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MEMORANDUM

SUBJECT: Application of RCRA to Calgon Carbon
Regeneration Facility

FROM: Marcia Williams, Director
Office of Solid Waste (WH-562)

TO: Thomas W. Devine, Director
Waste Management Division, Region IV

In response to your memorandum of March 11, we have reviewed the information relating to the Calgon facility. Based on that review and additional discussions with Calgon personnel, we have concluded that the August 23 memorandum from John Skinner is not directly applicable to the Calgon case. Nevertheless, Calgon does believe they can demonstrate that no mixing has occurred in the solids transport system. As a result, some of the principles underlying the August 23 memorandum may apply to their case. In the following paragraphs, we will elucidate our position on the Calgon case and then suggest what data is probably needed for the demonstration.

The Calgon system of interest is a solids handling system that is used to transport hazardous waste (spent carbon contaminated with various listed wastes) and solid wastes (spend carbon applied to streams other than those currently regulated) from tank trucks to a storage sump. The transport medium is either the treated solids handling water that is recycled from a storage tank, or make-up water from the river. From the carbon storage pump (hereafter referred to as the sump), spent carbon is lifted by a screw feeder to the regenerator for reclamation. The water exits the sump from a weir and then is subjected to treatment (clarification and activated carbon contacting) prior to discharge or recycle to the storage tank for reuse in solids handling. Calgon maintains that current practice is to use the water only once and to then discharge it to the Big Sandy River. Under this scenario, the water does not become a solid waste until discharged from the sump (i.e., when used to

transport the spent carbon, the water is not defined as a solid waste). It is at that point where Calgon must establish the stream is not a mixture of a solid and hazardous waste. Calgon's position is that they should be allowed to make the demonstration after treatment of the water in the clarifier and carbon columns based on an extrapolation of the interpretation presented in the August 23rd memorandum.

We can not agree with the Calgon position. First of all, the August 23rd memorandum is strictly confined to additional, on-site dewatering to remove non-regulated wastewater unintentionally commingled with the waste at the point of waste generation. Key to the exemption is the return of the wastewater to the system from where it came and a clear demonstration that the hazardous waste is not present in the returned stream. The exemption applies only for a waste generator who is continuing to remove the non-listed material at the site of generation. The Calgon case, on the other hand, is related to treatment of a mixture after the addition of a large volume of material to a hazardous waste.

The sole question in the Calgon case is whether or not mixing has occurred. Mixing may not have occurred if Appendix VIII constituents are kept on the carbon and the spent carbon solids containing the hazardous constituents do not escape the sump. Under those conditions, the river water will not have become mixed with the hazardous constituents, and would not contain hazardous waste. If Calgon can demonstrate two points, they may have a basis for application of the August 23 guidelines. First, they must analyze any solids escaping the sump during the unloading and feeding of the spent carbon to show that they are not the regulated waste. Secondly, Calgon must show that the hazardous constituents have not desorbed from the carbon into the water. This demonstration may be made by providing mass flows and constituent concentrations for the carbon, the influent water, and the sump effluent. Do not hesitate to contact Ben Smith of my staff at (202) 382-4791 if you have questions relating to our response or other questions relating to the August 23rd memorandum.