

Valley misses particle pollution deadline again

By Mark Grossi / The Fresno Bee

Friday, January 21, 2005

The San Joaquin Valley has again missed deadlines on cleanup rules for dust, soot and other potentially dangerous specks of pollution, activist groups said Thursday.

Earthjustice Legal Defense Fund announced intentions to sue the San Joaquin Valley Air Pollution Control District over seven particle pollution controls, which activists say should have been approved last year.

Such specks annually cause the premature death of more than 1,100 people in the Valley, which has missed every particle cleanup deadline since the 1990s. Earthjustice has filed more than a half dozen air quality lawsuits concerning the Valley in the last several years.

"The San Joaquin Valley air district has a tradition of inaction and delay," said Earthjustice attorney Susan Britton, representing Medical Advocates for Healthy Air, Latino Issues Forum and Sierra Club.

Air district officials said they have not had time to digest the Earthjustice announcement, which is a 60-day notice of a lawsuit. Officials have had public meetings on four of the seven rules in the past year. Two rules are scheduled before the board for possible approval next month.

"Some of the deadlines they're talking about may be wrong," said district lawyer Phil Jay. "We went back and amended our plan at one point, and I think some of the deadlines changed."

Jay said the district will contact Earthjustice to discuss the deadlines and controls for the Valley's particle pollutants.

The microscopic pollutants, called particulate matter, come from unpaved roads, farming, construction, wind-blown dust, waste burning and other sources.

Particulate matter is less than one-seventh the width of a human hair. The specks can evade the body's defenses, lodging in the lungs and even entering the blood system.

"Public health should be the No. 1 priority for the agency charged with regulating air pollution," said Kevin Hamilton, a respiratory therapist representing the Fresno-based Medical Advocates for Healthy Air. "Unfortunately, we see the victims of the district's inaction every day in the region's hospitals and clinics."

One of the more significant new rules would address sprawling development in the Valley, which is one of the three worst places in the country for particle pollution.

The rule would establish a fee for new houses and business developments located at the edge of cities. The fee would pay for pollution created by additional traffic and would be used in air cleanup programs.

Earthjustice said the rule should already be adopted and enforced some time this year. But the rule has encountered resistance from the building industry, and air district officials are trying to address the concerns.

Other rules would provide further controls for farm engines

EPA offers to limit fines to factory farms in exchange for data

JOHN HEILPRIN, Associated Press Writer

in the S.F. Chronicle, Friday, January 21, 2005

WASHINGTON (AP) -- Seeking data for future regulation, the government on Friday told factory-style farms that generate huge amounts of animal waste they can escape potentially large fines if their air pollution is monitored.

The offer by the Environmental Protection Agency is intended to produce the air-quality data needed for setting air-pollution standards for thousands of animal-processing farms, particularly hog, chicken and egg operations.

By signing on, the farms, increasingly run by a concentrated few companies, pay \$2,500 into an EPA fund and agree to let EPA-approved contractors monitor the air. The fund would pay for two years of air monitoring at 28 to 30 farms nationwide at a cost of up to \$500,000 each.

Companies also would have to agree to pay a civil penalty of anywhere from \$200 to \$100,000, depending on the size and number of farms they operate. Those fines would cover presumed violations, past and present, and fend off potential liability four years into the future, when EPA expects to issue its air standards.

Without the deal, EPA officials said, the air standards probably would take a decade or more to complete.

"This is not a 'pay up and get out of jail free' pass," said Thomas V. Skinner, EPA's acting chief of enforcement. "What he hope is that this agreement will provide us the ability to ... avoid lengthy litigation and getting tied up in the courts, to avoid doing it on a case-by-base basis, facility by facility."

Skinner said the agency retains authority to take immediate action against any company if its operations pose an imminent or substantial threat to public health.

Environmentalists described EPA's offer as a "backroom deal" that will harm public health.

"Rural families have been suffering from this pollution for years, and now they will have to wait," said Ed Hopkins, environmental quality director for the Sierra Club. "This is an agreement of the polluters, by the polluters, and for the polluters."

