Gene,

Thanks again for the opportunity to comment. I have a couple of additional points that are not necessarily new but help support prior comments. We have worked with one of our equipment suppliers to try to flush these points out in more detail. I hope the additional detail provides you with clarification on the basis for our concerns and the substantive content to improve the draft model rule.

Level Playing Field for Cleaning Technologies

We would propose that the OTC adopts the same formula for emission limits on open solvent cleaning systems as is currently proposed for airless systems. On the attached spreadsheet, under the tab "Airless Formula-Total Capacity," it shows the emission limits based on the total work capacity. These numbers seem very reasonable to us, but it is key that OTC considers the total working volume of the tanks / drying stations, since one work basket could be at each simultaneously. If OTC just considers the individual tank dimensions, then this method would penalize multi tank systems.

(See attached file: OTC MachineEmissions Estimations (011212).xlsx)

If this issue needs more dialogue to come to a common understanding of the concern and recommended remedy, I am happy to make the arrangements for that dialogue to take place.

Small degreasers

3M has also previously commented with a request to exempt open top vapor degreasers that have vapor /air interfaces of <1 square foot, recognizing that the energy requirements of a refrigerated freeboard chiller would have a climate impact greater than the incremental solvent containment that would be gained. The primary condenser on small degreasers adequately contains the vapor. A refrigerated freeboard, therefore, burdens small machines with extra cost with no additional environmental benefit. Please consider an alternative requirement for a working mode cover, freeboard ratio of 1, and optional automation of the vapor dwell.

One of our equipment partners also provided the following example:

For example, a small freeboard chiller requires around 500W to operate, thereby using about 12 kWh of electricity per day. 12 kWh * 0.63 kg CO2/kWh = 7.56 kg CO2 (The avg value for all elec production is about 0.63 kg CO2/kWh).

The normal solvent consumption of our F-100-810 or 1010 (both with less than a one square foot vapor to air surface area) is around six fluid ounces of Novec 72DA per day or 0.22 kg per day. A freeboard cooling coil would only reduce the solvent loss on the system by around 10% (0.02 kg per day. 0.02 kg Novec 72DA * 43 kg CO2/kg (the Global Warming Potential for Novec 72DA) = 0.9 CO2.

Although this example specifically addressed climate impact of the two options, it should also illustrate the balance that needs to be considered when addressing local air quality issues. In this example, the air quality improvement from degreaser emissions are more than offset by the emissions from the local power plant.

I hope this helps advance the model rule proposal. Please let me know if you need to have more dialogue to flush out either of these recommendations in more detail.

Again, thanks for your consideration of these comments,

Kurt

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