TO SEE THE MOUNTAINS: RESTORING COLORADO'S CLEAR AND HEALTHY AIR

THE HONORABLE GREGORY J. HOBBS, JR.*

Off to the west
Where my elm tree used to be
Before the beetles killed it
I see the Rocky Mountains
Trying to shoulder up
Above the violet-ochre smog . . .
The smog is drifting my way,
I can taste it . . .[1]

The mountains are before us always.
In this state of the Great Divide, we look west, we look east

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1. THOMAS HORNSBY FERRIL, *Stories of Three Summers, Colorado 1776*1876*1976, in* THOMAS HORNSBY FERRIL AND THE AMERICAN WEST 96 (Robert C. Baron, Stephen J. Leonard, & Thomas J. Noel eds., 1996).

to them. Shining out of the plains, they continually draw us to their constant promise. Native Americans, including the Pueblo People, the Navajos, and the Utes, considered them sacred.[2] Hispanos moving into the San Luis Valley from Northern New Mexico depended on them for home-building, firewood, and live stock grazing.[3] The 1859ers rushed into them for mineral treasure.[4]

Since the founding of the Colorado Territory in 1861, farmers, cities, and businesses have depended on the mountain waters for beneficial use. Skiers, backpackers, hunters, kayakers, and fisher persons from all over the world check their heart-travels by the gauge of mountain vistas, and—exalted at the sight of them—breathe deeply. Waking to the backbone of the Continent, Front Range residents can hardly wait for the weekend to be among "their" mountains.

To see the mountains clearly is a Colorado heritage. To breathe healthy air is a necessity of life. To keep the air clear and healthy has been and continues to be a public policy priority for each and every Colorado generation. Bad air not only brings on and aggravates injuries to persons who suffer diseases such as asthma, it is also suspected to trigger processes that cause heart attacks, strokes, and Alzheimer's disease.[5] Bad air also impairs the economic viability of tourism to a state that has been reputed throughout the world from the early days of the Colorado Territory as a recreational mecca.

Colorado's bad air problem built towards a crisis in the 1950s and 60s. The poem Ferril wrote in the 1970s testifies dramatically to the filth Denver residents saw and breathed. For example, in the benchmark year of 1972—shortly after the passage of the major 1970 Colorado air act and federal Clean Air Act (CAA) but before pollution controls set in—Denver air violated the national health standards for carbon monoxide more than 154 days that year.[6] In 1977, the downtown

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2. VIRGINIA MCCONNELL SIMMONS, THE SAN LUIS VALLEY, LAND OF THE SIX-ARMED CROSS 17 (2d ed. 1999); LEROY R. HAFEN & ANN W. HAFEN, COLORADO, A STORY OF THE STATE AND ITS PEOPLE 69 (1943).

3. *See* Lobato v. Taylor, 71 P.3d 938, 945–57 (Colo. 2002) (in the context of deeds to land of the Sangre de Cristo Grant in the San Luis Valley, discussing Mexican land grant, settlers' rights, and Colorado Territorial law).

4. ROBERT G. ATHEARN, THE COLORADANS 16 (1976).

5. Kris Newcomer, *Researchers Study Polluted Air as Trigger for Disease*, ROCKY MTN. NEWS, Oct. 28, 1990, at 8.

6. COLORADO AIR POLLUTION CONTROL COMM'N, 2 REPORT TO THE PUBLIC

monitoring station at 21st and Broadway reported forty-two days of violation for ozone.[7] Concentrations of total suspended particulates were at 136 micrograms per cubic meter while the federal ambient air standard was seventy-five micrograms per cubic meter.[8] In addition, levels of nitrogen dioxide violated the national standard at the downtown station.[9]

Denver was not the only city in Colorado experiencing problems. Greeley and Fort Collins often violated the national health standards for carbon monoxide, ozone, and total suspended particulates.[10] Pueblo and Grand Junction also violated the standard for total suspended particulates.[11]

The polluted air was not the sight tourists hoped to see. Visitors to rural valley towns surrounded by incredible mountains—like South Fork, Pagosa Springs, and Durango—were disappointed to find that wigwam waste-burner wood smoke caused a huge foul-smelling pall that obscured the vistas. Visitors to Rocky Mountain National Park and the Front Range mountains south to Pike's Peak passed through a ghastly Brown Cloud, still hoping to see the miraculous sights Zebulon Pike,[12] Stephen F. Long,[13] John C. Fremont,[14] John

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46 (1978).

7. *Id.* at 136.

8. *Id.* at 35.

9. *Id.* at 53.

10. *Id.* at 8, 10.

11. *Id.* at 11, 13.

12. From the prairie along the Arkansas River, Pike in mid-November of 1806 first sighted, as "a small blue cloud," the mountain in Spanish territory that would later bear his name. CARL UBBELOHDE, MAXINE BENSON, & DUANE A. SMITH, A COLORADO HISTORY 21 (8th ed. 2001).

13. Traveling up the South Platte, Long's party spotted from a great distance the great escarpment of the Colorado Rockies:

> From this encampment, we had a plain but still distant view of the mountains. . . . They stretched from north to south, like an immense wall occupying that portion of the horizon, lying to the northwest, west, and southwest. We could now see the surface of the plain, extending almost unvaried to the base of the first ridge, which rises by an abrupt ascent above the commencement of the snow.

FROM PITTSBURGH TO THE ROCKY MOUNTAINS, MAJOR STEPHEN LONG'S EXPEDITION 1819–1820, at 198 (Maxine Benson ed., 1988).

14. With Fremont in 1853–1854 on his fifth expedition, daguerreotype photographer Solomon Nunes Carvalho described the view from Bent's Fort near La Junta on the Arkansas: "When the weather is very clear, you can see the snow peaks of the Rocky Mountains from Bent's house, which is seventy [sic] miles distant." ROBERT SHLAER, SIGHTS ONCE SEEN, DAGUERREOTYPING FREMONT'S LAST EXPEDITION THROUGH THE ROCKIES 81 (2000). The distance from Bent's house to the peaks is actually 120 miles.

Wesley Powell,[15] Thomas Moran,[16] W.H. Jackson,[17] and a host of unnamed visitors and settlers described, painted, photographed, and revered.

The restoration of Colorado's clean air is a great story of natural resource restoration. It took nearly half a century to accomplish. Wishing for cleaner air became a public aspiration. Disgusted with air that looked and smelled like rotten soup, citizens grew tired of hoping that a great wind would blow the pollution away, or that the temperature would change and the latest pollutant-trapping inversion would lift. For five decades, unrelenting press attention focused on Colorado's pollution black-eye and virtually every step in cleaning it up. Fortunately, air is a common resource shared by all. At common law, no right of property ownership to pollute the public's air vests by law. Uncontrolled nuisance more accurately described air pollution's legal status in mid-twentieth century Colorado.

Early local efforts to control smoke could not get the job done. It took the very strong CAA and its amendments in 1970, 1977, and 1990 to provide a mandatory health-protection framework that complimented and drove implementation of Colorado's 1970 air statute and its subsequent amendments. The automobile and manufacturing industries had no choice but to comply with national standards designed to force the

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15. In his 1867 and 1968 field seasons in Colorado, Powell and his party, including wife Emma, climbed Pike's Peak and Longs Peak to gain the vistas. Amateur newspaper correspondent, Joseph Hartzell, with Powell on the Pike's Peak climb in 1867, wrote rhapsodically of a hundred mile vista:

> With a picturesque landscape of hundreds of miles in extent spread out beneath us, the clear, blue arch of heaven above, no wonder that it seemed to our rapt vision something like enchantment. Surely the Creator intended the grandeur and beauty of the world as a foretaste of the hereafter.

DONALD WORSTER, A RIVER RUNNING WEST, THE LIFE OF JOHN WESLEY POWELL 122 (2001).

16. In August of 1874, having heard of the fabled Mountain of the Holy Cross as a member of Ferdinand Hayden's survey party, Thomas Moran ascended into the mountains from Morrison to find and sketch that stunning view of the mountain's cruciform which—translated into his great painting—fired the imagination of the westering Nation. Camped on the South Platte River in South Park he described Pike's Peak looming fifty miles or so to the south. THURMAN WILKINS, THOMAS MORAN: ARTIST OF THE MOUNTAINS 138 (2d ed. 1998).

17. See, e.g., Jackson's 1892 photograph of the Central Front Range from Longs Peak to the Indian Peaks taken from northwest Denver and the late 1990s companion photograph following Denver's air quality restoration, in WILLIAM HENRY JACKSON & JOHN FIELDER, COLORADO 1870–2000, 20–21 (2000).

development and installation of air pollution technology as rapidly as possible.

But something else was going on in Colorado just as important. The state's business community came to see that its interest in economic development must be paired with cleaning up the state's air and developing a transportation network that included rapid transit in the Denver metropolitan area. After all, tourism and home-building depend on citizen enjoyment of the air resource for its own sake—to see Colorado's glorious landscape.

Press reports focused on how Colorado suffered national ridicule for its horrible air pollution. The most notable incident occurred in 1988 after the Denver Broncos suffered their third Super Bowl loss. The CBS Evening News proclaimed that Denver was "a town that's never been No. 1 in anything but carbon monoxide levels."[18] Soon thereafter, the Greater Denver Chamber of Commerce lent its considerable prestige to coordinate the Brown Cloud Study and support clean air action measures.

"Let's do something about this filthy air!" took hold as a top public priority. Starting in the 1950s, citizens came to recognize that they were part of the problem, as a result of burning trash in their backyards, driving smoky cars, and burning wood in their fireplaces, for example. The struggle for voluntary, then mandatory measures for air pollution clean-up has been long, costly, productive, and satisfying.[19]

On August 9, 2002, the United States Environmental Protection Agency announced that the Denver Metropolitan Area had achieved compliance with federal health limits for all six major pollutants regulated under the CAA:[20] particulates, ozone, carbon monoxide, nitrogen oxide, sulfur dioxide, and lead.[21] Further, the Denver Broncos won two super bowls in

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18. REGIONAL AIR QUALITY COUNCIL, DENVER METRO AIR QUALITY: 25 YEARS OF PROGRESS 3 (Air Exchange Supplement) (Aug. 2001), *available at* http://www.raqc.org/newsletters/AirExchange/Retrospect.pdf [hereinafter DENVER METRO AIR QUALITY]; Mark Obmasick and Michael Booth, *We Can See Clearly Now*, DENV. POST, Dec. 8, 1996, at A1; *see* Todd Hartman, *Denver Breathes Easy with EPA's Blessings*, ROCKY MTN. NEWS, Aug. 10, 2002, at 19A.

19. Todd Hartman, *At Long Last, Metro Area Breathes Easy*, ROCKY MTN. NEWS, July 29, 2002, at 1A.

20. Todd Hartman, *Denver Breathes Easy with EPA's Blessings*, ROCKY MTN. NEWS, Aug. 10, 2002, at 19A.

21. *See* DENVER METRO AIR QUALITY *supra* note 18, at 3. *See also* 42 U.S.C.

the meantime! Colorado is no longer seen as a national loser in football or air pollution.

Incredibly, compliance with the national air health standards and the resulting significant visibility improvement occurred despite Colorado's growth from two million to four and a quarter million people between 1970 and 2000. The Colorado air act and the CAA provided the legal platform, but the persistent will of Colorado and United States citizens made achievement of clean air goals possible.

Nevertheless, the Front Range area still violates the state's visibility standard fifty-five times a year[22] and—after a period of compliance—must now implement additional measures to control ozone pollution to meet the newly enacted eight-hour national ozone standard.[23] Clearly, the constant attention of Coloradans on keeping a restored air resource in place is crucial.

Because it took Colorado half a century to crack the terrible air problem, I cannot hope in this article to provide a comprehensive account of all the persons, efforts, and events that have contributed to the state's clean air restoration. But, I can say from historical and legal research, informed by personal experience in Colorado air quality matters since the early 1970s, how bad the problem was, how irresistible the public commitment to air pollution control became, and how glorious the healthy air and the vistas are that we can share.

In this article, I set forth the clean air public policy progression largely in chronological order. I also focus on significant stages of air pollution control. The article considers citizen realization about how bad the air was and it examines the visible progress made through the adoption of strong federal and state air pollution control statutes. In addition, the article discusses significant litigation that established enforcement precedent, and the role that stationary source

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§ 7409(a)(1)(A) & (b)(1); 40 C.F.R. §§50.4 to 50.12 (2003).

22. COLORADO AIR QUALITY CONTROL COMM'N, REPORT TO THE PUBLIC 2 (2002). *See also* Regional Air Quality Council, *Update on the Blueprint for Clean Air*, AIR EXCH. (Winter/Spring 2000), *available at* www.raqc.org/reports/blueprintforcleanair/bpupdate.htm.

23. *Our Ozone Problem Is Real*, DENV. POST, Dec. 6, 2003, at 15C; Joey Bunch, *Denver Area Returns to Dirty-Air List*, DENV. POST, Dec. 5, 2003, at 1A. *See* Christopher M. Kamper, *Colorado Addresses New EPA Ozone Standard*, 33 COLO. LAW. 67 (Feb. 2004); Allison D. Wood, *Implementing EPA's 8-Hour Ozone Standard, Round Two*, 18 NAT. RES. & ENV'T 16 (Winter 2004).

control, mobile source control, and transportation, land use, and air quality planning played in the restoration of clean air in Colorado. The article also reviews the Brown Cloud study, subsequent emission reduction measures, and Colorado's achievement in meeting national health standards.

Part I addresses how bad the air quality problem was in the 1950s up until the 1970s. Part II discusses how the 1970s brought about visible progress in controlling stationary pollution sources. Part III tells how the crucial air quality control decade of the 1980s dealt with transportation, land use, and air quality planning in the quest to bust the brown cloud. Part IV reveals how Colorado achieved the national health standards for air by the end of the 1990s. Part V cautions about new challenges in light of twenty-first century growth and the need for continued dedication to Colorado's air quality control priority.

I. HOW BAD IT WAS: THE 1950S TO 1970S

It seemed to Colorado "natives"[24] that the world was flocking here after World War II. Together, all we nestlings helped to foul the place; then came the inevitable process of cleaning up our mess.

A. Citizens Learn to Detest "The Sewer of the Air"

Coloradans hate not seeing the mountains. In 1959, an airline pilot based at Stapleton lamented the "deterioration of Denver's once crystal-clear air . . . it rivals any large city in smoke concentration—even Los Angeles."[25] A first and largely ineffective poke at controlling air pollution had actually started a decade earlier, but the ignorance of citizens about their own contribution to the problem and a pro-business attitude among state legislators prevented any real progress. Clearly, the air had to get worse before it got better. Citizen concern later turned into citizen contempt for public inaction and finally spurred legislators to act.

Denver adopted its first anti-smoke ordinance in 1948, but

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24. Indicating those who arrived just a little less recently than the others.

25. *Denver's Air So Bad It Rivals L.A., Airline Pilot Warns of Increased Smog*, DENV. POST, Jan. 18, 1959, at 3AA.

the building department rarely enforced it.[26] Fifty thousand backyard ash pits burned trash at home, contributing to "a perpetual haze hugging the Platte River valley . . . ."[27] Inspectors were sent to knock on the doors of those whose pits were smoking badly and to implore them to burn their trash a little better, if they could figure out how to do that.[28]

By 1954, there were 100,000 homes with polluting incinerators. They combined with factories, oil refineries, and motor vehicles to produce episodes of "eye-smarting pollution."[29] Denver established the post of Air Pollution Inspector, a public official whose job was to take pictures of industrial smoke stacks and send cease and desist notices to the operators. Such orders were largely ineffective because it took a court case to establish the existence of a nuisance and collect fines.[30]

In 1957, the U.S. Public Health Service issued a seventy-eight page report stating that pollution levels in Denver were a year-round problem. It recommended an inventory of air pollution sources, a meteorological study "so that further growth can be planned to avoid poisoning the general atmosphere," and adoption of an air quality control program.[31] A survey of air pollution sources included motor vehicles, refuse burning in landfills and backyard incinerators, manufacturing plants, heating of homes and buildings, and power plants.[32] Newspapers printed photograph after photograph displaying Denver's "smokescape" and "sewer of the air."[33]

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26. John Buchanan, *Denver Firms Spending $500,000.00 to Fight Smoke*, DENV. POST, Apr. 13, 1952, at 17A.

27. Jack Gaskie, *Ash Pits to Blame for Some of Pall Over Platte, Smoke Nuisance in Denver Cut 80 Percent in Past Two Years*, ROCKY MTN. NEWS, Mar. 24, 1951, at 41.