Skinner said the deal will not affect state and local agencies' enforcement of their laws governing corporate farm operations. Critics, however, said many states have statutes that defer to federal regulations if they are less restrictive.

Missouri Attorney General Jay Nixon said the agreement would have hindered his state's 1999 settlement in which Premium Standard Farms, the nation's second-largest hog producer, agreed to spend \$25 million over five years on pollution-reducing technology.

"This should be a collaborative process between state and federal regulators to try to keep everybody on the same team," Nixon said. "It's clear to me this is an effort to give amnesty to big-time players."

EPA said it believes the offer will appeal to pork and some poultry producers. It began work on the deal after the National Academy of Sciences reported in 2002 that EPA needed to improve the way its estimates the air pollution from animal farms.

Pollutants to be monitored include soot and volatile organic compounds, as required by the Clean Air Act, and ammonia and hydrogen sulfide, as required by Superfund's emergency reporting provision.

Pork producers are being urged to enter the agreement by the industry group that represents them, the National Pork Producers Council. EPA worked with the council and with pork, egg and dairy groups to develop the compromise.

"I don't know when we'll ever be afforded this opportunity again to be invited to be a part of the process," said Dave Roper, an Idaho cattle and hog producer who chairs the council's environment committee.

EPA has settled two recent Clean Air Act cases involving animal feeding operations and has one continuing with Seaboard Corp., a \$2 billion agribusiness and transportation company in Shawnee Mission, Kan. A Seaboard spokesman declined to comment and referred questions to the pork council.

Official hopes to expand bike paths

By Rick Brewer

Stockton Record, "On the Go," Saturday, Jan. 22,

TRACY -- Rod Buchanan delights in using Tracy's nearly 10 miles of dedicated bike paths.

The city's transportation supervisor said he recently bought a tandem bicycle to cart his two daughters along one of the paths that links Adams Park in the city's southern section to the Safeway shopping center on 11th Street and Corral Hollow Road. The Buchanans stop for a doughnut, then head home, he said.

"I take them one at a time. It's fun, casual and pretty, just a great family outing," he said. "The last time I did it, I saw another father and son together and I wondered how far they had ridden."

Another question Buchanan is attempting to answer is how the city can improve its status as a bike-friendly town. He is completing the first Bikeways Master Plan in the city since 1991, and is inviting public comment on the 64-page document this week.

The plan is the focus of a special meeting of the Tracy Parks Commission, which will discuss it at 7 p.m. Thursday at the Tracy Sports Complex, 955 Crossroads Drive.

The bike plan's purpose, Buchanan said, is to establish short- and long-term goals for a unified system of bikeway routes through and around the city. Buchanan said he would eventually like to see a network of roads dedicated for cyclists and pedestrians, potentially linked into a 20-mile loop around the city.

That's slightly more than double the amount of bike paths in the city.

"The biggest challenge in Tracy is that you can find bike lanes but sometimes they don't connect with other ones," said Ed Phippen, owner of Tracy Cyclery on 11th Street.

Buchanan said certain streets would need to be widened and some easements purchased for future development for the bike paths to link up. The Parks and Community Services Department is responsible for maintaining more than 13 acres of land associated with current bike paths, he said.

"It's all dependent on what becomes available from a funding standpoint, and what the City Council will approve," Buchanan said.

Grant Young is a teacher at Deuel Vocational Institute, and rides his bike more than 6 miles to and from work each day it doesn't rain. He also averages about 45 miles per weekend in the saddle, and said a circular route around Tracy would be a boon for bicycle enthusiasts.

"I ride for my physical and mental health, so it would be tremendous for someone like me," Young said. "But I also can't help to think how much it would encourage families with children to use their bikes more often."

Finishing a city-wide bicycle plan is important for future funding requests, Buchanan explained. State and federal agencies require it before a city asks for improvement money.

If a loop can be formed, Phippen believes bicyclists can ride without much fear of being hit by cars. They also will use bikes as a fuel-efficient and smog-reducing transportation alternative to commute to local employment centers, businesses and schools, he said.

