Proposed Amended Dry Cleaning Rule for Philadelphia

Air Management Services

March 05, 2009

PHILADELPHIA DEPT. OF PUBLIC HEALTH
AIR MANAGEMENT
SERVICES

Background

- **On September 4, 2007, the Air Pollution Control Board (APCB) directed Air Management Services (AMS) to draft a regulation to control dry cleaning facilities using Perchloroethylene (perc) as a cleaning solvent**
- **On August 5, 2008, the draft regulation was proposed to the APCB**
- **On September 10, 2008, the APCB met with the PA & DE Dry Cleaner Association (DCA)**
- **On September 16, 2008, AMS met with the Korean Dry Cleaners Association (KDCA)**
- **On October 16, 2008, the DCA e-mailed its draft version to AMS**
- **On October 24, 2008, AMS revises the draft regulation for APCB consideration**
- **On November 5, 2008 the APCB delays vote and forms an Ad Hoc Committee to review the October 24, 2008 draft after hearing DCA & KDCA comments**

Background

- On January 7, 2009 the APCB Ad Hoc Committee had its first meeting and entertained comments from DCA and KDCA and other industry group representatives
- On January 21, 2009 the APCB Ad Hoc Committee met a second time to make revisions to the latest proposed draft regulation based on comments from industry
- On February 20, 2009 the APCB Ad Hoc Committee met a final time to finalize the draft regulation.

Summary of Proposed Regulation

- No Perc Dry Cleaning Equipment shall be allowed to operate in a Co-residential or Co-sensitive Facility after December 31, 2013.
- No Perc in any new Co-located Facility or in conjunction with any new/replaced or additional Cleaning Equipment at any Co-located Facility.
- No Perc Dry Cleaning Equipment 15 years or older operating in any Co-located Facility after December 31, 2013.
- Stand- alone Facility has 2 years to upgrade to a fourth generation machine and spill containment.
- A vapor barrier or professional designed exhaust system must be installed within 6 months from the effective date of the regulations
- The Department may collect and analyze an ambient air sample for Perc concentration during the operation of dry cleaning equipment at an occupied space Co-located to the Facility. When Perc exceed 40 ppb, the facility has 30 days to take corrective action, if it exceeds 200 ppb facility must be shut down.

Comparison of Drafts

	8/5/08 Version	10/24/08 Version	2/25/09 Version
PERC phase out at CO-RESIDENTIAL (including sensitive populations) cleaners	2 years from effective date	2 years from effective date	After 12/31/2013
PERC phase out at CO-COMMERCIAL cleaners	2 years from effective date	After 12/31/2016	After 12/31/2013, PERC equipment 15 years or older replaced with non-PERC technology
Control Technology at CO-LOCATED cleaners	Within 6 months of effective date, 25 ft. buffer and vapor barrier and general exhaust	Within 1 year of effective date, 25 ft. buffer and vapor barrier or professional designed exhaust system	Within 6 months, 25 ft. buffer and vapor barrier or professional designed exhaust system
Monitoring	NO	NO	YES. If ambient sampling at CO-LOCATED business/residence is - greater than 40 ppb (less than 200 ppb) then correction action required. - 200 ppb or greater and the dry cleaner is shut down.
Replacement/Addition of PERC Dry Cleaner Equipment Requires NON-PERC Technology	YES	YES	YES

