograph plaintiff's facility, under construction, because plaintiff took reasonable steps to protect the secrecy of the trade secret), *cert. denied*, 400 U.S. 1024 (1971). See generally PRACTICING LAW INSTITUTE, PROTECTING TRADE SECRETS (1981) (discussion of trade secrets and methods by which holders can prevent disclosure, defend trade secret claims, and obtain remedies when trade secrets are illegally disclosed).

the information can only be known by the employer, employer's licensees and employees, and "certain other individuals."⁹¹ The Act, however, fails to define or identify these "certain other individuals." Depending on how this provision is interpreted, the amount of information qualifying for trade secret protection will vary. If "certain other individuals" is interpreted to mean only those individuals entitled by the Right-to-Know Act to access to trade secret information—emergency and medical personnel⁹²—then information possessed by more than one employer would not qualify for trade secret protection. But if information could qualify as a trade secret despite a finding that competitors possess such information independently, the Right-to-Know Act's definition would seem to accord with the Restatement's and the Trade Secret Protection Act's criteria for a trade secret.⁹³ "Certain other individuals" would include those employers independently and legally possessing the trade secret information. As more people qualify as "certain other individuals," the requirement that information cannot be general knowledge becomes less restrictive, and the amount of information designated as a trade secret increases.

The Right-to-Know Act requires that trade secret information must be "used or developed for use in the employer's business" and must give the employer the opportunity to obtain a competitive advantage over employers that do not possess such knowledge.⁹⁴ An employer need not show that the trade secret provides a competitive advantage; he or she must only show that the opportunity for such an advantage exists. Therefore, an employer should be prepared to provide documentation showing how such information benefits the employer, the extent to which the employer would be economically damaged if such information were denied trade secret protection, and how the trade secret affects the production process, the product's sale price, and the product's efficacy.⁹⁵

In addition to the trade secret defense, an employer may refuse to disclose information concerning hazardous chemicals if the request does not comply with

91. N.C. GEN. STAT. § 95-174(m) (1985).

92. *Id.* §§ 95-194(e), -194(f), -198(a), -198(b).

93. The Trade Secrets Protection Act allows for independent use by another competitor—"[t]he existence of a trade secret shall not be negated merely because the information comprising the trade secret has also been developed, used, or owned independently by more than one person, or licensed to other persons." *Id.* § 66-152 (1985). Likewise, the RESTATEMENT states that "[i]t is not requisite that only the proprietor of the business know [its trade secret]. Others may also know of it independently, as, for example, when they have discovered the process or formula by independent invention and are keeping it secret." RESTATEMENT (FIRST) OF TORTS, *supra* note 79, § 757 comment b.

94. N.C. GEN. STAT. § 95-174(m) (1985). The Trade Secrets Protection Act and the RESTATEMENT have similar requirements. See N.C. GEN. STAT. § 66-152(3)a (1985) (holder derives "actual or potential commercial value" over those not holding it); RESTATEMENT (FIRST) OF TORTS, *supra* note 79, § 757 comment b (information used by holder provides "an opportunity to obtain an advantage over competitors who do not know or use it"). Thus, unlike the Right-to-Know Act, the RESTATEMENT requires that the information be used, not just developed for use or possessed.

Alternate bills granted trade secret protection only to information that actually did provide a competitive advantage over nonholders of the information. See S. 699, § 130A-431(a)(7), N.C. Gen. Assembly, 1985 Sess. Such a definition places a greater burden of proof on the party claiming trade secret protection.

