Revised Definition of Solid Waste

John D. Fognani

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REVISED DEFINITION OF SOLID WASTE

John D. Fognani
Holland & Hart
Denver, Colorado

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I. INTRODUCTION

A. EPA's revised regulatory definition of solid waste and its revised reuse/recycling rules (hereinafter the "rules") were promulgated on January 4, 1985 in 50 Federal Register 614. The rules have been the subject of much criticism.

B. EPA's revised rules are contained in 8 pages of regulations and approximately 47 pages of preamble in the Federal Register.

C. Congress defined "solid waste" to include solid, liquid, semi-solid, and gaseous material as

"[A]ny 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 . . . ." 42 U.S.C. §6903(27) (emphasis added).

D. RCRA is divided into two parts (Subtitle C regarding hazardous waste control and Subtitle D regarding nonhazardous waste). EPA's regulatory definition of solid waste applies only to Subtitle C concerning hazardous wastes.
-- According to EPA, the statutory, not regulatory, definition of "solid waste" must be used for actions under §§ 3007, 3013, and 7003 of RCRA. See 50 Fed. Reg. at 627.


1. The petitioners argued that EPA exceeded its statutory authority by regulating secondary, in-process materials since the statute limits the definition of solid waste by referring to "discarded materials." Therefore, secondary materials which are reused or recycled, and not discarded, are beyond EPA's regulatory authority.

2. The petitioners also argued against EPA's arbitrary and capricious classification of secondary, mining and petroleum-related materials.

3. AMC asserted that the regulation would have a "chilling effect" on legitimate reuse/recycling of valuable secondary materials,

II. OVERVIEW OF THE RULES

A. EPA revised the regulatory definition of solid waste in an attempt to find a reasonable position between two unsatisfactory extremes:

1. That all secondary materials being recycled are solid wastes; or

2. That no secondary materials being recycled are solid wastes. See 50 Fed. Reg. at 617.

B. EPA's rules were revised to regulate off-site recyclers/reclaimers who were believed to be causing the majority of the documented damage incidents involving the recycling of secondary materials or wastes.

1. Because of its desire to regulate more than wastes or discarded materials, EPA arbitrarily swept into its regulatory program common and environmentally sound industry reprocessing practices.
2. The rules discourage, rather than encourage, beneficial materials reprocessing.

C. Understanding the rules.

1. EPA's prior rules.

a. Secondary materials, even if reused or recycled within an industrial process, that were "sometimes discarded" by someone, somewhere were regulated. 40 C.F.R. § 261.2 (1984). This standard was considered incomprehensible.

b. The old rules contained an arbitrary bias against reuse or recycling of "sludges," so that even beneficially reused/recycled sludges were regulated as solid and hazardous wastes. 40 C.F.R. § 261.6(b) (1984).

2. The present rules.

a. "Solid waste" is defined as any discarded material that is not excluded by 40 C.F.R. § 261.4(a) or that is not excluded by a variance under §§ 260.30 and 260.31 (see below).
b. The first step in determining whether a particular secondary material is a regulated solid waste is to determine whether the secondary material is excluded under 40 C.F.R. § 261.4 (a) because, for example, it is:

(1) Domestic sewage;

(2) Industrial wastewater discharge regulated as a point source under the CWA;

(3) In situ mining material not removed from the ground; and

(4) Atomic Energy Act source, special nuclear, or by-product material.

c. If none of the exclusions contained in 40 C.F.R. § 261.4(a) applies, the rules must be examined further.

d. Under the revised rules, "discarded material" is defined as any material which is:

(1) abandoned;
(2) considered "inherently waste-like," or

(3) recycled.

e. Material is abandoned if it is

(1) disposed of;

(2) burned or incinerated; or

(3) accumulated, stored, or treated before or in lieu of being abandoned, disposed of, burned or incinerated.

f. Material is considered "inherently waste-like" essentially if EPA decides it is. 40 C.F.R. § 261.2(d).

(1) EPA must list the waste based on promulgated criteria.

(2) The criteria seek to identify materials that are ordinarily disposed of, burned, or incinerated and which contain Appendix VIII hazardous constituents not ordinarily found in raw materials or products.
g. Recycling is the most important aspect of the revised rule.

(1) A secondary material is "recycled" if it is used, reused, or reclaimed.

(2) To determine whether a secondary material is a solid waste, one must know not only what type of secondary material is being recycled, but what type of recycling is taking place.

h. Five types of secondary materials, depending upon their use/reuse, may be classified as solid waste:

(1) Spent materials (which have been used and as a result have become contaminated).