"If that's capable of happening, a loop would certainly be in everyone's best interest," Phippen said.

"For people who want to cycle, it would be nice to have that level of bike path around town."

Supervisors face library, dairy issues

Overdue fines, contract with environmental group to be considered

By GRETCHEN WENNER, staff writer
Bakersfield Californian, Monday, Jan. 24, 2005

A broad range of issues, from library fines and animal control to restructured management, are on the county supervisors' agenda Tuesday.

Overdue blues

Supervisors will decide whether to end efforts to collect \$913,000 owed to the county library system for overdue and unreturned books. The debt piled up during four years in the late 1990s from more than 29,000 patrons, according to library officials, who say they've exhausted efforts to collect it.

Dairy contract

A Sacramento-based environmental consulting group, Jones and Stokes Associates, will likely be approved to draw up a group environmental report for a batch of eight dairy-related projects. The \$783,100 will eventually be paid back by project applicants and a state grant, county planners say. The first group of projects will bring a total of 49,000 animals here, mostly around Wasco.

Supervisors decided over the summer to process the 20 or so pending dairy projects in groups, rather than under a single environmental report or individual reports.

First 5 playgrounds

A \$1 million grant for 10 new playgrounds at county parks is slated for approval. The money comes from First 5 Kern, the local tobacco-tax agency that doles out dollars raised through a statewide 50-cents-a-pack tax on cigarettes.

The playgrounds are set for A.W. Noon Park, Buena Vista Aquatic Recreation Area, Delano Memorial Park, Hart Park, Lake Ming, Lake Woollomes, North Edwards Park and Twin Oaks.

It's the third year the parks department has received a playground grant from First 5 Kern.

The contract stipulates First 5 Kern must approve all public outreach materials for the playgrounds and insists all brochures and other materials say "Sponsored by First 5 Kern." The contract also calls for placing commemorative plaques mentioning First 5 Kern "where appropriate."

First 5 Kern has been criticized in the past for installing self-honoring plaques at projects funded with taxpayer money.

Leadership change?

New Supervisor Michael Rubio wants to change power structure for the county's highest ranking, non-elected official.

That would mean switching from the current county administrative officer position, or CAO, to a county executive officer, or CEO.

Scott Jones, who will be retiring as administrative officer April 1, prepared a report on pluses and minuses of such a switch.

The move would infuse the position with more power, as department heads would report directly to the CEO, rather than supervisors. That would centralize authority and save time for supervisors to focus on other tasks, Jones wrote.

The downside could include less board control over departments and extreme dependence on a single individual.

Jones recommends the current structure stay in place.

Weedpatch development

Some 60 new homes could go up along Nanak Road off Weedpatch Highway if supervisors approve a plan from developer Major Singh Kooner. The development would upgrade an 18-acre patch now zoned for mobile homes. The site, located inside an oil field, sits near a small Sikh enclave. County planning commissioners recommend approving the project with certain allowances for oil company operations.

The board also will:

- Honor Ed Johnston, who retired this month as assistant auditor-controller-county clerk after 33 years of county service.
- Vote on revisions to the county zoning ordinance including items affecting building height, size of accessory buildings on residential property and permits for animal composting and agricultural green waste facilities.
- Likely approve construction of Wings Way, a new four-lane road that will connect 7th Standard Road to Meadows Field Airport's new terminal.
- File a report on recommended changes to the county animal control unit, and likely approve a contract allowing animal rescue groups to take in unadoptable dogs and cats for rehabilitation.
- Decide whether to forgive the Housing Authority of the County of Kern for \$13,209.75 in fees owed to the county waste department. The housing authority refuses to pay the department's administrative fee, waste officials said.

Neighbors fight slaughterhouse

Company expects to open Goshen plant by fall

By Lynn Doan, Staff writer

Visalia Times-Delta, Friday, Jan. 21, 2005

meatpacking company that has been battling neighbors to build a slaughterhouse and packaging plant in Goshen for four years expects to begin construction by next fall, company officials said.

