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MEMORANDUM

TO: Keith Overcash  
Director, Division of Air Quality

FROM: Marc Bernstein *MB*  
Special Deputy Attorney General

DATE: September 28, 2009

RE: Commercial and Industrial Solid Waste Incinerators

This memorandum addresses an approach for implementing §129 of the Clean Air Act, 42 U.S.C. §7429, in the wake of the vacatur of applicable federal rules.<sup>1</sup>

When reviewing permit applications, the permitting agency (in this case the Division of Air Quality ("DAQ")) must determine whether a source is required to comply with the procedures and requirements of §129. In order to make that determination, DAQ must determine whether the source is a "solid waste incineration unit," which includes a determination of whether the unit is combusting "solid waste." "Solid waste" for this purpose is not defined by EPA. The statute merely refers to the Solid Waste Disposal Act ("SWDA") for implementation guidance. Several cases decided under the SWDA provide guidance regarding the definition of "solid waste" and what information DAQ must collect in order to make its determination.

The SWDA cases suggest that whether a material is "solid waste" is a highly fact specific determination. Therefore, for your guidance, I have attached a summary of the holdings of these cases along with a brief discussion of other pertinent issues from those decisions.

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<sup>1</sup> This is an advisory memorandum only. It has not been reviewed or approved according to the procedures for issuing Attorney General Opinions.

Based on those cases, you should request the following information from any permit applicant to support your determination. You may need to request additional information on a case-by-case basis.

1. Identification and description of the unit in which the applicant is requesting permission to burn the fuels.
2. A narrative description of the process by which the fuel was developed, beginning with virgin materials. The description should include (a) the approximate duration of each phase of the process, (b) the duration between phases, *i.e.*, storage times, (c) the location where each phase occurred in relation to the location where the fuel will be burned, (d) the involvement of any third parties (including contact information for those parties) and (e) whether the fuels were identified for use as fuels at the time they were created.
3. A narrative description of the complete industrial processes that occur on the site where the fuels will be burned. (A description of processes that are unrelated to the fuels and that will not use energy or other products of combustion of the fuels is not necessary.)
4. A physical and chemical description of the finished fuels, including the extent to which the fuels are physically and/or chemically similar to virgin materials that are also used for fuel and the extent to which the fuels are physically and/or chemically different from the virgin materials used to create them.
5. Identification and description of any existing markets for the fuels, including a discussion of the historical existence of the market, the size of the market and approximate prices for the fuels over time.
6. Identification of any treatment processes actually applied to the fuel at any stage or any treatment plan that applies to the fuel regardless of whether the plan was actually implemented. This should include all plans regardless of whether they were required by law or maintained by the applicant or a third party. This should also include all treatment processes applied by third parties.
7. A description of the general market use of the fuel material whether it is generally used as a fuel, another useful commodity or a waste. The description should include the approximate percentage of the total market that uses the material as a fuel, another useful commodity, or a waste.
8. A description of any benefits derived from the combustion of the fuels other than energy production.
9. To the extent possible, with regard to any third parties that handle the fuels, all of the above information.
10. Any other information relevant to whether the fuel is a solid waste, including whether it was discarded at any time, even briefly.

Once this information is provided by the applicant, DAQ should consult with the Division of Waste Management for assistance in determining whether the applicant has provided all the information requested; whether further information is needed; and whether the fuel should be determined to be a "solid waste." The final decision regarding the completeness of the application and whether the fuel is a "solid waste" must be made by DAQ.

## ATTACHMENT

### Major authorities regarding SWDA definition of “solid waste”

#### Statutory Definition

**RCRA §1004, 42 U.S.C. § 6903(27) (2009).**

The term “solid waste” means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880) [33 USC §1342], or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 USC §§2011 et seq.].

