Definition of Solid Waste – Final Rule
Summary

Overview: This rule defines what materials are considered "traditional fuels" and which materials are considered fuels or ingredients vs. wastes when burned in a combustion unit. Generally, EPA concludes that most non-hazardous secondary materials burned in combustion units are defined as solid wastes under RCRA. However, this rule provides exceptions to that determination for non-hazardous secondary materials that which are legitimately used as a fuel or ingredient. The flowchart for fuels is attached, though there is a similar flowchart for ingredients.

Traditional Fuels (do not need to meet legitimacy criteria):
Materials that are produced as fuels and are unused products that have not been discarded and therefore are not solid wastes, including:

1. Fuels that have been historically managed as valuable fuel products rather than being managed as waste materials, including fossil fuels (e.g. :Coal, oil, natural gas), their derivatives (e.g. petroleum coke, bituminous coke, coal tar oil, refinery gas, synthetic fuel, heavy recycle, asphalts, blast furnace gas, recovered gaseous butane and coke oven gas) and cellulosic biomass (virgin wood; and
2. Alternative fuels developed from virgin materials that can now be used as fuel products, including,
    - used oil which meets the specifications outlined in 40 CFR 279.11
    - currently mined coal refuse that previously had not been usable as coal, and
    - clean cellulosic biomass (defined in rule – includes forest-derived biomass, biomass crops grown for energy production, crop residues such as peanut hulls, and wood or clean biomass from fire clearance, disaster debris, land clearing or clean construction & demolition wood. To be clean, must not have contaminants at levels atypical of virgin biomass materials.)

To be fuels these materials must not have been discarded.

In order for other materials to be considered to be fuels or ingredients rather than waste materials, the materials must 1) remain within the control of the generator and 2) meet legitimacy criteria.

1. To be within the control of the generator, the non-hazardous secondary material must be generated and burned in combustion units at the generating facility or provided the facility combusting the non-hazardous secondary material is controlled by the generator, or the generating facility and combusting facility are under control of the same person, the material may be burned in combustion unit at a facility controlled by the generator or the person who both the generating and combusting unit are under the control of. If the material will be used as a fuel, a source can petition the EPA Regional Administrator to obtain a non-waste determination where the material does not remain under the control of the generator.
2. The legitimacy criteria remain unchanged from the proposal and are shown in the attachments. Clarifying notes from the preamble are also included on the attachments.

Materials that are generally non-wastes (if they meet legitimacy criteria)

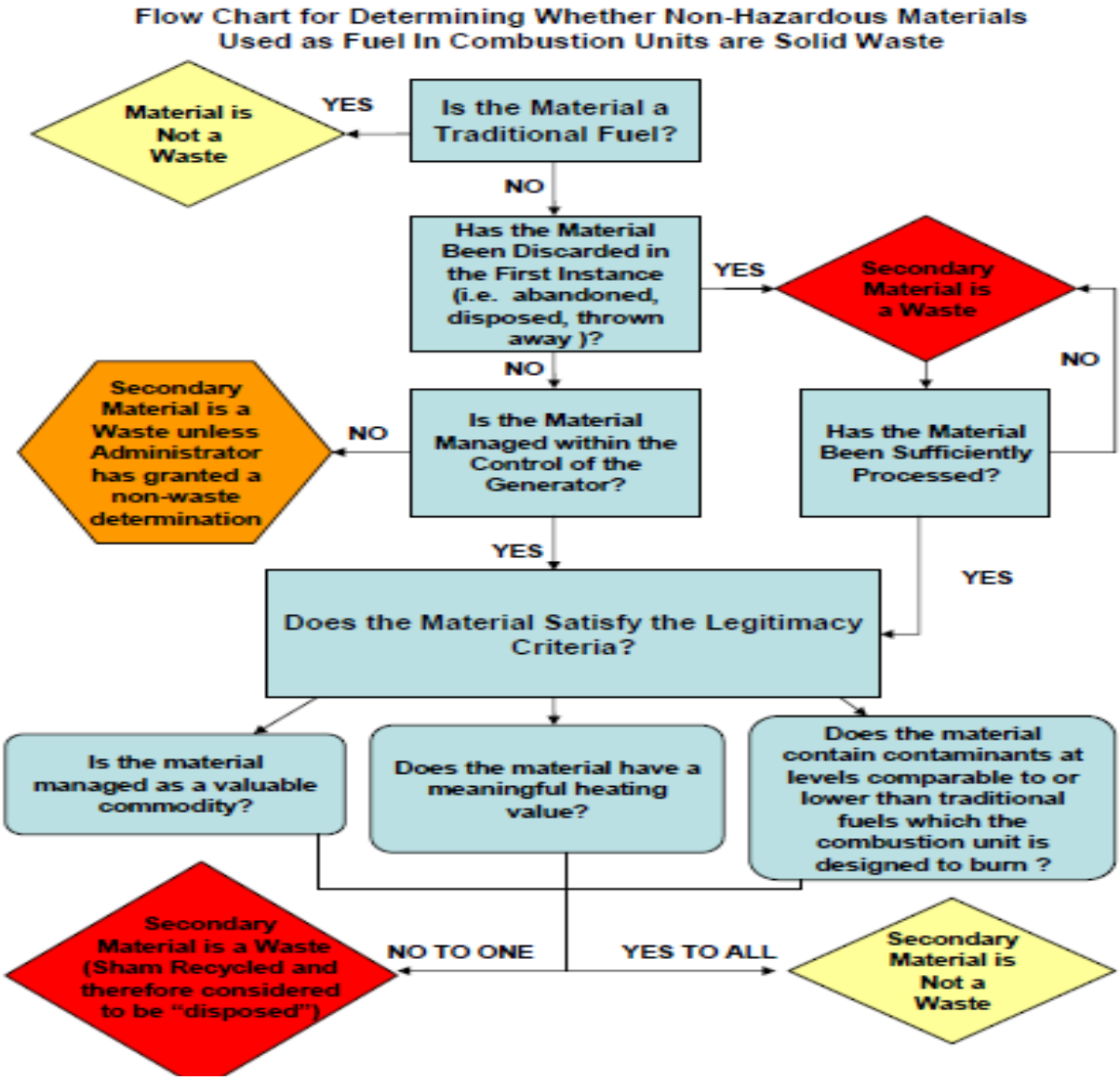
- Pulp and Paper Sludge (primary cellulosic fibers and secondary sludge)

