THE CITY OF LYNCHBURG, VIRGINIA

900 Church Street, Lynchburg, VA 24504
www.lynchburgva.gov
TEL: 434-455-3995

CITY COUNCIL

December 29, 2005

Ms. Melinda Wheeler
3400 Wilson Avenue
Lynchburg, VA 24501

Dear Ms. Wheeler:

Pursuant to your request to present a petition to City Council seeking to ban open air burning in the City, I have scheduled you to appear before City Council on Tuesday, January 10, at 7:30 p.m. City Council meetings are held in the Council Chambers, 900 Church Street. If this date/time is not convenient, please give me a call at 455-3982.

Sincerely,

cc: Kimball Payne
City Manager

Dear Mrs. Kost,
I'd be happy to be put on the schedule for the January 10th meeting if possible. You may contact me at:
Wmel53@aol.com

OR: (434) 528-0663
Thanks so much!
M. Wheeler

Melinda Wheeler
3400 Wilson Avenue
Lynchburg, Virginia
24501

January 10, 2006

Statement to Lynchburg City Council
Opposing Open Burning of Leaves and Trash in Lynchburg City

Good evening. My name is Melinda Wheeler, and I recently wrote to the Lynchburg City Council to let them know that I have been made ill by the outdoor burning of leaves and trash in Lynchburg City. Outdoor burning is done constantly in my neighborhood, and it affects my allergies, especially my allergy to mold, quite strongly. I have had breathing problems, sore throats, and have had to miss work to seek medical attention because of this.

Therefore, I would like to present the council with some information on the dangers of outdoor burning. According to the U.S. Environmental Protection Agency, backyard burning, as they call it, produces such air pollutants as:

Particle Pollution
Dioxins
Carbon Monoxide
Hexachlorobenzene
Ash

I would now like to read from the testimony of Donna Reynolds, of the American Lung Association of Virginia, which she gave in Chesterfield County on April 9, 2003 regarding open burning and the effects of particle pollution:

"Particulate matter is the generic term used for a type of air pollution that consists of complex and varying mixtures of particles suspended in the air we breathe. Particles are present everywhere, but high concentrations and/or specific types of particles have been found to present a serious danger to human health.

Particulate matter is a combination of fine solids such as dirt, soil dust, pollens, molds, ashes, and soot; Particles of special concern to the protection of lung health are those known as fine particles, less than 2.5 microns in diameter. (For comparison, a human hair is about 75 microns in diameter.) Fine particles are easily inhaled deeply into the lungs where they can be absorbed into the bloodstream or remain embedded for long periods of time. A recent study showed a 17% increase in mortality risk in areas with higher concentrations of small particles.

Particulate matter air pollution is especially harmful to people with lung disease such as asthma and chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema. Exposure to particulate air pollution can trigger asthma attacks and cause wheezing, coughing, and respiratory irritation in individuals with sensitive airways.

Recent research has also linked exposure to relatively low concentrations of particulate matter with premature death. Those at greatest risk are elderly and those with pre-existing respiratory or heart disease.

While the health risks associated with particlulate pollution are serious, we must not overlook the fact that air pollution burdens our society through these adverse health outcomes. Some of the health care costs associated with air pollution include increased hospitalizations, emergency room visits, doctor office visits, lost work days and restricted activity days."

According to the American Lung Association of Virginia, there are 1,225 people in Lynchburg City suffering from Pediatric Asthma, and 4,021 people suffering from Adult Asthma. So on behalf of myself, the over 5,000 asthma sufferers, as well as those who suffer from Chronic Bronchitis, Emphysema, Heart Disease, and Diabetes, we ask the Council to ban the open air burning of leaves and trash in Lynchburg, and for residents instead to rely on the city collection of trash and leaves.

Melinda Wheeler

PETITION TO BAN
OPEN AIR BURNING IN LYNCHBURG

We the undersigned request that the City of Lynchburg prohibit open air burning within city limits.