28. *Id.*

29. Bill Jones, *Denver's Air May Turn in 10-Years to LA-Like Smog*, ROCKY MTN. NEWS, Dec. 4, 1954, at 5.

30. Bill Jones, *Denver Plans to Crack Down on Air Pollution*, ROCKY MTN. NEWS, Feb. 5, 1955, at 5.

31. *Pollution of Denver Air Scored*, DENV. POST, July 2, 1957, at 11.

32. *Id.*

33. Gene Lindberg, *'Sewer of the Air,' Air Pollution over Denver Held Metropolitan Problem*, DENV. POST, Jan. 10, 1960, at 13A.

B. The Press Gets Interested and Legislators Partially Respond

Then called "smaze,"[34] Denver's filthy air rapidly became a political liability due to focused media attention. For example, the *Denver Post* in 1962 displayed a full page photograph of Mt. Evans rising out of a murky brown soup masking Denver below. The caption read: "Suspended filth hides Denver's rooftops. Mt. Evans gleams white from 2,000 feet up, but from the ground it is obscured."[35]

Seeing clearly was not the only issue. Citizens were suffering the health effects of bad air. Dr. William F. Spence of the University of Colorado Medical Center reported that, "the incidence of certain pulmonary diseases, such as chronic bronchitis, has increased to a marked degree in the past few years. . . . [as well as] a more serious condition, pulmonary emphysema . . . ."[36]

As the unabated pollution problem continued to hamper citizen health and clear mountain views, state lawmakers began to take notice. The stupendous golden-domed Colorado state capitol building sits on a mile-high hill looking straight west to the Continental Divide. Legislators were also unable to see Mt. Evans, and they clearly heard a rising citizen howl.

In 1963, a Denver State Legislator, William Griffith, introduced a bill in the General Assembly to create special enforcement districts for air pollution control. District court orders would trigger an election to establish a district in the local area, and, if formed, the district would have taxing authority and the power to employ an air pollution control officer and staff.[37] Deferring to local units of government has been the typical initial approach of Colorado legislators for dealing with difficult environmental and land use problems. However, because the bad air knew no jurisdictional boundary, the General Assembly began moving toward state-wide

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34. J. Bob Lucas, *U.S. Public Health Group to Make Survey of Denver Smaze Problem*, ROCKY MTN. NEWS, Nov. 27, 1956, at 31.

35. Bob Jain, *Denver's (and your) Air Pollution Problem*, DENV. POST, Jan. 21, 1962, (Empire Magazine), at 4.

36. *Id.*

37. *Air Pollution Control Bill Widely Backed*, DENV. POST, Jan. 17, 1963, at 3.

legislation. In 1963, it enacted the state "air sanitation act"[38] rather than the Denver legislator's local district proposal. Though inadequate, this legislation empowered the State Board of Health to establish air quality standards, including standards for motor vehicles,

> to reflect the relationship between the intensity and composition of air pollution and the health, illness, including irritation to the senses, and death of human beings, compatible with the preservation of public health, as well as damage to vegetation and interference with visibility.[39]

The act established a nine-member air pollution advisory board composed of government officials, industry representatives, and citizens. The advisory board was to consult with the Board of Health during the process of proposing suitable standards, which were to be considered at a public hearing, then adopted and submitted to the General Assembly for consideration. In connection with other Colorado air act revisions in 1964, the General Assembly adopted the standards that emerged from this process.[40]

C. Inadequacy of Initial State Program

The 1963 and 1964 legislation provided no comprehensive means of ensuring compliance. Enforcement of air pollution control standards depended on local ordinances and agencies.[41] As its population grew, Colorado's air got worse. Denver was not the only highly-polluted region in the state. Pueblo had more air pollution than all of the eleven Colorado counties tested during the final quarter of 1965.[42] Boulder, Colorado Springs, Fort Collins, Grand Junction, Greeley, and Longmont

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38. Act of Apr. 15, 1963, ch. 150, 1963 Colo. Sess. Laws 549, (codified at COLO. REV. STAT. § 66-24-1 to -5 (1963)).

39. § 3(1)(a), 1963 Colo. Sess. Laws at 550 (codified at Colo. Rev. Stat. § 66-24-3(1)(b) (1963)).

40. Act of Mar. 18, 1964, ch. 58, § 4, 1964 Colo. Sess. Laws 483, 484–85 (current version at COLO. REV. STAT. § 25-7-102 (2003)).

41. *See generally* Act of Apr. 15, 1963, ch. 150, §3, 1963 Colo. Sess. Laws 549, 550; Act of Mar. 18, 1964, ch. 58, § 6, 1964 Colo. Sess. Laws 484, 485.

42. *Pueblo Gets Worst Mark in State Air Pollution Tests*, PUEBLO CHIEFTAIN, Jan. 28, 1966, at 1A.

also failed air quality standards.[43]

In 1966, the General Assembly adopted revisions to the air statute, creating the Air Pollution Control Division, which could enforce Board of Health standards by issuing cease and desist orders.[44] The Board of Health designated four air pollution basins centering on the cities of Denver, Colorado Springs, and Pueblo, as well as Grand Junction.[45] The 1966 legislation also established a statewide Air Pollution Variance Board for the purpose of adjudicating appeals from Division compliance orders and for reviewing variance applications requesting temporary exemptions for polluters who needed time to comply with clean air standards.[46] The 1966 act exempted backyard trash burning from regulation.[47]

D. In Your Face Newspaper Photography and Disease Reports

Newspaper photography continued to expose a horrible air pollution problem. A 1966 article compared the once-clear view Denver residents enjoyed of the mountains with the "valley of the big smokes."[48] The captions read:

> The vista Denver was famous for is now too often found only "on a windy Sunday morning when the foundries, chemical plants and steam boilers are shut down, before people fire up their incinerators and when traffic is light," according to a meteorologist.
>
> This "valley of the big smokes" is the South Platte River bordering S. Santa Fe Dr. Chimneys contributing to

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43. *Id.*

44. Air Pollution Control Act, ch. 45, §§ 7 & 14, 1966 Colo. Sess. Laws 210, 217 & 224 (current version at COLO. REV. STAT. §§ 25-7-104, -121 (2003)).

45. Air Pollution Control Act, ch. 45, § 8(1)(c), 1966 Colo. Sess. Laws 210, 219 (codified at COLO. REV. STAT. § 66-29-8(1)(c) (Perm. Cum. Supp. 1967)); *Air Pollution Fight Charted*, DENV. POST, Apr. 14, 1966, at 19.

46. Air Pollution Control Act, ch. 45, § 7 & 11, 1966 Colo. Sess. Laws 210, 217 & 222 (codified at COLO. REV. STAT. §§ 66-29-7, -11 (Perm. Cum. Supp. 1967)); Rendall Ayers, *Hearing Held on Air Pollution*, DENV. POST, May 5, 1966, at 59.

47. Air Pollution Control Act, ch. 45, § 5(4)(b)(ii), 1966 Colo. Sess. Laws 210, 213–14 (current version at COLO. REV. STAT. § 25-7-108 (2003)).

48. Mark Bearwald, *How Denver Is Strangling Itself*, DENV. POST, Jan. 30, 1966 (Empire Magazine), at 5.

> growing smoke cloud belong to power generating plants and auto wrecking yards near the Hampden Ave. interchange.[49]

The accompanying text reported one Colorado citizen as saying, "it was 'quite unusual' to see any pall over [Denver]" in the early 1950s, but now in the mid-60s "it is unusual to see any city at all. Denver has disappeared in the gloom of its wastes."[50]

Citizens were outraged about the air pollution, but many could not see their own part in causing it. A beleaguered five-county association of Denver area cities and counties, known as the Regional Air Pollution Control Agency, labored to develop an ordinance to control, by 1968, "that odious neighborhood nuisance, the backyard incinerator."[51] But, "[c]ity fathers in Denver, Aurora and Boulder who considered banning these smudgepots" were

> besieged by aroused citizens who feel the freedom to smolder sodden trash is among the inalienable rights of man. Indeed, much of the mail generated by recent discussion of air pollution has come from irate householders who heap scorn and calumny on the automobile, the Public Service Co. and all industry while extolling the basic goodness and utility of the clean-burning incinerator.[52]

After looking out of his window in May of 1967 and seeing how bad Fort Collins' air had become in just six years, Dr. Elmar Reiter, a Colorado State University professor of atmospheric science, predicted that if nothing were done, citizens would suffer serious health problems, even death, and

> [c]ertainly by the end of this century we're going to have to put up direction signs pointing to the mountains—because people won't be able to see them any more.
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> . . . .
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> To really attack pollution we must combine the forces of meteorology, chemistry, political science, sociology, perhaps

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49. *Id.*
50. *Id.*
51. *Id.*
52. *Id.*

> theology—because we have to design a new society which provides for life with health and a future.[53]

Dr. Reiter should have included all the natural and political sciences and theology, too! This cosmic forecast about what it would take for a successful community effort to clean up Colorado's air turned out to be quite accurate. Citizen advocacy to spur legislators to action was clearly needed, and predictably it arose as the problem got worse. The source evidence was overwhelming–Denver air really was as bad as Los Angeles air. A visitor from Cleveland arriving for a medical convention exclaimed, "Oh, no! Not here, too!"[54] In reporting this in a piece entitled, *The Sky IS Falling Down*, the news writer summed up a dismal scene:

> Snuff out the smokestacks and there are the burning dumps. Snuff the dumps and you have the back yard burning. Squelch all these sources and the nastiest smog producer of them all still pours deadly gasses into the air, the cars, buses, trucks, and those sleek jets coursing in and out of Stapleton.[55]

Much needed to be done.

E. Snuffing the Backyard Smokers and Dreaming of Mass Transit

For starters, citizens had to change their burning habits. And cities had to make this possible by hauling the garbage away for land disposal. By January of 1968, the counties of Adams, Arapahoe, Boulder, Jefferson, and El Paso had a ban on backyard incineration in effect.[56] Denver delayed implementation of its ordinance pending acquisition of equipment for additional trash pickup.[57] Local officials were nervous about enforcing their ordinances.[58] Foreseeing the

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53. William Logan, *Purify Air or Die, Says CSU Scientist*, ROCKY MTN. NEWS, May 28, 1967, at 20.

54. Dirk Van Loon, *The Sky IS Falling Down—First of a Series, On a 'Bad Day' Denver Is Like L.A.*, ROCKY MTN. NEWS, Jan. 21, 1968, at 16.

55. *Id.*

56. Gordon G. Gauss, *Suburbs Prohibit Burning of Trash*, ROCKY MTN. NEWS, Jan. 2, 1968, at 10.

57. *Id.*; *Incinerator Ban Begins in Area*, DENV. POST, Jan. 4, 1968, at 26.

58. *See Incinerators Still Smoking at Springs*, ROCKY MTN. NEWS, Jan. 4,

difficulty in enforcing local ordinances, the General Assembly in 1967 adopted a ban on backyard refuse burning, except in sophisticated and expensive incinerators that no citizen was likely to buy. The ban was to take effect by January 1, 1970.[59] With the finger pointed at them and trash pickup available, citizens finally relinquished a very dirty habit.

As a result of the 1967 CAA,[60] Denver became one of the first five areas to be designated as a federal air quality control region. The others were the Chicago, New York, Philadelphia, and District of Columbia areas.[61] In 1968, based on this federal designation, the existence of air pollution throughout the state, and the lack of local funding and personnel, the highly respected League of Women Voters of Colorado called for the creation of a statewide pollution control authority with the power to implement uniform air pollution control and to enforce and supervise the construction of new air pollution sources.[62]

At the close of the 1960s, the need for comprehensive state and federal control of stationary and mobile sources of pollution was as clear as Colorado skies were filthy. Denver could not go it alone, despite the adoption of city ordinances to cut smokestack emissions in half and the enforcenment against smoking vehicles.[63] Discussion began about reducing automobile use through mass transit.

> Taking action against the automobile . . . is only one aspect of the assault on air pollution. A great deal must be done also to clean up stationary sources of pollution and to develop mass transit systems that reduce automobile use.

1968, at 31.

59. Air Pollution Control Act, ch. 357, sec. 2, § 5(4)(c), 1967 Colo. Sess. Laws 756, 756 (codified at COLO. REV. STAT. § 66-29-5(4)(c) (Perm. Cum. Supp. 1967)).

60. Air Quality Act of 1967, Pub. L. No. 90-148, 81 Stat 485 (codified as amended at 42 U.S.C. § 1857–1857*l* (1967)).

61. LEAGUE OF WOMEN VOTERS OF COLORADO, AIR POLLUTION CONTROL IN COLORADO—1968, at 1 (1968).

62. *Id.* at 2.

63. Don Lyle, *Council Ends '69 Session With Pollution Curb Okay*, ROCKY MTN. NEWS, Dec. 30, 1969, at 8.

> Denver will need all the help it can get from the state and the federal government to win the battle for clean air.[64]

In the crucial arena of public opinion, the stage was now set for strong state and federal air quality regulation.

II. VISIBLE PROGRESS, THE 1970S

The decade of the 1970s blew strongly across the face of America, fundamentally revamping pro-settlement laws affecting the environment. No place felt the effect of these laws more significantly than the West, which for over a century had depended on natural resource extractive and manufacturing industries to fuel its growth, including mining, smelting, steel-making, power production, lumber milling and waste burning. A healthy and enjoyable environment for people, plants, and animals became both an article of faith and a political platform for a new generation of office holders and seekers. State and federal air pollution control acts hammered out the way—all because citizen voters could see and smell how bad the problem really was.

A. Colorado Air Commission Established

Nineteen seventy was the state and national air-shed year for air quality legislation. The Colorado General Assembly and the United States Congress adopted comprehensive, interlocking statutes for controlling air pollution.[65] The genius of the federal law was that it set national goals for air pollution control and strong back-up measures to achieve them, but also allowed the states to shape and enforce their own laws, which could be more stringent than the federal requirements. While the 1970 CAA focused primarily on public health and welfare protection,[66] Colorado's 1970 Air Pollution Control Act also

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64. Editorial, *Denver Needs Help in Smog Battle*, DENV. POST, Dec. 18, 1969, at 22.

65. Air Pollution Control Act of 1970, ch. 64, § 1, 1970 Colo. Sess. Laws 220 (codified at COLO. REV. STAT. § 66-31-1 to -26 (Perm. Cum. Supp. 1971) (current version at COLO. REV. STAT. §§ 25-7-101 to -1309 (2003))); Clean Air Amendments of 1970, Pub. L. No. 91-604, 84 Stat 1676 (codified at 42 U.S.C. §§ 1857 to 1857b-1 (1971) (current version at 42 U.S.C. §§ 7401–7671(q) (2003))).

66. *See* Clean Air Amendments of 1970, Pub. L. No. 91-604, 84 Stat 1676. *See also* Whitman v. Am. Trucking Ass'ns., 531 U.S. 457, 465 (2001) (stating that

included a mandate to protect the enjoyment of "nature and scenery" throughout the state.[67]

> [I]t is hereby declared to be the policy of the state to achieve the maximum practical degree of air purity in every portion of the state. To that end, it is the purpose of this article to require the use of all available practical methods to reduce, prevent, and control air pollution throughout the entire state of Colorado . . . .[68]

The Colorado air act created a nine-member citizen Air Pollution Control Commission with "maximum flexibility" to adopt a "comprehensive program for . . . control of emissions from all significant sources of air pollution, and . . . ambient air goals for every portion of the state."[69] The General Assembly directed the Commission to receive and decide all applications for hearings on violations or applications for variances, or to assign them to the Variance Board for hearing and decision.[70]

The Commission's primary job was to adopt air contaminant emission control regulations for an impressive, illustrative, but not all-inclusive list of health-threatening, visibility-threatening, and nuisance-causing pollutants. These pollutants included particulates, sulfur oxides, sulfuric acids, hydrogen sulfide, nitrogen oxides, carbon oxides, hydrocarbons, fluorides, other chemical substances, odors, open burning of all types, organic solvents, photochemical substances, and toxic gases.[71]

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section 109(b)(1), 42 U.S.C. § 7409 (b)(1), "instructs the EPA to set primary ambient air quality standards 'the attainment and maintenance of which . . . are requisite to protect public health with and adequate margin of safety'" and the costs of achieving these standards are set without regard to the costs of achieving them).

67. 1970 Colo. Sess. Laws 220 (codified at COLO. REV. STAT. § 66-31-1 to -26 (Perm. Cum. Supp. 1971) (current version at COLO. REV. STAT. § 25-7-102 (2003))).

