INDOOR AIR POLLUTION: WHERE TO TURN FOR COMPENSATION

By Rebecca Ensign

I. INTRODUCTION

A source of pollution potentially much more destructive than outside air pollution is that pollution created inside the buildings where we work and the homes where we live. Although an amended Clean Air Act was signed by President Bush on 15 November 1990, the Act has no explicit provisions on indoor air quality. In addition, no one federal agency has primary responsibility for regulating and researching indoor air contaminants. Instead, an Interagency Council on Indoor Air Quality exists to organize research and control efforts. As a result of inadequate federal regulation in this area at the present time, resort must be made to existing legal theories and frameworks for compensation and deterrence.

II. SOURCES OF INDOOR AIR POLLUTION

Many sources of indoor air pollutants exist, including the known carcinogens of asbestos and radon, and the possible carcinogen of urea formaldehyde foam insulation. Asbestos is a group of minerals of fibers; asbestos inhalation can cause various illnesses, including cancer. Radon is a gas derived from the decay of radium found in soil and rock. Radon gas enters buildings through openings in the foundations, floor and walls. Formaldehyde and other volatile organic compounds (VOCs) are also found in buildings and may be dangerous to human health.

Another source of indoor pollution is indoor combustion pollutants which might come from appliances or outdoor pollution seeping inside. Tobacco smoke also releases pollutants including formaldehyde and carbon monoxide. Other indoor pollutants include materials from cleaning products, building materials, furniture, dry-cleaned clothing, pesticides, and paints. Finally, biological contamination (including bacteria, viruses, molds and yeast), can cause harm, including Legionnaire's Disease.

III. CAUSES OF INDOOR AIR POLLUTION

Two major causes of indoor air pollution have probably contributed to the recent increase in episodes of illness from indoor air. One of these stems from the energy crisis in the 1970's when the trend was to reduce energy costs by sealing buildings, making them more energy efficient. During this period, the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) reduced ventilation standards to only 15% fresh air, 85% recirculated air. These newly energy-efficient buildings seal in contaminants.

Another major cause is probably related to the remodeling of buildings. Man-made, synthetic, chemically-based building materials, furnishings, and office supplies are used in remodeling; these items off-gas formaldehyde or other VOCs. This off-gassing, in combination with tightly sealed buildings, is probably the main contributor to increased indoor air pollution.
IV. SYMPTOMS OF INDOOR AIR POLLUTION

Symptoms caused by indoor air pollution include: eye, nose and throat irritation; sensation of dry mucous membranes and skin; erythema (abnormal redness of the skin); mental fatigue; headaches, cough, and airway infections; hoarseness, wheezing, itching, and hypersensitivity; and nausea and dizziness. Many of the symptoms are similar to the flu and cold.\textsuperscript{13}

V. ENVIRONMENTAL ILLNESS/MULTIPLE CHEMICAL SENSITIVITIES

For some people the symptoms of indoor air pollution arise before the general population is affected. Some people are hypersensitive to certain chemicals or to the accumulation of chemicals in our everyday environment. These people can become extremely debilitated by their reactions to these pollutants. As related by testimony in \textit{Graham v. Canadian National Railway Company},\textsuperscript{14} this illness is called multiple chemical sensitivity and afflicts certain people at levels below the threshold normally expected to cause medical problems. The onset of the condition is thought to be triggered by exposure to large amounts of the subject chemicals, returning with only a low level of exposure to the chemicals.\textsuperscript{15}

Although the more extreme cases result in an inability to enter buildings or leave home without becoming violently ill, the theory of multiple chemical sensitivities is far from being accepted by the medical community.\textsuperscript{16} The California Medical Association, for example, asserts that there is no scientific justification for medical advice regarding multiple chemical sensitivities. Many doctors claim that people with multiple chemical sensitivities are making the whole thing up and should see psychiatrists.\textsuperscript{17} As information about indoor air pollution becomes more well-known, however, it may become clearer that people with multiple chemical sensitivities were indicators that these pollutants are bad for us all.

VI. THE ROLE OF THE COURTS

Since regulation is minimal in the area of indoor air pollution, the courts will be a major arena for those who want to be compensated for injuries caused by these pollutants. Common law causes of action and already existing statutes will have to be relied upon until indoor air becomes regulated.