This dangerous practice is a health hazard that aggravates allergies and asthma, and causes second hand smoke inhalation, which in turn can cause severe respiratory problems for people in proximity to the fires. Let's end this practice and keep our air clean.

NAME	ADDRESS	PHONE
1. Melinda Wheeler	3400 Wilson Ave. L-burg,	528-0663
2. Linda Stephens	3320 Wilbox Cove Lynchburg	845-7458
3. Beatrice Turner	3320 Wilbox Cove Lynchburg	845-7458
4. Randi Twery	1512 Somerset Dr Lyburg 24503	384-848
5. Melissa Myers	112 Alta Ln. Lynchburg VA 24502	237-656[illegible]
6. Sandy Kinzer	1009 Sheffield Drive Lynchburg, Va. 24502	239-7037
7. Joel Dechant	2412 Tate Springs Rd Lynchburg VA 24501 Apt. H1	528-4238

239-0144

8. Lee New 110 FARLEY BRANCH, L'BURG

9. Beverly Thompson 5625 Killarney Place Lynchburg Va - 239-2097

10. Louise Riley 1115 Heath Ave. Lynchburg 237-1394

11. Debbie West 24 Country Pl. lane Lynchburg, Va 385-4423

12. Bonnie Harper 8108 Timberlake Rd #101 Lynchburg 239-2111

13. Wendy Harper 8108 Timberlake Rd #101 Lynchburg 239-2111

14. Mary Stanton 198 Timberlake Dr Lynchburg 239-8011

15. Kim White 901 Goose Meadow Drive 525-8479

386-3114

16. Sheila Carter 2029 Woodcrest Drive 24503

17. Joy Strait 908 Westview Dr L'burg 24502

18. Barbara Clair 219 Norfolk Ave City 24505

19. Caryn McCreary 401 G Kerry Lane Lynchburg 24502

20. Amanda Edwards 595 Takoma St. Lynchburg 832-1181

21. Kita Brown 110 Yorkshire Cr., Lynchburg, VA 24502

22.

23. Marjorie Wheeler-Barclay 109 Huron Ave. Lynchburg 24503 846-6650

24. Barbara Gettinger 1221 Bell Tavern Rd. Lynchburg, 24503 434-384-6467

25. Jennifer Doss 432B Three Creeks Ct. Lynchburg, VA 24502 434-851-1911

26. Spencer Cross 1908 Quarry Rd. Lynchburg, VA. 24503 (434) 384-0461

27. Mark Protzman 213 Langhorne Lane Lynchburg, VA 24501

28. Dawn C. Shackelford 205 Maple Hills Dr. Lynchburg, VA 24502

29. MICHAEL TOZKY 6008 EDGEWOOD AVE 24502

30. Laura Bailey 384-1557 4508 Trents Ferry Ct. 24503

31. Marsha Burks 5821 Rhonda Rd, 24502 237-0879

32. Lyndall Nairn 3501 Willow Lawn Dr. 386-9743
Lynchburg VA 24503

33. Mary G. Kidd 3509 Willow Lawn Dr
Lynchburg, VA 24503 384-5994

34. [illegible] 3910 Handy
Lynchburg VA 24502 845-1472

35. ELZA C. BUTNER I am an asthma sufferer!
18 W. Princeton Cir, 24503 528-2853

36. James A [illegible] 309 Harrison St L'burg 24504 847-4458

37. DAVID OLIVERIO 400 L STONEMILL DR
LYNCHBURG 239-3499

38. Candace E. [illegible] 206 Warren Ave.
Lynchburg, VA 238-2516

39. [illegible] Brown 201 Roundabout Circle
Lynchburg, VA 832-8091

40. Nancy Schneider 337 Wild Turkey Rd
Lynchburg, VA 24502 385-0424

41. [illegible] Murphy 4109 MORNINGSIDE 384-2531
Lynchburg VA 24503

42. Dan C. Menendez 1928 Gaymor Terrace 384-2571
Lynchburg, VA 24503

43. Richard Burke 3900 FACULTY DR 385-4588
LYNCHBURG, VA 24501

PETITION TO BAN
OPEN AIR BURNING IN LYNCHBURG

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NAME	ADDRESS	PHONE
44. Merrill Tolbert	107 Huron Ave. Lynchburg, VA. 24503	846-4528
45. Flora Davies	37 Huron Ave Lynchburg, Va. 24503	
46. Polly West	1 Huron Ave Lynchburg VA 24503	

