Attachment C

Issues That Are Not Addressed by the Conceptual Approach

A. Ingredients

1. How does EPA's conceptual approach apply to ingredients?

2. EPA still needs to correct its assumptions about when combustion takes place. The NHSM Rule only addresses secondary materials that are combusted. According to OSWER, the definition of combustion is left to the Air Office. However, the preamble makes assumption that combustion is taking place in circumstances when it is not (i.e. use of secondary materials in cement kilns to make clinker).

B. Foundry Sand.

The preamble asserts for the first time that if a secondary material requires thermal reclamation then it is always a waste, even though the D.C. Circuit has held that, notwithstanding reclamation, and even storage before reclamation, material that is destined for reuse as part of a continuous industrial process is not abandoned or thrown away and therefore is not discarded. ABR, 208 F.3d 1047, 1056 (D.C. Cir. 2000).

We also note that with this preamble language EPA is placing facilities in a Catch-22 situation. If a facility thermally processes its material, it can destroy contaminants and return the material to the production process as a non-waste. This activity meets EPA's definition of processing and the material itself is never discarded. However, EPA also is saying that such processing turns the material into a waste.

EPA should disavow its preamble language on thermal treatment of foundry sand at the same time it rewrites its interpretation of the rest of the final rule.

C. Factory Scrap Tires.

The <u>rule language</u> states that scrap tires used in a combustion unit that are <u>removed from vehicles</u> and managed under the oversight of established tire collection programs are not solid wastes when combusted if they meet the legitimacy criteria. But, tire collection programs also collect unused tires from factories that were never placed on a vehicle because they did not meet the company's standards for sale as a tire.

Only a rule change can fix this problem because the rule language is so specific.

D. Off-specification Used Oil.

Off-specification used oil also is not discarded and is collected in programs similar to those used to manage TDF.

E. Treated Wood.

Certain types of treated wood (e.g., railroad ties), are not discarded and is collected in programs similar to those used to manage TDF.

F. Definition of Contained Gaseous Material

The NHSM Rule identifies when a non-hazardous secondary material is a solid waste when combusted for the purpose of determining the applicability of section 129 if the Clean Air Act. The 2000 CISIW Rule had previously had its own definition of solid waste as well as a definition of contained gaseous material. The 2011 CISWI Rule deleted both of these definitions. The NHSM Rule does not include a definition of contained gaseous material. Moreover, the response to comments on the NHSM Rule calls into question the definition of contained gaseous material that previously existed in the CISWI Rule. A letter from EPA states that no change in policy was intended. However, the regulatory history (the promulgation and then the deletion of a definition and the failure to repromulgate the definition in the successor rule) plus the response to comments language, leaves the question of the regulatory status of gases in pipes still open to question, notwithstanding the EPA letter. To provide firm regulatory grounds for its position that gases in pipelines are not solid wastes, EPA should repromulgate the definition of contained gaseous material as part of the NHSM Rule.

Because this definition was previously in rule language, only a rule change can address this issue.

G. Definition of Contaminants.

Rule language:

Contaminants means any constituent in non-hazardous secondary materials that will <u>*result in emissions*</u> *of the air pollutants identified in Clean Air Act section 112(b) or the nine pollutants listed under Clean Air Act section 129(a)(4)) when such non-hazardous secondary materials are burned as a fuel or used as an ingredient, including those constituents that could generate products of incomplete combustion.* 40 C.F.R. 241.2.

Preamble language:

On the one hand, some language in the preamble agrees with the rule language that emissions determine whether a material is a contaminant:

EPA is defining the term ''contaminant,'' as constituents that will result in emissions of the air pollutants identified in CAA section 112(b) and the nine pollutants listed under CAA section 129(a)(4) when such non-hazardous secondary materials are burned as a fuel or used as ingredients, including those constituents that could generate products of incomplete combustion. EPA has decided that these constituents are appropriate for the comparisons required by this criterion because these are the contaminants identified in the CAA that are to be considered by EPA in evaluating which contaminants to establish emission standards. 76 Fed. Reg. at 15524.

We believe that ''comparable'' is protective because it ensures that ***no more contaminants than those found in traditional fuels are released into the environment****. EPA has already determined that these contaminants pose a threat to human health and the environment. Therefore, the Agency will finalize the proposed approach of evaluating all of the contaminants to ensure that they are present in the non-hazardous secondary material at levels that are comparable to (or lower than) the concentrations found in traditional fuels that the combustion unit is designed to burn.* 76 Fed. Reg. at 15524.

