

## 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

January 6, 2010

Mr. Charles B. Newsome General Manager Carolina Stalite Company Post Office Drawer 1037 Salisbury, North Carolina 28145-1037

Dear Mr. Newsome:

SUBJECT:

Solid Waste Determination

Applicability Determination No. 1527

Facility ID No. 8000003

The North Carolina Division of Air Quality (NC DAQ) is reviewing new and modified sources that involve the combustion of materials that may be considered "solid waste" under Section 129 of the Clean Air Act (CAA). On January 4, 2010, NC DAQ received a request from Carolina Stalite Company to determine whether virgin wood sawdust purchased from an off-site vendor for combustion in an existing kiln at the Gold Hill facility would be considered a solid waste.

A new or modified combustion device that burns solid waste under CAA §129 would be subject to the requirements of this section for Commercial and Industrial Solid Waste Incinerators (CISWIs). However, if the material is not solid waste, the combustion device in not subject to the requirements of CAA §129. NC DAQ has considered the information submitted by Carolina Stalite Company and has determined the material is not solid waste. Therefore, the combustion of the sawdust in an existing kiln will not subject the source to the CISWI requirements of CAA §129.

The material is virgin wood sawdust produced by a pallet manufacturer in Davie County, North Carolina. The sawdust is collected from the sawing operations and transferred by auger to a truck for transport to various customers. Approximately 75% of the sawdust is being sold as fuel and the remainder is sold for agricultural applications. Sawdust prices in the area reached prices of approximately \$22.00/ton in 2009. Carolina Stalite Company proposes to burn the sawdust in Kiln No. 7 which heats slate rock to a temperature of approximately 2,200 °F to form an expanded, lightweight aggregate material. The sawdust would replace a portion of the bituminous coal that is currently being fired in the kiln.

NC DAQ's determination is based on the discussion of relevant law provided by the North Carolina Attorney General's Office in its September 28, 2009 memorandum to Keith Overcash. Several

**Permitting Section** 

1641 Mail Service Center, Raleigh, North Carolina 27699-1641 2728 Capital Blvd., Raleigh, North Carolina 27604 Phone: 919-715-6235 / FAX 919-733-5317 / Internet: www.ncair.org

NorthCarolina
Naturally

Mr. Newsome Applicability Determination No. 1527 January 6, 2010

characteristics of the material were relevant in the determination. First, neither the pallet manufacturer nor Carolina Stalite Company would incorporate additives in the sawdust to make it more valuable as a fuel source. Chemically, the sawdust would be substantially similar to the virgin wood from which it is derived. Second, there is evidence that there is a market for sawdust as a fuel, and that demand in the market is increasing. The sawdust is treated by the pallet manufacturer as a positively valued commodity, and at no point is the material discarded from the industrial process and treated as a waste. Finally, the material would be used by Carolina Stalite Company to generate useful heat in the production of light weight aggregate, replacing a portion of the existing fuel source. This determination does not cover any sawdust generated by the processing of returned or scrap pallets, rather it is limited to the sawdust generated from the construction of new pallets from virgin wood.

Because the purpose of this determination is only to summarize and record the relevant facts and analysis, the letter does not provide a complete discussion of the issues and, because the determination of what is a "solid waste" under CAA §129 is highly fact specific, this letter does not establish any requirements for future cases. Should you have any questions concerning this determination, please contact Ms. Fern Paterson, P.E. at (919) 715-6242.

Sincerely yours

Donald R. yan der Vaart, Ph.D., J.D., P.E.

Chief

cc:

Mooresville Regional Office Central Files