Materials that are generally wastes - may be processed and if they meet legitimacy criteria can be non-waste

- Manure as generated is a waste. May be able to be processed to become non-waste
- Off-spec used oil – must be processed to be on spec to become a non-waste
- Other biomass including Creosote treated timber, PCP, copper-based and borate-based treated wood, C&D wood. Borate based wood is the only one that appears to meet contaminant based criteria. Processing required for rest to meet legitimacy criteria. Also must meet control requirements or petition,
- CCR – must determine primary use – fuel or ingredient and use appropriate legitimacy criteria. If material previously disposed can process to meet criteria. If used as material in cement kiln may be non-waste.
- Sewage Sludge (generally cannot meet legitimacy criteria on contaminants vs coal)
- Coal Refuse from legacy piles – however if processed similar to coal, could become non-waste
- Processed Fats (animal and vegetable oils) – when processed meet non-waste criteria
- EPA also considered the following material ingredients: Cement Kiln Dust, CCR, Foundry Sand and Blast furnace Slag /Steel Slag

Key positive changes from the proposal are related to which materials may be considered to be non-wastes if they meet the legitimacy criteria:

- Scrap Tires which are used in a combustion unit that are removed from vehicles and managed under the oversight of established tired collection programs
- Resinated wood used in a combustion unit



Legitimacy criteria for non-hazardous secondary materials used as a fuel in combustion units:

i. The non-hazardous secondary material must be managed as a valuable commodity based on the following factors:
   a. The storage of the non-hazardous secondary material prior to use must not exceed reasonable time frames;
   b. Where there is an analogous fuel, the non-hazardous secondary material must be managed in a manner consistent with the analogous fuel or otherwise be adequately contained to prevent releases to the environment;
   c. If there is no analogous fuel, the non-hazardous secondary material must be adequately contained so as to prevent releases to the environment;

ii. The non-hazardous secondary material must have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy.