95. Address by Claire Boccella, Office of General Counsel for Chemical Manufacturers Association, Right-to-Know Institute, Chapel Hill, N.C. (Sept. 26-28, 1985).

statutory requirements.⁹⁶ Such a defense seems relatively straightforward, yet the question remains whether substantial compliance with the request provisions will be sufficient or whether the request must comply precisely with the statute. The employer carries the burden of proof for this defense.⁹⁷

An employer also may refuse to disclose if the person requesting information is doing so "directly or indirectly by, or in behalf of, a competitor of the employer."⁹⁸ This defense seems unclear. When requesting disclosure, an individual is required by the Act to identify himself or herself, and if applicable, identify the name of the organization, partnership, or corporation he or she is representing.⁹⁹ Obviously, if a written request reveals that the person is an employee of a competitor, the employer would have a valid defense; a court could easily determine that such a request was in behalf of a competitor. If, however, the requester is an employee of a certain competitor, but also happens to live next door to the employer, a legitimate reason exists for requesting information. It is easy to imagine other troublesome scenarios: the person who makes the request could be a spouse or relative of a competitor's employee, or he or she could be in a union that represents the competitor's employees. The general assembly should provide more guidance to help clarify this defense.

Another protection given to the employer that limits public access to information lies in the employer's control over the specific nature of the request for disclosure. The request "may include at the option of the employer, a statement to the effect that the information will be used only for the purpose stated" by the individual making the request.¹⁰⁰ The Right-to-Know Act, however, fails to state what purposes are permissible and what purposes entitle the employer to deny the request. The Act also fails to specify what remedies, if any, are available to the employer if the individual receiving information discloses the information beyond the scope of the stated purpose. If the disclosed information were a trade secret, the employer would have an action for misappropriation.¹⁰¹ It seems unlikely, however, that an employer would knowingly disclose a trade secret because the Act provides that the employer can withhold such information from disclosure.¹⁰²

If the agreement regarding use of the disclosed information qualifies as an enforceable contract, a breach of such agreement could result in a breach of contract action. Remedies would probably be limited to reimbursement for any economic damage suffered by the employer due to the disclosure. The Right-to-Know Act provides for written confidentiality agreements at the employer's option between the employer and health care providers when a hazardous chemical

96. N.C. GEN. STAT. § 95-208(b) (1985).

97. *Id.*

98. *Id.*

99. *Id.* § 95-208(a).

100. *Id.*

101. *See id.* §§ 66-152 to -157.

Under the Trade Secrets Protection Act, motives for disclosing information are irrelevant. All that is required is that an individual disclose a trade secret without express or implied authority or permission. *See id.*; Root & Blynn, *supra* note 76, at 846-48.

102. *See supra* note 75 and accompanying text.

trade secret is disclosed to the health care provider for the purpose of treating employees exposed to the hazardous chemical, and such a confidentiality agreement can provide for reasonable liquidated damages.¹⁰³ Although the Act does not provide for such damages in the context of the public's right-to-know, perhaps an employer could request a similar confidentiality agreement including a liquidated damages clause before releasing information to the public.

The Act further limits the public's access to information because it preempts all local governments from "exercising their powers to require disclosure . . . of information regarding the use or storage of hazardous chemicals by employers to any members of the public, or to any branch or agent of State or local government in any manner other than as provided"¹⁰⁴ If a city desired to increase disclosure to the public beyond the disclosure required by the Right-to-Know Act, it could not do so. Both Charlotte, North Carolina, and Durham, North Carolina, had right-to-know ordinances that provided for greater access to information than the Right-to-Know Act.¹⁰⁵ Both cities' ordinances required individuals to report lower amounts of hazardous chemicals present.¹⁰⁶ Also, the pool of chemicals regulated and available for public access was greater than under the Right-to-Know Act.¹⁰⁷ In contrast to the Act, which requires reporting merely a range of quantities present at a facility, the Durham Code provided for disclosure of the yearly maximum amount of each toxic chemical handled or used and information on any releases of disclosed toxic materials into the air, water, sewers, or land.¹⁰⁸ The definition of a trade secret in the Durham Code was also more limited than that in the Right-to-Know Act.¹⁰⁹ The Act's preemption provision thus limits the public's access to hazardous chemical information in those communities that had or would have had more liberal disclosure under their local ordinances.