68. 1970 Colo. Sess. Laws 220, 220 (codified at COLO. REV. STAT. § 66-31-2 (Perm. Cum. Supp. 1971) (current version at COLO. REV. STAT. § 25-7-102 (2003))).

69. 1970 Colo. Sess. Laws 220, 222–23 (codified at COLO. REV. STAT. §§ 66-31-5(1), -6(1)(a) (Perm. Cum. Supp. 1971) (current version at COLO. REV. STAT. § 25-7-109(1)(a) (2003))). *See* § 66-31-3(5) (defining ambient air as "the surrounding or outside air").

70. 1970 Colo. Sess. Laws 210, 223 (codified at COLO. REV. STAT. § 66-31-5(7) (Perm. Cum. Supp. 1971)).

71. 1970 Colo. Sess. Laws 210, 225 (codified at COLO. REV. STAT. § 66-31-8(2)(a)–(i) (Perm. Cum. Supp. 1971) (current version at COLO. REV. STAT. § 25-7-

The General Assembly also catalogued a breath-inspiring, non-inclusive list of air pollution sources for the Air Commission to control, including incinerators, the storage and transfer of petroleum products and other volatile sources, construction and demolition operations, the operation of parking lots, fuel additives, wigwam waste burners, pulp mills, alfalfa dehydrators, asphalt plants, industrial process equipment, industrial spraying operations, the reduction of animal matter, motor vehicles and airplanes, diesel-powered machines, engines, equipment, storage, the transfer of toxic gases, and any other industrial or commercial activity which tends to emit air contaminants.[72]

In other words, virtually every aspect of Colorado commerce and life activity causing air pollution became subject to the state's air quality restoration program. The General Assembly assigned important responsibilities to the Air Pollution Control Division, including monitoring the air, identifying air pollution sources, recommending emission control regulations and ambient air quality standards to the Commission, staffing the hearings of the Commission and the Variance Board,[73] and obtaining compliance with Commission-adopted regulations.[74]

B. The Air Division Gets Active

The 1970 Colorado air act also established a permit system in the Air Division to control new and modified air pollution sources prior to the start-up of their operations, and required polluters to file emission notices disclosing emission type and quantity.[75] These key provisions of the state act, like its federal counterpart, front-loaded the air quality priority into the way Coloradans conducted business.

Based on a pre-existing Health Board standard, the first emission control regulation adopted by the Commission—led by

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109(2) (2003))).

72. 1970 Colo. Sess. Laws 210, 225–26 (codified at COLO. REV. STAT. § 66-31-8(3)(a)–(l) (Perm. Cum. Supp. 1971) (current version at COLO. REV. STAT. § 25-7-109(3) (2003))).

73. COLO. REV. STAT. § 66-31-14 (Perm. Cum. Supp. 1971) (current version at COLO. REV. STAT. § 25-7-111 (2003))).

74. §§ 66-31-10, -13 (current version at COLO. REV. STAT. § 25-7-111 (2003)).

75. § 66-31-12 (current version at COLO. REV. STAT. §§ 25-7-114 to -114.4 (2003)).

its Administrator Joe Polomba—was directly aimed at controlling visible air pollution. Its trigger mechanism was an opacity standard that regulated the degree to which a smoke plume could mask the vision of a person attempting to look through it.

Trained "smoke readers" had used the Ringelmann Chart for years as a means of gauging the offensiveness of smoke plumes. To read black smoke, the inspector would hold the chart at arm's length, look through the hole in the chart's upper center, and compare the shade or density of the smoke with the shades printed on the chart.[76] To read white smoke, inspectors employed an equivalent opacity test learned at a state certification course.[77] Because fine particulates in smoke plumes cause both visibility restriction and health effects, an opacity standard aims to reduce particulate loading into the air by requiring installation of control equipment or cessation of the pollutant-causing activity, with resulting health and visibility benefits.

The pioneering federal and state air statutes set the framework for visible progress to control air pollution, but enforcement of those laws in the face of skeptical and uncooperative businesses became necessary.

C. Colorado Attorney General Takes a Lead Role

It takes the devoted attention of public law enforcement officers to translate statutes into court decisions and constructive advice for decision makers. In the 1970s, the Colorado Attorney General's office emerged on the front line of the air pollution control fight.

1. The First *Fry* Case

Manufacturing industries—one example of an initially uncooperative industry—were accustomed to using the public's air resource as a dumping space. Some business owners could not believe the government could force them to change their pre-existing practices and cost them money they did not choose

76. Bob Jaine, *Denver's (and your) Air Pollution Problem*, DENV. POST, Jan. 21, 1962, (Empire Magazine), at 4.

77. Lloyd A. Fry Roofing Co. v. Air Pollution Variance Bd., 553 P.2d 800, 806–07 (Colo. 1976).

to spend. The Fry Roofing Company in Commerce City, for one, refused to comply. It challenged the constitutionality of the act's sweeping grant of authority to the Air Commission, particularly the air purity goal and the act's alleged illegal retroactive application against pre-existing practices.

Fry Roofing cooked roofing oils in its Adams County plant, which was one of twenty-four plants it operated nationwide for making asphalt shingles. "Old man Fry," as the irreverent young regulators began to call him, said he would go all the way to the Colorado Supreme Court to prove his point. He did. Twice. In October of 1969, the Health Department issued an order directing Fry to cease emitting air pollutants from its plant. At a July 16 hearing, the Variance Board denied Mr. Fry's request for a variance because he repeatedly refused to submit a control plan. Newly constituted under Colorado's 1970 air act, the Air Commission refused to exercise its discretionary review authority over the Variance Board's decision. On July 31, 1972, the Colorado Supreme Court rejected Fry's challenge to the constitutionality of the air act, affirming the Adams County District Court.[78]

Fry argued to the Supreme Court its theory of unlawful legislative delegation to an administrative agency due to an asserted lack of standards for controlling the agency's exercise of discretion. Commenting on the ineffectiveness of air pollution control efforts and laws prior to the 1970 act, the Colorado Supreme Court rejected Fry's contention. It determined: (1) the term "air pollution" itself constitutes a sufficient standard for rulemaking; (2) the General Assembly directed the Commission and Health Department to develop and maintain a "comprehensive program" for air pollution prevention and control throughout the state; and (3) the General Assembly had provided sufficient guidelines for the Air Commission to do the job.

> The scope and guidelines to be followed by the commission in discharging its duties and responsibilities are those which are necessary or appropriate to foster the health, peace, safety, general welfare, convenience and comfort of

78. Lloyd A. Fry Roofing Co. v. Air Pollution Variance Bd., 499 P.2d 1176, 1176–77 (Colo. 1972).

> the people of the state, and which facilitate the enjoyment of nature, scenery, and other resources of the state.[79]

Fry also complained that the statute was so vague that no business could determine what conduct was necessary to avoid an injunction and the civil penalty sanctions of the Colorado air act.[80] In response, the Colorado Supreme Court pointed to the extensive procedural protections the legislature had provided—cease and desist orders giving notice of the alleged violations; administrative and judicial review appeal rights; opportunities for stay of enforcement pending appeal; and prohibition on civil and injunctive remedies until the cease and desist order became final.[81]

Rejecting Fry's illegal retroactivity argument, the Colorado Supreme Court held that the Colorado air act dealt only with "*future* conduct," in the form of a violation of a final cease and desist order.[82] The Colorado Supreme Court refused to reverse the variance denial. Examining the hearing record, the court upheld the Variance Board's finding that technology existed to control emissions at the Fry plant, and that Fry had presented no definite plan for the installation of the control equipment—"a condition upon which the variance board relies to insure compliance in the reasonably foreseeable future . . . ."[83]

Fry also asked the court to rule that four citizen groups had no right to be heard in the administrative proceedings. The court held that the Variance Board and the Commission have "unfettered and sole discretion" to grant intervention to citizen groups.[84]

Early in the life of the 1970 Colorado air act, no clearer legislative and judicial blessing for Colorado's fresh air program could have seemed possible. But Mr. Fry was obstinate and decided not to comply, despite citizen outcry and the Colorado Supreme Court's ruling.

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79. *Id.* at 1179.
80. *Id.* at 1180.
81. *Id.*
82. *Id.* at 1180–82.
83. *Id.* at 1181.
84. *Id.*

2. The Western Alfalfa Case

Enter into office, January of 1975, Governor Dick Lamm and Attorney General J.D. MacFarlane. Pollution control was among their highest priorities. MacFarlane, through his Deputy Attorney General, Jean Dubofsky, assembled an initial team of young lawyers to take office with him. They included an EPA water quality enforcement attorney and an air quality enforcement attorney,[85] who became the nucleus of the new Natural Resources Section that MacFarlane created in the Attorney General's Office.

The air enforcement program faced challenges early in 1975 not only from Fry, but also from Western Alfalfa Corporation, operator of three agricultural hay dryers in northern Colorado. In 1969, a Health Department inspector made air pollution observations at the three plants, resulting in cease and desist orders for violation of the then-applicable 40 percent opacity standard.[86]

In a challenge brought by Western Alfalfa in 1973, both the State District Court and the Colorado Court of Appeals ruled that these inspections constituted warrantless searches in violation of the Fourth Amendment to the United States Constitution.[87] The Court of Appeals reasoned that the company had suffered infringement of its confrontation rights in the administrative hearings.[88] Not having learned of the inspector's presence until the receipt of the cease and desist orders two weeks after the alleged violation day, the company

> could not effectively rebut the evidence against it since it had no representative present at the time the test was administered .... Since violations of the Act can be based upon emissions aggregating three minutes or more during any hour and since the evidence by its very nature is continually dissipating, we conclude that it is constitutionally mandatory in this type of case that the

85. David W. Robbins and the author.

86. Leland P. Anderson, Comment, *Requirement of Notice in Visual Opacity Readings*, 51 DENV. L.J. 603, 613 (1974).

87. W. Alfalfa Corp. v. Air Pollution Variance Bd., 510 P.2d 907, 907–08 (Colo. App. 1973).

88. *Id.* at 909–10.

> party accused be aware of the taking of tests and measurements on its premises at the time they are made.[89]

This 1973 Colorado Court of Appeals ruling caused alarm to enforcement personnel in Colorado and throughout the United States. Announcing the presence of an air pollution inspector, some feared, could simply result in the suspected offender shutting down the polluting activity until the inspectors departed.

The Colorado Supreme Court denied certiorari and the case then went to the United States Supreme Court in 1974.[90] In support of the State of Colorado, California's Attorney General's Office—aided by an EPA regional enforcement attorney based in Colorado—wrote a brief joined by thirty-four other State Attorneys General, asking the Supreme Court to reverse the Colorado Court of Appeals.[91]

Because the air pollution inspector "had sighted what anyone in the city who was near the plant could see in the sky—plumes of smoke," the United States Supreme Court unanimously applied the "open fields" plain view exception to the Fourth Amendment, thereby reversing the Colorado Court of Appeals.[92] On the due process issue raised by Western Alfalfa—that the "secret nature of the investigation"[93] deprived the company of its ability to put on any rebuttal evidence—the Court remanded the case for further decision because it was unsure of whether the Colorado Court of Appeals had based its

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89. *Id.* at 910 (citations omitted).

90. Air Pollution Variance Bd. v. W. Alfalfa Corp., 416 U.S. 861 (1974).

91. *Id.* The EPA was not a party to the appeal and did not enter an amicus appearance. But, the Enforcement Director for EPA Region VIII, Irv Dickstein, lent the author's brief-writing services to the California Assistant Attorney General in charge of preparing the states' amicus curiae brief, Daniel Taaffe, because opacity readings were a mainstay of federal and state air enforcement throughout the country.

92. *Id.* at 865. Discounting the presence of the inspector on the company's outside grounds as having constitutional significance, the Court's opinion pointed out that

> [t]he EPA regulation for conducting an opacity test requires the inspector to stand at a distance equivalent to approximately two stack heights away but not more than a quarter of a mile from the base of the stack with the sun to his back from a vantage point perpendicular to the plume; and he must take at least 25 readings, recording the data at 15- to 30-second intervals.

Id.

93. *Id.* at 865–66.

decision on state or federal constitutional grounds.

On remand in 1975, the Colorado Court of Appeals—relying on both the state and federal constitutional due process guarantees—continued to require notice to the company "that evidence is being gathered and be afforded a reasonable opportunity to be present . . . ."[94] The court's opinion implied a potential alternative to notice so long as the company "otherwise be provided with an adequate opportunity to gather similar probative evidence," but then receded from this suggestion by holding that constitutional due process gave the company a right to have "contemporary knowledge" of inspection tests "being made."[95]

The Court of Appeals announced its decision against the State one week before Colorado Attorney General MacFarlane took office. Explaining the State's decision to file an appeal with the Colorado Supreme Court, the new Assistant Attorney General for air enforcement, recently hired from the EPA regional office, observed, "If you go to inspect a polluter and tell him why you're there, he can shut down and go to lunch."[96] He added that "notifying a polluter right after an inspection is all that is required by state law."[97] Following the Court of Appeals decision, upon the advice of the Attorney General's Office, the Air Division changed its inspection practice to include reasonably prompt notice to companies of opacity readings after the inspector made them.

3. Attorney General Takes On The Air Commission

The stakes in *Western Alfalfa* and *Fry* were enormous. Prior to Attorney General MacFarlane taking office, law review commentaries had severely questioned (1) whether the 1970 Colorado air act contained sufficient authority for the Commission, Variance Board, and Air Division to obtain air

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94. W. Alfalfa Corp. v. Air Pollution Variance Bd., 534 P.2d 796, 801 (1975).

95. *Id.*

96. *Pollution Ruling to Be Appealed*, ROCKY MTN. NEWS, Feb. 27, 1975, at 38.

97. *Id.* *See also* Anderson, *supra* note 86, at 618 (suggesting that when allowing leeway for the enforcement inspection, but also providing the alleged polluter a meaningful opportunity to gather its own evidence, "notice must be given . . . only within a reasonably short period of time thereafter so as not to deprive the party of his right to a fair trial.").

pollution clean-up,[98] (2) whether these agencies could resist industry arguments and delay tactics,[99] and (3) why the Assistant Attorney General assigned to the Variance Board—which was frequently suspending enforcement of air regulations—was making fewer and fewer appearances at Board hearings.[100]

The Air Commission's ability and will to implement effective emission control regulations soon became an issue between the Attorney General and the Commission. In March of 1975, the Commission voted to relax its previously adopted standards to control power plant sulfur dioxide emissions for seven more years.[101]

Instead of proposing a revised regulation for this relaxation of regulation, the Commission simply attached its existing regulation to the notice of hearing and invited public comment. Attorney General MacFarlane informed the Commission that its notice of hearing was defective and its ensuing revision of the rule illegal, based on insufficient public notice. Nevertheless, the Commission voted to put the relaxed regulation into effect.[102]

The Attorney General responded that he would have to "confess error" should the Commission's action be challenged in court.[103] Environmental groups, including the Colorado chapter of the Sierra Club, had opposed the weaker regulations during the public hearing. Ultimately, the Commission rescinded its vote to publish the revised regulation and ordered new hearings.[104]

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98. *See, e.g.*, Jan G. Laitos, *Institutional Response to an Environmental Crisis: The Failure of State Air Pollution Control*, 48 DENV. L. J. 519, 533–35 (1972); COLO. REV. STAT. § 25-7-116 (Supp. 1971). The Air Pollution Variance Board became the Air Quality Hearings Board in 1979, then the General Assembly abolished it in 1984. *See* Air Quality Control Program, ch. 211, 1984 Colo. Sess. Laws 768 (current version at Colo. Rev. Stat. §§ 25-7-101 to -139 (2003)).

99. Jan G. Laitos, *The Limits of the Law: Functional Failures of the Air Pollution Variance Board*, 44 U. COLO. L. REV. 513, 521 (1973) (stating, based on case examples before the Variance Board, that "[v]ariances are increasingly becoming licenses to pollute.").

100. *Id.* at 527.