47. Vicki Mays 3508 Round Hill Rd. 384-2656

47. ~~Dustin Williams Rt. 5 Box 3445 Appomattox Va (434) 352-2083~~

48. Lindsay Hegna 1815 Rivermont Ave (908) 347-6618

Carolyn Franklin 5708 White Oak Dr. Lynchburg 24502

49. ~~Katherine Newcomer 305 Killarney Ct (434) 582-7771~~ 239-8314

50. Fannie Butler 2217 Yorktown Ave Apt. D9 City 01 (434) 846-4152

51. K. Merritt 2315 Atherwolt Rd Lynchburg VA

52. Samantha Hogman 309 Madison Street Lynchburg, VA 528-4217

53. Amber Toby 861 Dove Rd Lynchburg VA 846-3152

54. Tiffany Wilson 309 Madison St. Lynchburg, VA 426-8820

55. Amberly D. Oliver 225 Coffee Rd. Apt. 78 Lynchburg, VA 24503 (864) 313-54

56. DONALD MOORE 28 DUIGUID DRIVE, LYNCHBURG VA, 24502 528-574

57. Paul Thick 2712 tate springs Rd lynchburg va, 24501 509-26

58. Tom Switzer 2412 Tate Springs Rd Lynchburg VA 24501 (814) 221-5252

59. Melissa Sutphin 4251 White St. Lynch VA 845-5961

60. Elizabeth McNamara 103 Trinity Ct. L-burg 384-0521

61. [illegible] 3319 Wilson Ave L-burg

62. [illegible] 3325 Wilson Ave L-burg 845-5311

63. [illegible] 3307 [illegible] L-burg (434) (528-1398)

64. B.H. [illegible] 3316 Wilson Ave L. Burg (845-5455)

65. [illegible] 204 Warren Ave Lyn. Burg (434) 385-2033

66. John W. Hamlett 3309 Memorial Ave, Lynchburg 434-528-5618

67. Frances L. Young 3311 Memorial Ave Lynchburg, VA (434) 845-6712

68. Margaret Carey 415 Montrello Ave. Lynchburg VA 245

69. [illegible] Daniel Ave. Lynchburg

70. Crystal [illegible] 3426 Daniel Ave Lynchburg, VA 24502 384-7916

71. Thelma Tivery 397 Woodland Ave - Lynchburg 24503

72. Carol Goldman 392 Woodland Ave. Lynchburg 24503

73. Chris [illegible] 392 Woodland Ave.

74. Heather McNeely 393 Woodland Ave. Lynchburg 24503

75. Ray Tolar 390 Woodland Ave 401-2476

76. Ronald Baumgard 391 Woodland Ave 24503

77. Michelle Lemon 377a Woodland Ave Lynch 24503

78. Patricia McDonnie 377A Woodland Ave Lynch VA 2450

79. Evelyn Jackson 373A Woodland Ave 846-4895

80. Robert J. [illegible] 370 Woodland Ave 846-6568

81. Kenny Carter 349 Woodland Ave 24503

82. [illegible] 341 Woodland Ave 528-6524

L-24503

83. Anja Falcone 334 Woodland Ave 845-3941

84. [illegible] Yoshum 336 Woodland Ave 847-0550

85. Carolyn Pellerin 334 Woodland Ave 845-4801

86. Jennifer Elliott 324 Woodland Ave 528-1240

87. Barbara Shedd 308 Sumpter St. 528-4232

88. [illegible] 308 Sumpter St. 528-4232

89. Lucy L. Hicks 319 Sumpter 846 7086

90. [illegible] 221 Woodland Ave 523-[illegible]