On the other hand, other parts of the preamble disagree with the rule language that a constituent is only a contaminant if it results in emissions:

[W]e disagree with those commenters who argue that we should not be considering the contaminants in the non-hazardous secondary materials themselves as part of the legitimacy criteria, but, if considered necessary, compare the emissions profiles from the combustion units. In order for a nonhazardous secondary material to be considered a non-waste fuel, it must be similar in composition, whereas comparing the emissions profiles between combustion units that burn traditional fuels and non-hazardous secondary materials only tells one how well the combustion unit is operating, not what the secondary material is that is being burned. 76 Fed. Reg. at 15525.

The preamble also is inconsistent on how to determine if a constituent is a contaminant:

The metal wire in tires is 98.5 percent iron, but it is a small component of the TDF when processed. The Agency has determined that the concentration of iron in the processed TDF chips is comparable to those in coal. However, iron is not a HAP, nor are the other components of the wire expected to be released to the emissions in a typical boiler. Rather, the wire ends up in the bottom ash such that, according to one commenter, the metal can be recovered. 76 Fed. Reg. at 15493.

These inconsistencies raise the following issues and questions:

1. In the preamble, the Agency stresses that contaminant levels are based on the composition of a material and not on emissions, but contaminants are defined based on emissions. However, if a constituent is present in a secondary material but the combustion of that material will not result in emissions of that constituent, the constituent does not meet the definition of a contaminant and should not be considered when making a legitimacy determination. EPA must revise its

discussion of emissions in the preamble, which are inconsistent with the rule language. Or, if EPA has a different intent, it must amend the definition of contaminant.

2. In the preamble discussion of TDF, the Agency appears to say that the metal constituents of TDF are irrelevant to the legitimacy determination because the metals will end up in the bottom ash, and will not be released to the air. EPA makes the same point in its materials characterization paper for TDF. While this is consistent with the definition of contaminant, it is inconsistent with the discussion of emissions elsewhere in the preamble. How does this analysis apply to other secondary materials, such as the metals in coal refuse? EPA must revise its discussion of emissions from material other than TDF to be consistent with the TDF discussion and with the definition of contaminant in the rule language.

H. Processing

Rule Language:

Processing means any operations that transform discarded non-hazardous secondary material into a non-waste fuel or non-waste ingredient product. Processing includes, but is not limited to, operations necessary to: Remove or destroy contaminants; significantly improve the fuel characteristics of the material, e.g., sizing or drying the material in combination with other operations; chemically improve the as fired energy content; or improve the ingredient characteristics. Minimal operations that result only in modifying the size of the material by shredding do not constitute processing for purposes of this definition.

Preamble Language:

With respect to the technical question of how much wire must be removed before the amount of processing is considered sufficient, the specific unit types that use TDF chips require different levels of metal removal for handling concerns as noted by commenters. The ASTM Standard D 6700 ''Standard Practice for Use of Scrap Tire-Derived Fuel'' 97 describes the process for ''dewired'' and has a helpful guideline on the appropriate amount of wire removal for different unit types under the topic titled ''Handling Considerations Conveying, Grate and Ash.'' However, the ASTM standard is concerned with proper dewiring and not whether the resultant material is a waste or non-waste fuel. 76 Fed. Reg. at 15498.

In summary, EPA considers that previously discarded tires that have been made into TDF (shredded/chipped, sized, sorted, and with a significant portion of the metal belts or wire removed, at a level appropriate for the unit), meets the definition of ''sufficient processing.'' 76 Fed. Reg. at 15499.

For TDF EPA is requiring facilities to remove the same material (metal) as part of processing a material into a non-waste that elsewhere EPA says is not a contaminant

because the metal ends up in the bottom ash and not in emissions. EPA must resolve this inconsistency.

I. Third-party transfers.

EPA has no record to support a specific determination that the third-party transfer of non-hazardous secondary material constitutes discard. We continue to believe that EPA has no authority to make the generic determination that all third-party transfers constitute discard. This position was rejected by the court in *Safe Food and Fertilizer v. EPA,* 350 F.3d. 1263.