Area schools add measures to fight indoor air pollution

■ *Since 1993, Hazleton Area, Greater Nanticoke Area, Lake-Lehman and Tunkhannock Area have had to improve air quality inside school buildings.*

By BILL PEACE
Times Leader Staff Writer

Teachers complain of smells of mildew and aggravated allergies.

Parents say their children come home and report coughing and sneezing fits at school that end when they leave the school building.

Something harmful is in the air, they say, and it is making students and teachers sick.

Last year, Pennsylvania school districts topped the list of schools nationwide requesting air quality assessments from the National Institute for Occupational Safety and Health.

Since 1993, at least four area school districts have tested for air quality problems as a result of health complaints from parents and teachers. The tests were done by private contractors.

Hazleton Area, Greater Nanticoke Area, Lake-Lehman and Tunkhannock Area have identified and corrected poor air quality problems.

The complaints have prompted an addition to school building maintenance procedures: air quality tests.

"The stale odor immediately hit you when you walked into the school," said Mary Sowa of Freeland who claims that her two sons, Nicholas, 11, and Steven, 9, suffered headaches and sinus infections while attending Freeland Elementary in Hazleton Area School District.

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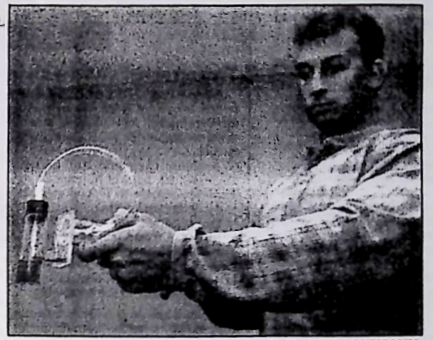

TIMES LEADER/BOB ESPOSITO

Jeff Miller, vice president of J. Miller & Sons of Kingston, demonstrates indoor air quality testing devices.

Air

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The boys still attend the elementary school, but they no longer experience health problems because the school remedied the poor air conditions, Sowa said.

Last year, the National Institute for Occupational Safety and Health received 200 requests nationwide for air quality evaluations in schools. Thirty-eight percent, or 75 of those total requests, came from Pennsylvania public school officials, said Ken Wallingford with the federal agency in Cincinnati, Ohio.

Wallingford, an indoor environmental quality research coordinator, said the high percentage of requests from Pennsylvania is puzzling.

"Public schools (in Pennsylvania) targeted for tests are not always old. Some were built in the 1970s," Wallingford said.

Jeff Miller, vice president of a Kingston-based air quality testing company, said he thinks he knows the reason Pennsylvania stands out.

The state's dramatic climate change causes buildings to harbor mold and mildew, said Miller of J. Miller & Sons. When air conditioning and heating units lay dormant for months, they tend to harbor mildew and mold, especially between dry and wet seasons, he said.

But state environmental officials and environmental researchers say indoor air quality is a relatively new health issue and there are no state or federal laws requiring testing in public buildings.

Indoor air pollution remains an invisible problem at schools and at the workplace because few people pay attention to it, said Mark Carmon, spokesman for the state Department of Environmental Protection in Wilkes-Barre.

TIMES LEADER/KAREN LAVER

Students leave the Middle Level Education Building in Lake-Lehman School District one recent afternoon. Air Management Technologies, Inc. of New Columbia, Union County, is expected to conduct air quality tests based on complaints that teachers and students are experiencing allergic symptoms while at school.

"Many workers just sit at their desks eight hours a day unaware that sources of pollution might come from duct work or carpet adhesive," said Carmon. "And there are no comprehensive regulations to monitor this. It's extremely under-regulated."

Daniel M. Pindzola, a research engineer working on air purification projects at Wilkes University, said since its inception 25 years ago, the Environmental Protection Agency has focused primarily on outdoor pollution.

"Indoor pollution is still a relatively new issue," Pindzola said. "With recent budget cuts in the federal agency, it doesn't look like the issue will get much attention."

Some of the reported culprits in school buildings: mold spores growing in damp carpets, mildew multiplying in ventilation systems, and carbon monoxide unable to escape a tightly closed building.

To help districts combat health hazards, the EPA has issued a set of guidelines for schools to use as a checklist to maintain healthy air.

The checklist, issued in a September 1995, report, recommends that districts provide an adequate air flow through school buildings, maintain the ventilation system, and designate a district indoor air quality coordinator.

