



Building Performance Institute, Inc.



June 30, 2014

Via email: SaferConsumerProducts@dtsc.ca.gov

Ms. Deborah O. Raphael, Director
California Department of Toxic Substances and Control
1001 I Street
Sacramento, CA 95814-2828

RE: BPI Comments on Proposed Rulemaking Regarding Priority Products: Spray Polyurethane Foam Systems Containing Unreacted Diisocyanates

Dear Ms. Raphael:

Building Performance Institute, Inc. (BPI) appreciates the opportunity to comment on the above-referenced proposal regarding the California Department of Toxic Substances and Control's (DTSC's) recent listing of *Spray Polyurethane Foam Systems Containing Unreacted Diisocyanates* as an initial Priority Product under the Safer Consumer Product Regulations. We appreciate the opportunity to learn more about the Department's process and to provide you with some information about spray polyurethane foam (SPF) and unreacted isocyanates.

About BPI

BPI is the nation's premier building performance credentialing, quality assurance and standards setting organization. BPI develops technical standards using an open, transparent, consensus-based process built on sound building science. From these standards, we develop professional certifications for individuals, companywide credentials for BPI GoldStar Contractors, home energy rating systems and quality assurance services that help raise the bar in home performance contracting. BPI is approved by the American National Standards Institute, Inc. (ANSI) as an accredited developer of American National Standards and as a certifying body for personnel credentials. BPI supports more than 150 programs in a wide range of climate zones including the US Department of Energy and Environmental Protection Agency's Home Performance with ENERGY STAR® and Weatherization Assistance Programs nationwide.

BPI offers the following:

- National standards to ensure top quality, consistent protocols are being followed throughout the home performance and weatherization workforce
- Certification of individuals in building analyst, heating, AC/heat pump, shell/envelope and multi-family designations
- GoldStar Contractor Program for companies committed to delivering quality home performance improvements using a quality management systems and a certified workforce
- BPI Rater Program for the delivery of affordable scoring for homes that supports contractor delivery models, consumer education, and real estate valuation
- Partnership with testing organizations delivering BPI services in their market

Standards - Certification - Accreditation - Quality Assurance

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- Energy efficiency program consulting services to individual programs and government through General Services Administration (GSA) and California Multiple Awards Schedule (CMAS)
- Manufacturer Product Listing Program for the Home Performance Industry

California's Strategic Goals

California has established aggressive goals to improve the energy efficiency of both existing buildings and buildings that will be constructed in the future, by taking a building-as-a-system approach (e.g., *California Long Term Energy Efficiency Strategic Plan*¹ (CLTEESP), Energy Upgrade California, AB758, Title 24 California Energy Code, California Green Building Standards Code [CalGREEN], AB1103). These long-term goals, laws, and regulations embraced a whole building performance approach to comprehensively address building energy efficiency. BPI works closely with the California Public Utility Commission, California Energy Commission, the California investor-owned utilities (IOUs) (Pacific Gas & Electric Company, Sempra, San Diego Gas & Electric), and numerous municipal utility (e.g., SMUD) and local government programs including the regional energy networks that focus on building-as-a-system energy efficiency improvements to reduce energy use, control peak load, and reduce carbon emissions.

Building envelope tightness and proper insulation are key factors in achieving optimal building performance² and driving toward Net Zero Energy buildings. Effectively tightening the building allows for proper sizing of HVAC equipment, proper control of ventilation, and improvement of indoor air quality. Achieving proper envelope tightness and insulation is at the top of the loading order in both new construction and in retrofit; is a mandatory part of the Energy Upgrade California® Home Upgrade program; and is almost always used to achieve required goals in the Advanced Home Upgrade Program. Virtually every retrofit or new construction job uses SPF, which plays an important role in helping achieve energy efficiency goals. All of these programs share BPI's motto: *First, Do No Harm; Last, Do No Harm*. Safety of workers and building/home occupants is paramount to successful implementation.

