SPFA Technical Committee Reports

2010 Update and 2011 Activities
Overview

- **Product Stewardship and Safety (PSSC)** – Rick Duncan
- **Codes and Standards (CSC)** – Eric Banks (Mac Sheldon)
- **Building Envelope (BEC)** – Tom Sojak
- **Roofing (RC)** – Roger Morrison
- **Technical Oversight (TOC)** – Roger Morrison
Overview

- NREL-EERE Retrofit Guidelines
  - National specification for national/state retrofit and incentive programs?
- Public Review Draft posted Dec 2010
  - NO SPF Insulation in Ch 6
  - NO PU sealant foam specifications in Ch 4
- 3-week effort by SPFA volunteer task force
  - SPFA submitted public comment
  - Added 40+ pages of missing content
  - SPF and PU sealants to be included in March 2011 publication
Product Stewardship and Safety Committee (PSSC)

Rick Duncan
SPFA
Product Stewardship and Safety

Objectives

- **Address** issues regarding health, safety and environmental impact of SPF products and applications
- **Work** with other SPFA committees and external organizations on HSE issues
- **Educate** and emphasize proper use of correct PPE to contractor base
Product Stewardship and Safety

Key Projects

- **Chemical Safety Training** – Worked with CPI to develop new online chemical safety training
- **General Safety** – Coordinated development of new one-day SPF Safety course
- **Life Cycle Analysis** – Initiated an industry-wide LCA for spray foam products.
- **CPI Research Program** – Worked with CPI to develop research programs addressing SPF emissions and worker exposures
- **Other** – Advisor to SFM, Response to GWP article on SPF blowing agents
Completed in 2010....

- **Spray Foam Chemical Safety Training**
  - Supported development of CPI’s new online training program, launched in January 2011
  - Supported upgraded chemical safety content development for www.spraypolyurethane.org
Product Stewardship and Safety

Completed in 2010....

- **SPFA Safety Course** (new for 2011)
  - One-day Safety course for Accreditation integrating:
    - CPI’s online chemical safety training content **PLUS**
    - Half-day generaljobsite safety training
Product Stewardship and Safety

Work in Progress....

- Launched Life Cycle Analysis Project
  - 18 SPFA supplier sponsors to fund $160k project
    - Sponsors help develop LCA template for their products
  - Evaluates environmental impact of SPF
    - 3 generic foam formulations (LD, MD, Roofing)
    - Model energy savings for residential and commercial buildings in three climate zones (2, 4, 6)
  - Delivers needed information to design community
    - Support environmental marketing claims with hard data
    - Enable SPF to be considered for green building programs
Product Stewardship and Safety

Future work for 2011...

- Continue CPI/SPFA project with Federal Agencies. Tier 2
  Product Stewardship activities will be a focus over next two years

- Distribute key product stewardship activities developed by CPI/SPFA project members to broad contractor base

- Continue LCA project to be completed in late 2011
Codes and Standards Committee (CSC)

Eric Banks
BASF Corporation
Codes and Standards

Objectives

- **Monitor**
  - Construction codes throughout the United States
  - Performance standards and “certifications”
  - Current and future trends related to codes and standards

- **Participate**
  - Propose code and acceptance criteria changes
  - Committee membership

- **Influence**
  - Future direction of the construction codes
  - Acceptance of SPF across many construction applications
Codes and Standards

Completed in 2010

- 2012 I-Code Development Cycle (see poster session)
  - Major threats defeated (IBC, IRC, and IECC)
  - “30% Solution” adoptions benefited SPF (IECC)
- ICC-ES Acceptance Criteria AC377 changes
  - Clarified Appendix X language regarding thickness measurements for SPF and intumescent coatings
  - Updated I-Code references to 2009 Edition
  - Added NFPA 275, UL723 and UL263
- California Energy Commission
  - Draft “compliance option” document (see breakout session)
Codes and Standards

Topics for 2011

- Ongoing ICC-ES Acceptance Criteria development work
  - AC377 (SPF) and AC12 (plastic foams) harmonization
  - Attic floor fire testing (ASTM E 970)
  - Intumescent coatings
  - Language clarifications
  - Testing methods

- Intumescent coating applications
  - Education, testing and implementation

- “Air Barrier” performance specifications
Codes and Standards

Topics for 2011 (continued)

☐ International Green Construction Code (IgCC)
  ▪ Development
  ▪ Adoption

☐ Complete SPF “Compliance Option” document for the California Energy Commission (CEC)

☐ Advancement /Completion of an ASTM Standard Specification for Low Density SPF

☐ Other “Green” standards and “certifications”

☐ Support other SPFA committees and task groups
Building Envelope Committee (BEC)

Tom Sojak
Gaco Western
Building Envelope

Objectives

☐ Expand the use of foam-in-place polyurethane insulation with the building envelope

☐ Review and support development of methods for performance evaluation

☐ Develop, document and disseminate information on applications in different building envelopes and systems
Building Envelope

Meetings in 2010

- Conference Calls
  - March 19
  - July 30
  - December 10
Building Envelope

Key Projects

- **Compatibility of CPVC and Spray Foam Insulation** - Demonstrate that there is no chemical / physical impact to the performance and longevity of CPVC pipe and fittings when it is in contact with SPF.

- **Attic and Crawl Space Testing Program** - Continue the Attic and Crawl Space Testing Program for Attic Floors
Building Envelope

**Key Projects** (continued)

- **Assessment of Air Barrier Technologies** – Assessment of the impact of air barriers on energy and moisture control through the ABAA – ORNL Research Project.

- **Hybrid Insulation Guidelines** – Develop a guidance document defining proper methods of combining SPF with air-permeable fibrous insulations.
Building Envelope

Future work for 2011...

