

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

Beverly Eaves Perdue Governor

Sheila C. Holman Director Dee Freeman Secretary

November 15, 2012

Mr. Sam McLamb Principal AHP Financial Services, LLC 825 Merrimon Avenue, #377 Asheville, NC 28804

SUBJECT:

Clarification of Secondary Material Determination

AHP Financial Services, LLC - Long Branch Steam Plant

Harmony, Iredell County

Dear Mr. McLamb:

On August 31, 2012 the North Carolina Division of Air Quality (NC DAQ) approved your proposal to burn used poultry bedding as a fuel in a new gasification/combustion (boiler) system at AHP Financial Services, LLC – Long Branch Steam Plant (AHP) that will provide steam to an existing rendering plant owned by Tyson Foods, Inc. located in Harmony, Iredell County, North Carolina. The boiler will be used to generate steam for the feed manufacturing process and to produce electricity for distribution.

The used poultry bedding was classified as a non-hazardous secondary material (NHSM) within the meaning of Title 40, Part 241 of the Code of Federal Regulations (40 CFR Part 241). The used poultry bedding described in the NHSM determination above was processed, and met the legitimacy criteria provided in 40 CFR 241.3(d)(1). Therefore, NC DAQ determined that the material is not a solid waste when used as fuel in a combustion unit.

In the NHSM determination AHP analyzed the contaminant levels in composite samples of used poultry bedding collected from Anderson Farm. For many contaminants the results show that the measured contaminant levels in the used poultry bedding are within the range of contaminant concentrations in the traditional fuels that the new boiler system will be designed to burn (both using maximum values and averages). The manganese (Mn) content of used poultry bedding from Anderson Farm is 507 ppmvd which is higher than the average Mn content of either wood or coal. In the August 31st determination the NCDAQ relied, in part, on the particulate removal efficiency of the proposed control devices to estimate the emission rate of Mn which was incorrect.



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Since AHP stated that the used poultry bedding from Prestage Farms was representative of the used poultry bedding that would be burned, the NC DAQ based the Mn contaminant comparison on the combined values from both AHP and Prestage. Therefore, the average Mn content of used poultry bedding is 493 ppm which is also higher than the average Mn content of either wood or coal. However, the highest measured Mn content in the used poultry bedding was 580 ppmd, which is lower than the upper range of Mn content in wood (15,800 ppmd). The relatively few number of samples of turkey litter would indicate that the highest measured value is undoubtedly not the maximum value for all used poultry bedding. However, the disparity between the average Mn contents indicate that there is little doubt that the maximum manganese content of used poultry bedding would be considerably below 15,800 ppmd.

This clarification does not change the August 31, 2012 conclusion that the used poultry bedding meets the legitimacy criteria provided in 40 CFR 241.3(d)(1). If you have any questions regarding this NHSM determination, please contact me at (919) 707-8475.

Sincerely

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

Chief

c: Mooresville Regional Office Central Files