A. POTENTIAL LITIGANTS

The usual plaintiffs in cases brought because of indoor air pollution include employees, unions, employers, building owners, lessees, and tenants.\textsuperscript{18} Employers might claim loss of productivity of their employees. Typical defendants in these types of cases will be developers, owners, real estate agents, architects, engineers, general and sub-contractors, building manufacturers, and building materials and furnishings manufacturers.\textsuperscript{19}

B. CAUSES OF ACTION

Conceivable causes of action include: negligence; strict liability (both products and CERCLA); breach of contract and express warranty; breach of implied warranty (fitness for a particular purpose and habitability); breach of covenant of quiet enjoyment by constructive eviction; fraudulent concealment and misrepresentation; nuisance; assault and battery; and emotional distress.\textsuperscript{20}
C. PROOF PROBLEMS

One of the major obstacles to most of these causes of action will be problems of proof. Proving indoor air pollution causes an injury can be expensive and difficult since no single discipline can be used as a source of experts. Also, a plaintiff will need to study a building's heating, ventilating, and air conditioning (HVAC) system. In addition, plaintiffs will have a difficult time proving the specific chemical causing the problem. To avoid this, plaintiffs might try proving epidemiologically that the building is "sick" and try to tie their symptoms to this. The problem is that the symptoms are similar to the flu or common cold, making causation difficult to demonstrate. These proof problems added together can often result in a "tenuous link of causation."

A plaintiff can try to argue "synergism," that the combination of chemicals in the office caused the problem. The trouble is that scientific experts do not generally accept the "synergism" theory; therefore, proof related to this theory can be excluded under Frye v. United States (which states that a scientific principle "must be sufficiently established to have gained general acceptance in the particular field in which it belongs."). Defendants can counter that these symptoms are psychological.

D. SOME SPECIFIC THEORIES OF LIABILITY EXAMINED

1) NEGLIGENCE

A plaintiff can argue negligence against anyone who contributed to an economic loss or personal injury. The plaintiff has to establish that the defendant owed a duty to conform to a certain standard of conduct and that plaintiff's injury was caused by defendant's breach. Breach can be shown by failure to act like a reasonable person and many fact scenarios might lead to the conclusion of breach. For example, an employee could arguably sue his employer for failure to test the air adequately. Another way to show negligence might be to prove the defendant breached a duty to warn purchasers or occupants about a pollutant.

At this stage of the development of the law, unreasonableness will be difficult to establish since general knowledge of the risks of indoor pollution does not exist. As public awareness grows, however, the reasonableness standard might establish a higher level of care. One potential standard of what a reasonable person would do is embodied in the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) which has recommended levels of outdoor air of at least 15 cubic feet per minute per person (cfm/p). These standards, although not legally binding, are widely adhered to and might indicate a reasonableness standard.

Possible defenses to a negligence action include: contributory/comparative negligence; assumption of the risk; damages caused by a third party; contaminant levels within an acceptable range; and work performed consistently with methods used by professionals in the field.

2) STRICT LIABILITY

a) PRODUCTS LIABILITY

If a plaintiff argues strict liability, there is no need to prove misconduct by the defendant. Plaintiff would have to prove injury by a defective product which was unreasonably dangerous because of its manufacture, design or lack of warning. This theory
can be used against building supply manufacturers and sellers; however, buildings themselves are not considered products in a majority of jurisdictions.\textsuperscript{32} Therefore, the whole chain of distribution involved in the actual building could not be sued.

b) CERCLA

A possible argument for strict liability can be made under the Comprehensive Environmental Response, Cleanup and Liability Act (CERCLA),\textsuperscript{33} which allows recovery of response costs from the disposal of hazardous substances. A majority of courts believe CERCLA claims should not be allowed, however, at least as applied to asbestos remediation.\textsuperscript{34} Another problem for indoor air pollution plaintiffs is that a release or threatened release to the environment is required under CERCLA. Some cases do exist, however, where CERCLA cost recovery was allowed for indoor air pollution.\textsuperscript{35} These cases involved seepage into a building from a contaminated site, a pollutant release from a building and a threatened release from a building.\textsuperscript{36}

3) BREACH OF CONTRACT OR WARRANTY

A plaintiff can also claim damages for breaching the express or implied terms of a contract.\textsuperscript{37} A plaintiff can sue under an express warranty claim or, if the sale is covered under the UCC, the implied warranties of merchantability and fitness for a particular use. If the transaction is not covered by the UCC (e.g. new home sales), a majority of jurisdictions will allow suits on implied warranties of good workmanship or habitability. Some states have extended the implied warranty to used homes if the claim arises within a reasonable time of the original sale.\textsuperscript{38}

