

November 21, 2011

California Energy Commission  
Dockets Office, MS-4  
Re: Docket No. 10-BSTD-01  
1516 Ninth Street  
Sacramento, CA 95814-5512

**DOCKET**

**10-BSTD-01**

DATE NOV 21 2011

RECD. NOV 21 2011

Re: Spray Polyurethane Foam Alliance Title 24 Task Group - Comments Joint Appendix Workshop – November 7, 2011

Dear Mr. Bozorgchami:

On behalf of the undersigned members of the Spray Polyurethane Foam Alliance (SPFA) trade association and the spray polyurethane foam industry stakeholders in the State of California, we are writing to comment on the information presented at the November 7, 2011 California Energy Commission (CEC) workshop on the 2013 California Building Energy Efficiency Standards. We appreciate CEC's consideration of our collective concerns.

During this workshop, the CEC Staff presented an overview of the proposed draft changes to several appendices for the 2013 Building Energy Efficiency Standards. While the appendices that directly affect SPF (JA4 and RA3) were briefly discussed, no substantive additional information was presented at this meeting.

SPFA would like to provide the following specific comments, and will follow up with a detailed letter before November 30th:

**Issues with JA4:**

1. In regard to the U-value tables in JA4, it has been acknowledged that CEC Staff is working with several consultants to be sure these tables are accurate. SPFA has identified several discrepancies in these tables, and is willing to assist in any way possible to resolve them -- preferably before the 2013 Title 24 is published.

2. In the October 27<sup>th</sup> letter, SPFA suggested an option for using R13 and R19 insulation in 2x4 and 2x6 cavity walls that included additional R-value (R5 or R6) for the continuous insulation, instead of just R15 and R21 cavity insulation with R4 continuous insulation. While CEC Staff has stated that R13 insulation may be permitted in 2x4 walls, we ask that R19 be included for 2x6 walls.

#### **Issues with RA2:**

3. Table RA2-1 proposes to limit residential air leakage to 7.0 ACH50 (building air changes per hour at 50 Pa). We believe this number is too high based on the presentation from the summer workshop. Moreover, the national model energy code, 2012 IECC R402.4.1.2 has set a limit of 5.0 ACH50 for warm climates (IECC Zones 1-3) and 3.0 ACH50 for colder climates, which are easily achievable in residential construction. The currently proposed air leakage rate is less stringent than the national model codes, and moves California further away from reaching its 2020 energy efficiency goals. In addition, U.S. DoE urges states to adopt the national energy code (IECC) or demonstrate that their own local codes meet an equivalent level of energy-efficiency within one year of the completion of the national code.
4. Table RA2-1 still specifically lists that closed-cell SPF installations must adhere to a Quality Insulation Inspection (QII) per RA7. Of course the reference to RA7 must be changed to RA3.5.5. More importantly, SPFA believes that this is discriminatory, and either ALL insulations must be installed to QII standards in RA3.5, or NO insulations should be required to meet QII standards (i.e., remove this statement from Table RA2-1). CEC Staff agreed to remove this per Dave Ware's email on November 8<sup>th</sup>.
5. RA2 provides credits for ducts that are buried in attic insulations. SPFA requests that the same credit be given for ducts encased in SPF. SPF applied to the outside of ducts is accepted in the national model residential building code (2009 IRC M1601.3) as a means to insulate and air seal ductwork.

#### **Issues with RA3:**

6. The recognition of SPF product R-values remains an open issue. SPFA requests that the R-values recognized by the BEARHFTI or via third-party product evaluation reports are used to determine the R-value of all SPF products, instead of minimum R-values proposed by CEC Staff. We understand there is a concern about specific SPF product identification by field inspectors, but SPFA believes that R-values for specific loosefill insulation products are being recognized by these inspectors based on the CF-6R document signed by the loosefill insulation contractor. SPFA asks that the same product recognition be applied to SPF products using the signed CF-6R. A detailed example supporting SPFA's position was provided to CEC staff on November 17<sup>th</sup>.

7. RA3.5.2.4 indicates that batt insulations must be friction-fit into the stud cavities. RA3.5.1 also includes a definition of inset stapling. SPFA suggests that a sentence be added to these sections that inset stapling of batts is not permitted. Inset stapling is known to diminish the thermal performance of batt insulations, and is not permitted by RESNET as a Class I installation of these products.
  
8. RA3.5.5.2 continues to restrict the use of SPF insulations in unvented attics by requiring specific inspections and approvals. The 2010 California Building Code has already addressed and accepted unvented attics under CBC R806.4.

CEC noted that some changes to these appendices have been made since they were initially posted on October 12. SPFA would like to reinforce its commitment to work with CEC Staff to resolve the issues initially identified in our October 27 letter, and to be sure they are addressed prior to publication of the 45-day language documents in early December.

As an industry, SPFA stands ready, willing, and able to assist CEC staff to work through the science, technology, and economics related to SPF insulation materials and their proper application. Please do not hesitate to contact any member of our task group if you have any comments or questions regarding this letter.



Richard S. Duncan, Ph.D., P.E.  
 Technical Director  
 On behalf of the Title 24 Task Group:

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