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

OCT 4 2005

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

**MEMORANDUM**

SUBJECT: Guidance for Identifying Incidental Processing Activities

FROM: Matthew Hale, Director
Office of Solid Waste

TO: RCRA Waste Management Directors
Regions I - X

Resource Conservation and Recovery Act (RCRA) Subtitle C regulations define solid wastes for the hazardous waste regulatory program, in part, by distinguishing between: (1) secondary materials that are used or reused as products or ingredients to make products, and (2) those that must undergo reclamation before they can be used or reused.[1] Secondary materials that are used or reused directly without reclamation generally are not regulated under the Subtitle C regulations because they are not considered solid wastes (see 40 CFR 261.2(e)).[2] In contrast, secondary materials that undergo reclamation are often solid wastes and, if hazardous, may be subject to the hazardous waste regulations. (See 40 CFR 261.2(c).)[3]

On several occasions, members of the regulated community have raised questions about whether materials that undergo some limited processing before they are used as products or ingredients are excluded from regulation as solid wastes under 40 CFR 261.2(e). For example,

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[1] A secondary material is a material that potentially can be a solid and hazardous waste when recycled (e.g., spent materials, sludges, by-products, scrap metal, etc.). See 50 FR 616, footnote 4 (Jan. 4, 1985).

[2] Materials involving use, reuse and return to the original process continue to be solid wastes if the materials are used in a manner constituting disposal or used to produce products applied to the land; or are burned for energy recovery, used to produce a fuel, or contained in fuels; or are accumulated speculatively. See 40 CFR 261.2(e)(2)(i)-(iii).

[3] Note that proposed changes to the regulations governing reclaimed secondary materials were discussed in a Federal Register notice published on October 28, 2003 (68 FR 61557).



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these persons have identified the uncertainty over whether a material is reclaimed versus used/reused under 40 CFR 261.2(e)(1) as a real or perceived barrier to recycling and pollution prevention efforts.

The preamble to the 1985 Definition of Solid Waste regulations states that materials which undergo only "incidental processing" are not reclaimed and thus can be excluded under the use/reuse provisions. (See January 4, 1985, 50 FR 639.) That preamble also states that processing steps that do not themselves regenerate or recover material values and are not necessary to material recovery are not reclamation. The preamble also provides some specific examples of such processes. We have become aware that some people have interpreted these examples to be the only examples of incidental processing.

Toward addressing this issue, the EPA-State Definition of Solid Waste Network formed a workgroup to develop guidance and help facilitate regional and state efforts in making incidental processing determinations. Please find attached the product of that workgroup, entitled "Guidance for Identifying Incidental Processing Activities."

We believe this guidance will assist the regulated community, states, and EPA regions in identifying incidental processing activities and distinguishing them from reclamation on a site-specific basis. We encourage the regulated community, states, and EPA regions to work together to utilize this clarifying guidance to maximize the nation's safe use/reuse of valuable materials.

If you have questions about the "Guidance for Identifying Incidental Processing Activities," please contact Cheryl Nelson at (415) 972-3291 or Jim O'Leary at (703) 308-8827.

# GUIDANCE FOR IDENTIFYING INCIDENTAL PROCESSING ACTIVITIES

U.S. EPA, Office of Solid Waste
October 2005

This document provides guidance to help the Environmental Protection Agency (EPA), states, and regulated community in considering what types of activities constitute incidental processing for purposes of EPA's regulations under the Resource Conservation and Recovery Act (RCRA). More specifically, activities considered as incidental processing may be excluded from RCRA regulation under the use/reuse recycling provision of 40 CFR 261.2(e)(1) rather than being considered RCRA regulated reclamation activities under 40 CFR 261.2(c)(3).

This document does not substitute for EPA's regulations, nor is this document a regulation, itself. Thus, this guidance cannot impose legally-binding requirements on EPA, states, or the regulated community, and only applies to a particular site-specific situation based upon the circumstances. EPA also may change this guidance in the future, as appropriate.