- Continue ABAA –ORNL Research Project through 2011
- Complete Hybrid Insulation Guidelines for Climate Zones 5-8
- Launch new project for SPF Compatibility with Low Voltage Electrical, Video and Sound Wiring Systems
- Host Educational Webinars on BEC topics for SPFA members
- Assist CSC with code development
- Develop Tech Documents as needed
- Liaison with Other Associations (ACC/CPI, CUFCA, ICAA, etc)
Roofing Committee (RC)

Roger Morrison
Deer Ridge Consulting
Roofing

- The Roofing Committee had one meeting (conference call) on April 30
- Next Meeting – February 16 from 8-12 PT in Las Vegas
- RoofPoint, a program to evaluate the sustainability and environmental aspects of re-roofing was reviewed. RC generally supports RoofPoint’s mission and is working on drafts of same.
Roofing

Future projects include:
- Photovoltaic systems and SPF roofs
- Update other AY roofing documents as needed
Technical Oversight Committee (TOC)

Roger Morrison
Deer Ridge
Consulting
Technical Oversight

Objectives

- **Maintain and Update** existing SPFA technical documents to assure consistency and accuracy
- **Review and Approve** all published guidance documents developed and published by SPFA based on industry consensus
Technical Oversight

Meetings in 2010

- Conference Calls
  - May 21
  - July 9
  - October 15
  - November 19
  - Several others for specific tasks

- Physical Meetings
  - January 18, 2010 (Las Vegas)
Technical Oversight

Tech Tip Development

- **Tech Tips**: Brief monographs designed to aid contractors through the sharing of techniques, ideas and procedures.
- Posted to the SPFA website
- Approved and published in 2010:
  - Heated Hose Tips
  - Cold Weather Coating Recommendations
  - Maintaining Material Temperatures
  - Gun Cleaner Update
  - SPF Exotherms
Technical Oversight

Other Activities...

- **AY 119 Glossary** completely updated and republished
- **AY 126 Thermal and Ignition Barriers** being updated
- **Intumescent Coatings**: Develop descriptive language to be incorporated into SPFA documents as needed.
- **Intermediate Density SPF**s: Revised physical property tables in AY documents to reflect new products
- **New AY document Hybrid Insulation Systems** in Climate Zones 1-3 reviewed and approved.
Technical Oversight

Other Activities (continued)

- Document Management System
  - **Objective:** To collect and maintain important SPFA documentation for archival, research and member support.
  - Most archived material has been cataloged.
  - Staff to prepare document retention policy.
  - Documents are to be scanned and retained electronically in searchable format.
Accreditation Committee
Accreditation Program Objectives

• To **provide** an established set of criteria which individuals and companies can demonstrate their commitment to professionalism in the spray polyurethane foam industry.

• To **identify** and **recognize** those individuals and companies, by fulfilling prescribed requirements of education, examination and experience, that meet a high standard of professionalism.
Accreditation Program Objectives

- To **encourage** individuals and companies to support the professional development of their industry by taking personal responsibility for the value of their work through self education.
Key Projects

• New SPF Applicator Credentialing Program

• New Fundamentals of SPF Health & Safety Course and Accreditation Course Updates

• Expanded Accreditation Program training
New SPF Applicator Credentialing Program

- Accredited Roofing Applicator Requirements
- Accredited Building Envelope (BE) Applicator Requirements
- Company Accreditation Requirements
- Accreditation Renewal
Accredited Roofing Applicator Requirements

- Three Independently Inspected Roofing Projects
- Fundamentals of Spray Polyurethane Foam (formerly 101)
- Roofing Prerequisites for the Spray Polyurethane Foam Industry (formerly R-1)
- Fundamentals of Spray Polyurethane Foam and Covering Systems for Roofing (formerly 101-R)
- Equipment and Materials courses
- Fundamentals of SPF Health & Safety
- OSHA 10 HR Construction Course
Accredited Building Envelope (BE) Applicator Requirements

- Three Independently Inspected BE Projects
- Fundamentals of Spray Polyurethane Foam (formerly 101)
- Fundamentals of Spray Polyurethane Foam and Coverings for the Building Envelope (formerly 101-BE)
- Equipment and Materials Courses
- Fundamentals of SPF Health & Safety
- OSHA 10 Hr Construction Course
Company Accreditation and Credentials Renewal

- **Company Accreditation** — requires 50% of company employed spray foam applicators to be accredited and all spray foam associated workers having been trained in Fundamentals of SPF Health & Safety.

- **Accreditation Renewal** — will require credential renewal (individual /company) every 3 years to include updated training and exam when current credentials expire.
Accreditation Courses

- **New - Fundamentals of Health & Safety course**
  All new one day required Accreditation Program course consisting of CPI chemical safety training content coupled with general jobsite safety training.
  (½ day SPF H&S and ½ day general jobsite safety)

- **Updated - Fundamentals of SPF for the Independent Inspector**
  This course has just been updated to provide SPF training for both the roofing and BE inspections.
Expanded Accreditation Training

• **Independent third party trainers** instrumental in providing course instruction in 2010.

• Several **suppliers** also offered SPFA course implemented by the “**train the trainer**” program goal envisioned at Spray Foam 2010.

• **165 individuals registered for SPFA courses at SF10 in Orlando** and another **120+ trained through third party and supplier training efforts.**
Goals for 2011

- **Online training**
  Offer SPFA accredited courses online beginning with the new *Fundamentals of SPF Health & Safety Course*. All courses to be offered online by year end.

- **Expand Building Envelope inspector list**
  Work nearing completion for a Building Envelope inspector webinar to share with a ready RESNET audience. Webinar intended to create interest in obtaining SPFA credentials from current RESNET home inspectors to inspect projects for contractors seeking the SPFA BE credentials.