101. Ken Gepfert, *MacFarlane to Challenge Weakened Air Regulations*, ROCKY MTN. NEWS, May 23, 1975, at 6.

102. *Id.*

103. *Id.*

104. Steve Wynkoop, *New Hearings Ordered on Oxide Rules*, DENV. POST, June 13, 1975, at 3.

4. The Second *Fry* Case

The Fry Roofing penalty and injunction enforcement case went to an eight-day trial in June of 1975 before a jury in Adams County District Court. The jury found that Fry had violated Regulation No. 1's opacity standard (ratcheted down from 40 to 20 percent opacity) eighty-three times since 1971.[105] Judge Clifford Gobble assessed a $41,500 civil penalty and, adopting the jury's findings as his own, issued an injunction preventing the plant from violating the 20 percent opacity standard. The judge stayed execution of the injunction for three months to give Fry the opportunity to make a "genuine" effort to comply with the law.[106]

Instead of ordering and installing control equipment, Fry appealed. Seven years after the Division had issued Fry the first cease and desist order, the Colorado Supreme Court upheld the injunction against further violation, but ordered the trial court to reduce the amount of civil penalties[107] to reflect its decision in *Western Alfalfa* on the issue of reasonable notice of inspection.[108] The court also decided that air cases do not require a jury trial—though one had been impaneled in this case as a precaution should the court hold a jury trial to be necessary.

In *Western Alfalfa,* announced the same day as *Fry,*[109] the Colorado Supreme Court upheld the validity of the visible emission standard. It found the standard technically sound, and the Air Division opacity readings accurately performed. The court explicitly recognized the link between opacity

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105. Howard Pankratz, *Fry Roofing Co. Guilty in Colo. Air Pollution*, DENV. POST, June 27, 1975, at 20. The EPA provided key expert testimony at the trial, and Assistant Attorneys General Gene Lucero and the author tried the state's case. Michael Gilbert represented the citizens group during the long struggle to obtain Fry Roofing's compliance. After the Supreme Court's second *Fry* decision against him, Fry sold his roofing company to the Owens Corning Co., which promptly installed the needed air pollution control equipment.

106. *Firm Penalized on Clean-Air Violation*, DENV. POST, July 10, 1975, at 25.

107. Lloyd A. Fry Roofing Co. v. Air Pollution Variance Bd., 553 P.2d 800, 810 (Colo. 1976).

108. Air Pollution Variance Bd. v. W. Alfalfa Corp., 553 P.2d 811 (Colo. 1976).

109. Lloyd A. Fry Roofing Co. v. Air Pollution Variance Bd., 553 P.2d 800, 810 (Colo. 1976); Air Pollution Variance Bd. v. W. Alfalfa Corp., 553 P.2d 811 (Colo. 1976). The author had the privilege of arguing both cases to the Colorado Supreme Court.

standards and the reduction of particulate loading into the air. Reciting that "public enjoyment of the air resources of this state" is an explicit legislative objective of Colorado's air act,[110] the court held that standards for visual clarity were enforceable. On the issue of whether due process required prior, contemporaneous, or reasonable after-the-fact notice of inspection to the company, the court held for requiring notice of inspection results within a reasonably short time following the inspection, because the deterrent force of a potential surprise inspection is an effective compliance tool.

> Due process contemplates that notice should be given of a visual opacity reading by the Department of Health within a reasonably short period of time following the completion of the inspection. Because surprise may play a crucial role in the course of some inspections, we do not require prior or contemporary notice of the inspection. Basic fairness is achieved . . . by delivering actual notice to a plant manager or officer or agent thereof within a short period of time following the inspection.[111]

In *Fry*, the Colorado Supreme Court upheld the injunction based on six opacity readings reporting violations, accompanied by reasonably short notice thereafter,[112] and ruled that the state need not make a showing of irreparable injury because the statute provided for an injunction to prevent future violations of the final cease and desist order. The court affirmed the Colorado Court of Appeals decision in *Western Alfalfa* to suppress the inspection tests because the Air Division inspectors had provided none of the opacity readings to the company within a reasonable period of time after taking them.

August 23, 1976, the day the Colorado Supreme Court announced its decision in both cases, was a great day for Colorado air enforcement. The State Air Division and the Attorney General's Office proved that the air quality laws were not only visionary; they had teeth and could bite into long-practiced habits of doing business. Attention now focused on two state agencies, the Air Commission and the Variance

110. *W. Alfalfa*, 553 P.2d at 814.
111. *Id.* at 816.
112. *Fry*, 553 P.2d at 810.

Board, which would have much to say about whether the state would adopt and enforce control regulations capable of cleaning up the air.

D. Stationary Source Control

The 1970 CAA provided for Colorado and the other states to adopt and enforce an implementation plan[113] for attainment and maintenance of the national ambient air health standards.[114] When submitted by the state and approved by the EPA, the state emission control regulations in the plan became federally enforceable.[115] With strong state and federal control laws in effect, the public's expectation and investment in air pollution control began to produce returns. A sense of public mission began to pervade legislative halls, citizen board and commissions, environmental organizations, and the agencies charged with making pollution control plans work.

But progress was slow in the first decade of the new air laws because air pollution was so immense and the necessity of businesses to make the needed expenditures so great. State agencies in many instances had to plead with polluters to submit plans for cleaning up their operations and seemed captive to counterpleas that strict enforcement would shut business down causing people to lose their jobs. Indeed, the General Assembly had established Colorado's air pollution Variance Board for the very purpose of relaxing the Commission's regulations for as long as companies might need.

1. Controlling the Power and Steel Plants, The Commission Gets Active

Inevitably, the backup federal enforcement power had to come into play. In July of 1976, the EPA filed a lawsuit in the U.S. District Court for Colorado to enforce the state's opacity standard at the CF&I Steel Plant in Pueblo. Previously, the EPA had issued timetables for CF&I to correct its furnace shop and coke plant emissions, which CF&I failed to meet.[116]

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113. 42 U.S.C. § 7410 (1977); Clean Air Amendments of 1970, Pub. L. No. 91-604, 84 Stat 1676.

114. 42 U.S.C. § 7409.

115. 42 U.S.C. § 7413.

116. Claire Cooper, *1st Federal Clean-Air Suit Filed Against CF&I Corp.*,

Frustrated with unsuccessful attempts to obtain CF&I compliance and not wanting to cede air quality decision making to the EPA, the Variance Board began denying variance applications for plant activities for which control techniques were available, rejecting the company's arguments that air pollution control would cost too much.[117]

Also in 1976, the Air Division began to issue permits requiring new Colorado-Ute[118] and Public Service Company (PSCo) [119] coal-fired power plants to install sulfur-dioxide scrubbers to prevent state ambient air quality standard violations. Holding regulation development and permit review hearings in the local areas, the Commission received much citizen comment in favor of the pollution controls.[120]

Industry lawyers challenged the Commission's authority to condition permits on compliance with state ambient air standards.[121] Ambient standards address the allowable concentration of pollutants in the outside air. Emission control regulations apply at the source from which pollutants are emitted. The companies argued that the Commission only had authority to adopt emission control regulations and that it could not include compliance with state ambient air standards as a condition of construction permits.[122] The Air Division initiated this controversy by including in the Public Service Pawnee Power Plant permit a condition that would trigger the installation of control equipment if air pollution receptors, placed in farmers' corn fields, detected a violation of ambient air standards.[123]

Looking to preserve rural and mountain vistas, the

ROCKY MTN. NEWS, July 3, 1976, at 6.

117. *Id.*

118. Steve Wynkoop, *Air 'Scrubbers' Decreed for Yampa Power Units*, DENV. POST, Aug. 29, 1976, at 29; *Install 'Scrubber' Units, Ute Power Plant Ordered*, ROCKY MTN. NEWS, Aug. 29, 1976, at 13.

119. Al Nakkula, *Pollution Control Unit Allows Public Service Pawnee Plant*, ROCKY MTN. NEWS, July 23, 1976, at 5.

120. Bob Jain, *Pawnee Plant for Morgan Stirs Up Verbal Dust*, DENV. POST, May 9, 1976, at 18.

121. Steve Wynkoop, *PSC Trying to Avert Air Controls on Pawnee Plant*, DENV. POST, Aug. 22, 1976, at 20.

122. Steve Lang, *Industries Challenge Pollution Standards*, ROCKY MTN. NEWS, Aug. 26, 1976, at 6.

123. *See* Richard J. Schneider, *Pawnee Power Plant Construction OK'd, but PSC Objects to Some Terms*, ROCKY MTN. NEWS, Feb. 12, 1976, at 5; *see also* Steve Lang, *PSC's Request to Build Plant Runs into Snag*, ROCKY MTN. NEWS, Mar. 4, 1976, at 5.

Commission agreed with the Division. It read Colorado's air act to include the protection of good ambient air against avoidable deterioration. It made no sense to commence the clean-up of existing sources while allowing new or modified sources to escape installing and operating the best available pollution control devices.

The power industry was arguing that burning "low-sulfur Western coal" should be a form of control.[124] The Commission's counter-position—to protect good air areas by requiring the installation of control technology or the denial of construction permits—presaged the subsequent federal prevention of significant deterioration program ("PSD") that Congress mandated in the 1977 CAA Amendments.[125]

AMAX Coal Company, a division of AMAX Inc., intervened in the Pawnee Power Plant proceedings to claim a trade secret privilege for certain information relating to its coal supply contract with PSCo. The Commission responded that Colorado's air act required public disclosure of "emission data," so that interested citizens could participate in permit hearings. At issue were the sulfur dioxide emissions that could result from burning the coal. While the Commissioners, the Air Division staff, and the expert for the Environmental Defense Fund viewed the contract and coal data under a protective order procedure, AMAX filed suit in Fort Morgan and Denver District courts to prevent public disclosure of its claimed-to-be privileged-information.

Granting review under its original writ jurisdiction, the Colorado Supreme Court read Colorado's air act to provide that the local district court has review venue over any issues associated with a particular air pollution source.[126] In contrast, judicial review of Commission rulemaking resides in the Denver District Court.[127] The Air Division, Environmental Defense Fund, and AMAX settled the suit by a stipulation in Morgan County District Court that made the sulfur dioxide

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124. Schneider, *supra* note 123.

125. Richard L. Griffith, *The Colorado Prevention of Significant Deterioration of Air Quality Program*, 12 COLO. LAW. 1927, 1983–86 (Dec. 1983); *see* Envtl. Def. Fund v. Colorado Dep't of Health, 731 P.2d 773, 775 (Colo. App. 1986).

126. Air Pollution Control Comm'n v. Denver County Dist. Court, 563 P.2d 351, 354 (Colo. 1977).

127. Diane L. Burkhardt, *A Practitioner's Guide to the Colorado Air Quality Control Commission*, 16 COLO. LAW. 1347, 1405, 1407 (Aug. 1987).

emission data public and withheld privileged commercial and financial information from disclosure.[128]

In the Colorado-Ute permit matter, the company did not seek judicial review of the permit condition requiring its Craig plant to meet the state ambient air standards. Nevertheless, it later challenged the Commission's use of those standards in reviewing and conditioning permit applications to require SO_2 scrubbers, including those in the Craig station permit. In a suit Public Service Company initially joined, but later dropped out of, the Colorado Court of Appeals invalidated the state ambient air permit condition that Colorado-Ute had not originally taken to judicial review.[129]

The controversy about the use of state ambient standards as an enforcement condition in stationary source permits produced a legislative change. Based on 1979 changes to Colorado's air act,[130] the Commission amended its new or modified source regulation in 1980.[131] Compliance with state ambient air quality standards would now appear as a permit condition only in the absence of an applicable federal ambient standard.

Accordingly, the Colorado Supreme Court vacated the Court of Appeals decision, finding Colorado-Ute's generic challenge to use of state ambient air standards as a permit condition to be moot because the Commission's revised regulation reserved state ambient standards for application only when no counterpart national ambient standard existed. And, the court held Colorado-Ute to compliance with the state ambient air standard condition in the Craig station permit because the company had not timely filed for judicial review under the State Administrative Procedure Act.[132]

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128. Stipulation dated Feb. 7, 1978 (on file with author). David C. Mastbaum represented EDF and a citizen's group calling itself Information Please, Inc., an association of concerned farmers and individuals in the power plant's vicinity. Charles W. Newcom of Dawson, Nagel, Sherman & Howard represented AMAX Coal Company. Hubert Farbes and the author represented Colorado at the Air Commission hearings and in court.

129. Colorado-Ute Electric Ass'n v. Air Pollution Control Comm'n, 648 P.2d 150, 153 (Colo. App. 1982).

130. Colorado Air Quality Control Act, ch. 266, 1979 Colo. Sess. Laws 1017, 1030–31 (codified at COLO. REV. STAT. § 25-7-114(4)(b) (Repl. Vol. 1973, as amended)).

131. 5 COLO. CODE REGS. § 1001-5 (2002).

132. Air Pollution Control Comm'n v. Colorado-Ute Electric Ass'n, 672 P.2d 993, 997 (Colo. 1983).

In another industry-filed case, the Colorado Supreme Court recognized the standing of affected businesses to seek pre-enforcement judicial review of Commission decisions.[133] Litigation by CF&I resulted in the Colorado Court of Appeals invalidating the Commission's fugitive dust regulation for its vagueness and its discriminatory treatment of private versus public sources.[134] The Court of Appeals criticized the regulation because it failed to differentiate between wind-blown dust and dust-stirring caused by machinery. The Court of Appeals balked at the use of the opacity method for observing dust violations because the emissions were not from a discrete point. Particularly scathing was the Court of Appeals' rejection of the Commission's rationale that private companies could more readily afford to control unpaved roads than public agencies. After the Colorado Supreme Court granted certiorari, it then dismissed the appeal at the parties' request—in effect, the Commission conceded defeat on this one.[135]

2. Commission Collaborative Rulemaking

In response to this string of industry-instituted litigation against Commission regulations, causing delay and uncertainty to an effective control program, the Commission successfully turned to a subcommittee format for formulating proposed regulations.[136] With one or more of the Commissioners presiding, these informal sessions with Air Division staff allowed business representatives and citizens to participate in regulation development at an early stage.

The formality of the rulemaking hearing had not lent itself

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133. CF&I Steel Corp. v. Colorado Air Pollution Control Comm'n, 610 P.2d 85, 92 (Colo. 1980).

134. CF&I Steel Corp. v. Colorado Air Pollution Control Comm'n, 640 P.2d 238, 241–42 (Colo. App. 1981).

135. Colorado Air Quality Control Comm'n v. CF&I Steel Corp., 662 P.2d 488, 489 (Colo. 1983). One who has been so involved on the public regulation side of the air quality effort, such as the author, can overlook or ignore the contributions made by those who represented business concerns in the many hearings, court cases, and legislative committee meetings from the 1970s to the 1990s. Here I acknowledge the dedicated work for their clients of Jim Sanderson and Don Cawelti for PSCo; Bill Robb and David Furgason for CF&I; Ira Rothgerber and Bob Slosky for Fry Roofing Company; and Girts Krumins for Colorado-Ute.

136. Burkhardt, *supra* note 127, at 1408.

to talking out loud about scientific, technical, and policy agreements and disagreements. This new process allowed the airing of issues and differences preliminarily. Often, these interchanges resulted in the Air Division being dispatched to return with additional data and analysis that regulated businesses, the EPA, or other state pollution control agencies would supply.[137] Then proposed regulations would be shaped and proposed for public hearing.

The General Assembly spurred on the Commission's turn to a more collaborative rulemaking approach. In 1979, it adopted revisions to Colorado's air act that established legislative review of state implementation plan measures that the Commission intended to submit to the EPA for approval.[138] The General Assembly required the federally enforceable plan to include only those cost effective measures necessary to comply with federal law. More stringent state requirements would be reserved for state enforcement only.

Through the work of the Air Commission, the Division, and the Attorney General's Office—combined with the EPA's backup enforcement authority, technical assistance, and state program funding grants—stationary source control was well under way by the end of the 1970s.

The Commission's effort to keep already clean air clean bore fruit. In 1979, The General Assembly approved the Commission's 1977 designation of Colorado category one areas for the protection of national parks, monuments, and wilderness areas from sulfur dioxide emissions resulting mainly from power plants. These areas included Rocky Mountain and Mesa Verde national parks, the Great Sand Dunes, Dinosaur and the Black Canyon of the Gunnison national monuments, and the Weminuche, West Elk, Mount Zirkel, Flattops, Eagle's Nest, and Maroon Bells wilderness areas.[139]

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137. The Commission has prepared a helpful flow chart for the formal rule-making process. *See* GUIDEBOOK TO THE AIR QUALITY CONTROL COMMISSION'S RULE-MAKING PROCESS, at app. A, 22 (Mar. 11, 1999).

138. *See* Act of June 20, 1979, ch. 406, 1979 Colo. Sess. Laws 1539, 1552 (codified at COLO. REV. STAT. § 25-7-133 (Repl. Vol. 1973, as amended) (current version at COLO. REV. STAT. § 25-7-133 (2003))).