Jeff Miller said the company's air quality testing of public schools has increased 25 percent during the last two years. In the last year, the company has tested air quality in 40 school districts east of State College — three of them in Luzerne County, including College Misericordia.

"We're going to hear more about this as people continue to complain about unhealthy indoor settings," Miller said.

Four districts clean air inside schools

Faced with mounting complaints about poor air quality in their schools, some local districts have initiated their own solutions:

■ Lake-Lehman

The problem: Since last September, teachers and students at the Middle Level Education Building in Lake-Lehman School District have complained about allergic reactions while they are in the building.

"One mother told me her son was not diagnosed with asthma until he got to the middle school, and teachers have complained of respiratory problems," said Lake-Lehman School Board member Karen Whipple.

The remedy: Last week, the School Board voted to hire Air Management Technologies Inc. of New Columbia, Union County, to begin air quality testing in the school at a cost of $1,355. No date has been set for the testing.

■ Greater Nanticoke Area

The problem: In the Greater Nanticoke Area School District, teachers and students complain about the strong smell of mildew in basement classrooms at the 85-year-old Lincoln Elementary School.

The remedy: This month, J. Miller & Sons air quality specialists of Kingston, complete air quality tests at the school. Although the company found mold and mildew levels below maximum standards set by the federal Environmental Protection Agency, district officials said they are following the company's recommendation to place dehumidifiers in the basement.

Acting Superintendent Anthony Perrone said he was pleased with the results of the study and the district will follow the recommendations. For now, he said, there's no reason to test other district buildings.

■ Tunkhannock Area

The problem: In November 1994, a Tunkhannock grandmother claimed her two granddaughters, ages 6 and 7, suffered from breathing problems caused by mold growing in a ventilation system at the Evans Falls Elementary School.

Lancaster Laboratories Inc., an analytical laboratory in Harrisburg, reported no problems with the air quality at the 16-year-old elementary school, and school officials deny any link between the children's reported health problems and the ventilation system.

The remedy: The district treated carpets to eliminate mold spores and directed rain water further away from the building.

■ Hazleton Area

The problem: In the winter of 1993, the state Department of Environmental Resources reported high levels of carbon dioxide in the tightly sealed Freeland Elementary School, which might have led to respiratory illnesses among a number of students and teachers.

The remedy: The school district added more vents, cleaned existing vents, repaired leaking roofs and shampooed carpets this summer to improve air quality at the 17-year-old Alvin Street school.

Cold

(Continued from Page 1A)

■ *After a few days of snow, sleet and freezing rain, arctic air will pay a visit*

By JIM VAN NOSTRAND
Times Leader Staff Writer

WILKES-BARRE — So you think it's cold? Quit complaining. It's only going to get worse.

A strong arctic blast of air from northern and western Canada is expected to hit the Wyoming Valley Friday, plunging the actual temperature below zero over the weekend. Wind chill will make it feel colder than that.

The warm sunshine that blessed the area on Monday was a brief respite from winter's icy clutches, National Weather Service meteorologist Dave Solano said. The outlook for today and the rest of the week is cloudy, with highs in the low 30s and lows in the 20s.

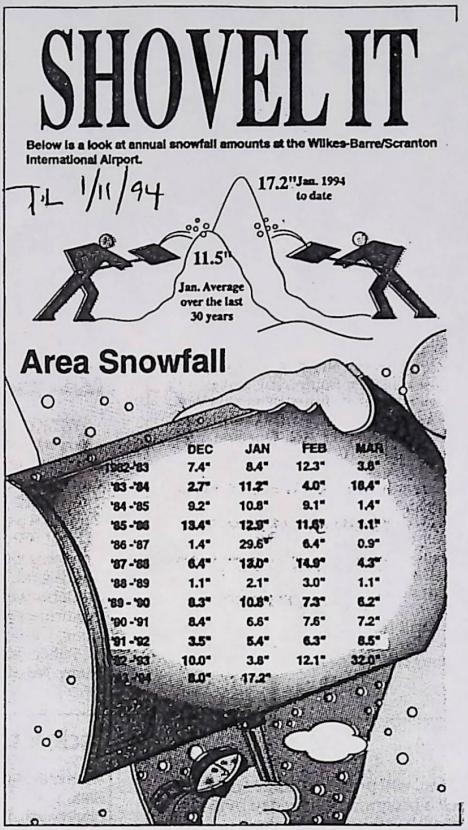
Light flurries should deposit less than an inch of snow today, Solano said. A storm from the southwest beginning Wednesday night will bring more snow, sleet and freezing rain through Thursday.