This preemption of local regulations has stirred controversy. Supporters of the preemption provision maintain that the Act provides statewide unanimity and that varying local laws would greatly burden industry.¹¹⁰ Alternatively, the preemption provision arguably cancels important protective measures duly enacted by local governments.

103. N.C. GEN. STAT. § 95-198 (1985). Such agreements provided for in right-to-know legislation have been upheld. See *United Steelworkers of Am. v. Auchter*, 763 F.2d 728, 743 (3d Cir. 1985) (confidentiality agreements upheld including a provision for reasonable liquidated damages).

104. N.C. GEN. STAT. § 95-217 (1985).

105. CHARLOTTE, N.C., CODE ch. 9, art. I, § 8-7 (1986) (preempted by the Right-to-Know Act); DURHAM, N.C., CODE ch. 9, art. III, § 1 (1985) (formerly effective May 25, 1986, but preempted by the Right-to-Know Act).

106. See CHARLOTTE, N.C., CODE ch. 9, art. II § 8-28 (1986); DURHAM, N.C., CODE ch. 9, art. III, § 9-37 (1985).

107. See CHARLOTTE, N.C., CODE ch. 9, art. II § 8-28 (1986); DURHAM, N.C., CODE ch. 9, art. III, § 9-37 (1985).

108. See DURHAM, N.C., CODE ch. 9, art. III, § 9-36 (1985).

109. *Id.* § 9-43 (only chemical name, trade name, common name, or CAS number can qualify as a trade secret).

110. See Morrill, *supra* note 3. Similar arguments have been made at the federal level regarding OSHA's Hazard Communication Standard and its preemption of similar state laws. See *United Steelworkers of Am. v. Auchter*, 763 F.2d 728, 736 (3d Cir. 1985) (preemption motivated in part to reduce regulatory burden placed on industry by multiple state laws).

Notwithstanding the preemption provision, local governments might be free to establish their own data base containing hazardous chemicals present in the locality and allow public access to these compilations. The Right-to-Know Act allows any person in North Carolina to request disclosure and receive information. The Act, however, does not define "person." The definition of person found in other North Carolina laws often includes units of local governments.¹¹¹ Consequently, if a local government qualifies as a person, the local government would be entitled to all the information that can be disclosed to an individual, subject to the employer's request that the information be used only for the stated purpose and subject to defenses previously described.¹¹² Even if the local government does not qualify as a person, the statutory language seems to permit a representative of a local government to request in writing information available under the Act, provided that the statutory requirements are met and that the representative discloses the name and address of the organization for which he or she is requesting information. Arguably, a local government would be free to establish its own data base and allow public access to its compilation.

Finally, in analyzing the Right-to-Know Act, one must examine the usefulness of the information provided to the public. Will the Right-to-Know Act enable the public to receive the information that it needs to protect itself? The Act allows the public to become aware of the presence of hazardous chemicals used by employers and to receive health and safety information regarding such chemicals. With this knowledge, the public presumably can take more adequate measures to protect itself from health and safety problems. The Act assumes, however, that the information the public receives will be accurate and up to date. Unfortunately, this may not always be the case.

The public is entitled to receive from the employer a list of hazardous chemicals at the facility and, for each chemical listed, the approximate quantity present and the currently available MSDS¹¹³—the heart of the disclosure requirement. An MSDS contains the name of the chemical, all hazardous ingredients, health and physical hazards, signs and symptoms of exposure, primary routes of entry, target organs, precautions for safe handling, permissible exposure levels, applicable control measures, emergency and first aid procedures, and date of preparation and party responsible for preparation.¹¹⁴ Such information must be updated within three months if new information is available.¹¹⁵ However, MSDSs have generated some problems. According to some reports, certain MSDSs traditionally have not contained much health and safety