139. Colorado Air Quality Control Act, ch. 266, 1979 Colo. Sess. Laws 1017, 1054–55 (codified at COLO. REV. STAT. § 25-7-209 (Repl. Vol. 1973, as amended) (current version at COLO. REV. STAT. § 25-7-209 (2003))).

Under the 1977 CAA Amendments, the PSD[140] built upon Colorado's pre-existing Category One designation of national parks and wilderness areas. The PSD permit program is designed to protect air that is cleaner than the national ambient air quality standards. It includes a highly protective limit for sulfur dioxide emissions that could impact federal Class I areas. In Colorado, these areas, of course, include the Flat Tops Wilderness, which is only fifty miles downwind from the vast oil shale deposits in the Piceance Basin.

Soon after the 1977 federal amendments, President Jimmy Carter's campaign for America's energy independence spurred a flurry of hopeful oil shale development projects. The Bureau of Land Management (BLM) conducted an air quality assessment as part of its proposed oil shale leasing program. Early permits submitted by project developers proposed installing pollution control technology that would control oil shale SO_2 emissions in the 50 to 70 percent range. The BLM's assessment showed that a much higher degree of control would be required. Accordingly, when the EPA issued the first PSD permit, for Texaco's project, it set the required level of control at 90 percent. This shocked the industry because it projected project costs could increase as much as 15 to 20 percent as a result of the stringent limit.[141] As it turned out, the market price of oil dropped far below the price that would support oil shale development. The oil shale bust, a recurrent theme in Colorado history, had come back round again.

East of the Continental Divide, bad air data in the mid-1970s indicated the need for far more control of existing air pollution and this produced a great deal of contention about what should be done and what it would cost to do it. Front Range growth and automobile emissions came into focus as a huge source of air pollution. The beloved car, a very visible sign of American freedom that propelled a significant part of the American economy and gave the average Americans the ability to see and enjoy this magnificent country, needed a major tune up. A large part of Colorado's air problems rolled directly out of Henry Ford's invention.

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140. 42 U.S.C. §§ 7470–7491 (2003).

141. E-mail from Bob Yuhnke, Attorney, to author (Mar. 11, 2004, 11:05:00 MDT) (on file with author). Yuhnke represented the Environmental Defense Fund in discussions about the best available control technology necessary to protect the Flat Tops Wilderness Area.

III. MOBILE SOURCES AND THE BROWN CLOUD, THE 1980S

The motor vehicle, highway construction, and homebuilding industries that drove America's post-World War II economic expansion contributed greatly to dirty air because the internal combustion engine that turned the wheels emitted carbon monoxide, particulates, volatile hydrocarbons, and nitrogen oxides in prodigious amounts.

A. The Dirty Beloved Automobile

As stationary sources were being controlled, finger pointing turned to the pollution-causing activities of citizens and their cars. The Colorado Air Commission's 1978 Report to the Public stated that "existing *controlled* stationary source emissions of particulates, carbon monoxide, and hydrocarbons account for only 10 percent, 6 percent, and 5 percent, respectively, of the total emissions of each of those pollutants in the Denver Region."[142] Additional stationary source controls could only achieve substantial gains in the control of nitrogen oxide emissions.[143]

As with eliminating backyard trash burning, citizens found it hard to change their pollution-causing habits. To Coloradans and other American westerners, freedom and the car were synonymous. Add to this the fact that convenient public transportation was virtually non-existent.

> While the public is increasingly aware of the automobile as a major polluter, there is no evidence that drivers are willing to abandon the car for other forms of transportation.
>
> . . . .
>
> A comparison of states' legislative initiatives to meet the federal requirements as set forth by the 1970 Amendments to the Clean Air Act shows that, in the western states, the problems of dealing with the automobile are of foremost importance. Individual strategies for restricting automobile

142. AIR POLLUTION CONTROL COMM'N, 2 REPORT TO THE PUBLIC 59 (1978).
143. *Id.* at 61.

> use, relating land use to this restriction, and taking steps to increase mass transit are just in the discussion stages.[144]

Of course, Colorado and other states depended on the promulgation and enforcement of federal motor vehicle emission control standards for new cars. Rampant auto pollution in cities across the United States spurred standards requiring the development of clean air technologies for new cars. Because of its high elevation and the lower oxygen content in its air, Colorado air pollution control strategies had to focus on cleaner cars, emission control repairs, and fuels that burned cleanly at high altitudes.

B. Vehicle Inspection and Maintenance

Keeping the emission control devices working properly through a vehicle inspection-maintenance program was a necessary and early measure adopted by the Commission and Air Division. In 1977, the General Assembly authorized planning for such a program.[145] This new statute assigned the Air Commission the job of adopting exhaust gas emissions standards and motor vehicle inspection regulations. The proposed standards would be subject to legislative review before they would go into effect, and the Department of Revenue was to oversee the licensing of inspection stations.[146]

However, the 1978 session produced H.B. 1209, a bill that would have deprived the Air Commission of its authority to set mobile source emission standards, assigning this power instead to the Executive Director of the Department of Revenue and transferring all Air Division mobile sources personnel to that department.[147] Also, enactment of this bill would have required the Commission to obtain Legislative Council review of any state implementation plan measure before it was submitted to the EPA.[148]

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144. *Id.* at 174.

145. Act of June, 30, 1977, ch. 564, 1977 Colo. Sess. Laws 1901, 1901–12 (codified as amended at COLO. REV. STAT. §§ 42-4-301 to -315 (Repl. Vol. 1974, as amended)).

146. 1977 Colo. Sess. Laws 1902, 1902–04 (codified at COLO. REV. STAT. §§ 42-4-308 to -309 (Repl. Vol. 1974, as amended)).

147. H.R. 1209, 51st Gen. Assem., 2d Reg. Sess., at 15–17, 35, 37 (Colo. 1978).

148. H.R. 1209, at 5–7 (current version at COLO. REV. STAT. § 25-7-133

Calling attention to the public's concern about the Brown Cloud, Governor Lamm vetoed H.B. 1209. In doing so, he rebuked the General Assembly for undercutting the state's ability to develop its own state implementation plan to come into compliance with the national health standards.

> It is tragic that in a year when the public has recognized the Brown Cloud for the threat that it is, and has been urging strong action to fight this menace, that the Legislature has produced a bill that is actually a *step backward* in the fight towards cleaning our air.
>
> Four months ago I asked this Legislature to make air pollution control the number one priority for this legislative session.
>
> . . . .
>
> A memorandum of law prepared by the Attorney General concludes that if HB 1209 was allowed to become law, it would "make it impossible for this state to assert that it has the requisite enabling authority and administrative capacity to comply with the Federal Clean Air Act."[149]

Propelled by the 1977 CAA,[150] in 1979, the General Assembly adopted the revised Colorado Air Quality Control Act.[151] Among other things, it required the Department of Health and the Department of Revenue to develop a pilot program to test "various vehicle emission control alternatives which may include emission testing and maintenance, air pollution control tune-up, and vehicle modification alternatives as determined by the commission."[152]

(2003)).

149. Veto Message of Gov. Lamm, H.R. 1209, 51st Gen. Assem., 2d Reg. Sess., H.J. 1004, at 44–54; H.J. 1005, at 31–37 (May 8, 1978).

150. Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 105, 91 Stat. 685, 689 (current version at 42 U.S.C. § 7408 (2003)).

151. Colorado Air Quality Control Act, ch. 266, 1979 Colo. Sess. Laws 1017, 1017–1061 (codified as amended at COLO. REV. STAT. § 25-7-101 to -305 (Repl. Vol. 1973, as amended)).

152. 1979 Colo. Sess. Laws at 1049 (codified at COLO. REV. STAT. §§ 25-7-130(2)(a) (Repl. Vol. 1973, as amended)); *see also* 1979 Colo. Sess. Laws at 1049–50 (codified at COLO. REV. STAT. § 25-7-131 (Repl. Vol. 1973, as amended) (current version at COLO. REV. STAT. §§ 25-7-130, 131 (2003)).

In 1980, the General Assembly ultimately adopted the "Automobile Inspection and Readjustment program," otherwise known as the "AIR Program," which required motorists to obtain an emission compliance windshield sticker for their cars.[153] The Air Commission had adopted standards and procedures for the inspection and maintenance of motor vehicle model years 1968 to 1981.[154] This law allowed certified mechanics at neighborhood garages to perform emission testing to see that cars conformed with these standards and regulations. The General Assembly required the Commission to adopt new standards annually for each succeeding model year.[155] It assigned to the Department of Revenue the job of licensing inspection stations and mechanics to perform repairs on cars that did not pass.[156]

Concerned about negative public reaction to the program because of the time and cost required for obtaining inspections and performing needed repairs, the General Assembly required the Air Division to maintain a telephone answering service and to report yearly on the status of the AIR program.[157] For motor vehicles model year 1981 or newer, the legislature capped the cost of required repairs at $100. After spending this amount, a certificate of emissions adjustment would be issued.[158] Under the aegis of Air Division Director, Dr. Jim Lents, the program went into operation.[159]

In reaction to the 1990 CAA Amendments,[160] the General Assembly in 1992 adopted provisions presaging an enhanced inspection and maintenance program with centralized inspection stations in the six county Denver Metropolitan Area.[161] The Assembly enacted such a program the next year under threat of federal sanctions that included the loss of highway funds. The 1993 legislation authorized a "loaded

153. Act of May 23, 1980, ch. 169, 1980 Colo. Sess. Laws 757, 757–74 (codified at COLO. REV. STAT. §§ 42-4-306.5, -307 to -316 (Repl. Vol. 1973, as amended)).

154. § 4, 1980 Colo. Sess. Laws at 761–64.

155. § 4, 1980 Colo. Sess. Laws at 762.

156. §§ 3 & 5, 1980 Colo. Sess. Laws at 759–60, 764–65.

157. § 5, 1980 Colo. Sess. Laws at 764.

158. § 8, 1980 Colo. Sess. Laws at 767.

159. DENVER METRO AIR QUALITY, *supra* note 18.

160. Act of Nov. 15, 1990, Pub. L. No. 101-549, 104 Stat. 2399, 2433–34 (codified at 42 U.S.C. § 7511a(c)(3)(B)–(C) (2003)).

161. *See* Act of May 27, 1992, ch. 179, 1992 Colo. Sess. Laws 1163, 1171 (codified at COLO. REV. STAT. § 25-7-105(13)(a) (2003)).

mode" test, which tested emission levels as the engine was running at various speeds.[162] The enhanced program went into effect as a condition to vehicle registration because of the Denver Metropolitan Area's non-attainment status.[163]

C. Oxygenated Fuels

Because the inspection/maintenance program was an insufficient motor vehicle control strategy because it only served to check for the deterioration or disconnection of motor vehicle emission control devices in individual vehicles, the Commission in 1987 began requiring the use of oxygenated gasoline during wintertime to reduce carbon monoxide emissions in Colorado's worst air regions.[164]

The newly-emerging alternative fuels industry vigorously campaigned for approval of an oxygenate standard so high that only ethanol or methanol would pass. Denver Conoco Refinery spokespersons testified in favor of setting a standard that would allow the gasoline producers and the ethanol producers to compete in providing air quality benefits. This was a refreshing development in a very contentious rulemaking proceeding. While many of the major gasoline producers opposed any "oxy-fuels" program, they grudgingly conceded the viability of a regulation that would allow them to compete against the "gasohol" industry by means of a petroleum-based additive.

The Denver Chamber of Commerce supported the oxy-fuels program at the Commission's hearings. This evidenced an important change in the business community. Large manufacturing operations had been the long-time mainstay of commerce in Colorado. That had given way to an economy based on new home and office construction required to serve the new and growing populace, who expected and demanded better air.

As a result of its hearings, the Commission adopted a gasoline oxygenate level that allowed the use of methyl tertiary

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162. *See* Act of June 8, 1993, ch. 321, 1993 Colo. Sess. Laws 1922, 1925–26, 1931–32 (codified at COLO. REV. STAT. §§ 42-4-306.5, -307(Repl. Vol. 1993)). *See* COLO. REV. STAT. § 25-7-105(13)(a) (2003).

163. *See* 42 U.S.C. § 7511a(c)(3) (2003).

164. *See* COLO. REV. STAT. § 25-7-106(1)(e) (2003); 5 COLO. CODE REGS. § 1001-16 (2003).

butyl ether ("MTBE"). Ironically, the federal government and the Commission later banned MTBE when it began to show up as a toxic pollutant in ground water.[165]

What the oxy-fuels experience proved was that fuel improvements could reap pollution reduction benefits, and competition between fuel suppliers for "clean fuels" would benefit the public at a moderately increased cost—about $2.90 per household during the 1987–88 winter Better Air Campaign season, which was far less than the $7.00 per car that one major oil company had predicted.[166]

Testimony at the Commission's oxy-fuels hearings included an oil industry claim that the program wouldn't work and that women and children would die in the streets because cars would literally stop running.[167] But cars continued to run, and cleaner motor vehicle fuels in use today include compressed natural gas, propane, and electricity.[168]

D. Transportation, Land Use, and Air Quality Planning

It wasn't magic——but it was magical——that Colorado's historical preference for deferring hard matters to local governments actually produced a new generation of city council persons and mayors who took on the challenges handed to them. They campaigned for urban-suburban air quality, land use, and transportation plans. In the 1980s, the Commission, Denver officials, and air quality citizen groups focused their attention on sky-rocketing auto use and the huge contribution motor vehicle use was making to Colorado air pollution. Air pollution control planning led to community planning and reinvigorated Denver's entrepreneurial role.

1. Imagine A Great City

A change in Denver mayoral politics in 1982 resulted in the election of a strong air quality advocate, Federico Pena.

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165. *See* COLO. REV. STAT. § 25-7-139 (2003); 5 COLO. CODE REGS. § 1001-16 at 1(I)(D)(2) (2003).

166. Lou Chapman, *Oxy-Fuel Project Cost Drivers Less Money Than Predicted*, DENV. POST, Apr. 22, 1988, at 4B.

167. Dick Cooper & Jeffrey A. Roberts, *Mixed Signals Sent on Air Pollution*, DENV. POST, Jan. 27, 1989, at 1B.

168. *Id.*

His "Imagine A Great City" was a clarion call for change.[169] It included seeing the mountains clearly and breathing healthy air.

Cut off from annexing additional land because of the Poundstone Amendment,[170] choked with air pollution, and confronted with suburban competition for attractive retail and residential development, Denver pressed to revitalize its historic role as the entrepreneurial, cultural, and political core of Colorado opportunity.[171]

Degraded air was the most visible symbol of Denver's leadership slide, and the citizenry, business community, and media were ready for revival. During 1983, his first year in office, Mayor Pena presented to the Air Commission a commitment by city workers to commence a ride-sharing program that would extend area-wide the next year.[172] On bad air days during the winter, citizens chosen based on their license plate number would be asked to participate in voluntary no-drive days. On the worst days, the plan would request that drivers cancel non-essential trips.

Comprised of forty-two different towns and cities in the Metropolitan Area, the Denver Regional Council of Governments ("DRCOG") rejected the ride-share proposal. In adopting it anyway, the Commission appealed to DRCOG to reconsider its opposition "because air pollution is a problem

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169. *See* CAROL ABBOTT ET AL., COLORADO: A HISTORY OF THE CENTENNIAL STATE 341 (3d ed. 1994).

170. COLO. CONST. art. XX, § 1 (1974). This 1974 initiated amendment to the Colorado Constitution required voter approval by the electorate of an area Denver proposed to annex. Adopted largely in reaction to the desegregation decision of the federal District Court, this amendment to preserve the suburbs resulted in Denver's later ability to hold its water supply for the primary use of the core city. *See* Bennett Bear Creek Water Dist. v. City & County of Denver, 928 P.2d 1254, 1272 n.27 (Colo. 1996); CARL UBBELOHDE ET AL., A COLORADO HISTORY 349 (8th ed. 2001).

171. An early example of this entrepreneurial spirit occurred after the Civil War, when General William Tecumseh Sherman was assigned military jurisdiction over the West. He decided he needed to see what was there. He traveled up the Platte Trail; then came down the Front Range from Fort Laramie. He most looked forward to seeing and being in the Rocky Mountains. He was a private person. He hated receptions and having to make speeches, but the civic leaders of Denver came out to see him and invite him to a reception and give a speech. Their motivation was to get the Army to build forts in Colorado so Denver merchants could sell them supplies. *See* ROBERT G. ATHEARN, WILLIAM TECUMSEH SHERMAN AND THE SETTLEMENT OF THE WEST 75 (1956).

