

Working examples for waste determination

Recently the DAQ posted the latest memorandum from the AG's office dated July 20, 2011 discussing the new EPA waste definitional rule. Below please find a working document of some examples that illustrate how DAQ believe the rule (40 CFR 241) is implemented. The take home lesson is (1) Is it a traditional fuel? (that has not been discarded), (2) If not, is it a secondary material that is not a waste? (must still meet cleanliness standard), (3) If not, do you want to petition the EPA for a last chance? and (4) If not – it's waste.

Examples of the Use of the EPA's Definitional Rule

The EPA promulgated a new "definitional" rule to elucidate the applicability of CISWI. The rule notes that traditional fuels are not solid wastes, and that some secondary materials (materials not the primary product of a process) are also not waste. Within the definition of traditional fuel there are (1) historical fuels (including [virgin] cellulosic biomass) and (2) alternative fuels (including clean cellulosic biomass (CCB)). The final statement within the definition, "These fuels are not secondary materials or solid wastes unless discarded," refers to both traditional and alternative fuels *as defined* by the rule (since petroleum coke cannot be considered non-secondary in any practical sense). These "traditional fuels" (both historical and alternative) are rarely discarded and would, in any event, not require a petition of the EPA to determine whether they had been discarded.¹ Generally, the definitions under §241.2 define materials that are not secondary materials.

Secondary materials are generally solid waste unless they either (1) fit into one of the 4 exemptions given in §241.3(b), or (2) have been defined as not a solid waste by the EPA through the petition process described under §241.3(c).

Some examples are helpful.

Peanut Shells – This biomass is specifically included in the definition of CCB and therefore is an alternative traditional fuel. As an alternative traditional fuel it is not a secondary material and, unless discarded, is not a waste (see the attorney general's five factor test). The EPA need not be petitioned to determine whether peanut shells are discarded or not. The only caveat for all alternative traditional fuels is they cannot contain contaminants not normally associated with virgin biomass materials (in this case pristine peanut shells), or in concentrations not normally associated with pristine peanut shells.

Pulp and Paper Sludge – This is not an historical fuel (e.g., it has not been historically managed as a valuable fuel product), nor is it listed as a CCB. Therefore, pulp and paper sludge is not a traditional fuel. Sludge from a wastewater treatment plant at a pulp and paper facility is a non-hazardous secondary material, and must therefore be identified under §241.3 to determine if it is a waste. This section defines what secondary wastes are not solid wastes when burned using possible 4 scenarios:

¹ The only traditional fuels that would be considered solid waste would be those that are discarded. Five of the ten factors used by the NC DAQ in the past are valid for determining this question. The attached memorandum lists those five factors.

(b)(1) Under this section the sludge could be burned as a non-solid waste at the generating pulp and paper facility if the sludge met the legitimacy criteria. The EPA need not be petitioned under this provision.

(b)(2) Under this section, tire scarps (meeting certain requirements) and resinated wood meeting the legitimacy criteria can be burned as non-waste material even when burned by the generator. No petition to the EPA is needed.

(b)(3) This section could allow the combustion of sludge (for example) as non-waste without petition to the EPA if it (i) is included as an ingredient (as defined in the rule) in a combustion unit and (ii) meets the legitimacy criteria, and

(b)(4) This section could allow the combustion of sludge as a non-waste provided it was processed before combustion and the processed material passes the legitimacy criteria. Petition to the EPA is not required.

If the sludge is not managed within the control of the generator and does not qualify under (b)(2) – (b)(4) a petition can be submitted to the Regional Administrator seeking a determination that the material is not a waste.

Poultry Litter

The analysis begins with whether this can be considered a traditional fuel. It is not listed as either an historic or alternative traditional fuel indicating that it should be treated as a secondary material.² As a secondary material it must meet one of the requirements given in 241.3(b)(1) – (4) as above.

(b)(1) Farmers burning the litter themselves must show that the litter meets the legitimacy criteria under (d)(1).

(b)(2) Does not apply to this material.

(b)(3) As before, this section could allow the combustion of the poultry litter as non-waste without petition to the EPA if it (i) is included as an ingredient (as defined in the rule) in a combustion unit and (ii) meets the legitimacy criteria,

(b)(4) Probably the most promising as long as the litter is processed in some way. As an example, the gasification of the litter and the subsequent combustion of the resulting gas might allow classification as a non-waste provided the gas meets the legitimacy criteria for gas (natural gas, refinery gas, *etc.*).

As always, the applicant can submit a petition to the EPA for a determination that the litter is not a waste if none of the above provisions can be satisfied.

² The EPA in their preamble to the March 21, 2011 rule discusses manure more generally. 76 FR 15479.