January 31, 2019

Mike Stevenson, Chair
Madison County Board of Health
493 Medical Park Drive
Marshall, NC 28753

RE: Moratorium on asphalt plants to assess public health concerns

Dear Chairman Stevenson and members of the Board:

On behalf of the Blue Ridge Environmental Defense League and our members in Madison County, I write to request that the Board of Health act today to reduce a risk to public health. Specifically, we request that the Board of Health adopt a resolution recommending that Madison County enact a moratorium on new asphalt plant permits. Asphalt plants are controversial because they are major sources of toxic air pollution. The purpose of the moratorium would be to allow time for important public health concerns to be explored.

Madison County needs time to consider regulations which will better protect its residents. A six-month countywide moratorium would allow the county to consider prudent and protective measures, such as buffer zones and setbacks from schools, day care centers and nursing homes, to protect its most vulnerable residents. A recommendation from the Board of Health to the County Commission to adopt such a moratorium would be a conservative step well within the provisions of state and local statutes.

Moratoriums are well-established in North Carolina law. In a legal review of moratoria, Dr. David Owens of the UNC School of Government stated:

Given the time required to adopt an interim zoning ordinance or amend an existing ordinance, local governments occasionally want to take more immediate action to put a hold on proposed projects or maintain the status quo while new regulations are being considered or new public improvements are put into place. Final decisions on major land-use policies should not be made hastily. The complexity of the issues, their controversial nature, the time required to conduct adequate studies and prepare plans, and the need to allow broad public participation in the debate mean that a careful and deliberate course often needs to be followed by the local government. Yet there may well be a need to keep problems from worsening during this period of consideration. The most frequently discussed means of securing this "breathing space" is adoption of an ordinance establishing a moratorium on certain approvals, or adoption of a resolution directing the local government's staff to cease processing applications for certain approvals. In North Carolina this has included moratoria on subdivision approvals, rezonings, building permits, and water and sewer
hookups or extensions.¹

Under state law, a city or county may regulate businesses and conditions which are found to be detrimental to the public health.² Moreover, the courts have ruled on the authority to impose moratoria on construction and operation of new or additional waste treatment systems and on new pollution sources.³

Information provided to me indicates that an asphalt plant could be sited at McCravy Stoneworks. As you may know, asphalt plant smokestack emissions include arsenic, benzene, cadmium, formaldehyde and hundreds of other poisons.

What is less well known is that the “blue smoke” which accompanies asphalt plant operation does not pass through pollution control devices or the stack. These fumes are emitted at ground level and drift with the wind. They contain many of the same volatile organic compounds and polycyclic aromatic hydrocarbons (VOC and PAH) emitted from the stack. There are two major categories of fugitive emissions: visible and invisible. The invisible emissions are VOC’s which contribute to smog. The visible emissions are heavier hydrocarbons, PAH, that become airborne at operating temperatures of 300 degrees-F. Both of these toxic emissions are unfiltered and may travel a mile downwind.⁴ Fugitive emissions may even exceed smokestack emissions. See attachment A, “Asphalt Plant Fugitive Air Emissions.”

I have attached to this letter some documents from our files, including a study which revealed excess levels of leukemia and solid cancers in children who lived near manufacturing of bitumen products, also known as asphalt. See attachment B, “Hazard proximities of childhood cancers in Great Britain from 1953–1980.”⁵

The Boston Public Health Commission “predicted unacceptable lifetime cancer risks to the public from asphalt factory stacks.” See attachment C, Letter from Lillian Shirley.⁶

After due consideration, the regional health department in Boone, NC, wrote to the owner of an asphalt company to formally request the withdrawal of his proposal, stating, “It was the consensus of the sub-committee that the potential health risks associated with this particular location were far too great for the Health Board ever to consider it as acceptable for the construction of an asphalt plant.” See attachment D: Letter from David

² See N.C. Gen. Stat. § 160A-174(a) and 153A-121
⁴ Source: Ravi Nadkarni, who earned his Ph. D. in Metallurgy & Ceramic Engineering at the University of Utah and authored/coauthored about 70 professional papers and other works which directly resulted in Section 119 of the Clean Air Act.
⁵ Dept. of Public Health and Epidemiology, Medical School, University of Birmingham, September 1996, Journal of Epidemiology and Community Health, Knox EG and Gilman EA, 1997
⁶ Letter from Lillian Shirley, RN, MPH, Executive Director, Boston Public Health Commission to Carol M. Browner, Administrator, US Environmental Protection Agency, 3/14/97

Esse quam videri
Triplett, Appalachian District Health Department.\textsuperscript{7}

The Blue Ridge Environmental Defense League conducted a survey in response to health concerns of residents in the mountain community of Bethel in Macon County. The door-to-door survey showed that 45% of the residents living within a half mile of the two-year old Rhodes Brothers asphalt plant report a deterioration of their health which began after the plant opened. The most frequent problems include high blood pressure (18% of people surveyed), sinus problems (18%), headaches (14%), and shortness of breath (9%). See attachment E, “Cullasaja-Bethel Community Health Survey Report” attached.

Finally, asphalt industry representatives often misconstrue the decision by the US Environmental Protection Agency in 2002 which deleted asphalt concrete manufacturing as a major source of hazardous air pollutants. No de-listing of asphalt plants as major sources for criteria pollutants has been promulgated by EPA. See attachment F, “Asphalt Plants are Still Major Sources of Pollution.”

Thank you for your consideration of our request. Please feel free to contact me for further information.

Respectfully,

\begin{center}
\includegraphics[width=2in]{signature.png}
\end{center}

Louis A. Zeller  
Executive Director  
(336) 982-2691  
BREDL@skybest.com

Attachments

A. Asphalt Plant Fugitive Air Emissions: A Public Health Hazard, BREDL  
B. Hazard proximities of childhood cancers in Great Britain from 1953–1980  
C. Letter from Lillian Shirley, RN, MPH, Executive Director, Boston Public Health Commission  
D. Letter from David Triplett, Chairman, Appalachian District Health Department to B.K. Mount, Maymead Inc., 9/30/97.  
E. Cullasaja-Bethel Community Health Survey Report, BREDL. 3/5/01  
F. Asphalt Plants Are Still Major Sources of Pollution, BREDL

\textsuperscript{7} Letter from David Triplett, Chairman, Appalachian District Health Department to B.K. Mount, Maymead Inc., 9/30/97.