Western Pacific Meat Co. owner Rod Balcao was forced to stall plans to build the plant, less than a mile north of Goshen, when an appeals court decided last month that the project failed to adequately address its effect on groundwater.

However, Balcao said his company will need to revise only "a couple of sentences" before bringing it back to the county for approval.

"We'll make the changes, and once they're approved, I think we're home free," said Balcao, who estimated the new facility would provide more than 200 jobs with a \$6 million annual payroll.

The proposed plant, which was approved by the Tulare County Board of Supervisors four years ago, drew heat from neighbors who say they fear a slaughterhouse will emit foul odors and damage the quality and availability of groundwater. However, until last month they had been unsuccessful in reversing the county's decision in court.

Raymond Carlson, who represented the neighbors in their appeal, said they would "go to as many courts as they have to [to] finally get a ruling."

If last month's ruling ultimately fails to halt construction of the plant, Carlson said he would argue that the plant violates a county ordinance that requires "animal confinement facilities" to contain at least 80 acres. The proposed plant would sit on a 55-acre site.

"There are already a lot of dairies in the area that smell like urine and manure, which attract flies," said John Rojas, who lives less than a mile away from the proposed site. "If they build [the meatpacking plant], the blood is going to bring even more flies."

Rojas said he sympathizes with those who would benefit from the new jobs but said his family's health and sanitation come first.

"The plant could be built somewhere farther away from homes, and then people here could commute to work," he suggested.

Pam Stillwell, who lives a block from Rojas, said she is mainly concerned about traffic.

"More jobs means more people driving on these streets, and I have to take my kids to school in Visalia every morning," she said.

Plant's proponents

Not all neighbors are opposed.

Chad Tafti, chairman of the Goshen Planning Committee, a community group that hosted public hearings on the project, said the committee received almost unanimous support from residents. The committee chose to support the project because it would create jobs and benefit the Goshen economy, he said.

"All of this [opposition] was initiated by two neighbors who were concerned about their property value," Tafti said. "They are for the betterment of themselves, in my opinion."

Tafti said neighbors need not worry about unpleasant odors because the plant would be enclosed, and all raw meat would be shipped out daily, rather than stored.

"[Balcao] showed us where every piece of this animal was going to be sent, everything from the hide to the bones," he said.

But once opposing neighbors formed into a group, they began a "smear campaign," Tafti said.

"They made it sound like this company was going to be dragging these animals by their tails and tying them to the back of pickup trucks," he said.

Cheryl Smith, who lives two blocks from the proposed plant, said she is looking forward to a new company in town.

"Most residents here are either unemployed or don't have the job skills to get jobs," Smith said.

"The plant would give us more jobs and raise our tax base, since we're hoping to incorporate into a city in the next five years."

Goshen has a population estimated to be about 3,000.

Similarly, neighbor Alva Guinn asked, "If it's going to create jobs, why wouldn't anyone want it?"

Guinn, who has been retired for 20 years, said he wouldn't mind a meatpacking plant in town if it meant boosting the economy.

Balcao described his battle against neighbors as an "awful, frustrating experience," but said he intends to see the project completed.

"The community is looking forward to this, but it's been [neighbors who appealed the county's decision] that caused all of these stalling tactics," Balcao said. "There have been many times when I felt like giving up, but I didn't."

The state court of appeals is scheduled to submit last month's decision to trial court in mid-February. Trial court is then expected to order Balcao to present additional information on the project's groundwater effects to the county's Planning Commission, Tulare County Counsel Kathleen Bales-Lange said.

Bales-Lange estimated the Planning Commission would need 45 days to circulate Balcao's new information before coming to a second decision on the project.

SoCal air quality watchdog sues BP affiliate for \$183 million

S.F. Chronicle, Thursday, January 20, 2005

LOS ANGELES (AP) -- The agency that regulates air quality in Southern California filed a second lawsuit Thursday against BP West Coast Products, demanding \$183 million for thousands of alleged violations that caused excess smog emissions.

The South Coast Air Quality Management District also sued the company in 2003 seeking \$414 million for separate violations. That action is pending.