172. Sandy Graham, *City Workers to Spearhead Denver Car-Pool Program*, ROCKY MTN. NEWS, Nov. 11, 1983, at 11.

that needs area-wide cooperation."[173] Downtown Denver, Inc. appeared before the Commission to endorse the ride-sharing plan. Moderating its position in response to the Commission's appeal, DRCOG became the regional coordinator of a matching carpool service.

2. Metropolitan Air Quality Council and Transportation Roundtable

To spur local air quality advocacy and planning, Governor Lamm and Mayor Pena organized the Metropolitan Air Quality Council in 1985,[174] which Steve Howards and Patti Shwayder staffed. Under the Chairmanship of Michael Shonbrun, the Council met at National Jewish Hospital, internationally known for its respiratory health expertise, and Council members became publicly vocal about the need to "move people, not cars."[175]

The MAQC, as it was called, endorsed clustered housing, mandatory shuttles to bus stops, land use controls to reduce vehicle miles traveled, wood burning bans, extensive use of oxygenated fuels, conversion of Public Service power plants to natural gas, and emission tests for diesel cars and trucks.[176]

Confronted with a divisive mass transit debate pitting suburban beltway advocates against those who were pushing core area redevelopment, Governor Roy Romer and Senator David Wattenberg formed the Transportation Roundtable in June of 1988. Late in the summer, Governor Romer endorsed mass transit for Denver's southeast and southwest corridors. Mayor Pena had warned the Roundtable that "the city will die unless future transportation needs are met by rapid transit, instead of additional automobile lanes. Widening highways will destroy neighborhoods."[177]

The Governor's trial balloon called for funding mass

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173. *Id.* (quoting the author).

174. *See* Rebecca Cantwell, *Hazy Days for Air Council*, ROCKY MTN. NEWS, July 16, 1990, at 7 (story on new Regional Air Quality Council referring to predecessor Metropolitan Air Quality Council).

175. Editorial, *A Transportation Superfund*, DENV. POST, Sept. 15, 1988, at 6B.

176. Lou Chapman, *Improving Land Use Smog War's Next Goal*, DENV. POST, May 16, 1988, at 1A.

177. Berny Morson, *Romer Backs Rail Lines for Southern Corridors*, ROCKY MTN. NEWS, Sept. 3, 1988, at 30.

transit through beltway tolls and it prompted skepticism.[178] Beltway supporters opposed the siphoning off of their revenues while MAQC members feared the E-470 and W-470 beltway proposals would "throw the metro area even further out of compliance with federal air quality standards by encouraging private automobile use."[179]

The Governor's Transportation Roundtable ultimately recommended fixing road and transit priorities based on the consideration of three factors: air quality, mobility, and safety.[180] Amidst speculation that mandatory no-driving restrictions would be necessary in order for the Denver Metropolitan area to meet the national health standards for carbon monoxide and particulates,[181] voters in Adams, Boulder, and Jefferson County defeated the proposed W-470 beltway[182] portion of a comprehensive Metro beltway by a 5-to-1 edge.[183] Nevertheless, the electorate in the E-470 area voted to proceed with that portion of the beltway as a toll road.

Air quality advocates read the defeat of the W-470 proposal as a citizen call to elected officials saying, "Get your act together and have a plan that makes sense."[184] The MAQC supported DRCOG's 2010 transportation plan proposal for developing a rapid-transit system radiating from downtown Denver,[185] but opposed its proposal to complete the Denver metro beltway.

DRCOG's 2010 transportation plan was the first in Colorado to undergo a comprehensive air quality analysis. Mayor Federico Pena was committed to building Denver International Airport east of downtown, with the possibility of

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178. Terry Kliewer, *Panel Cool to Using Beltway Tolls for Rapid Transit, Roads*, DENV. POST, July 26, 1988, at 2B.

179. *Id.*; Bill McBean, *E-470 Growth Key: Downtown v. Suburbs*, DENV. POST, Nov. 2, 1988, at B1; *see* Vincent Carroll, *Urban Sprawl Would Ignore Red Light on E-470*, Nov. 4, 1988, at 65.

180. Vincent Carroll, *Traffic Puzzle Planners Caught Between Moving More People While Polluting Less*, ROCKY MTN. NEWS, Jan. 15, 1989, at 57.

181. Thomas Graff, *Specter of Driving Bans Raised, Strategies Offered to Fight Area's Top Environmental Concerns*, DENV. POST, Jan. 27, 1989, at 3B.

182. *See* Terry Kliewer, *W-470 Hailed as Vital to Growth, Assailed as Brown-Cloud Harbinger*, DENV. POST, Jan. 25, 1989, at 3B.

183. Terry Kliewer, *W-470 Fee Suffers Resounding Defeat*, DENV. POST, Feb. 8, 1989, at 1A.

184. Jim Kirksey & Jay Grelen, *Highway's Foes Say Voters Want Data, Better Planning*, DENV. POST, Feb. 8, 1989, at 10A.

185. Leroy Williams, Jr., *Planning Against Pollution*, ROCKY MTN. NEWS, May 23, 1989, at 8.

a rail link into the city. The air quality analysis done in connection with the environmental impact statement for the airport demonstrated that DRCOG's plan, along with the E-470 beltway, would cause future violations of the national health standards for particulates and ozone. Concerned about violating the health standards and jeopardizing federal funding, Governor Romer defined the role of the Transportation Roundtable to include transit funding and additional air quality measures.[186]

The Transportation Roundtable and the General Assembly's Legislative Review Committee ultimately endorsed three priorities for the metropolitan area: "[c]ost effective measures for making better use of existing transportation systems[, i]mprovements necessary for safety and air quality[, and b]uilding a transit system parallel with beltway construction."[187]

In the 1989 legislative session, General Assembly leaders Dave Wattenberg, Al Meiklejohn, Don Ament, Danny Williams, and Norma Anderson all helped to craft bills setting forth a comprehensive air quality/transportation framework. Political, business, and community leaders supported these bills,[188] but the bills died near the end of the session. Governor Romer then called a special session that resulted in creation of the Metropolitan Transportation Development Commission.[189]

3. The Metropolitan Transportation Development Commission

The MTDC's job was to submit a metropolitan transportation plan to the General Assembly no later than January 31, 1990, and to consider among other proposals "[t]he parallel buildout of mass transit and regional roadways, transportation systems management, and air quality issues."[190]

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186. E-mail from Robert Yuhnke to author (Mar. 6, 2004, 08:43:00 MDT) (on file with author). Yuhnke represented the Environmental Defense Fund in Colorado air quality matters, as well as being a member of the MAQC and the RAQC.

187. Greg Hobbs, *Legislature Gridlocks on Transportation*, DENV. POST, May 1, 1989, at 7B.

188. *See id.*

189. Act of July 11, 1989, ch. 10, 1989 Colo. Sess. Laws 69, 69–72 (codified at Colo. Rev. Stat. § 43-2-148 (Repl. Vol. 1984, as amended)).

190. 1989 Colo. Sess. Laws at 70 (codified at COLO. REV. STAT. § 43-4-148(3)

Governor Romer appointed the members of the Commission in August of 1989, and they went to work soon after.[191]

Also in the summer of 1989, Governor Romer replaced the Metropolitan Air Quality Council with the Regional Air Quality Council. The Denver Regional Council of Governments appointed fifteen of the thirty members of the newly-formed RAQC, which started work on August 9, 1989, as the lead air quality planning group for the Denver Metropolitan area.[192] In light of the adverse air quality impacts projected for DRCOG'S 2010 Plan, MAQC members appointed to RAQC continued to question that plan, which projected that vehicle miles traveled would double but did not commit to offsetting air quality strategies. One member said,

> 'That kind of scenario will wipe out the gains we've made from wood burning restrictions, offset the reductions in carbon monoxide through better fuels and emission systems and increase the brown cloud.'[193]

Observing that the metro area did not comply with federal clean-air standards for carbon monoxide and fine particulates and that a state implementation plan to achieve compliance was due the next year, the EPA warned that mandatory measures would be required and only a program with a proven track record would be credited under the federal CAA.[194]

Surveys conducted in 1989 by the Metropolitan

(1984 Repl. Vol., as amended)).

191. Dick Cooper & Terry Kliewer, *Romer Names Metro Transport Commission*, DENV. POST, Aug. 2, 1989, at 3B. The members were former state Representative Bud Hover, Denver Mayor Federico Peña, Jim Smith of U.S. West Communications, Boulder County Commissioner Ron Stewart, state highway commissioner Tom Strickland, Aurora Mayor Paul Tauer, Tom Thomas of the Regional Transportation District Board, Morrison Town board member John Thomasson, Adams County Commissioner Elaine Valente, and Greg Hobbs as Regional Air Quality Council representative. The Commission selected Tom Strickland as its chair.

192. *See* Thomas Graff, *Air Quality Council Looking for Director with Superhero Traits*, DENV. POST, Aug. 10, 1989, at 8B.

193. Thomas Graff, *Clean Air Drive 'Not Tough Enough'*, DENV. POST, Oct. 16, 1989, at 10A.

194. *Id.* Near the close of the 1980s, former Chair of the Air Commission Carol Sullivan found good news in the "considerable progress" made towards carbon monoxide control, but also warned. "The mountains will disappear . . . if we continue at our current pace. In fact, the Rockies already now fade away some days into a grey-brown blur." Carol Sullivan, *Will Pollution Hide Our Mountains in 2,100?*, DENV. POST, July 22, 1989, at 7B.

Transportation Development Commission ("MTDC") revealed that metro-area residents loved their cars but hated the Brown Cloud, as the Front Range pollution soup came to be known.[195] They favored a rail system to reduce pollution and congestion.[196] Kicking off the Clean Air Colorado program—a year-round voluntary effort to encourage carpooling and driving reductions on high pollution days—Governor Romer credited the oxy-fuels program for reducing carbon monoxide by 10 to 12 percent; however, he said, more needed to be done in every area, including transit.[197]

The MTDC endorsed the construction of light rail in three Denver corridors and the completion of the E-470 beltway. When the MTDC took its vote to send the proposal to public hearing, a Jefferson County Commissioner who supported building W-470 grumbled from the audience audibly, "[N]obody is going to use it."[198] The public weighed in at the hearings with both fervent supporters and adamant detractors arguing their viewpoints.[199]

In two successive years, the General Assembly considered bills to refer the MTDC recommended Metropolitan Transportation Plan to the voters for approval. The 1990 and 1991 sessions defeated both of these bills in close votes in the Senate after House passage, in part due to rural fears that an independent source of transportation funding for Denver might isolate the West Slope's quest for the funding it needed. Western Slope leaders have long viewed transportation dollars as an economic lifeline and have depended on a statewide approach to building and maintaining Colorado's transport network.

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195. Thomas Graff, *Commuters Love Cars but Hate Brown Cloud*, DENV. POST, Oct. 29, 1989, at 4B. Joe Palomba, who later became the Air Commission's first administrator, had written a report for the Colorado Department of Health in 1961 describing Denver's bad air as a "brownish-blackish cloud." By the 1980s, the "Brown Cloud" had become the proper name for a very improper and unpopular condition of pollution. Gary Massaro, *The Guy Who Gave Brown Cloud A Name*, ROCKY MTN. NEWS, Oct. 31, 1999, at 40A.

196. *Id.*; *Freedom From the Road: Public Support is Swinging Toward Light-Rail System*, ROCKY MTN. NEWS, Nov.19, 1989, at 74.

197. Graff, *supra* note 195.

198. Berny Morson, *Light Rail May Figure in Area Transport Plan*, ROCKY MTN. NEWS, Nov. 20, 1989, at 8.

199. Mary George, *Public Takes Swipes at Metro Transportation Plan*, DENV. POST, Dec. 3, 1990, at 1B.

The MTDC's 1990 report to the General Assembly[200] called for a twenty year transportation plan that included:

> A two-track light rail system . . . from downtown Denver to the southeast Metro area along I-25 to the Tech Center.
>
> A light-rail spur . . . along I-225 connecting Aurora to both downtown Denver and the Tech Center.
>
> A two-track light rail system . . . from downtown Denver southwest along Santa Fe to Mineral Avenue.
>
> A fourth rapid transit corridor [linking] downtown Denver with Jefferson County, running parallel to Colfax Avenue.
>
> A dedicated busway . . . along U.S. 36, connecting Boulder with the . . . I-25 North [busway].
>
> [A] dedicated busway . . . [from] I-25 North . . . from U.S. 36 to 120th Avenue.
>
> [A] transit corridor linking downtown Denver, Stapleton Airport . . . and the new Denver International Airport.
>
> [A] downtown Denver "crossmall" [linking] transit . . . from the north and south as well as passenger traffic from the 16th Street Mall . . . .
>
> [A] system of bikeways and pedestrian walkways.
>
> [S]pecial transit programs [for the elderly and disabled].

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200. METRO. TRANS. DEV. COMM'N, A REGIONAL SOLUTION TO METROPOLITAN TRANSPORTATION: FINAL RECOMMENDATIONS TO THE COLORADO GENERAL ASSEMBLY (Jan. 1990).

> [C]onver[sion of] . . . motor fleets to alternative fuels, such as methanol, compressed natural gas and propane.
>
> [C]onstruction of sound barriers.
>
> [Improvements of] . . . major traffic corridor[s] . . . including Wadsworth, Santa Fe, State Highway 287, U.S. 36, 120th Avenue, Colorado Blvd., Colfax Avenue, Havana, Parker Road and Hampden Ave.
>
> [Construction of] the E-470 toll toad.
>
> Traffic system management improvements, [such as] traffic signalization, ramp metering, extra turn lanes, bus pull-offs, and electronic signage [for motorist advisories].[201]

The funding package would include a 5 percent sales tax on car rentals, a 5 cent per gallon motor fuel tax, a .4% sales tax, and a $10.00 vehicle registration fee increase. General sales tax revenues from the package would fund rapid transit and other special projects because rapid transit was seen to benefit the community as a whole. Roadway improvements would be funded by the motor fuel, vehicle registration, and car rental taxes specified in the package. A new Metropolitan Transportation Authority would be created to oversee implementation of the plan.[202]

After the 1990 defeat, the MTDC submitted a revised plan to the 1991 legislature.[203] The 1991 plan proposed a fifty-fifty split between rapid transit improvements and road improvements. Reacting to criticism of the 1990 plan, the MTDC now proposed that the Metropolitan Transportation Authority would serve only as a financing and priority setting entity and would not build and operate the system. DRCOG would retain its role in transportation planning as the

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201. *Id.* at 15–17.

202. *Id.* at 26–29.

203. METRO. TRANS. DEV. COMM'N, CONSENSUS '91: A REPORT ON THE DEVELOPMENT OF THE TRANSPORTATION SYSTEM IN THE DENVER METROPOLITAN AREA (Jan. 1991).

designated Metropolitan Planning Organization under the CAA. The Regional Transportation District ("RTD") would construct and operate the rail lines. A Northwest Parkway linking E-470 and C-470 would be built.

The rapid transit, special project, and road improvements contained in the 1990 plan were re-proposed in the 1991 plan. In the reconfigured financing proposal, the General Assembly would specify the funding mechanism and any increase in the gas tax would be put to a statewide vote and, if approved, would benefit projects around the state.

This second referendum bill again failed by a close vote in the Senate and the opportunity for early completion of a comprehensive, well-funded, multi-modal, transportation system for the Metro area evaporated. Instead of a 1992 referendum on a coordinated transportation plan, the public received Doug Bruce's tax and revenue limitation proposal, which it approved.[204]

Consequently, RTD was on its own in starting a rapid transit system from downtown Denver, north to Five Points and southwest to Littleton, funded by a combination of the tax revenues that it raised and federal grants. The electorate did not approve RTD's "Guide the Ride" extension of the budding light rail network. Not until 1999 was the public given the opportunity to vote upon and approve a new funding mechanism for light rail as well as the highway improvements Governor Bill Owens had campaigned for.[205] The result is the now-commenced construction of the southeast rail connection and the I-25 road expansion between the Denver Tech Center and downtown. This delayed vote reaped increased costs and achieved fewer improvements than the MTDC plan would have provided had the General Assembly referred the original measure and had the voters approved it.

