Message

From: BECKHAM, LISA [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=75A0012699094CF59508BB04E90B393C-LBECKHAM]
Sent: 5/22/2015 12:39:40 AM
To: Guy Smith [gsmith@mdaqmd.ca.gov]
Subject: RE: Federally Applicable Regulations for Medical Waste Pyrolysis Units

By "few to none in Region 9 and zero in California" I meant HMIWI and not medical waste experts. ;)

From: BECKHAM, LISA
Sent: Thursday, May 21, 2015 5:31 PM
To: 'Guy Smith'
Subject: RE: Federally Applicable Regulations for Medical Waste Pyrolysis Units

Hi Guy-

My apologies for the delay in responding. It looks like you've done a thorough analysis of the potentially applicable regulations. I think the only one that requires more analysis is whether it is subject to Subpart CCCC. I talked to one of our waste experts in the Region (although not specifically a medical waste expert, she said there are few to none in Region 9 and zero in California), and my understanding was that medical waste is treated as regular commercial/industrial waste once it leaves the hospital (i.e. it is not municipal waste or hazardous waste). So, I'm leaning towards Subpart CCCC as applying. Let me know if you would like to discuss further.

The definition for commercial solid waste:

Commercial and industrial solid waste incineration (CISWI) unit means any distinct operating unit of any commercial or industrial facility that combusts, or has combusted in the preceding 6 months, any solid waste as that term is defined in 40 CFR part 241. If the operating unit burns materials other than traditional fuels as defined in §241.2 that have been discarded, and you do not keep and produce records as required by §60.2175(v), the operating unit is a CISWI unit. While not all CISWI units will include all of the following components, a CISWI unit includes, but is not limited to, the solid waste feed system, grate system, flue gas system, waste heat recovery equipment, if any, and bottom ash system. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the solid waste hopper (if applicable) and extends through two areas: The combustion unit flue gas system, which ends immediately after the last combustion chamber or after the waste heat recovery equipment, if any; and the combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. The CISWI unit includes all ash handling systems connected to the bottom ash handling system.

Lisa Beckham
Environmental Engineer
Air Permits Office
EPA Region 9
(415) 972-3811

From: Guy Smith [mailto:gsmith@mdaqmd.ca.gov]
Sent: Thursday, May 07, 2015 3:59 PM
To: BECKHAM, LISA
Subject: Federally Applicable Regulations for Medical Waste Pyrolysis Units

Good Afternoon, Lisa:

I have a proposal on my desk for a Hospital Medical Infectious Waste Incinerator (HMIWI) using pyrolysis to reduce the HMIW to syngas and char. The syngas will initially be burned in a thermal oxidizer with no heat recovery/energy production, but that will likely happen once the operation settles out. The facility will have

two identical main pyrolysis units, each capable of converting 2 tons of waste per hour and one secondary unit capable of 1 ton per hour which will only pyrolyze the char from the two primary units.

Try as I may, I cannot find a single NSPS that applies to this facility – here's my take on the likely candidates:

40 CFR 60, subpart Ce: This is a new unit, so Ce doesn't apply.
40 CFR 60, subpart Ec: Exempts pyrolysis units in 60.50c(f).
40 CFR 60, subpart E: Each incinerator has a charging rate of less than 50 tons per day.
40 CFR 60, subpart AAAA: Does not meet definition of MSW in 60.1465 (specifically excludes medical waste).
40 CFR 60, subpart BBBB: Construction will start after August 30, 1999.
40 CFR 60, subpart CCCC: Exempt if regulated by Ce or Ec, which these units are NOT, but the definition of Commercial Solid Waste seems (to me, anyway) to exclude HMIW.
40 CFR 60, subpart EEEE: Exempt if regulated by Ce or Ec, which these units are NOT, but the facility is neither a very small Municipal Waste Combustion Unit nor is it located at an institutional facility, and therefore does not meet the definition of an OSWI in 60.2977.

I'm sure that there has to be some USEPA regulation governing these facilities or they would be popping up all over the place. My research so far has turned up a few, but they have all been collocated with the hospital that generated the HMIWI.

I'd sure appreciate any insight you could give me on this one.

Thanks very much,

Guy Smith
Air Quality Engineer
Mojave Desert AQMD
760.245.1661
gsmith@mdaqmd.ca.gov