Use and reuse of materials that would otherwise be disposed of conserves our natural resources by minimizing the use of raw materials, saving disposal capacity, and making use of the value remaining in these materials. In some cases, these materials may undergo some degree of processing before or during reuse. The goal of this document is to provide guidance on when these activities may, based on case-specific circumstances, involve "incidental processing," as opposed to reclamation that may be regulated as a hazardous waste management activity.[1] Of course, regardless of whether such operations are regulated under RCRA, operators should undertake these activities in a manner that prevents any releases to the environment, and should manage any wastes that are generated in compliance with all applicable laws and regulations.

The RCRA hazardous waste management regulations recognize that not all recycling activities involve waste management. Legitimately using or reusing secondary materials as ingredients in an industrial process or as effective substitutes for commercial products is therefore excluded from RCRA regulation pursuant to the use/reuse exclusions of 40 CFR 261.2(e).

The recycling term "used or reused" is defined in the RCRA regulations (40 CFR 261.1(c)(5)). A secondary material is "used or reused" when it is: (1) employed as an ingredient in an industrial process and distinct components of the secondary material are not recovered as separate end products, or (2) employed in a particular function or application as a substitute for a commercial chemical product without reclamation.

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[1] Under the current hazardous waste regulations, neither use/reuse nor reclamation of characteristic sludges, characteristic by-products, commercial chemical products, or scrap metal is subject to regulation. Consequently, it is not necessary to distinguish incidental processing from reclamation for these materials, and this guidance is not relevant to them. See Table 1 cited in 40 CFR 261.2(c)(3).

The first step in deciding whether a secondary material qualifies for the use/reuse exclusion at 40 CFR 261.2(e) is to determine whether the recycling activity is legitimate.[2] If the recycling is legitimate, the second step is to determine whether the recycled material is inherently waste-like or will be burned for energy recovery, used in a manner constituting disposal, or speculatively accumulated, any of which would normally disallow the exclusion for the secondary material (40 CFR 261.2(e)(2)). If neither the first nor second step precludes the material from use/reuse, the third step is to decide whether a reclamation step is involved in the recycling process.

**General Description of Reclamation**

The exclusions of 40 CFR 261.2(e)(1) are conditioned on a secondary material being used or reused, without reclamation. A material is reclaimed if it is processed to recover a useable product (material recovery) or if it is regenerated (40 CFR 261.1(c)(4)). Wastes are regenerated when they are processed to remove contaminants in a way that restores the wastes to their useable original condition. Examples of regeneration given in the 1985 Definition of Solid Waste rule are reclamation of spent solvents or reclamation of other spent organic chemicals. Secondary metal smelting is an example of processing to recover a useable product (or material recovery). (See January 4, 1985, 50 FR 633.)

**General Description of Incidental Processing**

Questions arise, however, when there are processing steps prior to, or during, the main use/reuse activity, concerning whether such processing steps constitute reclamation or incidental processing. Incidental processing includes only those processing steps that are not necessary to material recovery, and which do not themselves regenerate the material or recover material values. (See 50 FR 639.) Examples of incidental processing provided in the preamble to the 1985 Definition of Solid Waste rule include:

- wetting of dry wastes to avoid wind dispersal
- briquetting of dry wastes to facilitate resmelting
- sintering or thermally agglomerating iron-bearing materials before charging them to a blast furnace

All of the examples discussed in the 1985 preamble are activities that: (1) change a material's physical form without changing the mass of the material or its chemical composition, or (2) make only a minor change to the mass of the material, which also may make a minor change to the chemical composition of the material. Using this same concept, the Agency has

