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To: Gene Pettingill
State of Delaware
Dept. of Natural Resources & Environmental Control
Division of Air Quality

Re: Comments on OTC Model Rule Draft 2A 081711

We appreciate the commission's willingness to solicit and consider comments regarding the OTC Solvent Degreasing 2011 Model Rule development. Kyzen Corporation, a supplier of engineered cleaning solutions for high technology manufacturing environments, offers the following comments for your consideration:

2.0 Definitions:

Cold Cleaning is a term that needs to be defined. We suggest the following definition:

“Cold Cleaning Chemistries” Cold cleaning refers to a cleaning agent engineered with a VOC solvent in combination with non-VOC solvents such as water. Cold cleaners may be heated but are operated at temperatures well below the boiling point of the VOC solvents contained within the cleaning agent. Many cold cleaners are aqueous in nature, with most designs including a wide range of materials engineered as a composition that is typically diluted in water. Cold cleaner designs are targeted a specific soil and cleaning equipment configurations.

Electronic Assembly term needs to be defined. We suggest the following definition:

Electronic Hardware means a printed circuit board, components placed on the circuit board, assembly process of placing and soldering the components to the circuit board, and processes to assemble the printed circuit board (stencil printers, reflow ovens, wave soldering, dispensing, coating, underfill, rework, stencil cleaning).



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4.0 Equipment Design and Work Practice Requirements

This section provides detail in operating a Solvent vapor degreasing process. The section is silent on cold cleaning processes. Should this section develop a higher level of detail on equipment design and work practice requirements for cold cleaning processes?

5.0 Compliance Test Methods

The methods for determining the VOC content in cold cleaning processes needs development. EPA Method 24 was developed for coatings and may not be a good test for cold cleaning processes. Kyzen Corporation is open to working and helping OTC and other constituents to develop a VOC method for cold cleaning processes.

6.0 Monitoring, Record Keeping and Reporting

This section focuses on open-top vapor degreasing and airless/airtight cleaning processes. This section is silent on cold cleaning processes. Should this section develop a higher level of detail on equipment design and work practice requirements for cold cleaning processes?

Kyzen Corporation recognizes that cleaning processes within manufacturing operations are more than a cleaning agent; it is a process. Engineered design and work practice requirements must be considered to develop cleaning processes that meet the intent of the Model Rule for Solvent Degreasing. Kyzen recommends that the commission consider a working group with expertise in cold cleaning to help develop proper controls and work practice requirements.

Thank you for your consideration.

Sincerely,

Mike Bixenman
Chief Technology Officer
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