Despite the loss of the MTDC proposal, the need for a multi-modal transportation system in the Metro area responsive to air quality criteria has remained a paramount public priority. The 1990 CAA Amendments required each state to develop a transportation-air quality planning process for the development and implementation of measures

204. COLO. CONST. art. X, § 20 (1992).

205. Act of June 2, 1999, ch. 280, 1999 Colo. Sess. Laws 1108, 1108–20 (codified as amended at COLO. REV. STAT. §§ 43-4-701 to -715 (2003)).

necessary to demonstrate and maintain attainment of national ambient air quality standards. This reform included the "conformity amendment," which conditions a state's receipt of federal funding on its demonstrating that the transportation plan for its metro areas will achieve the level the state had set for motor vehicle emissions in its air quality implementation plan.[206] As the Metropolitan Planning Organization for Denver area transportation, DRCOG now, for the first time, had a great incentive to cooperate with RAQC and the Air Quality Commission.[207]

Though it failed to achieve its financing and construction goals, the MTDC effort helped develop a better working relationship among the transportation agencies. As the MTDC was still in the process of trying to obtain legislative approval to put a referendum to the voters to build the beltway/rapid transit infrastructure, Governor Romer and Senate President Ted Strickland formed the thirty-seven member Strategic Planning Task Force on Statewide Transportation. The Task Force was called on to make recommendations on the development of a plan for making Colorado a "transportation hub" for the United States.

The Task Force's final report to the General Assembly's Highway Legislation Review Committee recommended a statewide plan for a network of highways, a rail system, airports, and alternate modes of transit in the metropolitan areas. It also recommended the creation of a State Department of Transportation with authority to implement the system.[208]

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206. Act of Nov. 15, 1990, Pub. L. No. 101-549, 104 Stat. 2399, 2435 (codified as amended at 42 U.S.C. §§ 7408(e) & (f), 7506(c). *See* COLO. REV. STAT. §25-7-105(1) (2003). Bob Yuhnke of the Environmental Defense Fund, a member of the MAQC and the RAQC, was the author of the conformity amendment which required the transportation planning agency in a metropolitan area to design a regional transportation system that would achieve the levels of vehicle emissions required for attainment of air quality standards. Yuhnke organized the national coalition of transit agencies, metropolitan planning organizations and state air agencies that won enactment of the conformity provision. *See* Notes & Comment, *The Conformity Coalition*, ENVTL. F., Sept.–Oct. 1992, at 8–9. A nationwide expert in the requirements of transportation and air quality planning, Yuhnke aided the discussion of many such strategies in Colorado.

207. David Pampu of the DRCOG staff was a constant participant in transportation/air quality planning for many years, patiently attending seemingly endless meetings and debates.

208. STRATEGIC PLANNING TASK FORCE ON STATEWIDE TRANSP., A STRATEGIC PLAN FOR TRANSPORTATION DEVELOPMENT IN COLORADO, REPORT TO THE HIGHWAY LEGISLATION REVIEW COMMITTEE OF THE GENERAL ASSEMBLY 4–

The report contained findings and recommendations from the Environmental Focus group to "encourage the growth of well-planned and livable communities that place a premium on parks, open space, bikeways, walkways, and alternative forms of transportation including bus, rail, and high occupancy vehicle lanes."[209]

In 1991, a bi-partisan bill co-sponsored by a long list of Colorado legislators created the State's Department of Transportation, giving it power to "address the statewide transportation problems faced by Colorado; and . . . obtain federal funds by responding to federal mandates for multi-modal transportation planning."[210] This incredibly important statute brought into being a Colorado agency that, along with the Air Commission and the RTD, has the authority to mobilize citizen aspirations for a livable Colorado.

Citizen approval for the needed funds is crucial to fulfilling these aspirations. RTD is currently planning to ask the voters in the seven-county Denver Metropolitan Area to approve a plan for a transit network that essentially mirrors and improves upon the plan the MTDC recommended fifteen years ago.

If approved by the voters, new commuter rail lines will run from downtown Denver to the Jefferson County courts in Golden, to Ward Road in Arvada, to Boulder and Longmont north along the I-25 corridor to 160th Avenue, to the Denver International Airport, with connecting links along the I-225 corridor to serve Aurora's new city center and the Fitzsimmons medical complex. There will be rail extensions to Highlands Ranch and Lone Tree, and suburb-to-suburb bus service would be increased.[211]

E. Plans to Bust the Brown Cloud

While progress was being made in the mid-1980s toward

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13 (1990).

209. *Id.* at 56.

210. COLO. REV. STAT. §43-1-101(1)(d) & (e) (2003). *See* 1991 Colo. Sess. Laws, ch. 188, at 1019–1138. Co-sponsors included Senator Tom Norton, who later became Senate President and then Executive Director of the Colorado Department of Transportation, as well as Representatives Norma Anderson and Lew Entz (now Senators) and Senator Tillie Bishop of the Western Slope.

211. Jeffrey Leib, *FasTracks Vote Likely in '04*, DENV. POST, Nov. 5, 2003, at 1B.

meeting the national health standards through the control of invisible gaseous emissions, like carbon monoxide from motor vehicles, Coloradans still faced foul-looking air. Citizen advocacy was reaching a crescendo. The MAQC's call in the spring of 1987 for Public Service Company's three Denver Metro power plants to switch permanently from coal to natural gas—met by PSCo's prompt rejection—prompted Governor Romer to organize a major study of possible cures for the Brown Cloud.[212] The Air Commission and EPA Region 8 had long wanted a complete source apportionment study of Front Range air pollution.

1. The First Brown Cloud Study

Interested in practical measures to control pollution and understand its causes, Governor Romer called on the private sector, and in particular PSCo, its coal supplier Cyprus Minerals Company, and its natural gas supplier Colorado Interstate Gas Company, to help fund the study.[213] They agreed. Regional Administrator Jim Scherer added the EPA's full support. The Greater Denver Chamber of Commerce, headed by Richard Fleming,[214] stepped forward to coordinate this unprecedented scientific and socio-economic study.[215]

Ben Byan of the Chamber, Joel Kohn of the Governor's Office, and Irv Dickstein, Director of the EPA's regional enforcement branch, incorporated the non-profit Metro Denver Brown Cloud Study, Inc. to receive and administer funds for the study. They engaged Dr. John Watson as the Principal Investigator. Administered by Carol Lyons, the work geared up in the 1987–88 winter season. An extensive network of air quality monitoring devices was installed to track and record emissions. PSCo volunteered to burn natural gas for forty-five days to test the effectiveness of fuel switching.

Through source characterization, ambient air pollution sampling and analysis, visibility and optical monitoring,

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212. 1987–88 METRO DENVER BROWN CLOUD STUDY, PROJECT SUMMARY 1 (Oct. 1988).

213. This remarkable public/private partnership demonstrated how far Colorado's air restoration efforts had come since the days of back yard trash burning and uncontrolled industrial smoke.

214. *See* REGIONAL AIR QUALITY COUNCIL, *supra* note 18, at 2.

215. 1987–88 METRO DENVER BROWN CLOUD STUDY, *supra* note 212, at 6.

meteorological monitoring, and data analysis and computer modeling, this study documented the complex interaction of primary and secondary particles. Both were contributing to the Metro Area's visible air pollution.

Primary particles include combustion-produced carbon from mobile sources, industrial operations, wood burning stoves and fireplaces, and geological dust from roadways, vacant lots, river banks, and agricultural areas. The invisible gases that combine to form the secondary particles are "precursor emissions" including sulfur dioxide, nitrogen oxides, hydrocarbons, and ammonia emitted by motor vehicles, power plants, oil refineries, and other industrial processes. Ammonia comes from agricultural operations, sewage treatment plants, and other biological sources. The secondary particles formed from these gases are ammonium nitrate, ammonium sulfate, and organics.[216]

2. Brown Cloud Study Conclusions

The Brown Cloud study concluded that, during the worst episodes, pollution migrates down the South Platte River Valley as far as sixty miles to the northeast and then returns as "aged" pollution. During this transport process, urban pollution combines with the invisible gases emitted by agricultural operations in the Platte River valley to form secondary particles that return and mix with primary particles continually-emitted in the metropolitan area.

"Sewer of the air"—that 60s term used by the press—turned out to be an apt description of this mess. The Brown Cloud included a witches' brew:

> [Twenty-five percent]—primary fine particle emissions from mobile sources and from residential wood burning, [and vegetative burning]. [Half of the primary particulate motor vehicle emissions were from diesel engines.] . . . Dust contributes an average of approximately 10 percent of the visibility impairment. The contribution of dust to the brown cloud increases [significantly] after the roads are sanded.[217]

Nearly all the remainder—secondary particulates caused by

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216. *See id.* at 14, 16.
217. *Id.* at 19.

the interaction of invisible gases, ammonium nitrate particles—constituted about 25 percent of the Brown Cloud, with ammonium sulfate particles constituting about 10 percent.[218] As to the precursor gases, half of the nitrogen oxides came from mobile sources and half from coal-fired power plants.[219] Half of the sulfur dioxide came from coal-fired power plants, the rest from refineries, diesel trucks, and cement plants.[220]

The PSCo natural gas burning experiment significantly reduced sulfur dioxide and nitrogen oxide emissions,[221] but did not lead to visibility improvements during the natural gas-burning days, so the report said. Because of the complex interactions leading to the formation of secondary particulates from urban and agricultural emissions, the Brown Cloud staffers could not correlate emission reduction directly to visibility improvement. They recommended a future effort to monitor coal-burning conditions for a comparison with gas-burning data.[222] This recommendation later produced a second Brown Cloud study.

The Brown Cloud report's conclusion was that no one control strategy could deliver the air pollution knock-out punch. Emission reductions would have to come from many different particulate and gaseous sources.[223]

3. Brown Cloud Control Strategies

Perhaps the most significant practical aspect of the Brown Cloud report was its identification of possible clean air strategies, all of which have since been adopted in some form:

> Implementation of mass transit.
>
> Coal to gas conversion for industrial and power plant boilers.

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218. *Id.*
219. *Id.*
220. *Id.*
221. *Id.* at 60.
222. *Id.* at 63.
223. *Id.*

> Post combustion cleanup for industrial and power plant boilers. [Clean coal burning technology including] sodium based dry sorbent injection systems . . . .
>
> Alternative fuels [to replace] diesel vehicles.
>
> Reduction of residential wood burning emissions.
>
> [Control of] oil, gas, and chemical processing facilities [particularly refineries].
>
> Low sulfur diesel fuel standards for fuel sold in Colorado.
>
> More stringent emission inspection and maintenance (I/M) program for gasoline powered vehicles.
>
> Reduction of airborne re-entrained dust [such as road sanding controls].[224]

Governor Romer called a press conference to hail completion of the Brown Cloud study. He pressed for implementation of all the listed control measures, except for the coal to natural gas fuel switch.[225] He said power plants were "insignificant contributors" to the Brown Cloud and the projected loss of 870 coal mining jobs on the Western Slope was unacceptable, although the study estimated the offsetting creation of 840 natural gas jobs in northeastern Colorado. The Governor preferred use of cleaner-burning coal technology. Coal and power companies lauded him for this.[226]

Despite MAQC member criticism about eliminating the fuel-switching option,[227] the Denver press was behind putting

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224. *Id.* app. 2, at 70, 72–75. Air pollution alerts to trigger emission reduction strategies were also suggested.

225. *See* Governor Roy Romer, Statement on the 1987–88 Metro Denver Brown Cloud Study (Oct. 7, 1988).

226. Katherine Corcoran, *Romer Defends Coal-Burning Plants*, DENV. POST, Oct. 8, 1988, at 1A.

227. A soon-appearing *Westword* article displayed Governor Romer on its

more air pollution controls in place, whatever they might be.[228] PSCo blunted the coal/natural gas controversy by converting its non-operable, nuclear-powered St. Vrain plant to natural gas. Prodded by the Public Utilities Commission and citizen watchdogs, PSCo announced inclusion of conservation and alternative cleaner energy measures as part of its power supply agenda.

F. Regional Air Quality Council Established

Viewing the MAQC as too narrowly-based to achieve the air pollution control consensus he envisioned, Governor Romer in June of 1989 replaced it with a thirty-member Regional Air Quality Council ("RAQC") consisting of many local Denver government officials and chaired by Harris Sherman. The Council chose Ken Lloyd as its Executive Director.[229]

Though the DRCOG had lobbied hard for the position of lead regional air quality planning agency, as well as lead transportation planning agency, Governor Romer refused to acquiesce. He elected to go forward with an independent air quality planning agency, as his predecessor Governor Lamm had when he constituted MAQC.[230] Rather than ignoring and isolating all of his MAQC critics, Governor Romer appointed a number of them to RAQC.

The Governor also created the Colorado Environment 2000 Citizens Committee. Among other recommendations, its final report endorsed the Brown Cloud control strategies and MTDC's call for a twenty-first century metropolitan transportation control plan featuring mass transit.[231]

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front page, wearing a crown of smoke stacks. Interviews with MAQC members, Denver officials, and scientists questioned the clean bill for the power plants. Bryan Abbas, *Romer's Cloud Control, What Did a Million-Dollar Study Buy? More Dirty Air*, WESTWORD, Nov. 16–22, 1988, at 12.

228. Editorial, *Going After the Brown Cloud,* DENV. POST, Oct. 9, 1988, at 4D; Editorial, *Public Service May Do Even Better than Switch to Gas*, ROCKY MTN. NEWS, Dec. 9, 1988, at 78 (quoting a member of the MAQC as saying, "If we can burn coal and get the same emissions reductions [we would get] from burning natural gas, then we ought to be all for it.").

229. Rebecca Cantwell, *Hazy Days for Air Council*, ROCKY MTN. NEWS, July 16, 1990, at 7.

230. Thomas Graf, *Details on Proposed Air Quality Group Given*, DENV. POST, Apr. 27, 1989, at 2B.

231. Thomas Graf, *Threats to State Environment Cataloged, Polluted Skies, Fouled Water, Vanishing Wetlands, Pesticides Top Report of 31 Problems,* DENV.

In 1989, the General Assembly directed the Air Commission to establish a visibility standard for Front Range air, the nation's first such standard for an urban area.[232] It also enacted legislation, proposed by MAQC, to authorize the Commission's adoption of regulations limiting the use of wood burning stoves and fireplaces during high pollution days.[233] Despite the legislature's fairly frequent salvos to the Air Commission about sticking to cost-effective control measures, the General Assembly endorsed a visibility standard, plainly responding to wide-spread citizen disgust about not seeing their beloved mountains.

The business community's interest in the economic development potential of restoring world-class vistas was persuasive. Air quality control had turned into a bi-partisan public effort, and the cost of pollution technology installation was being spread among all citizens in the form of higher power rates and product prices. In survey after survey, the public stated its willingness to pay to restore the brightening air.

IV. HEALTH STANDARD ATTAINMENT AND MAINTENANCE, THE 1990S

It turns out that restoring and maintaining Colorado's air resource is a yardstick of Colorado's leadership capability. Just as many stepped forward in the beginning of the fight against the Brown Cloud, many have continued to step up for clean air.

A. Clean Air Leadership

Through many a contentious episode, a way was forged by the start of the 1990s to bring Colorado into compliance with national ambient air quality standards and to reduce the Brown Cloud substantially. To make this possible, Governor Romer, the General Assembly, the Air Commission, RAQC, and Denver Mayors Federico Pena and Wellington Webb, joined

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POST, Jan. 11, 1990, at 1B.

232. Act of May 26, 1989, ch. 235, § 4, 1989 Colo. Sess. Laws 1155, 1156–57 (codified at COLO. REV. STAT. § 25-7-106.1 (Rep. Vol. 1982, as amended) (repealed 1996)); DENVER METRO AIR QUALITY, *supra* note 18, at 2.

233. 1989 Colo. Sess. Laws at 1157 (codified at COLO. REV. STAT. § 25-7-106.3 (Repl. Vol. 1982, as amended)).

together with local air quality planning agencies and many local government officials, citizen activists, and business leaders across the state.[234]

Commending its commitment to air quality restoration, the U.S. Conference of Mayors bestowed upon Denver the 1990 national "City Livability Award." The ever-vigilant media hailed Mayor Pena's receipt of the award as being on behalf of the entire Metro area, and called for the "battle to improve air quality" to continue.[235]

Inexorably, as a new motor vehicle fleet rode into Colorado, as businesses came to see clean and healthy air as a valuable community asset, as the state's tourist industry emerged as a strong economic factor, and, most importantly, as citizens counted good air restoration and maintenance among their highest priorities, Colorado managed to come into compliance with the national health standards by the start of the twenty-first century.