91. Earl [illegible] 1506 Fillmore St 426-5490

92. Naomi Amos 100 E. Randolph Pl. 846-0741

93. Carolyn Bell 42 N. Princeton Circle 847-5339

94. Richard D. Barnes 56 N. Princeton Cir. 846-4434.

95. JENNIFER GLENN 18 RIVERVIEW PL LYNCHBURG 396-7073

96. Diane Wilson 2190 Woodcrest Dr. Lynchburg 384-2831

97. Donna M Sloman 108 Wooldridge Cir. Lynchburg, VA 24502

98. R. Jan Orr 228 Ivy Dr. Lynchburg, Va. 24503

99. Pamela Calloway 306 Keywood Dr. Lynchburg, VA 24501

100. Rea Clark 3564 Round Hill Rd Lynch 24503

101. Dorothy Marshall 2136 Carrington Rd. Lynch. 24501

Donna Reynolds.
American Lung Association of Va.
1-800-345-5864
dreynolds@lungva.org

Statement
Chesterfield County
Open Burning Ordinance
April 9, 2003

Good evening. My name is Donna Reynolds and I serve as the Director of Community Relations for the American Lung Association of Virginia. The American Lung Association of Virginia works to promote lung health and protect lung disease. Toward that end, I am here this evening to speak in support of an ordinance to toughen open burning restrictions in Chesterfield County.

According to the U.S. Environmental Protection Agency, the open burning of land clearing debris creates substantial emissions of a large number of pollutants including carbon monoxide, particulate matter, benzene, acetone, toluene, ethyl benzene, pinene, naphthalene, phenol and 14 polycyclic aromatic hydrocarbons. (I have provided each member with a copy of this study along with my comments.)

While many of these pollutants are known to be toxic to humans and cause a wide range of serious health effects, I would like to limit my comments this evening to pollutants called particulates.

Particulate matter is the generic term used for a type of air pollution that consists of complex and varying mixtures of particles suspended in the air we breathe. Particles are present everywhere, but high concentrations and/or specific types of particles have been found to present a serious danger to human health.

Particulate matter is a combination of fine solids such as dirt, soil dust, pollens, molds, ashes, and soot; and aerosols that are formed in the atmosphere from gaseous combustion by-products such as volatile organic compounds, sulfur dioxide and nitrogen oxides.

Particles of special concern to the protection of lung health are those known as fine particles, less than 2.5 microns in diameter. (For comparison, a human hair is about 75 microns in diameter.) Fine particles are easily inhaled deeply into the lungs where they can be absorbed into the bloodstream or remain embedded for long periods of time. A recent study showed a 17% increase in mortality risk in areas with higher concentrations of small particles.

Particulate matter air pollution is especially harmful to people with lung disease such as

asthma and chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema. Exposure to particulate air pollution can trigger asthma attacks and cause wheezing, coughing, and respiratory irritation in individuals with sensitive airways.

Recent research has also linked exposure to relatively low concentrations of particulate matter with premature death. Those at greatest risk are the elderly and those with pre-existing respiratory or heart disease.

While the health risks associated with particulate pollution are serious, we must not overlook the fact that air pollution burdens our society through these adverse health outcomes. Some of the health care costs associated with air pollution include increased hospitalizations, emergency room visits, doctor office visits, lost work days and restricted activity days.

The current federal standard for particulate matter (PM10) is 150 micrograms per cubic meter (ug/m3) of air averaged over 24 hours and 50 ug/m3 averaged over a one-year period. In July 1997, the U.S. EPA set a new stricter standard that will regulate fine particulate matter (PM2.5) for the first time: 65 micrograms per cubic meter (ug/m3) measured over a 24-hour period and 15 ug/m3 averaged over a year. The new standard will be phased in over the next few years.