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[2] An April 26, 1989, guidance memorandum identifies and discusses several factors used, where appropriate, to conduct this evaluation. Memorandum from Sylvia K. Lowrance, Director, U.S. EPA Office of Solid Waste to Hazardous Waste Management Division Directors, U.S. EPA Regions I - X, April 26, 1989. This evaluation is also discussed in a proposed rule published in the Federal Register on October 28, 2003 (68 FR 61557).

since identified a number of other examples where processing of materials is considered "incidental." In these examples, the processing steps only made changes to the physical form or minor changes to the mass of the material. Examples include:

- Shredding and grinding leather trimmings to attain required particle size[3]
- Triple distillation of 99% pure mercury to a higher specification[4]
- Filtration to protect the mechanical integrity of product handling equipment, such as pumps[5]
- Final filtration to remove minute quantities of particulate matter to guarantee the physical quality of the product[6]

These incidental processing activities may take place at any step during the use/reuse process. In addition, a process may involve more than one such processing step and still not be considered reclamation when the cumulative effect of all processing activities results in only the kinds of processing changes that would be considered "incidental." Finally, incidental processing steps in operations using secondary materials are likely to be similar to comparable "incidental" steps in analogous production processes using virgin raw materials.

**Additional Examples of Incidental Processing**

Understanding the concept of incidental processing is important for those implementing the hazardous waste management regulations because of the potential regulatory implications. To assist in understanding this concept, we offer some additional examples of processing activities that may, depending on site-specific circumstances, fall within the concept of "incidental processing." As noted above, all of the examples of incidental processing previously discussed by the Agency have been activities that simply: (1) change the material's physical form without changing the mass of a material or its chemical composition, or (2) make only a minor change to the mass of the material, which also may make a minor change to the chemical composition of the material. We believe the following types of activities may also fall within this general construct, which we have generalized from the 1985 preamble. Thus, depending on site-specific circumstances, secondary materials that are used or reused in operations that include these types of activities may meet the 40 CFR 261.2(e) use/reuse exclusion:

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[3] June 11, 1996 letter to Donald P. Gallo, Michael, Best & Friedrich, from Michael Shapiro, U.S. EPA.

[4] May 30, 1986, letter to Bruce J. Lawrence, Bethlehem Apparatus Company, Inc. from Matthew A. Straus, U.S. EPA.

[5] November 30, 2000, letter to Jeffrey Scott, U.S. EPA, from Elizabeth Cotsworth, U.S. EPA.

[6] November 30, 2000, letter to Jeffrey Scott, U.S. EPA, from Elizabeth Cotsworth, U.S. EPA.

- A process that increases or reduces particle size, including crushing
- Melting of base metals (as when lead or scrap metal is introduced to a production process and converted from a solid into a liquid, or when solder is melted and used in a molten form in solder pots)
- Viscosity adjustment
- Minor physical or gravity separation without the addition of chemicals (e.g., flocculation agents)
- Screening or filtering to protect the integrity of downstream pumps or equipment from inert foreign objects such as loose screws, nuts, bolts, cigarette butts, etc.
- Ensuring purity by separating minor amounts of foreign material (e.g., grit, ash, or water)
- Final processing (e.g., clarifying or settling) of a material that closely resembles a finished product to remove minor impurities

In evaluating situations like the examples above, another indicator to consider in determining whether an activity may be incidental processing, as opposed to reclamation, is to evaluate whether an analogous process using raw materials includes the same or similar "incidental" (as discussed above) activities, at the same point in the process. For example, some processes that use virgin materials filter out small amounts of ash, other inert process residues, or water as a polishing step. This is often the case for processes that produce products marketed as "ultrapure," such as pharmaceuticals and high grade solvents. Thus, it may be appropriate to view similar steps to be incidental processing when making analogous products from secondary materials.

Please note that most states are authorized to implement the RCRA hazardous waste program. State regulations, therefore, apply in authorized states in lieu of the federal regulations. Persons with questions about how the hazardous waste regulations apply to their operations should contact their implementing state agency or EPA regional office (in states not authorized for the RCRA program).