The company released air pollutants by failing to properly maintain equipment at its refinery in Carson and, in some cases, the violations were caused by negligence and some were deliberate, AQMD said in a statement, citing the Superior Court lawsuit.

Phone calls to BP officials late Thursday were not immediately returned.

Among the violations between August 2002 and October 2004, according to the lawsuit, were the company's failure to maintain more than three dozen petroleum storage tanks and also its industrial wastewater system.

"Emissions from the Carson refinery have significantly impacted its neighbors, including schoolchildren, and posed a very serious air pollution problem," said AQMD's executive officer, Barry Wallerstein. "We hope this lawsuit will send a strong message to the company and other polluters in the Southland, that endangering public health from illegal air pollution violations will not be tolerated."

The district, which covers Orange County and parts of Los Angeles, San Bernardino and Riverside counties, has the worst air quality in the nation.

In \$184-Million Lawsuit, AQMD Alleges That BP Failed to Fully Inspect Refinery for Leaks

By Miguel Bustillo, Times Staff Writer

L.A. Times, Friday, Jan. 21, 2005

Southern California's chief air pollution regulator filed a \$184-million lawsuit Thursday against BP, alleging that the company had continually failed to fully inspect its Carson refinery for leaks of smog-forming chemicals.

It is the second such legal action by the South Coast Air Quality Management District against BP in two years. Together, the suits seek \$597 million in penalties from the company, formerly known as BP-Arco.

The latest suit alleges that the Carson refinery repeatedly failed to maintain, inspect and repair thousands of pieces of equipment, including more than a dozen petroleum storage tanks, from 2002 to 2004, as required by law. The earlier suit alleged similar violations from 1994 to 2002.

The major difference, said the AQMD's chief prosecutor, Peter Mieras, is that the latest suit also alleges that the refinery never properly inventoried the 140,000 joints, valves and other potential places in its labyrinth of pipes where leaks could occur.

As a result, Mieras argued, there is no way the refinery could have been inspecting all of those spots for leaks when filing reports on its so-called fugitive emissions with local and federal officials, as required by law.

AQMD officials are primarily concerned that the refinery is leaking a greater amount of volatile organic compounds than it is reporting. Such compounds are among the main ingredients of smog.

"I don't believe BP is being picked on. We are prosecuting BP because they have a particularly poor environmental record," Mieras said. "If the refinery is unable to demonstrate that they have identified these components, they are going to have a hard time demonstrating that they have been inspected."

BP spokesman Phil Cochrane said the company had not had time to review the latest suit, but believed it had been complying with inspection rules.

"We take the allegations very seriously," he said. "We respectfully disagree with their assertions, but as a matter of practice we work hard to comply with all regulations at all times."

ARB Warns, Danger from Popular "Air Purifying" Machines

Air Resources Board news release, Friday, Jan. 21, 2005

SACRAMENTO - Today, the California Air Resources Board (ARB) heard evidence revealing the unrecognized danger from indoor air purifiers known as ozone generators. Sold as indoor air cleaners, indoor air purifiers, and personal air purifiers, they intentionally emit large amounts of ozone, a criteria air pollutant, purportedly to clean the air.

"These machines are insidious. Marketed as a strong defense against indoor air pollution, they emit ozone, the same chemical that the ARB and the US/EPA (U.S. Environmental Protection Agency) have been trying to eliminate from our air for decades," said acting ARB Chairperson Barbara Riordan. "More chilling is that some people susceptible to the ill effects of ozone will eagerly bring these Trojan horses home."

In a update of health research to Board members, ARB staff reported the results from multiple studies of ozone generating machines. These devices sold as indoor air cleaners, indoor air purifiers, and personal air purifiers, purposely emit ozone, the major component of smog, to clean the air. One study, conducted by the USEPA, ran an ozone generator in a test home at its maximum setting. When the room's air was sampled, ozone levels were found exceeding 0.3 parts per million (ppm), and an adjacent room's levels exceeded 0.2 ppm. This level is equal to a stage one smog alert when local air pollution control districts advise the public to avoid some outdoor activities. These readings far exceed the state's ambient one-hour standard for ozone of 0.09 ppm, and any recently observed outdoor peak levels in California. At the machine's medium setting, even with the home's central fan turned on, ozone levels still exceeded the state standard. These findings force the Board to recommend the public avoid using these devices.