4) FRAUDULENT CONCEALMENT OR MISREPRESENTATION

Where a builder, seller or broker makes an untrue statement concerning indoor pollution, a purchaser can sue for misrepresentation. Generally, these causes of action are based on silence by the defendant and a plaintiff can win by showing intentional concealment of material facts not readily observable by the purchaser. Generally, a seller must disclose latent defects of which the seller had knowledge or were reasonably discoverable.\textsuperscript{39}

5) AMERICANS WITH DISABILITIES ACT

The Americans with Disabilities Act (ADA) of 1990 allows an employee plaintiff to get to a defendant employer without invoking the worker’s compensation laws. The ADA creates a potentially explosive area of liability because a “disability” has been held to include ailments related to breathing and working. The ADA is particularly useful in the context of those plaintiffs with multiple chemical sensitivities and hypersensitivity to certain pollutants. Under the ADA, “[n]o covered entity shall discriminate against a qualified individual with a disability...”\textsuperscript{40} A “covered entity” includes private employers.\textsuperscript{41} The term “disability” means “a physical... impairment which substantially limits one or more... major life activities.”\textsuperscript{42} As such, using the ADA supplemented with the Equal Employment Opportunity Commission (EEOC) regulations, an employee with environmental sensitivities can argue that indoor pollution and contaminants substantially limit their ability to breathe and work. Of course, the employee would have to prove that s/he could perform the essential functions...
of the job. Perhaps a defendant employer could argue that an essential function of the job includes being able to work in the same environment as the other employees without complaint. However, this is not a strong argument, since breathing contaminated air is probably not an essential function of many jobs.

The defendant employer could also argue that reasonable accommodation cannot be accomplished without undue hardship. The success of this argument depends on many factors (e.g., cost, financial resources of the employer, type of operations, etc.), which must ultimately add up to “significant difficulty or expense.” Cleaning up a building can be an expensive proposition in some instances and the defendant employer may occasionally win on the undue hardship exception. How this question is resolved will ultimately depend on the specific facts of the case.

Federal case law interpreting the Rehabilitation Act of 1973 has labelled one example of environmental sensitivity (smoke sensitivity) a physical handicap. In Vickers v. Veterans Administration, the court held that the plaintiff was “handicapped” because his hyper-sensitivity to tobacco smoke limited his major life activities including his capacity to work in an environment not completely smoke free. The court presumed for the sake of argument that the defendant employer had to make reasonable accommodations and found that the defendant did. The court refused to hold, however, that the defendant had a duty to make reasonable accommodations under the Rehabilitation Act.

The Vickers court found reasonable accommodation even though efforts fell short of banning smoking in the building altogether. The court held that the plaintiff himself did not take all the actions necessary to avoid expense. The ADA, as opposed to the Rehabilitation Act, explicitly requires reasonable accommodation; therefore, Vickers is even stronger precedent analogizing the ADA to the Rehabilitation Act.

Another district court opinion found that contaminants from recurrent water leaks which caused environmental hypersensitivity in plaintiff established plaintiff as a qualified handicapped person under the Rehabilitation Act. As such, the court held that the EEOC regulations required reasonable accommodations. The court held that this standard was not met because plaintiff was not relocated as an option. The court held an agency may not avoid its duty to make reasonable accommodation if no reason exists to suspect the existence or cause of the problem.

6) CALIFORNIA CASE LAW

A California appellate court recently rendered an important decision in the area of environmental sensitivity discrimination. In Fresno v. Fair Employment and Housing Commission, the court held that “physical handicap” as defined in California statutes included hypersensitivity to tobacco smoke. California Government Code 12926(h) provides that “physical handicap” includes “impairment of physical activity... or loss of functions.” The Fair Employment and Housing Commission (FEHC) regulations define “impairment of physical ability” more specifically to include “[a]ny physiological disorder or condition” affecting the respiratory system. The court also relied on FEHC’s regulation identifying a “major life activity” to include breathing.

The court also cited a California Supreme Court case which liberally construed California Government Code section 12926(h)’s definition of “physical handicap” to include “any physical impairment which is disabling in that it makes achievement unusually difficult.” The California Supreme Court held in that case that high blood pressure may
be a physical handicap. The Fresno court relied on this definition in part to include tobacco hypersensitivity within the definition of physical handicap.

