

Must Defluxers Follow SCAQMD Rules Throughout the U.S.? Productive Progress

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BFK Solutions

Cleaning Consultants, est. 1994

- The industry leaders in critical cleaning consulting
 - Process improvement, not product sales
 - Experience, expertise, common sense
- Barbara Kanegsberg, “*The Cleaning Lady*”
 - Biochemist, clinical chemist, manufacturing process
 - IPC revision, electronics cleaning handbook
- Ed Kanegsberg, “*The Rocket Scientist*”
 - Physicist, engineer, process evaluation
 - Multiple patents
- “Clean Source” eNewsletter
 - Free
 - Sign up
- Editors, 2 volume “Handbook for Critical Cleaning,” CRC Press, 2nd edition, 2011

Issue: SCAQMD Rules Moving through U.S.

- Ozone Transport Commission (OTC)
 - Congressional mandate
 - Regional Model Rules
 - Template for State regulations
 - Rules may be adopted outside of OTC area
- <http://otcair.org/>
- Connecticut
- Delaware
- District of Columbia
- Maine
- Maryland
- Massachusetts
- New Hampshire,
- New Jersey
- New York
- Pennsylvania
- Rhode Island
- Vermont
- Virginia

Problem: OTC presumed SCAQMD approach is correct

- OTC - limited staff, limited money
- Original update: cut and paste from South Coast Air Quality Management District Rule 1122
- Would impact vapor degreasing and aqueous cleaning
- **Perception from SCAQMD**
 - **No complaints in SoCal**

OTC Model Rule Original Update – Choices for Defluxing – Low Cleaning Efficiency, High Costs

- Use cleaning agents, maximum 25 g/L VOC
 - Aqueous or solvent
 - Low defluxing efficacy
- Use VOCs in an airless cleaning system
 - \$200K ++++; longer process time
 - Unintended consequence: favors exempt chlorinated solvents
 - Federal Halogenated Solvents NESHAP
 - You can use perchloroethylene in an open-top!

“Do something, Barbara” – requests at
IPC/SMTA cleaning conference



Solution: Productive interaction with OTC

- Continued OTC mis-perception: aqueous processes were “non-critical”
- BFK Solutions – established dialogue with OTC
 - Written, oral, formal, informal
 - Gave “straight scoop” on Southern California
 - Discussed performance issues, 25 g/L VOCs
 - Reviewed technical & performance issues, airless systems
 - <http://otcair.org/document.asp?fview=correspondence>
- SMTA/IPC members got very involved

We told OTC about Southern California Electronics Assembly Job Shops

- Do not complain
 - Fear of regulatory citations, fines
- Avoid defluxing
- Deflux with water
- Accept only electronics assembly projects where water removes the flux
- Decline projects using cleaning chemicals

What We Achieved: Current Proposed OTC Model Rule Modifications

- Vapor degreasing exempted from 25 g/L limit
 - NESHAP-like equipment & controls
- 150 g/L VOC maximum for electronics assemblies & process adjuncts
 - Why is 150 g/L important?
 - 150 g/L is workable for defluxing
 - 25 g/L is impractical

A Qualified Eureka

- Current version of Model Rule much more reasonable
- Next OTC meeting, March 21, 2012, Washington D.C.
- Suggest you provide OTC with supportive comments prior to the meeting
- We'll provide updates in "*Clean Source*"
 - Our newsletter

IPC Superheroes