According to the most recent data collected, several areas of Virginia will not meet the new health-based standard for particulate pollution. At this time, Richmond is challenged as one of the areas that may barely meet the new standard. We believe any efforts by local governments to restrict air pollution will assist with helping the region meet these new standards and protect the air our citizens breathe.

On behalf of the American Lung Association of Virginia, I urge you to adopt a more restrictive open burning ordinance in Chesterfield County to protect public health and improve the quality of the air our children and families breathe. Thank you.

(Selected Key Studies On Particulate Matter and Health: 1997-2001)

Human Health

Burning trash in the open produces many pollutants, including:

- dioxins,
- particle pollution,
- polycyclic aromatic hydrocarbons,
- volatile organic compounds,
- carbon monoxide,
- hexachlorobenzene, and
- ash.

Many dangerous health conditions can be caused by inhaling or ingesting even small amounts of these pollutants. Small children, the elderly, or people with preexisting respiratory conditions can be especially vulnerable to some of these pollutants.

Dioxins

Backyard burning is of particular health concern because it produces significant quantities of dioxins. Dioxins and "dioxin like" compounds are a group of 30 highly toxic chlorinated organic chemicals. They are produced naturally in small quantities, but are primarily the result of human activity. They can be produced through industrial processes such as chlorinated chemical manufacturing and metal smelting. Currently, however, the largest quantified source of dioxin emissions is the uncontrolled burning of household trash (backyard burning). Studies have shown that only small amounts of chlorinated materials in waste are required to support dioxin formation when burning waste. This means that even when materials containing high levels of chlorine, such as PVC, are removed from household trash, burning the waste still creates dioxins because nearly all household waste contains trace amounts of chlorine.

Much of the dioxins created and released into the air through backyard burning settle on plants. These plants are, in turn, eaten by meat and dairy animals, which store the dioxins in their fatty tissue. People are exposed to dioxins primarily by eating meat, fish, and dairy products, especially those high in fat. Backyard burning occurs most commonly in rural farming areas where dioxin emissions can more easily be deposited on animal feed crops and grazing lands. These dioxins then accumulate in the fats of dairy cows, beef, poultry, and swine, making human consumption of these harmful chemicals difficult to avoid.

Dioxins are classified as persistent, bioaccumulative, and toxic pollutants (PBTs). PBTs are highly toxic, long-lasting substances that can build up in the food chain to levels that are harmful to human and ecosystem health. Persistent means they remain in the environment for extended periods of time. Bioaccumulative means their concentration levels increase as they move up the food chain. As a consequence, animals at the top of the food chain (such as humans) tend to have the highest dioxin concentrations in their bodies.

Dioxins are potent toxicants with the potential to produce a broad spectrum of adverse effects in humans. Dioxins can alter the fundamental growth and development of cells in ways that have the potential to lead to many kinds of impacts. These include adverse effects upon reproduction and development, suppression of the immune system, disruption

of hormonal systems, and cancer. For more detailed information on dioxin health effects, safety issues, and risk, visit EPA's Dioxin and Related Compounds Web site.

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Particle Pollution

Particle pollution, also referred to as particulate matter, or PM, refers to microscopic particles released by open burning. Particles that are small enough to get into the lungs (those less than or equal to 10 um in diameter) can cause numerous health problems. Particles can aggravate respiratory conditions such as asthma and bronchitis, and have been associated with cardiac arrhythmia (heartbeat irregularities) and heart attacks. People with heart or lung disease, the elderly, and children are at highest risk from exposure to particles. For more information EPA's particulate matter site.

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Polycyclic Aromatic Hydrocarbons

Polycyclic aromatic hydrocarbons, or PAHs, are a group of chemicals commonly found in particulate matter (or smoke and soot) released from backyard burning. The are formed from the incomplete combustion of certain materials. Some PAHs are carcinogenic, or cancer-causing.