Friday's frigid air mass probably won't bring oodles of snow, said Fred Gadomski, a meteorologist at Penn State University in State College. It should be bitterly cold, however, much colder than anything seen this year so far.

Gadomski recommends residents stay indoors and get the blankets and hot chocolate ready. They can watch Saturday's National Football League playoff game between the Buffalo Bills and the Los Angeles Raiders.

That game should set a record low temperature for a football contest, Gadomski said.

"If people want to watch other people suffer in the cold, it will be on national television," Gadomski said. Kickoff at Buffalo's Rich Stadium will be 12:30 p.m. NBC will televise.



The 17.2 inches of snow that has fallen at the Wilkes-Barre/Scranton International Airport so far in January is more than the 30-year average of 11.5 inches, Solano said. It isn't even close to a record-setting pace, though. The highest in the past 30 years was 29.6 in 1986-87.

A total of 27.8 inches has fallen this season, Solano said. The 30-year average is 47.1, and the record of 88.6 inches was set in the winter of 1904-1905.

Professional prognosticators say it's impossible to forecast exact snowfall levels over a given season. The National Weather Service won't even hazard a guess three days out.

Snow depths vary wildly, even within small geographic areas, they say. And like bombers, moisture-laden clouds may or may not drop their loads when passing overhead.

Whether they use the number of nuts squirrels tuck away or the number of foggy days in October, people try to surmise nature's plans.

"It's just about as far from reality as you can possibly get," said Gadomski at Penn State, which operates the world's largest university weather observatory.

Residents don't really notice when the television forecasters are 5 degrees off on the thermometer, Gadomski said. But if five inches more snow falls than expected, their viewers have to shovel it.

"People really want to know, down to the inch, what's going to be in their yard," Gadomski said.

One guy willing to stick his neck out is Daniel Pindzola, an associate professor of climatology and meteorology at Wilkes University. He predicts warm air masses from the Gulf of Mexico will clash with cold fronts in February and March, producing 20-inch snow storms later this winter.

Pindzola bases that opinion on intuition, not scientific measurements, he said.

The 1994 edition of the Old Farmer's Almanac, which has attempted weather predictions since 1792, would seem to agree. It calls for more cold, blustery weather and above-average snow for February and March, Managing Editor Susan Peery said.

Take the almanac with the proverbial grain of salt, however. It also predicted milder-than-normal weather this month.

■ See COLD, Page 10A

PG&W Ponders Cloud Seeding to Battle Drought

By FRED NEY
Staff Writer

While Pennsylvania Gas and Water Company continues to struggle with the current drought by developing back-up plans to cope with a continued spell of dry weather, cloud seeding, or rain making, is not presently considered as a feasible alternative.

The subject of cloud seeding arose last week during discussions with members of PG&W's citizens advisory committee, who requested that their names not be used.

In an effort to determine if cloud seeding is being contemplated as one of PG&W's emergency strategies, the question was put to both PG&W and a local university expert on the topic.

Tom Ward, PG&W's public affairs director, commented Saturday that utility officials aren't presently considering cloud seeding because "it is not a technique normally employed by water utilities."

Dr. Daniel Pindzola, associate professor of earth and environmental sciences at Wilkes University, is highly familiar with cloud seeding, having worked on such activities during a five-year period during which he was employed by the U.S. Department of Defense.

"It's a controversial method of forcing rainfall," he advised Saturday.

Explaining that scientific technology is quite advanced in the area of "rain making," Dr. Pindzola explained that clouds, if they are sufficiently dense, can be "encouraged" to release precipitation by "seeding" them from above with either frozen carbon dioxide (dry ice) or with silver iodide.

"But, there are a number of problems," he offered.

"First of all, when you're talking about producing rainfall to replenish reservoirs, it's a problem of getting the clouds to drop water directly over reservoir areas. If your 'aim' is off even a little, it does no good.

"Secondly, there are potential legal issues when you tamper with nature and possibly deprive another geographic area of needed rainfall.

"Since prevailing winds move clouds from west to east, what happens if you deplete atmospheric moisture before the clouds get to, say, New Jersey? If farmers there don't get rain and suffer financial loss, could they sue Pennsylvania for taking rainfall they consider as theirs?" he asked rhetorically.