(2) Sludges (which are solid, semi-solid, or liquid wastes);

(3) By-products (which are not one of primary products of a production process and not solely or separately produced);
(4) Scrap Metals (which are bits and pieces of metal parts or recyclable metal pieces); and

(5) Commercial chemical products (which are not used in the manner intended).

i. Secondary materials used in four types of recycling activities can be regulated as solid waste:

(1) If a secondary material (spent material, sludge, by-product, scrap metal, or commercial chemical product) is used in a manner constituting disposal (i.e., placed on land);

(2) If a secondary material (spent material, sludge, by-product, scrap metal, or commercial chemical product) is burned to recover energy, used to produce a fuel or contained in fuel;

(3) If a secondary material (spent material, listed sludge, or listed by-product) is reclaimed; or
(4) If a secondary material (spent material, sludge, by-product or scrap metal) is accumulated speculatively.

NOTE: Reclamation is defined as a process involving recovery of a usable product or regeneration of a product.

j. Three recycling uses of secondary materials are considered to be exempt from the solid waste definition:

(1) Secondary materials used as ingredients in industrial processes.

(2) Secondary materials used as effective substitutes for commercial products.

(3) Secondary materials generated on-site and returned to the original production process without any intermediate processing ("closed loop" exception).

NOTE: Although EPA's proposed definition of solid waste, 48 Fed. Reg. 14472 (April 4, 1983), excluded secondary materials used as substitutes for raw materials or feedstocks, the final, revised definition did not retain this exemption.
k. Non-listed by-products or sludges are not regulated under the definition of solid waste, if and when reclaimed.

(1) Caveat -- The "speculative accumulation" rule requires 75% recycling within a calendar year.

(2) Variances may be obtained from a Regional Administrator in limited circumstances on a case-by-case basis.

III. EXAMPLES ILLUSTRATIVE OF PITFALLS UNDER THE RULES

A. Great caution must be exercised to avoid unintended regulatory consequences in reusing or recycling secondary materials.

1. Even if materials are traditionally or commonly reused or recycled as feedstocks or raw material substitutes, practices must be re-examined in light of EPA's revised rules.

2. Wastes (i.e., sludges or by-products) which have been listed by EPA as hazardous wastes pose problems under the rules.
B. Examples serve to demonstrate the various regulatory consequences under the rules.

Distinctions in the rules are drawn depending on whether secondary materials are listed or unlisted hazardous wastes and whether they are reused or recycled on- or off-site.

3. Assume the secondary materials are listed hazardous waste (because of toxicity), and are being shipped from off-site for reuse or recycling.

(a) Listed hazardous waste must be appropriately manifested and transported from off-site to the site of reclamation.

(b) Unless the listed hazardous waste is used immediately, storage for any amount of time at an owner/operator's facility will require the owner/operator to obtain a storage permit from EPA for the materials.

(c) According to the revised rules, the material remains a solid waste (and therefore hazardous waste) until actually reclaimed.
(d) The "downstream" consequence of reusing or recycling a listed hazardous waste is significant.

(1) EPA's "derived from" rule
   (§ 261.3(c)(2)) provides that any waste or residue derived from the reclamation of a listed hazardous waste automatically results in the residue or waste being classified as a hazardous waste. (50 Fed. Reg. 619 at n.7).

(2) Because of EPA's "mixture" rule
   (§ 261.3), any mixture of a listed hazardous waste with a non-listed hazardous waste results in automatic classification of the entire mixed waste or material as hazardous waste.

4. Assume a listed sludge or listed by-product is generated and used on-site.

   (a) If the material is returned to original production process, without any intermediate processing, it is not a solid waste and not regulated under EPA's revised rules.
(b) If the material is dewatered first for use in an industrial process, the dewatering phase is considered intermediate processing and results in regulation of the material as a solid waste. The consequences are as follows:

1. Storage of the material before reuse or recycling requires a storage permit.

2. The material remains a solid (and hazardous) waste until it is reclaimed.

3. The consequences of the "derived from" rule attach.

5. Assume that the material is not listed, and is generated and reclaimed on-site.

(a) No regulatory consequences attach in reclaiming the material.

(b) However, the "speculative accumulation" rule requirements must be met (i.e., the material will be classified as a solid waste if 75% of it is not used within a calendar year. If 75% is not recycled, a
variance may be sought and obtained from EPA.

6. Assume the material is a spent material.

(a) Regardless of how it is reclaimed (unless it meets one of the three exemptions set out in II.C.j. above), it remains a solid waste.

7. Assume the material contains precious metals which can be recovered in "economically significant" quantities --

(a) A "conditional exemption" exists.

(b) Off-site shipment requires compliance with the manifesting, transportation, and recordkeeping regulations.

(c) No storage permit is required -- the intrinsic value of the material is recognized -- and appropriate measures to prevent escape of material are considered to be taken.

(d) The "speculative accumulation" rule must nevertheless be met.