111. See *supra* note 25.

112. See *supra* notes 67-102 and accompanying text.

113. See *supra* notes 64-66 and accompanying text. The Hazardous Substances List includes only those substances designated as hazardous and that are usually stored or used at the facility in amounts of 55 gallons or 500 pounds, whichever is greater. The Right-to-Know Act is confusing in that it first sets out the threshold quantity of 55 gallons or 500 pounds to meet before listing on the Hazardous Substances List is required. N.C. GEN. STAT. § 95-191(a) (1985). Yet in the same section the Act designates a class for substances on the Hazardous Substances List stored at quantities of less than 55 gallons or 500 pounds. *Id.* § 95-191(a)(2). These provisions do not appear consistent or reconcilable.

114. 29 C.F.R. § 1910.1200(g) (1985).

115. *Id.*

information, particularly information regarding chronic effects.¹¹⁶ Apparently, small chemical manufacturers may not have the resources or staff to generate sufficient data concerning the particular chemicals at the facility.¹¹⁷ Obviously, if an MSDS is not very informative or is incorrect, the public is unable to obtain accurate and useful information.¹¹⁸

Another problem arises because the Act's disclosure requirements are not all inclusive. The public is not entitled to learn where hazardous chemicals are located at the facility or the conditions of usage or storage.¹¹⁹ Furthermore, the general assembly did not include any requirement to disclose information about emissions or discharges of those hazardous chemicals into the environment if such emissions or discharges do not contravene a standard. A right-to-know bill in the North Carolina State Senate—the Supplemental Hazardous Substances Emission Survey—did include such measures. The bill required employers to report the amount of emission or discharge of any hazardous substance on the hazardous substance list¹²⁰ and to make the report available for public access.¹²¹ This provision, however, was not included in the final draft of the Right-to-Know Act.¹²²

116. Address by William Bunn, M.D., J.D., M.P.H., Assistant Professor of Occupational and Internal Medicine at Duke University Medical Center, Right-to-Know Institute, Chapel Hill, N.C. (Sept. 26-28, 1985).

117. Address at Right-to-Know Institute, Chapel Hill, N.C. (Sept. 26-28, 1985).

118. The Right-to-Know Act imposes a duty on "[c]hemical manufacturers and distributors [to] provide . . . MSDS's to manufacturing and nonmanufacturing purchasers of hazardous chemicals in North Carolina for each hazardous chemical purchased." N.C. GEN. STAT. § 95-192(a) (1985). The Hazard Communication Standard now also has strict requirements that impose a duty on chemical manufacturers and distributors to determine the hazardous properties of chemicals produced or imported, respectively, and to produce accurate MSDSs. See 29 C.F.R. § 1910.1200(d), (e) (1984). Employers have the option of either relying on MSDSs received from chemical manufacturers or distributors or producing their own. *Id.* § 1910.1200(e)(2).

119. N.C. GEN. STAT. § 95-208(a) (1985). Such information, however, is available to fire and police departments. *Id.* § 95-191(a)(3).

120. Employers would have been required to submit to the Department of Natural Resources and Community Development the following:

a) The total stack or point-source emissions of the hazardous substance; b) The total estimated fugitive or nonpoint source of emissions of the hazardous substance; c) The total discharge of the hazardous substance into the surface or groundwater, the treatment methods, and the raw wastewater volume and loadings; d) The total discharge of the hazardous substance into public-owned treatment works; and (e) The quantity, and methods of disposal, of any wastes containing a hazardous substance, the methods of on-site storage, . . . location[s] of the final disposal site . . . and the frequency and method of transfer, including identity of the hauler of the wastes.