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Volatile Organic Compounds

People in the immediate vicinity of a burn barrel are also exposed to high levels of volatile organic compounds (VOCs) produced by open burning. Many VOCs are harmful to humans. They also contribute to ground-level ozone pollution, also known as smog, which can worsen respiratory, heart, and other existing health problems. Inhaling certain VOCs can lead to eye, nose, and throat irritation; headache; loss of coordination; nausea; and damage to liver, kidney, and central nervous system.

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Carbon Monoxide

Another major pollutant generated by backyard burning is carbon monoxide (CO). At low levels of exposure to CO, humans may experience a variety of neurological symptoms including headache, fatigue, nausea, and vomiting. For more information, visit EPA's carbon monoxide site.

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Hexachlorobenzene

Hexachlorobenzene, or HCB, is a highly persistent environmental toxin that degrades slowly in air and, consequently, undergoes long-range atmospheric transport. HCB bioaccumulates in fish, marine animals, birds, lichens, and animals that feed on fish or lichens. Based on studies conducted on animals, long-term low-level exposures may damage a developing fetus, cause cancer, lead to kidney and liver damage, and cause fatigue and skin irritation. HCB is considered a probable human carcinogen and is toxic by all routes of exposure.

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Ash

Backyard burning also produces ash residue, which can contain toxic metals such as mercury, lead, chromium, and arsenic. These metals can be toxic when ingested. When a person ingests hazardous amounts of lead, for example, he or she may experience high blood pressure, cardiovascular problems, kidney damage, and brain damage. Unaware of the potential danger, some people scatter the ash in their gardens or bury it on their property. Garden vegetables can absorb and accumulate these metals, which can make them dangerous to eat. Children playing in the yard or garden can incidentally ingest soil containing these metals. Also, rain can wash the ash into groundwater and surface water, contaminating drinking water and food.

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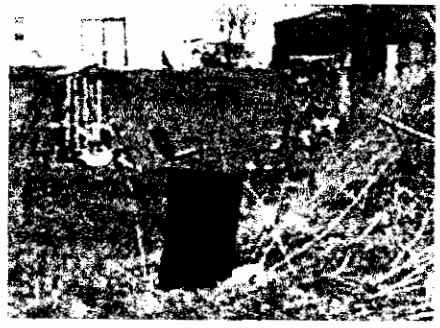
Environmental Effects

Backyard burning produces various compounds toxic to the environment including nitrogen oxides, volatile organic compounds (VOCs), carbon monoxide, and particle pollution.

- Nitrogen oxides, or NOx, is a group of nitrogen compounds that are partially responsible for acid rain and contribute to global warming, ozone depletion, and the formation of smog.
- Volatile organic compounds, or VOCs, are carbon-based compounds that undergo photochemical reactions (i.e., they react with sunlight) when released into the atmosphere. The VOCs and the compounds they form in the atmosphere, such as ozone, contribute to the formation of smog.
- Carbon monoxide, or CO, chemically reacts with sunlight to create harmful ozone. CO production can significantly impact ambient air quality and a region's ability to meet Clean Air Act regulatory air quality standards. Burning garbage in a barrel or pile produces more CO than decomposition in a landfill. CO is also a significant greenhouse gas.
- Particle pollution, also known as particulate matter, or PM, refers to the fine particles that produce visible smoke that reduce visibility and creates haze, which is a major air pollution problem for many rural communities. In addition to being unhealthful, particles soil our homes and cars and transport dangerous chemicals, such as dioxins.

Fires



Backyard burning is also frequently the cause of residential, brush, and forest fires, particularly during drought conditions. In Wisconsin, 35 percent of wildfires were started by uncontrolled burning of garbage, brush, and grass. Often, fire hazards are caused by burn piles or barrels left unattended, which grow too large or are not fully extinguished.