The Fresno court refused to define tobacco hypersensitivity as merely an environmental limitation and not a physical handicap. The court held that tobacco smoke may be an environmental limitation alone if it is “merely irritating” but not if the smoke severely limits the ability to breathe.58

Once the court found that plaintiffs suffered from a physical handicap, the court addressed the issue of reasonable accommodation. California statutes require an employer to reasonably accommodate the physical handicap if the employer knew of the handicap unless the employer can demonstrate that the accommodation would be an undue hardship. Reasonable accommodation may include accessibility, job restructuring or alteration of the premises.60

The Fresno court relied on these California statutes and federal case law interpreting the “virtually identical” Rehabilitation Act to hold that the FEHC did not abuse its discretion in finding that the employer did not make reasonable accommodations. The Fresno court favorably cited McDonnell Douglas Corporation v. Green62 in which the United States Supreme Court held that a plaintiff has the initial burden of proving s/he was qualified and the employer failed to reasonably accommodate. Once the prima facie case is established, the burden shifts to the employer to show undue hardship. Then the plaintiff can still rebut and prove pretext (i.e. the employer was using the undue hardship defense as an excuse to discriminate).63

The Fresno court distinguished Vickers since in that case it was an agency policy to permit smoking and there was no comparable policy in this case. The Fresno court also factually distinguished Vickers stating that in this case the environment was “like a smoke-filled bar in which everyone gagged together.” The Fresno court held that the FEHC finding of no reasonable accommodation was not an abuse of discretion since the efforts taken by the employer simply did not work.64

The Fresno court also held that good-faith efforts by the employer were not an excuse limiting legal liability.65 In addition, the court held that merely permitting the employee to take unpaid leave violated state law since she was precluded from enjoying the privileges of employment because of the handicap.66

The importance of this decision has been further strengthened since the California Supreme Court denied review of the opinion and the decision remains intact. The Fresno case is important because it defines the level of reasonable accommodation necessary by the employer and because the court was willing to classify types of environmental illness as a physical handicap requiring employers not to discriminate. Individuals with environmental sensitivities at least have recourse against their employers for any discrimination which includes a failure to reasonably accommodate.
E. SOME SPECIFIC CASES

1) CALL V. PRUDENTIAL: This case settled but not before the judge ruled that if the jury found the HVAC system to be defective, the designer and contractor of the building could be strictly liable. This court treated the building like a sold product and the whole chain of distribution could be sued under strict products liability.

2) PERKINS V. MATOMIC: Nine women filed suit against a building landlord and management company that maintained the HVAC system when they became asthmatic shortly after they moved into a new building. Plaintiffs claimed an unspecified bacteria or mold contaminated the air. The case settled for an undisclosed amount.

3) BEEBE V. BURLINGTON INDUSTRIES: Plaintiffs claimed a new carpet in their office caused illness. The defendants convinced a jury that plaintiff's symptoms would have shown up immediately if caused by the carpet, not months later.

4) BABURA V. S.E.W. INVESTORS: Environmental Protection Agency employees allege toxic exposure because of claimed negligent renovation of EPA's Washington, D.C. headquarters. The plaintiffs claim that renovations disrupted the ventilation system and that fumes from construction materials and cleaning products recirculate in the building. Defendants include the owners of the building, the management agent and limited partners who owned the building. Plaintiffs also claim negligence in hiring the renovators. This case is currently in the discovery stage.

5) CLEMMONS V. BOHANNON: The court held that putting a non-smoker prisoner with a smoker prisoner in the same cell against their expressed will can be cruel and unusual punishment violating the 8th Amendment and a denial of due process violating the 14th Amendment.

6) PINKERTON V. GEORGIA PACIFIC CORPORATION: A jury awarded $203,000 in compensatory damages and over $16 million in punitive damages when particle board flooring materials caused adverse health effects. The defendants were the manufacturers of a urea-formaldehyde resin particle board which caused high formaldehyde concentrations in a newly constructed home.

VII. FUTURE OF INDOOR AIR POLLUTION

Indoor air pollution promises to be a controversial issue in the future. Some federal agency action is occurring now but regulation and research in this area promises to be explosive soon. OSHA has requested information and comments on Indoor Air Quality (IAQ) in occupational environments. This could lead to a federal regulation on IAQ in non-industrial workplaces, but the comments request closing time period is not until 21 January 1992. The Architectural and Transportation Barriers Compliance Board has issued final guidelines regarding the Americans with Disabilities Act (ADA) accessibility guidelines. The Board stated that pending further study of chemical and environmental sensitivities, the Board would not address this topic at this time. The Board stated that this issue required further coordination and cooperation with other Federal agencies and private standard setting agencies. Unfortunately, the Environmental Protection Agency (EPA) is opposing new IAQ legislation, despite reports by the EPA itself of the dangers of indoor pollution. The EPA is dragging its feet and claiming it needs more time.

Although agency action does not appear to be moving quickly to address the problems of indoor air pollution, some Congressional action has been started. Two companion indoor
air quality bills have been reintroduced into the 101st Congress. These bills are non-regulatory and emphasize research, information and education.