ARB scientists expressed concern, since some manufacturers aggressively market these products to individuals with asthma and other respiratory and health problems. Ozone can damage the cells lining nasal passages and lungs making it difficult to breathe and can exacerbate asthma symptoms. At the ozone levels noted above, some people would experience reductions in lung function, particularly if they engage in significant indoor activity (ie., housework, use of exercise equipment, children in active play), as well as symptoms such as pain on deep breath, cough and chest tightness. Elevated ozone levels can also damage household materials, such as carpeting and paint, as well as react indoors to form increased levels of formaldehyde and ultra-fine particulate matter; with their compounding negative health effects. If a family were to leave these machines on constantly, it would be as though the family lived in a 24 hour/seven day a week stage-one smog alert.

With public concern about indoor air quality rising, advertising and sales of these devices is increasing. Manufacturers often falsely claim that these devices eliminate bacteria, mold, and chemical contaminants from the air, and that they help persons with asthma and allergies. Independent studies by the USEPA, the Consumers Union, and others have shown that these devices do not effectively destroy microbes, remove odor sources, or reduce indoor pollutants enough to provide any health benefits. Ozone masks the odor of other indoor pollutants by deadening the sense of smell. Although ozone is used effectively in water to destroy microbes, ozone in air must reach extremely hazardous levels (50-100 times the outdoor air quality standards) to effectively kill microbes.

The ARB and a handful of other state and federal agencies have taken actions in an attempt to address this health issue. However, no agency has clear authority to control ozone emissions from devices, and actions to date have not been effective in addressing this problem. For more information on air purifiers see the ARB website at: <http://www.arb.ca.gov/research/indoor/acdsumm.pdf> .

[S.F. Chronicle commentary, Friday, Jan. 21, 2005:](#)

Toxic Shock

Airtight buildings, a chemical-soaked environment, stress main culprits in 'sick-building syndrome'

by Carol Lloyd, special to S.F. Chronicle

Last week, I spoke to a woman who had suffered sick-building syndrome (SBS) a dozen years ago and is still grappling with the psychological and physical legacy of temporarily losing her mind and permanently damaging her immune system. In Trudy's case, I found her story and her accompanying documents persuasive, but when she began ranting about people allowing their babies to chew on plastic toys, or the thoughtlessness of twentysomethings carrying around their single-serving water bottles, I felt my hackles rise.

Wait just one polyester-pickin' minute, I thought. Maybe toxic chemicals sucked into an office from the next-door auto-body shop have the power to poison us as they did her. I'll buy that. But the evils of bottled water? Let's not go there.

So it was with some dismay that I cracked the covers of two recent contributions to the growing body of literature on SBS, only to read statements that made me wince.

In her introduction to "The Sick House Survival Guide: Simple Steps to Healthier Homes" (2003, New Society Publishers) author Angela Hobbs tosses off rhetorical questions like, "Wouldn't you feel totally empowered if you discovered that if you took a few paces to the left, you might walk right out of the pocket of electromagnetic fields responsible for the panic attack that's about to take hold of you?"

The answer, for me, was no: I would feel not "totally empowered" but, rather, totally deranged -- eager for the arrival of men in white coats.

Likewise, when Athena Thompson declares in "Homes That Heal and Those That Don't" (2004, New Society Publishers) that there are absolutely no acceptable exposures to any pollutants or toxic chemicals -- "The only safe level is zero," reads a pull quote from page 7 -- I couldn't help but feel that what the doctor should really order is not a perfectly pristine environment of green building materials and hypoallergenic soaps but a good dose of reality -- starving children in India, war in Iraq, pollution so bad in some cities that the residents wear gas masks.

"The world is not a safe place!" I want to scream. "Let's get over ourselves, people, and focus on the problems that really matter!"