S. 699, § 130A-431(a)(5), N.C. Gen. Assembly, 1985 Session.

121. *Id.* § 130A-461. Other states provide that information similar to that found on the proposed Supplemental Hazardous Substances Emission Survey be available to the public. See N.J. STAT. ANN. § 34:5A-9(d) (West Supp. 1985) (any person can request a copy of the environmental survey); Gold, *The New Right-to-Know Act*, 56 PA. B.A.Q. 53, 54 (1985) (employers required to prepare "Environmental Hazard Survey, . . . a compilation of [emission and discharge of substances] but . . . limited to information required to be submitted under other environmental reporting requirements," and public has access to the information).

Although now preempted by the Act, see *supra* notes 104-109 and accompanying text, the Durham ordinance provided for public disclosure of information on any releases of hazardous substances into the air, water, sewer, or land. See DURHAM, N.C., CODE ch. 9, art. III, §§ 9-35(e), 9-36(a)(v) (1985).

122. Address by Harry Payne, N.C. House of Representatives and sponsor of bill, Right-to-Know Institute, Chapel Hill, N.C. (Sept. 26-28, 1985) (Employers were concerned with the cost of

To illustrate the usefulness of storage information and emission data, consider the following scenario: An individual living downwind and next to a chemical manufacturer experiences shortness of breath for a few days. Believing the facility is to blame, the individual requests and receives all the information he or she is entitled to under the Right-to-Know Act—the list of the hazardous chemicals, approximate amounts present, and an MSDS for each hazardous chemical on the list. The individual can examine each MSDS and see what chemicals produce respiratory problems by exposure through the air. The individual could also visit a physician, show the physician the MSDSs and list of chemicals, and ask if any of the chemicals present could cause shortness of breath.¹²³ The individual could also talk to a chemist to determine which chemicals on the list could travel through the air. The individual, however, is not provided with information describing the use, transfer, or storage conditions for the chemicals that would help determine if the individual had been exposed to a chemical. Also, information concerning emission of any chemicals into the atmosphere by the facility such as the chemical identity and quantity, and the time, duration, and date of emission, are all vital information that would enable an individual to determine if he or she has been exposed to a hazardous chemical. However, this information is usually unavailable because the Act does not require it to be compiled or disclosed. Such situations may well leave members of the public frustrated as they shuffle through a stack of MSDSs attempting to determine which of the listed chemicals could have caused their specific symptoms or other suspected damage to the community.¹²⁴ The general assembly should respond to this problem by enacting a discharge and emission reporting requirement.

In conclusion, the Hazardous Chemicals Right-to-Know Act provides the public access to information that was previously impossible or impractical to obtain. Such information includes a list of hazardous chemicals present at a facility, the approximate amount of each chemical, and an MSDS for each chemical. The Act attempts to balance the public's need for information with the chemical producer's and user's right to protect confidential business information and trade secrets. Although such a balance is difficult to maintain, the general assembly should consider requiring emission and discharge data to be compiled for all chemicals on the hazardous substance list by each facility. Allowing public access to this data would enable the public to acquire information

complying with such a requirement—it was feared that small businesses did not have the resources for such testing and monitoring.).

123. Some doctors may not be able to discuss accurately signs and symptoms of exposure to certain chemicals. Many physicians lack familiarity with toxins in the workplace and with MSDSs. Address by William Bunn, *supra* note 116.

124. Interview with Charles Jeffress, *supra* note 41.

Employer-employee litigation involving exposure to toxic chemicals has shown that the party claiming that such exposure caused sickness or disease must be able to identify which substances were responsible with at least some specificity. In *Klein v. Council of Chem. Ass'n*, 587 F. Supp. 213 (E.D. Pa. 1984), for example, an employee sued a chemical manufacturer, alleging that exposure to chemicals in the workplace resulted in his contracting cancer. The court held that the employee failed to state a cause of action when he could not identify and establish his contact with the specific chemicals alleged to have caused the cancer.

about hazardous chemicals on site, particular substances that have been emitted or discharged, and those chemicals to which the public has been exposed. Access to such information is essential if the public is to understand and prepare adequately for the consequences of a hazardous chemical leak.

JOHN L. SPILSBURY