Besides federal agency and Congressional action, state action will also probably be a major force in the future. In California, Cal. Health and Safety Code section 4268 (1991) establishes that the State Department of Health Services shall conduct and promote research and studies relating to indoor air pollution. In Washington state, the State of Washington Department of General Administration has issue design requirements relating to sick building issues. These requirements include: an air distribution system that assures a constant volume of circulating air; temperate and humidity control; full-capacity ventilation for 90 days as a "flush-out period" and for an additional 90 days after employees move in. There are also requirements for testing furniture and carpets for contaminants.

VIII. CONCLUSION

The issue of indoor air pollution will be a major one in the future, probably eventually leading to stringent regulation. At present, however, plaintiffs have to rely on common law causes of action and existing statutory law. One statute which is promising to be especially important in this area for people with environmental hypersensitivities is the Americans with Disabilities Act and parallel state legislation. Since the agencies and Congress seem to be dragging their feet in this area, the importance of private suits will be tremendous in deterring indoor pollution and compensating those who are injured as a result of this pollution.

Since indoor air pollution has much more immediate and potentially much more destructive effects than outdoor air pollution, consumers and voters should push for regulation in this area. Until Congress or the federal agencies act, however, the best way to deter indoor polluters is private suits. The risk of potentially huge losses in court will propel those responsible for indoor air pollution to act quickly and safely to remedy the situation.

ENDNOTES

2Id. at CRS-1.
3Id. at CRS-2.
5Id. at 13.
6Id. at 14.
7Id. at 15.
8CRS Issue Brief at CRS-2.
9Cohoon at 15.
11Id. at 2-3.
12Id. at 3. "Volatile" means the chemicals in these materials turn into gases at room temperature.

Kornreich at 67.


Kornreich at 67.

Berger at 68.


Kornreich at 69.

Kornreich at 69.


Kornreich at 72.

Kornreich at 72-73.

Kornreich at 74-75.

42 U.S.C. 12112(a).

42 U.S.C. 12111(2). The term “employer” is limited to an employer affecting commerce with 15 or more employees for each of 20 or more calendar weeks in the current or preceding years. 42 U.S.C. 12111(5)(A). The term exempts the United States. 42 U.S.C. 12111(5)(B).

42 U.S.C. 12101(2)(A). A “physical impairment” means “any physiological disorder or condition” (29 CFR 1613.702(b)). “Major life activities” means “breathing . . . and working” (29 CFR 1613.702(c)). A “qualified individual with a disability” is one who can perform the “essential functions” of the position (42 U.S.C. 12111(8)). The term “discriminate” includes refusal to make “reasonable accommodations” unless it would cause “undue hardship” (42 U.S.C. 12112(b)(5)(A)).

43 A federal district court “seriously” questioned whether an employee’s ability to work in a particular building is a reasonable job requirement. *Watson v. United States*, No. 84-216, slip op., (D.C. DC 1985).
44 U.S.C. 12111(10).

45 U.S.C. 794. The Rehabilitation Act establishes that a qualified individual with a handicap cannot be discriminated against in programs receiving federal funding.


49 Watson v. U.S.

50 29 CFR 1613.702(a).

51 See also, Doe v. Hampton, 566 F.2d 265, 282 (D.C. Cir. 1977).


53 Cal. Govt. Code 12926(h).

54 CCR, tit. 2, 7293.6(d).

55 CCR, tit. 2, 7293.6(f).


57 Id., at 609.

58 Fresno at 1550.


60 Fresno at 1551-1552; CCR, tit. 2, 7293.9(a). “Accessibility” includes making facilities “readily accessible and usable by handicapped individuals.”

61 Fresno at 1553.


63 Fresno at 1553.

64 Fresno at 1555.

65 Id., at 1554.

66 Id., at 1554-55; Cal. Govt. Code 12940(a).

67 No. SWC 909 13, Calif. Super. Ct., settled 10/15/90.

68 See, Berger, supra.

69 No. CA 89-00357, D.C. Super. Ct.

70 No. A8 103-037, Hamilton County, Ohio Ct. of Common Pleas (1989).

71 Dean at 5-6.


73 Dean at 5-6.

74 918 F.2d 858, reh’g granted (10th Cir. 1990).

75 No. CV188-4651CC, Cir. Ct. of Clay County, Mo., January 8, 1990.

76 Kornreich at 62.


80 S. 657 (Mitchell) and H.R. 1530 (Kennedy).

81 CRS Issue Brief at CRS-9.