"And, what would happen if Ohio decided it wanted the rain before it gets to Pennsylvania? So, you see, there are a lot of issues involved that may be much more complicated than just seeding clouds to make it rain," Dr. Pindzola instructed.

While cloud seeding seems improbable, PG&W is doing other things to brace for an extended dry spell.

With Luzerne County area reservoirs at an all-time low ebb, mandatory water rationing appears destined to kick-in by mid-December with at least commercial customers being required to cut back 25 percent or face stiff financial penalties.

The same 25 percent cutback may apply to residential customers by mid-December or a while later, depending on need.

Meanwhile, PG&W is trying to slow reservoir depletion by tapping streams near reservoirs. The utility also maintains underground well fields it is preparing to tap as well as six back-up reservoirs.

PG&W also has rights to draw water from the Susquehanna River, if necessary, but utility officials quickly point out that water source would require considerable treatment to make it potable.

Memberships in Professional and Scientific Societies

Organization Name	Scope: Local, State, Regional, National	Offices Held
American Inst. of Chem. Eng.	National	
American Soc. for Test Materials	National	
Water Pollution Control Fed.	National	
American Defense Assoc.	National	

Teaching at Wilkes 1988-89 (including teaching overloads)

	Course Title	Hrs. of Lecture per Week	Hrs. of Recitation per Week	Contact Hrs. of Laboratory per Week	# of Day Sections; Enrollment	# of Evening or Weekend Sections/ Enrollment
Fall '88 Total of Students Taught 70	Synoptic Meterology	3	----------	3	1	----------
	Survey Meterology	2	----------	2	3	----------
Spring '89 Anticipated Total of Students Projected 37	Prin. of Env. Sci.	3	----------	3	1	----------
	Adv, Air Quality	2	----------	6	1	----------

Other Duties Performed for Base Salary, 1988-89 (Full-Time Faculty)

Duty/Activity	Hours per Week
Advising	One
Research/Scholarship	One
Committee Work	One
Department Chairperson	

# of Advisees: 12

Other Duties for Extra Compensation, 1988-89 (Full-Time Faculty)

Duty/Activity	Hours per Week

esc

9-26-88

Faculty Resume Information Sheet

Full Name Pindzola (Last) Daniel (First) M. (M.I.)

School or College and Department SOEPS

Age as of September 1, 1988, Date of Birth 53; February 8, 1935

Academic Rank Associate Professor

Full-Time [X] Part-Time [ ]

Non-Wilkes College Teaching, If Part-Time

Earned Degrees	Name of Institution	Location	Area, Field or Major	Degree Received	Date Conferred
	Poly. Inst. of Brooklyn	N.Y.	Chem. Eng.	B.S. ChE	6/56
	Poly. Inst. of Brooklyn	N.Y.	Chem. Eng.	M.S. ChE	6/58
	Poly. Inst. of Brooklyn	N.Y.	Chem. Eng.	Ph.D. ChE	6/62

Teaching Experience Incl.Wilkes	Name of Institution	Location	Subjects/ Fields Taught	Full or Part-Time Rank	Dates of Service From—To
	Wilkes College	W-B, PA	Eng. Materials		1/87-present
	Wilkes College	W-B, PA	Envir. Eng.		" "
	Wilkes College	W-B, PA	Meterology		" "
	Wilkes College	W-B, PA	Envir. Science		" "

Non-Teaching Experience

	Firm or Organization or Self-Employed	Duties	Title	Dates of Service From - To
Full-Time	Energy & Mineral Research	Res.& Devel	Dir. R&D	11/84-12/86
	ER Tech Support Inc.	" "	CEO & teach.	8/83-11/84
	Franklin Inst. Resi Labs	" "	Prin. Eng.	3/69-8/83
	E. L. Dupont	" "	Chem. Eng.	8/62-3/69
Part-Time				

List Major Consulting Activities

Utility Engineers- Air Model
Wastewater Treatment Design Catrel Co - Process,review, andproduct develop.

Bibliographic Citation of Principal Publications - Last Five Years

Production of ECO-ROCK Synthetic Aggrogate by Fusion of Ineinerator Residue and Sewage Sludge. Proceedings of 67th Transportation Research Bd. Meeting; Washington D.C., January 11, 1988.

(OVER)