#### Major Case Decisions<sup>2</sup>

1. ***Safe Air v. Meyer*, 373 F.3d 1035 (9th Cir. 2004).**  
Practice of burning Kentucky bluegrass hay and stubble demonstrates that hay and stubble are not solid waste because the hay and stubble are used by the producers in a continuous on-site process that produces benefits for farming by conditioning the soil *etc.* The materials were not burned for fuel value.
2. ***Safe Food & Fertilizer v. EPA*, 350 F.3d 1263 (D.C. Cir. 2003).**  
EPA reasonably determined that feedstock and fertilizer made from zinc-bearing waste from unrelated industrial processes (*e.g.*, steel manufacturing using electric arc furnaces) were not solid wastes. This determination was based on a combination of the market participation and chemical identity theories (along with limits in order to ensure substantial chemical identity). The market participation theory refers to whether market participants treat the materials as a positively valued commodity or a negatively valued waste. Chemical identity refers to the fact that the product is substantially chemically identical to a product that is formed from virgin materials and used in the same manner. Additionally, the court held that if finished products are used in a useful manner and not “discarded,” “it follows that feedstocks used to manufacture them are also not ‘discarded’ – and therefore not waste – since the feedstocks are ingredients in a non-discarded final product.”  
Finally, the court clarified *AMC I* (discussed below), indicating that although use of a by-product by the party that produced the by-product tends to negate its characterization as a “solid waste,” the transfer of a by-product to a third party does not automatically mean it is “discarded.” In *AMC I* petroleum by-products were “returned to an appropriate stage in the refining process so they can eventually be used.” In *Safe Food & Fertilizer*

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<sup>2</sup> The cases are presented in reverse chronological order. Later cases should be understood to qualify earlier decisions.

the party that was using the by-product was producing fertilizer, which was entirely unrelated to the industrial processes that generated the by-product. The court concluded that this difference was not determinative.<sup>3</sup> The ultimate question continues to be whether the by-products could “reasonably be considered part of the waste disposal problem.”

3. ***Am. Petroleum Inst. v. EPA*, 216 F.3d 50 (D.C. Cir. 2000).**

(1) EPA may characterize primary treatment as the first step of waste disposal and therefore classify anything that is undergoing primary treatment as solid waste if EPA determines that the purpose of the primary treatment was to facilitate waste disposal. If the purpose of primary treatment was to recover valuable product for re-insertion into the production process, EPA may not characterize it as waste disposal. (2) EPA had authority to implement provisions regarding waste recycling to ensure against sham recycling; that is, to ensure that non-useful by-products were not recycled along with useful by-products for the sole purpose of avoiding waste disposal rules.

4. ***Ass’n of Battery Recyclers, Inc. v EPA*, 208 F.3d 1047 (D.C. Cir. 2000).**

For a material to escape classification as a solid waste, RCRA does not require that a material be reused immediately in the industrial process in the sense that no time passes. However, qualifying *AMC I* (discussed below), the material must be immediately reused in the sense that it must be directly reinserted into the industrial process.

5. ***Owen Elec. Steel Co. of S.C., Inc. v. Browner*, 37 F.3d 146 (4th Cir. 1994).**

Slag that sits untouched for six months before it is sold to other entities for reclamation is reasonably classified as solid waste. The “fundamental inquiry” is whether the materials are immediately recycled by the same industry.

6. ***United States v. ILCO*, 996 F.2d 1126 (11th Cir. 1993).**

Spent batteries from which a recycler extracted materials to produce lead ingots were solid waste because EPA reasonably concluded that an item needs only to be discarded once to be discarded. It does not need to be finally and forever discarded.

7. ***Connecticut Coastal Fishermen’s Ass’n v. Remington Arms Co.*, 989 F.2d 1305 (2d Cir. 1993)**

Lead shot and clay targets that have been left in the ground and water after being used for their intended purpose are solid waste.

8. ***Am. Mining Congress v. EPA*, 907 F.2d 1179 (D.C. Cir. 1990) (“*AMC II*”).**

It was within EPA’s discretion to regulate as “solid waste” materials that were stored on site in a holding pond that may be reclaimed some time in the future but were not at the time part of an ongoing industrial process, and in fact were being treated in wastewater treatment systems.

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<sup>3</sup> In both *AMC I* and *Safe Food & Fertilizer* the by-product was used as feedstock for a production line. No court has determined whether a by-product used for burning as fuel is a solid waste.

9. ***Am. Petroleum Inst. v. EPA*, 906 F.2d 729, 741 (D.C. Cir. 1990).**  
EPA had authority to regulate as a solid waste materials that were delivered to a third party as part of a waste treatment plan, because they were no longer part of an ongoing process. A material does not lose its status as solid waste just because it is reclaimed at some later time by a third party.
  
10. ***Am. Mining Congress v. EPA*, 824 F.2d 1177 (D.C. Cir. 1987) (“*AMC P*”)**  
Materials that were destined to be reused onsite by the same entity immediately as part of an ongoing industrial process were not discarded and were not solid waste.