But these books -- like my discussions with Trudy -- eventually won me over despite my reservations that these healthy-home makers sometimes relied on hyperbole to make their point. In the end, even though most people are not catastrophically affected by indoor air pollution or electromagnetic fields, certain people seem to be, and their stories offer edifying information for the rest of us.

Over the last 25 years, the emerging problem of SBS has become one of increasing concern for insurers, employers and doctors confronted with individuals complaining of a wide variety of symptoms related to being inside a given building. If the symptoms can't be traced to a specific toxin -- like mold, for instance -- SBS is diagnosed. Because everything in our homes and workplaces have grown increasingly dependent on chemicals and technologies (some 700,000 chemicals are used in manufacturing everyday products, and everything from appliances to computers to children's toys uses electricity), living and working in airtight buildings often constructed from an assortment of toxic products has meant that we stew in chemical soups all day and all night and rarely consider the consequences.

Angela Hobbs' own story of collapsing health illustrates just how complicated dealing with SBS can be. Hobbs considered herself in the pink of health when she, her husband and their two young boys moved into a fully renovated old home in Newmarket, in the Canadian province of Ontario, complete with new carpet, uncured newly varnished hardwood floors and electric baseboard heaters in every room. Over the next 10 months, however, she suffered from a

battalion of escalating symptoms that began with forgetfulness (she often neglected to pick her children up from school), confusion and fatigue and evolved to seizures, a shriveled arm, inappropriate laughing and crying, wasting, migraines and nausea. Until she met a physician who had studied environmental illness, all the doctors she consulted informed her that she was in perfect health; her symptoms were psychological, they told her, and all she needed was a good psychiatrist.

Indeed, when you imagine this suburban housewife weeping, giggling and vomiting in her perfectly renovated home, it's difficult not to make connections between this illness and that of Victorian ladies who suffered bouts of hysteria. Could SBS be our modern-day madness for unfulfilled middle-class women?

Luckily for Hobbs, though, she managed to recover by altering her physical circumstances, not her emotional ones. After much misery and self-doubt, she went about methodically trying to uncover the external source of her ills. Hobbs created a chemical-free "sanctuary" to sleep in, tested each food group for allergies, eliminated her exposure to various cosmetics and fabrics and sealed off exposed particle board (which leaches formaldehyde) in her home with aluminum tape. Her symptoms improved, but not markedly.

The real "Eureka!" came when she found that her worst symptoms could be alleviated through reducing her exposure to electromagnetic fields, which, because of the nature of her home -- its location and construction -- were extremely high. (Electromagnetic fields, which can be measured with a gauss meter, vary in intensity throughout a home, depending on proximity to appliances, electrical wiring and outdoor power lines.)

Hobbs' conclusion was that she had developed an allergy to electricity -- a concept outside of mainstream medicine in the United States but more commonly accepted in Europe, where there are institutes devoted to "electrosensitivity." According to studies (largely disputed by mainstream American medical research), electrical radiation affects production of melatonin, a hormone involved in sleep and many other vital bodily functions.

Eventually, Hobbs convinced her husband that they should move, but only after he began sleeping in her highly electricity-charged spot on the bed (perhaps because it was near a faulty wire?), fell chronically ill himself and finally admitted that his dear wife hadn't simply lost possession of her senses.

After her gruesome tale, Hobbs offers what she calls simple steps to creating a safer home: finding a safe place to sleep, reducing our chemical burden via water, food, cosmetics, fabrics and air and, finally, reducing electromagnetic fields. It is here that most people who don't have serious symptoms may cordially part ways with Hobbs. From creating a perfectly clean sleeping sanctuary to storing toothpaste and all cosmetic items in glass seasonings jars to flipping the circuit breaker each night before bedtime, these "simple" strategies seem anything but.

Thompson's "Homes That Heal" covers much the same landscape, though with a good deal more detail focused on buildings. She shows how new conventional construction has evolved to include many unhealthy chemicals and how the way we live in our homes (by adding lots of new toxic chemicals and not cleaning out organic toxins like mold and dust mites) can contribute to making a building "sick." She addresses the dangers of construction materials -- from carpets and vinyl to asphalt and oriented strand board -- as well as building techniques that often lead to toxic circumstances, like venting oven ranges into attics instead of outside or failing to seal off insulation-filled attics.