B. The Second Brown Cloud Study and New Initiatives

Metro Denver Brown Cloud Study, Inc. contracted to produce a second study in the early 1990s. This was a modeling effort aimed at analyzing the secondary particulate problem. It was staffed by Paulette Middleton, Principal Investigator, Skip Spensley, Administrator, and Warner Reeser, Technical Advisor. Their analysis reaffirmed that the Brown Cloud is comprised mainly of tiny solid particles and aerosols, which become suspended in the atmosphere.[236] They named wood burning, street-sanding, mobile sources and power plants as significant contributors to the Brown Cloud.[237]

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234. Denver had the vigorous and able assistance of Tony Massaro and Theresa Donahue. Governor Romer had Joel Kohn, Cole Finegan, Wade Buchanan, and Patti Shwayder, formerly of the MAQC staff, who he appointed to head the Colorado Department of Health and the Environment.

235. Jeffrey Leib, *Air Award May Open Eyes to City*, DENV. POST, June 19, 1990, at 1B; Editorial, *Livable City Award Deserved*, DENV. POST, June 19, 1990, at 6B.

236. BROWN CLOUD II: THE DENVER AIR QUALITY MODELING STUDY, FINAL SUMMARY REPORT 1 (Dec. 1993).

237. The metropolitan brown cloud study effort raised $1.2 million for the first study and $1.0 million for the second study, with 45% donated by coal interests, 45% from gas interests, and the remaining from interest groups such as the Wood Smoke Alliance and the Automobile Manufacturers. E-mail from Ben Bryan, Denver Chamber of Commerce, to author (Jan. 8, 2004) (on file with

Changes Congress made to the CAA in 1990 played a major role in Colorado's clean air restoration. Borrowing from the Clean Water Act's design for periodically renewable discharge permits, the new federal act required the state to (1) maintain a current emissions inventory for the six national health standard pollutants and a multitude of hazardous substances, and (2) institute an operating permit program for large stationary sources—to include compliance with any new standards or regulations adopted after issuance of the permits.[238] As a result, the Air Commission extensively revised its Regulation No. 3 to comply with the federal requirements, requiring permit renewal applications every five years.[239]

Amidst new research by the Webb-Waring Lung Institute, which was investigating a wide variety of health injuries resulting from bad air, including heart attacks, strokes, arthritis, tumors, Alzheimer's disease and lung disease,[240] the Air Commission and the General Assembly adopted many new measures, including mandatory wood-burning controls, enhanced inspection/maintenance of motor vehicles, operating permits for stationary sources, alternative de-icing agents to eliminate the particles emitted from re-entrained street sand, and a variety of other air pollution reduction requirements.[241]

In 1994, the General Assembly created the Visibility and Air Quality Related Values Task Force, and charged it with recommending ways to protect federal class one areas (national parks and wilderness areas) from visibility impairment and acid deposition.[242] The National Park Service and the Forest

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author). Enron Gas Processing Company and Enron Oil Trading & Transportation Company—by agreement between them and Metro Denver Brown Cloud Study, Inc.—contributed $278,358 to the study derived from a settlement agreement reached with the EPA in another matter. The author represented the Enron Companies in fashioning these agreements. The Enron penalty funds were earmarked for additional studies that the Regional Air Quality Council identified. *Id.*

238. Jefferson V. Houpt, *Colorado's New Clean Air Program*, 22 COLO. LAW. 541, 541–42 (Mar. 1993).

239. Thomas Morris, *Colorado's Clean Air Act Amendments Regulations*, 23 COLO. LAW. 861–62 (Apr. 1994); *see* COLO. REV. STAT. § 25-7-114.3 (2003).

240. Kris Newcomer, *Researchers Study Polluted Air as Trigger for Disease*, ROCKY MTN. NEWS, Oct. 28, 1990, at 8.

241. Rebecca Cantwell, *Cleaning Up our Dirty Air: The Fallout, Tighter Curbs Will Crimp Wood-Burning*, ROCKY MTN. NEWS, Oct. 28, 1990, at 8.

242. Act of May 25, 1994, ch. 246, § 4, 1994 Colo. Sess. Laws 1390, 1393 (codified at COLO. REV. STAT. § 25-7-213 (Repl. Vol. 1989, as amended) (repealed 1995).

Service were especially concerned about the effects power plant and automobile emissions were having on the plants, animals, soil, and water in Rocky Mountain National Park and the Indian Peaks Wilderness—where high rates of acid and nitrate deposition threatened water quality in pristine high altitude watersheds.

With a legislatively-prescribed life of only one year, and in the context of the by-now-familiar but tiresome standoff between the coal and power companies, on one side, and the natural gas and air quality advocates on the other side, this task force was unable to reach agreement on what particular control measures it should propose. But it did recommend new legislation enabling the Air Commission to address air quality-related values in national parks and wilderness areas. Air quality-related values include odor, flora, fauna, soil, water, geological features, and cultural resources. The General Assembly agreed. In 1996, it adopted amendments to Colorado's air act, assigning the Commission this responsibility.[243]

An environmental law suit aimed at PSCo's Hayden power plant in the Yampa River Valley also produced tangible results. Concerned that the Hayden Plant was contributing to acid deposition in the Mt. Zirkel Wilderness Area and causing health and visibility impairments, the Sierra Club—represented by Reed Zars—sued the company in Colorado Federal District Court for air pollution violations. This suit resulted in a $2 million fine to the company. PSCo agreed to donate $2.25 million to conservation projects in the Steamboat Springs area and invest $150 million for air pollution controls at the Hayden Plant.[244]

As part of his clean air work, Mayor Wellington Webb in 1994 prevailed upon the Air Commission to rescind its approval—given just a month before—for a metro air quality plan that would have increased the allowable particulate emissions ("PM_{10}") mobile source emissions budget from forty-four tons per day to sixty tons per day. A press report hailed the perspicacity of Webb's leadership, as the less stringent limit would have "diminished downtown's status as the

243. COLO. REV. STAT. §§ 25-7-1001 to -1008 (2003).

244. Berny Morson, *Public Service to Pay Huge Fine,* ROCKY MTN. NEWS, May 23, 1996, at 5A.

economic capital of Colorado.... [w]ith a single shrewd political move, Webb found a way to improve his city's environment and economy."[245]

At stake from Denver's point of view was the health of metro citizens and the possibility that suburban roads would be built at the cost of a transit plan for the central area. Using its power to review portions of the Air Commission-adopted state implementation plan prior to its submission to the EPA, the General Assembly directed that the sixty ton per day level, not the tighter limit, be used for transportation conformity purposes in connection with federal funding requests.[246] At the same time, the Assembly preserved the tighter limit as a regulation adopted under the state's reserved authority, apparently allowing RAQC and the Air Commission to design Brown Cloud reduction measures to meet the stricter particulate limits.

Plainly seeing the need for a long range air quality plan, RAQC in 1996 launched the Blueprint for Clean Air, a comprehensive evaluation of the strategies needed to maintain air quality over the next twenty years.[247] Subsequently, Xcel Energy (formerly Public Service Company) agreed to reduce its sulfur dioxide emissions by 70 percent and its nitrogen oxide emissions by 40 percent at its coal fired Metro area power plants.[248] A bill passed by the General Assembly in 1998 allowed the utility company to pass along the costs of the cleanup, estimated at $211 million, to consumers.[249] Governor Romer had called for such reductions when he announced the

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245. Mark Obmascik, *Webb's Vision Clear in Urging Tougher Air Pollution Fight,* DENV. POST, Nov. 19, 1994, at B1.

246. Act of May 31, 1995, ch. 227, sec. 1, § 25-7-105(1)(a)(III), 1995 Colo. Sess. Laws 1149, 1149–50.

247. DENVER METRO AIR QUALITY, *supra* note 18, at 3.

248. Regional Air Quality Council, *Update on the Blueprint for Clean Air, supra* note 22, at 1. The RAQC and air quality advocates were catalysts for this result. Jim Martin of the Environmental Defense Fund, for example, had long been active in negotiations with PSCo to achieve power plant controls in the metro area. As part of this effort, in 1998, the General Assembly adopted provisions for regulatory assurances to stationary sources against further Air Commission requirements in a fifteen year period, if they would commit to significant voluntary emission reduction measures. *See* COLO. REV. STAT. § 25-7-1201 to -1208 (2003).

249. Act of May 27, 1998, ch. 267, sec. 3, § 40-3.2-101 to -102, 1998 Colo. Sess. Laws 1044, 1050–51. *See* Fred Brown, *Clean-Air Strategy Unveiled, Regional Commission Targets Brown Cloud in 7-Step Program,* DENV. POST, July 10, 1998, at A1.

results of the Brown Cloud study in October of 1988.[250]

Progress kept coming. The Air Commission adopted more stringent emission requirements for motor fuels.[251] DRCOG placed a high priority on a Metro Vision 2020 land use and transportation plan that included urban growth boundaries.[252] With the active support of the General Assembly and Governor Bill Owens, voters overwhelmingly approved a General Assembly referendum that proposed financing for the widening of I-25 as well as light rail construction along the corridor in the south Denver Metro area, with a spur along I-225 to Parker Road in Aurora.[253]

DRCOG's 2025 Transportation Plan now calls for ninety-three centerline miles of rail or high occupancy vehicle lanes, with rail to Golden and the Denver International Airport, radiating out of a revitalized Union Station. The rail system is expected to make about 158,000 passenger trips per day.[254]

C. Demonstrable Achievement

By the close of the 1990s, the Denver Metropolitan region had gone thirteen years without violating the one-hour ozone standard and eight years without any violations of the twenty-four-hour PM_{10} particulate standard.[255] Governor Bill Owens submitted Colorado's request for attainment and maintenance designation for these pollutants and for carbon monoxide, which the EPA subsequently approved.[256]

In its 2001–02 Report to the Public, the Air Commission was privileged to tell Colorado citizens that "Colorado maintained compliance with all federal health-based standards

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250. Romer, *supra* note 222, at 7.

251. *Id.*

252. *Id.*

253. *Id.* at 2.

254. DENVER REG'L COUNCIL OF GOV'TS, METRO VISION 2025 INTERIM REGIONAL TRANSPORTATION PLAN 55 (2002).

255. Regional Air Quality Council, *Maintenance Plans Adopted for Ozone and PM_{10}*, AIR EXCH. 1 (Summer 2001), *available at* http://www.raqc.org/newsletters/AirExchange/summer2001.pdf.

256. *Denver Breathes Easy with EPA's Blessings*, ROCKY MTN. NEWS, Aug. 10, 2002, at 19A. Governor Owens had the help of State Transportation Executive Director Tom Norton, Department of Health and Environment Executive Director Jane Norton (now the state's Lieutenant Governor), and Doug Benevento, who succeeded Jane Norton as Health and Environment Director.

in fiscal year 2002."[257] As new cars get cleaner, the inspection maintenance program contributes a diminishing percentage of air pollution benefit. Currently, only 7 percent of cars inspected fail the test. As a result, the state has introduced a Rapid Screen program to sort out cars that do not need a full-scale emissions test. Vehicles owners who drive by the sensor and pass the test receive a postcard notification that they do not need the complete inspection.[258]

V. FUTURE CHALLENGES, 2000 AND BEYOND

Is clean air restoration an interim respite in a surge of growth-spurred pollution? The Air Commission and the EPA are warning citizens of the need for renewed vigilance. The Front Range is having trouble with maintaining the ozone standard,[259] and the metropolitan area has the third-worst traffic congestion in the nation after Los Angeles and San Francisco.[260] The state visibility standards were violated fifty-five times during the 2001–02 winter.[261] Regional haze continues to interfere with citizen enjoyment of our national parks and wilderness areas.[262]

In talking to Colorado residents, one may find that they still complain about the dirt in Colorado's air and fear health problems.[263] The Air Commission set the state's visibility

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257. COLORADO AIR QUALITY CONTROL COMM'N, REPORT TO THE PUBLIC 2001–2002 at 1 (Oct. 1, 2002), *available at* http://www.cdphe.state.co.us/ap/down/01-02finalreport.pdf [hereinafter COLO. AIR QUALITY CONTROL COMM'N].

258. Todd Hartman, *Emissions Tests Barely Worked,* ROCKY MTN. NEWS, Nov. 29, 2003, at 4A.

259. During the summer of 2003, the Denver Metropolitan region violated EPA's new eight-hour ozone standard, based on the three-year average. E-mail from Ken Lloyd, RAQC Director, to author (Dec. 19, 2003) (on file with author). Because of the Early Action Compact Colorado previously entered into with the EPA, nonattainment designation because of this violation will be delayed if Colorado puts additional measures in place to assure attainment. *See* REGIONAL AIR QUALITY COUNCIL, OZONE EARLY ACTION COMPACT, *available at* http://www.raqc.org/ozone/EAC/ozone-eac.htm; *see also* COLORADO STATE UNIVERSITY, NORTHERN FRONT RANGE AIR QUALITY STUDY, *available at* http://www.nfraqs.colostate.edu/nfraqs/index2.html (last visited Feb. 12, 2004).

260. John Rebchook, *Panelist: FasTracks Will Create Jobs,* ROCKY MTN. NEWS, Mar. 13, 2004, at 16C.

261. COLO. AIR QUALITY CONTROL COMM'N, *supra* note 254, at 2.

262. *Id.* at 8. *See* Air Pollution Control Div., *Issue Paper: Colorado's Regional Haze SIP Development Process, Presentation of Options to the Colorado Department of Public Health and Environment* (approved Apr. 18, 2002).

263. On March 12, 2004, the Air Commission adopted additional measures

standard based on the results of extensive citizen surveys designed to ascertain the vista-viewing the public deems acceptable. The visibility standard is exceeded if 7.6 percent or more of the light in a kilometer of air is blocked over a four-hour average from eight a.m. to four p.m.[264]

It has become obvious that attaining and maintaining health standards alone is not enough and can still leave Colorado with levels of visibility impairment that citizens don't like. They place a high premium on being able to see and enjoy their magnificent surroundings.

James Michener, a lover of Colorado's mountains, plains, and rivers, wrote sadly in the early 1970s about Front Range smog. His *Centennial* country—even while he was writing that great book celebrating the eons of Colorado and its civilizing contemporary experience—was suffering terribly from air pollution:

> Denver must certainly be one of the most civilized places on earth, with a bright new art museum, a good orchestra, one of the world's best natural history museums, and a recreation area including twoscore mountain peaks over fourteen thousand feet high. It also has one of America's worst pollution problems, for air from the prairies backs up against that wall of mountains, producing a smog that makes the one in Los Angeles look like a summer haze.[265]

Come back James Michener! Air quality control has a lasting place in this state's agenda to protect people, plants, animals, and our economic well-being. It's about community. From wherever they come to be here, Coloradans of this and every future generation—like the Native Americans and Hispanos who preceded us before the founding of the Colorado Territory—will always lift their hearts to the peaks of the Divide and join in the public discourse so necessary to keeping the air clean.

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to meet the national health standards for ozone; new controls would address thousands of oil and gas pumping and storage facilities and require gasoline producers to sell fuel with slightly lower volatility levels. The General Assembly will be reviewing these additions to Colorado's state implementation plan. *Board OKs Tougher Plan to Fight Smog*, ROCKY MTN. NEWS, Mar. 13, 2004, at 24A.

264. *Id.*

265. JAMES A. MICHENER, ABOUT *CENTENNIAL*, SOME NOTES ON THE NOVEL 41 (1974).

Our poetic love affair with the West and all its possibilities inspires what we can and will do. The great twentieth century Irish poet W.B. Yeats extols the beauty of the brightening air in these stanzas from the *Song of Wandering Aengus*:

> I went out to the hazel wood,
> Because a fire was in my head,
> And cut and peeled a hazel wand,
> And hooked a berry to a thread;
> And when white moths were on the wing,
> And moth-like stars were flickering out,
> I dropped the berry in a stream
> And caught a little silver trout.
> When I had laid it on the floor
> I went to blow the fire aflame,
> But something rustled on the floor,
> And some one called me by my name:
> It had become a glimmering girl
> With apple blossom in her hair
> Who called me by my name and ran
> And faded through the brightening air.[266]

The hazel wand is our dedication to community. The glimmering girl is Colorado.

Surely, there is more work to do, but today's Brown Cloud is a shadow of the 1950s version that caused citizens to experience mucked-up vision and wheezing lungs. The public debate about growth, transportation, land use, increased automobile traffic, and air quality must produce solutions, or Colorado will find a half-century of progress evaporated to a blip of light in a returning smog-filled twilight.[267]

Through many a political and economic thicket has streamed the hope and the glory of restoring our air. May each generation breathe well, see clearly, and carry on Colorado's clean air heritage.

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266. W.B. YEATS, THE COLLECTED POEMS OF W. B. YEATS 57 (definitive ed., final rev. 1965).

267. *See* Joey Bunch, *On the Road to Dirtier Skies?*, DENV. POST, Dec. 28, 2003, at 1A.