Message

From: Cheever, Robert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=F12D4E8C3C5B4E879445B927ED54814A-CHEEVER, ROBERT]
Sent: 12/20/2016 3:20:10 PM
To: 'Little, David' [david.little@dnr.mo.gov]
Subject: RE: tire pyrolysis

David,

Lisa is out until January 3.so do you need a response before then, or can it wait?

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From: Little, David [mailto:david.little@dnr.mo.gov]
Sent: Tuesday, December 20, 2016 9:16 AM
To: Hanlon, Lisa
Cc: Cheever, Robert
Subject: tire pyrolysis

Lisa,

Will a proposed tire pyrolysis meet the definition of incineration and be subject to CISWI?

- Whole tires are brought onsite and shredded onsite.
- Shredded tires are fed into a chamber, with a nitrogen purge, then indirectly heated to 500-1100 F.
- Collected vapor is condensed to synoil. Non-condensable vapor (syngas) is indirectly fired to heat the chamber. Excess syngas is flared onsite. Syngas is not sold offsite.
- Char, steel, and synoil are shipped offsite. The primary purpose is not metal recovery.

I can't find an answer in the CISWI rule, CISWI public comments and responses, solid waste regs, ADI, or other states' recent permits (CH2E in Hudson Colorado, Alliance International/Theodore Tire in Alabama, Reklaim in Oregon, Greenu in Nevada, Kool Metal Recycling in Florida, Blizzard Energy in Kansas). Here are the questionable parts,

- Do the tires have to be obtained from an approved tire management program, otherwise they are solid waste and CISWI? Or does the approved tire management program only apply to combustion units such as a boiler or cement kiln?
- The syngas is "contained gaseous material", and therefore is solid waste per 40 CFR 258.2 and 40 CFR 241.2?
- The syngas and synoil are typically offspec and do not meet the requirements to be a traditional fuel or ingredient. If the 40 CFR 241.3 legitimacy criteria are not satisfied for the gas, oil, and char then this is solid waste combustion?
- Do the chamber heater and waste flare have to meet the control device requirements in 40 CFR 60.18, otherwise they are incinerators?
- Does the facility need to continuously demonstrate the process not to be incineration, per the Feb 2, 2000 EPA Region 5 response to Indiana, "Pyrolysis Unit NSPS Definition"?
    - Zero oxygen inside the chamber

    - Positive chamber pressure
- NSPS Ea, Eb, and EEEE specifically define pyrolysis as incineration. Why is CCCC so unclear?

Thank you,

David Little, PE
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