Then, room by room, she covers every possible environmental horror that can occur inside a home -- from overchlorinated water to artificial air fresheners, from moldy vinyl shower curtains to dust-mite-ridden pillows, from radon to leaking gas ovens, from evil cell phones to toxic craft materials. For each menace (read: conventional choice), she dutifully offers a healthier substitute: shower water filters, a hemp shower curtain, organic cotton underwear. Dotted throughout are sidebars referring to scientific studies that have uncovered yet more terrifying factoids about the toxins living in our midst. It's all pretty harrowing, but, without a serious scientific background and

an investigation into studies with conflicting results, it's difficult to know how to assess this body of evidence.

After reading these books, I could also see how just knowing this stuff about sick houses could induce not just accusations of hypochondria but also real somatic responses. The house isn't really one entity, after all: it's the container of our lives. And once you realize how many poisons we've surrounded ourselves with, it's pretty impossible not to ascribe blame for this allergy, that flu, your mother's cancer, to this giant airtight receptacle of poison.

Eager to hear from someone who had tried to parse the subject more scientifically, I contacted Alan Hedge, director of Cornell University's Human Factors and Ergonomics programs in the department of design and environmental analysis. For the last 20-odd years, he and his fellow researchers have been studying the sick buildings and have amassed a lot of evidence that it's not psychosocial phenomena.

In part, he says the blurry notions around SBS -- and the accusations that it is all a psychological phenomena -- has stemmed from the inaccuracy of the phrase.

"It's a convenient definition," explained Hedge. "But sick-building syndrome is not something you can have. It's really a misnomer."

The phrase simply describes the effect of low-level, long-term exposures of thousands of chemicals and other pollutants on individuals working inside a relatively airtight building. And, since the energy crisis of the 1970s, conventionally constructed buildings -- be they homes or office buildings -- have grown increasingly airtight, which has created huge problems with air quality.

But early on -- in the 1980s, when the first claims of sick buildings surfaced -- certain trends tended to suggest that the phenomena had a psychological teleology.

"We started seeing strange phenomena," he explained. "It seemed to affect different groups -- men and women -- differently. This was rather unusual. How can pollutants be gender specific? Then we also noticed that sick-building syndrome also differed depending on the job. The highest incidence occurred with clerical jobs, then technical, and least of all managerial. But how could air pollutants target certain jobs?"

Hedge discovered a number of factors that contributed to the likelihood that a person would complain of SBS -- but none of them were psychological or simply a matter of chronic complainers. "We looked at whether these were the people who always griping about everything, or people who didn't like their jobs," he said. "But it wasn't. Almost everyone began the day feeling the same way, but by the end of the workday, certain individuals were suffering from symptoms that would go away when they left the building."

The first risk factor was the individual's proximity to technology. Computers and other technological devices, Hedge said, are not only a "source of pollutants in the air but also a magnet for particles in the air." Another commonality was job-related stress -- the more work individuals were expected to accomplish, the more likely they would come down with symptoms. "It wasn't that the sickness was all in their heads," he said. "But the extra job stress seemed to prime their immune systems to respond to the contaminants."

Hedge also discovered that the best remediation is not the standard response -- installing a new ventilation system -- but thoroughly cleaning the air and the building.

So, what is the state of SBS today? Although Hedge's last large-scale study was published in 1998, and much other research since then has confirmed his results, insurers and others on the paying end of the SBS cases have increasingly made it difficult for him to conduct workplace studies. And, case by case, they still tend to argue that such complaints are the product of unstable minds rather than unsafe workplaces. "It fell on deaf ears," said Hedge of his study's impact on insurers and employers. "They're going to fight it tooth and nail. It's in the nature of the system. It's the American way."

Carol Lloyd is currently at work on a book about Bay Area real estate. She teaches a class on buying your first home in the Bay Area, and another class based on her best-selling career counseling book for creative people, "Creating a Life Worth Living."