November 17, 2010

Clerk of the Board
Air Resources Board
1001 I Street 23rd Floor
Sacramento, CA 95814

To Whom It May Concern:

I am writing with comments on the Air Resources Board (ARB) proposed amendments to the California Consumer Products Regulation which will be considered at the public hearing scheduled for November 18. I am in strong support of the limits proposed by staff. My comments in this letter focus specifically on one of the categories "Spot Remover (Dry Clean Only)."

I am Director of the Institute for Research and Technical Assistance (IRTA), a technical environmental nonprofit organization that identifies, develops, tests and demonstrates safer alternatives with a primary focus on solvent applications. I have worked on alternatives for the dry cleaning industry for more than 30 years. I have conducted government sponsored projects that address alternatives to perchloroethylene (PERC) in the major dry cleaning process. I have also conducted projects to find safer alternative spotting chemicals.

Alternatives to PERC in the main dry cleaning process are being used widely in California and ARB is phasing out the use of PERC altogether in 2023. About one-third of the cleaners in the state currently use PERC alternatives. Major alternatives include hydrocarbon, wet cleaning and carbon dioxide cleaning. It is the practice of cleaners to pre-spot garments before they are put into the main cleaning machine. In many cases, cleaners also post-spot garments if the pre-spotting and the main cleaning process have not entirely removed spots. The spotter generally applies the spotting agent in a squeeze bottle to the spot, rubs it into the fabric, flushes it with steam from the spotting board and dries it with compressed air, also on the spotting board.

The major spotting agent used today is trichloroethylene (TCE), a chlorinated solvent that is a carcinogen. PERC, also a carcinogen, is sometimes also used for spotting. Other VOC solvents are used in some commercial spotting agents. The spotting agents designed to remove spots are called POG spotting agents where POG refers to Paint, Oil and Grease.

ARB is proposing to ban the use of TCE and PERC in spotting agents and also establish a VOC limit. This will reduce VOC emissions and it will also reduce the use of carcinogens which can expose community members and, perhaps more importantly, spotters and other workers in cleaning facilities. For cleaners using the wet cleaning process, water is discharged to the sewer and it is particularly critical that these cleaners not use chlorinated solvents that will enter the sewer. ARB is taking an important action and I strongly support it.

My organization has conducted two projects over the last few years that focus on identifying, developing, testing and demonstrating safer alternatives to the POG spotting agents used today. In one project, sponsored by Cal/EPA's Department of Toxic Substances Control and EPA Region IX, IRTA worked with several cleaning facilities to develop, test and demonstrate alternative low-VOC, low toxicity alternatives. In a second project, completed more recently, IRTA tested and demonstrated alternative water-based and soy based spotting agents. This project was sponsored by the Bay Area Air

Quality Management District (BAAQMD). Based on the results of the testing, the BAAQMD adopted a regulation that bans the use of halogenated spotting chemicals like TCE and PERC.

In the two projects, IRTA staff worked directly with spotters in cleaning facilities to test the alternatives. IRTA worked with cleaners who use alternatives to PERC for the main cleaning process, including facilities that use hydrocarbon, wet cleaning and carbon dioxide. The aim was to find safer alternative spotting agents that could be used by cleaners as PERC is phased out. In both projects, all of the spotters and cleaning facilities liked one of the alternatives they tested as well as the currently used spotting agents and thought they performed well. The final reports detailing the results of the testing can be accessed on IRTA's website at www.irta.us.

Water-based cleaners and soy based cleaners perform as well as the spotting agents used today. One of IRTA's reports provides sources for three water-based and two soy based cleaners that can be purchased from suppliers. Suppliers of the currently used spotting chemicals claim that water-based and soy based cleaners will not work. Water-based cleaners are used for cleaning parts heavily soiled with oil and grease in auto repair facilities and there is no reason to believe they are not suitable for this application. Soy based cleaners are especially suited for cleaning ink and various other POG materials and they work very well in this application. I have done hours of testing myself in cleaning facilities and I am confident these safer alternatives can work effectively for this use.

I appreciate the opportunity to comment on this important regulation. I support ARB's ban of the chlorinated solvents and the low VOC limits specified in the proposed regulation. If there are questions about the spotting process, the safer alternatives or the dry cleaning process in general, please call me at one of the numbers below.

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