



North Carolina Department of Environment and Natural Resources
Division of Air Quality

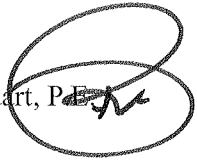
Beverly Eaves Perdue
Governor

B. Keith Overcash, P.E.
Director

Dee Freeman
Secretary

MEMORANDUM

TO: Steve Vozzo

FROM: Donald R. van der Vaart, P.E. 

DATE: November 10, 2009

SUBJECT: Natures Earth Pellets
Solid Waste Determination

Natures Earth Pellets, LLC submitted information regarding a project it is proposing in the Fayetteville Region that involves the combustion of wood material. The Division of Air Quality is reviewing new and modified sources that involve the combustion of materials that may be considered "solid waste" in light of the discussion of relevant law provided by the Attorney General's Office to the Division in its September 28th memorandum. The information provided by Natures Earth Pellets was provided to allow the Division to determine whether this material was solid waste under Section 129 of the Clean Air Act.

A new or modified combustion device that burns solid waste material would be subject to the requirements of Section 129 as a Commercial and Industrial Solid Waste Incinerator (CISWI). However, if the material is not solid waste, the combustion device is not subject to Section 129. The Division has considered the information submitted by Natures Earth Pellets and has determined the material is not a solid waste. Therefore, the combustion device the company proposes to use to burn the material will not be subject to the Section 129.

In summary, Natures Earth Pellets proposes to produce pellets made of shavings and sawdust. These pellets would be marketed primarily for use in commercial and residential stoves in the Northeast United States. That is, the goal of the process is to create a wood product for the purpose of burning. The sawdust and shavings would be purchased from other industries that have created shavings and sawdust as a by-product. Natures Earth Pellets would purchase the sawdust and shavings for between approximately \$25 and \$35 per ton. The raw materials come to Natures Earth Pellets as virgin wood sawdust and shavings without any additives. They would then be converted to pellets without any additives so that the chemical composition of the finished product would be identical to that of the raw materials and identical to that of virgin wood, except possibly regarding moisture content.

The plant at which the raw materials would be converted to wood pellets would use a burner to produce heat for the pelletizing process. A fraction of the shavings and sawdust would not be able to be efficiently converted to wood pellets and would instead be used to power the burner. This sawdust and these shavings would share the same chemical make up as the finished product (except possibly regarding moisture content), and both would be used for a similar purpose: to burn to produce heat. The price paid by Natures

Earth Pellets for the sawdust and shavings would be comparable to alternative fuels such as Central Appalachian coal when measured on a heating value basis.

In making this determination, the Division noted the following distinct characteristics of the operation proposed by Natures Earth Pellets.¹ First, the shavings and sawdust that would be used as incoming raw material would be collected and transported to the company as raw material for the pelletizing process that Natures Earth Pellets proposes. It may be true that shavings and sawdust created as by-products were in the past considered a waste by the companies that now collect them for sale to Natures Earth Pellets, but Natures Earth Pellets and many similar companies have developed a new market providing a fuel for biomass combustion. That market includes commercial and residential stoves in the Northeast United States. As a result, the material is specifically being collected, transported and priced as a raw material and not as a negatively valued waste. Second, there are no additives in the raw material added either before the material reaches this company or added as part of this company's process. Finally, the raw material that would not be used to compose the final product would be used to create useful heat in the same manner as the intended use of the finished product, i.e., combustion. Considering all of the above, under the specific facts of this case, the materials would not at any time be entering the waste stream and would not be a "solid waste."

cc: Regional Supervisors
Lee Daniels

¹ Because the purpose of this memorandum is only to summarize and record the relevant facts and analysis, this memorandum does not provide a complete discussion of the issues and, because the determination of what is a "solid waste" is highly fact specific, this memorandum does not establish any requirements for future cases. In addition, this memorandum does not address the applicability of federal rules under §129 of the Clean Air Act. Considering that the materials discussed herein would not be "solid waste," the applicability of the §129 rules is not an issue.