Impact of SPF

1. Spray polyurethane foam (SPF) can help California meet its energy efficiency and climate change goals as well as move the state forward on its strategic plan for zero net energy buildings. It also helps builders and contractors lower construction costs, meet or exceed today's building code requirements and provide additional benefits to customers.
 - SPF is included in the California Energy Code Quality Insulation Installation (QII) program, and with additional improvements planned for future versions of the Energy Code, SPF will become an even more valuable tool in advanced wall-systems and roof deck insulation.
 - Air leaks waste up to 40% of the energy used to heat and cool buildings; SPF allows builders and contractors to air seal/insulate in one step, which saves time. It also reduces the need for additional air sealant materials.
 - Without SPF, it would be much harder for the state of California to meet its ambitious energy efficiency goals and reach the target set forth in its landmark *Global Warming Solutions Act* (AB32) as well as AB758, CLTEESP, and AB1103.
 - SPF can also help builders and contractors meet the requirements of programs such as ENERGY STAR® for new homes, Home Performance with ENERGY STAR, Energy Upgrade California, and popular green building rating systems like Build It Green's GreenPoint Rated certification.

¹ California Long Term Energy Efficiency Strategic Plan: Achieving Maximum Energy Savings in California for 2009 and Beyond. September 2008. California Public Utilities Commission.

² Id. S. 2, pp. 12, 16.

2. SPF resists heat transfer and provides excellent R-value, which is the measurement of thermal resistance for insulation. The higher an insulation's R-value, the greater its thermal resistance. R-values for open-cell SPF typically range between three and four per inch of thickness, while R-values for closed-cell SPF typically range from six to seven.
3. Spray polyurethane foam (SPF) is an, effective and proven building material with a long track record of success when installed by a trained professional contractor that has no direct substitute.
 - SPF can serve as highly effective insulator of a home or commercial building when installed on walls and in attics. High-density SPF also can be used as a resilient roofing material for low-slope roofs.
 - Unlike other insulation products, SPF adheres to the wall or roof and forms a continuous insulation and air barrier on the surfaces and cavities to which it is applied, even on contoured or irregular surfaces or in areas that are hard to reach.
4. Industry certifications and federal regulations are already in place to help insure that SPF is properly specified, managed, and installed in ways that assure the safety of building occupants and workers, including:
 - Center for The Polyurethane Industry (CPI) Spray Polyurethane Foam Chemical Health and Safety Training (qualifies for BPI continuing education units).
 - Spray Polyurethane Foam Alliance (SPFA) Professional Certification Program (PCP) for Insulation and Roofing, with four job task analyses each, developed in an ISO-17024 compliant process to create appropriate knowledge, skills, and abilities. Higher levels also require OSHA 10 and 30 hour cards prior to examination.
 - Occupational Safety and Health Administration (OSHA) already has in place a National Emphasis Program to protect workers from the potential serious health effects from occupational exposure to isocyanates. These efforts need not be duplicated, and adequately address DTSC's concerns.

Recommendations

Constructive partnerships with the industry can help DTSC avoid unnecessary duplication of effort, by eliminating silos of information. The American Chemistry Council (ACC), SPFA, and CPI have spent the last four years actively working with multiple federal regulatory agencies. BPI encourages DTSC to coordinate with and closely evaluate this effort, before making unnecessary, impractical and potentially damaging decisions regarding regulation of SPF.

- DTSC should incorporate science-based information from existing sources, to gain synergies, minimize costs and maximize benefits, thus avoiding duplication with ongoing efforts. Numerous studies have already been conducted to evaluate the presence, exposure, and detectability of products, as well as the necessary measures to ensure worker safety.³
- DTSC should become an active partner in the many ongoing industry product stewardship, training and research activities and leverage the collaborative work already in process and completed with the multiple federal agencies that are already addressing many of the issues DTSC has identified as drivers of its decision.
- DTSC should work closely with ACC to communicate the science and safety surrounding SPF products and demonstrate the importance of product stewardship efforts already underway. These include the CPI library of product stewardship resources that outline important safety guidelines for all types and applications of spray foam. These publicly available resources are at www.spraypolyurethane.org.

³ ACC Comments on the DTSC Priority Product Profile for "Spray Polyurethane Foam Systems Containing Unreacted Diisocyanates," March 2014, April 29, 2014.

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Conclusion

BPI commends DTSC on its intent to protect the workers and building and home occupants of California. However, the approach has not been fully integrative and ignores much of the industry and federal efforts that have already occurred to address the stated concerns. Personal protection equipment coupled with proper training and certification provide the necessary tools to keep this valuable product in use, supporting the health, safety, comfort and energy efficiency goals of California and its residents.

Respectfully submitted

By: /s/ Tiger Adolf

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