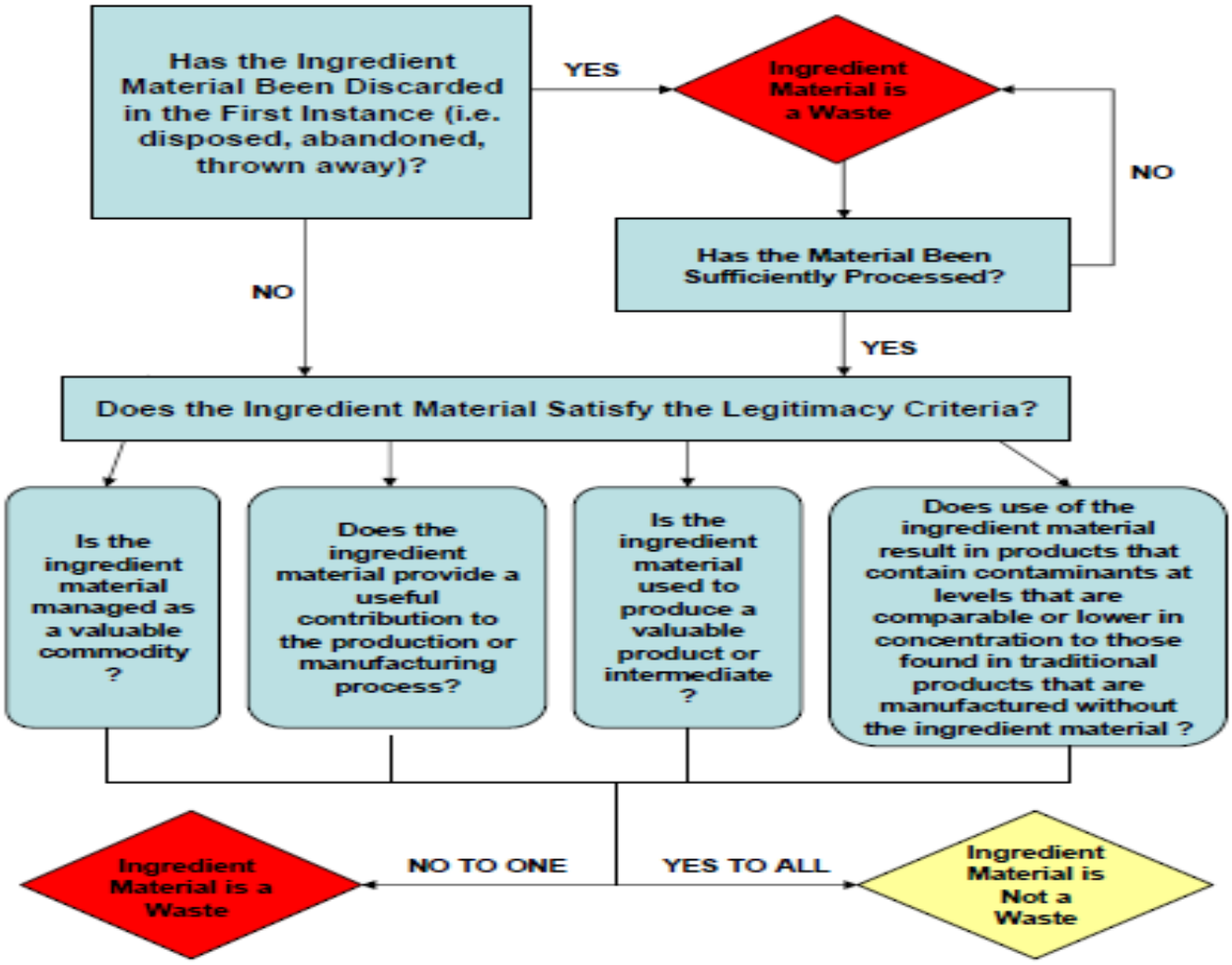
iii. The non-hazardous secondary material must contain contaminants at levels comparable in concentration to or lower than those in traditional fuels which the combustion unit is designed to burn. Such a comparison is to be based on a direct comparison of the contaminant levels in the non-hazardous secondary material to the traditional fuel itself.

NOTE:

ii. Meaningful heating value - EPA has not established a numerical criteria but states that a source must demonstrate that the energy recovery unit can cost-effectively recover meaningful energy from the material being used as fuel.

iii. Comparable levels of contaminants - In order to meet criteria you must have comparable levels of HAPs and Section 129 (a) (4) pollutants in the non-hazardous secondary material and in the fuel that would otherwise be burned in the unit.

Flow Chart for Determining Whether Non-Hazardous Secondary Material Ingredients Burned In Combustion Units are Solid Wastes



Legitimacy criteria for non-hazardous secondary materials used as an ingredient in combustion units:

i. The non-hazardous secondary material must be managed as a valuable commodity based on the following factors:
   a. The storage of the non-hazardous secondary material prior to use must not exceed reasonable time frames;
   b. Where there is an analogous fuel, the non-hazardous secondary material must be managed in a manner consistent with the analogous fuel or otherwise be adequately contained to prevent releases to the environment;
   c. If there is no analogous fuel, the non-hazardous secondary material must be adequately contained so as to prevent releases to the environment;

ii. The non-hazardous secondary material must provide a useful contribution to the production or manufacturing process. The non-hazardous secondary material provides a useful contribution if it contributes a valuable ingredient to the product or intermediate or is an effective substitute for a commercial product.

iii. The non-hazardous secondary material must be used to produce a valuable product or intermediate. The product or intermediate is valuable if:
   a. The non-hazardous secondary material is sold to a third party, or
   b. The non-hazardous secondary material is used as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process

iv. The non-hazardous secondary material must result in products that contain contaminants at levels comparable in concentration to or lower than those found in traditional products that are manufactured without the non-hazardous secondary material. (contaminants of concern are HAPs and Section 129 pollutants)