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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

June 11, 1996

Donald P. Gallo
Michael, Best & Friedrich
100 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4108

Dear Mr. Gallo:

Thank you for your letter dated October 20, 1995, concerning the use of waste leather trimmings in the manufacture of adsorbent materials. I apologize for the delay in responding to your letter. In that letter you indicated that your client wished to use waste leather trimmings as a raw material in the production of commercial adsorbent materials. Specifically, your client was proposing to shred or grind waste leather trimmings to a certain particle size, package them, and market these materials for use as adsorbents for spilled liquids in a fashion similar to "oil dry" or "floor dry" products. As I understand it, your letter requests clarification on the regulatory status under the Resource Conservation and Recovery Act (RCRA) of the leather trimmings, both prior to processing into adsorbent products, and after being used to adsorb a variety of materials.

First, I will address the status under RCRA of the leather trimmings being collected and processed into adsorbent products. Because the leather trimmings may exhibit the hazardous characteristic for chromium, it is important to determine whether these materials would be regulated as RCRA solid or hazardous waste in the recycling scenario you described. A secondary material that is used/reused as an ingredient in an industrial process to make a product, or is used/reused as a substitute for a commercial product, would not be defined as a solid waste provided the secondary material is not reclaimed first. 40 CFR 261.2(e)(1)(I) and (ii). The EPA would not view the shredding and grinding of the leather trimmings, in order to attain the required particle size, as reclamation. However, a secondary material is a solid waste if the product being produced is burned as a fuel,

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used in a manner constituting disposal, or used to produce products that are placed on the land. 40 CFR 261.2(e)(2). It is EPA's view that many sorbents (including adsorbents) are used on the land, which is a typical use when cleaning up spilled liquids on the ground; therefore, the leather trimmings would be defined as a solid waste. The remainder of this letter presumes that the leather trimmings being used to make adsorbents are defined as solid wastes.

As you correctly pointed out in your letter, waste scrap leather from various leather product manufacturing is defined as a solid waste that is exempt from hazardous waste regulation, provided that the hazardous characteristic for chromium is the only factor defining the waste as hazardous. 40 CFR 261.4(b)(6)(ii)(G). Thus, even if leather trimmings are solid waste because they will be used to produce products that are placed on the land, they would be exempt from hazardous waste regulation. The product adsorbents would also be exempt from hazardous waste regulation.

Below I have addressed your questions about the status of the adsorbents after they are used to clean up spills of various hazardous and non-hazardous wastes. I agree with the statement in your letter that when the adsorbent is used to adsorb listed hazardous waste, the resultant adsorbent/waste mixture would be defined as listed hazardous waste. I also agree with your statement that a RCRA waste determination must be made on mixtures of adsorbents with characteristic hazardous wastes. However, you also stated in your letter that it is your understanding that mixtures of exempt hazardous waste and non-hazardous waste are not regulated as hazardous (where the mixture only exhibits the characteristic of the exempted material). I do not agree that this interpretation applies to wastes generated from mixtures of adsorbents with spills of non-hazardous wastes; a waste determination would have to be made on the resulting mixture regarding any and all RCRA characteristics, including chromium. The reason for this is that EPA originally exempted specific wastes from the leather tanning and finishing industry based upon information submitted to EPA at that time. This information allowed EPA to determine that these wastes 1) contained chromium exclusively or nearly exclusively in the trivalent form, 2) were generated from an industrial process using trivalent chromium exclusively (or nearly exclusively), and the process does not

generate hexavalent chromium, and 3) the waste is typically and frequently managed in non-oxidizing environments. It would be inappropriate to extend the exemption for leather tanning and finishing wastes to any newly-generated wastes comprised of adsorbents (made from scrap leather) that are mixed with any number of possible spilled materials.

For example, the use of these adsorbents on an acid spill would result in a waste that might no longer meet the definition of corrosivity, if the sorbed acid no longer meets the definition of a liquid or aqueous waste (see 40 CFR 261.22). In this example, the mixture might only be hazardous due to the toxicity characteristic for chromium; and the mobility of chromium under these conditions would certainly be a potential concern that was not contemplated in the original information upon which the exemption in 261.4(b)(6)(ii) was based. Therefore, the identification of this newly-generated waste as characteristically hazardous for chromium would be appropriate and would ensure the safe management of this material. Conversely, exempting this mixture because the original leather trimmings were exempt, before being ground up and mixed with an acid, does not seem like a logical extension of the original exemption (nor one the Agency wants to encourage). Another example where the Agency would have a concern would be wastes resulting from the use of these adsorbents on used oil (the example in your letter was crankcase oil). If the resultant adsorbent/used oil mixture exhibited only the characteristic for chromium, it would be difficult to determine whether the chromium was present due to the adsorbent, the used oil (used oil can contain chromium), or some combination of both. There is no environmental benefit to making this determination in any event, as the risks posed by the adsorbed oil are the same regardless of the source of the chromium. Further, the Agency has a lengthy record for mixtures of used oil and other wastes, including sorbents, that would only be further complicated by the application of the waste scrap leather exemption. Therefore, the exemption for the original waste scrap leather would not be appropriate for this mixture.

Finally, I would like to reiterate your statement that you will need to check with the implementing agency of each state where the adsorbent would be marketed. Also, state regulators are typically most familiar with the location and acceptance criteria of disposal facilities within their states, as well as with any

particular state regulations that may impact the disposal requirements for these types of materials. If you have any questions on this information, please contact Ross Elliott of my staff at (703) 308-8805. Thank you for your interest in the recycling and safe management of solid and hazardous waste.

Sincerely yours,

Michael Shapiro, Director
Office of Solid Waste