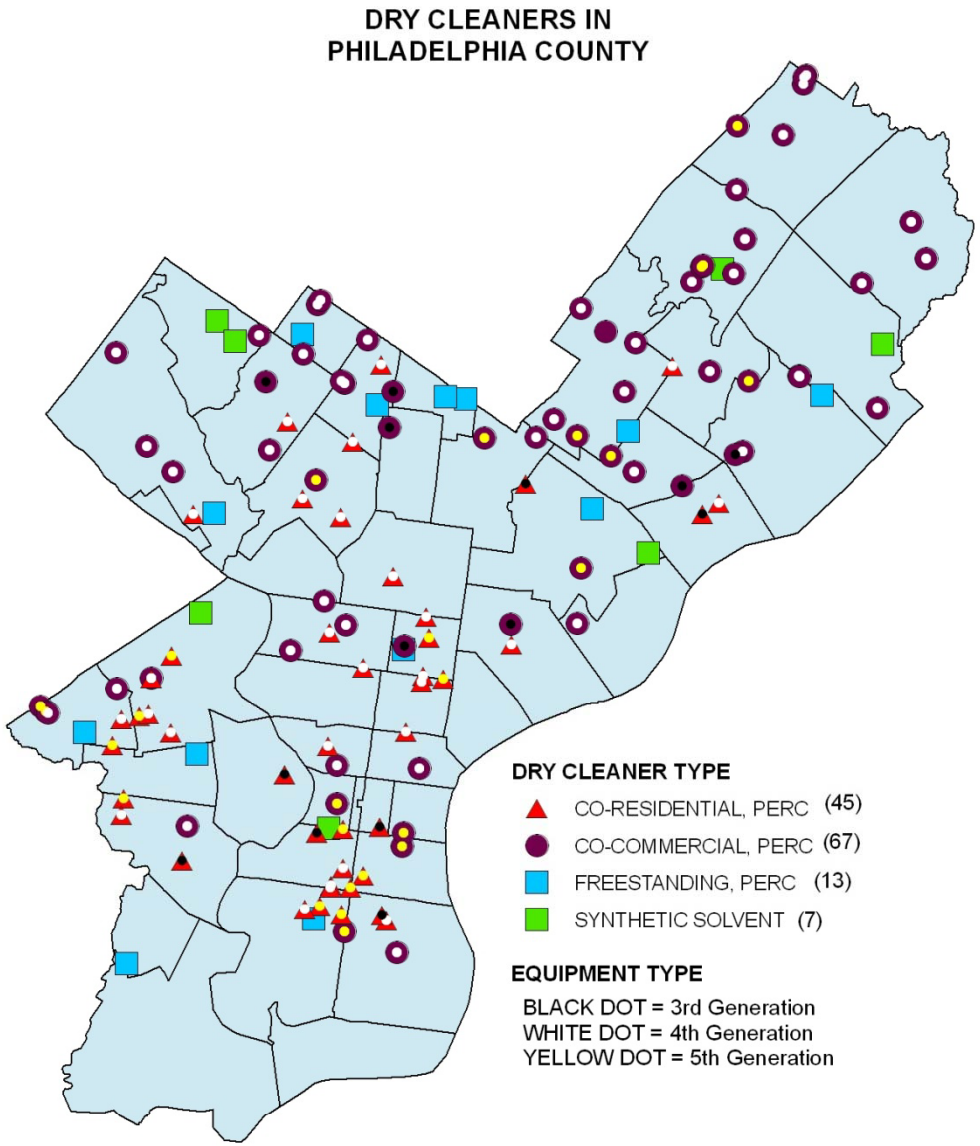
Question and Answers

- Why is there a phase out of PERC equipment that is 15 years or older with non-PERC technology?
  - Based on sampling at co-commercial locations and the life expectancy of equipment

Question and Answers

- How and why were the indoor air levels of 40 PPB and 200 PPB established as monitoring requirements?
  - Based on reviews of literature and ATSDR Heath based minimum risk levels.

Other Questions?


DRY CLEANERS IN
PHILADELPHIA COUNTY
DRY CLEANER TYPE
CO-RESIDENTIAL, PERC (45)
CO-COMMERCIAL, PERC (67)
FREESTANDING, PERC (13)
SYNTHETIC SOLVENT (7)
EQUIPMENT TYPE
BLACK DOT = 3rd Generation
WHITE DOT = 4th Generation
YELLOW DOT = 5th Generation
2008.10.14
AMS
-HRK-

Impact on Regulated Community

CO-RESIDENTIAL

Category	Cost per Facility
Co-residentials currently using >=4th generation machines	**Total sources: 38**
• Changing to alternate solvent to comply	$50,000.00
• Changing to 'Freestanding' to comply	$1975 + Cost of moving
Co-residentials currently using 3rd generation machines	**Total sources: 7**
• Changing to an alternate solvent to comply	$50,000.00
• Changing to a 'Freestanding' to comply	$6975 + Cost of moving

Impact on Regulated Community

CO-COMMERCIAL

IF 2 YEARS PHASE OUT IS APPLICABLE TO CO-COMMERCIALS :	
Co-commercials currently using >=4th generation machine	**Total sources: 59**
• Changing to an alternate solvent to comply	$50,000.00
• Changing to a 'Freestanding' to comply	$1975 + Cost of moving
Co-commercials currently using 3rd generation machine	**Total sources: 7**
• Changing to an alternate solvent to comply	$50,000.00
• Changing to a 'Freestanding' to comply	$6975 + Cost of moving

IF 2 YEARS PHASE OUT IS NOT APPLICABLE TO CO-COMMERCIALS :	
Co-commercials currently using >=4th generation machine	**Total sources: 59**
• Continuing to use perc	$1,975.00
Co-commercials currently using 3rd generation machine	**Total sources: 7**
• Continuing to use perc	$6,975.00

Impact on Regulated Community

FREESTANDING

Freestanding currently using >=4th generation machine	**Total sources: 10**
• Continuing to use perc	$1,975.00
Freestanding currently using 3rd generation machine	**Total sources: 3**
• Continuing to use perc	$6,975.00

USING EXEMPT SOLVENTS

Using exempt solvents	**Total sources: 7**
Using exempt solvent, any generation	$0.00

Perc Concentrations (24-hr) at Businesses Neighboring Perc Plants (Results in ppb)

	Sampling Dates (2008)									
Location	08/28	09/03	09/09	09/12	09/18	09/24	10/05	10/15	10/22	10/29
A	72.4	220	316	---	---	---	---	---	---	---
B	214	130	47	---	---	---	---	---	---	---
C	405	64.3	49.8	---	---	---	---	---	---	---
D	---	---	---	0.42	1.39	INV	---	---	---	---
E	---	---	---	3.75	INV	2.18	---	---	---	---
F	---	---	---	8.57	8.42	13.96	189	585	202	173
G	---	---	---	---	---	---	171	18.8	56.1	---
H	---	---	---	---	---	---	---	864	253	229

Business Types Neighboring Plants

Neighbors and Machine Generation of Perc Plants 24-hr Samples		
Location	Businesses	Generation of Machine
A	Restaurant & Bar	4th
B	Office	4th
C	Office	3rd (2 machines) and 4th (1 machine)
D	Barber Shop	3rd
E	Beauty Salon	3rd
F	Children Daycare	4th
G	Delicatessen	4th
H	Office	4th (2 machines)