SPFA TECHNICAL COMMITTEE REPORTS

2009 Update and 2010 Activities
Overview

- Product Stewardship and Safety (PSSC)
- Codes and Standards (CSC)
- Building Envelope (BEC)
- Technical Oversight (TOC) and Roofing (RC)
SPFA PRODUCT STEWARDSHIP AND SAFETY COMMITTEE (PSSC)

Julia Rubino
Bayer Materials Science
Product Stewardship and Safety

Objectives

- Address issues pertaining to 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
Key Projects

- **Spray Foam 101 Chapter 1 Update** – Work with CPI to provide needed updates to SPFA Accreditation course chapter on HSE
- **Life Cycle Analysis** – Perform an industry-wide LCA for spray foam products.
- **Emissions Study** – Protocol for testing emissions from finished foam
- **Worker Exposure Study** – Study of chemical exposure during application
- **Other** – PDBE article, Spray Foam Magazine responses
Product Stewardship and Safety

Completed in 2009....

- Chapter 1 Workbook Update
  - Completed in June. Sent to CPI for comments and revisions

- Participated in CPI/SPFA project with Federal Agencies (multiple PSSC members)
  - Developed Tier I HSE documents available at www.spraypolyurethane.com

- Emissions Study and Worker Exposure Study transferred to CPI/SPFA Research Group
Product Stewardship and Safety

Work in Progress….

- Participated in CPI/SPFA project with Federal Agencies (multiple PSSC members)
  - Focus shifted to Various Task forces engaged in Tier 1 Activities
    - Participation in Effective Workplace Practices Workgroup
    - Participation in HazCom Workgroup
Product Stewardship and Safety

Future work for 2010...

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

- Act as lead in distributing key product stewardship activities developed by CPI/SPFA project members to broad contractor bases and SPFA member

- Offer PPE Training Webinars on a quarterly basis

- Evaluate future of LCA project for 2010 – start project work if funding approved
SPFA CODES AND STANDARDS COMMITTEE (CSC)

Eric Banks
BASF Polyurethane
Foam Enterprises
Codes and Standards

Objectives

- Review and develop an industry-consensus position regarding modifications to the International Codes (IBC, IRC, IECC), as well as state and local codes.
- Work with ICC-ES to continually refine and improve product acceptance criteria (AC-377)
- Interact with ASTM, NFPA, FM and other testing organizations to develop and refine test procedures relevant to SPF and coatings.
Completed in 2009....

- Test protocol for attic & crawl space assemblies
  - Developed by task group (open to membership)
  - Incorporated into AC377 as Appendix X

- Unvented Attic Assemblies
  - California adopts 2009 IRC

- 2009-2010 ICC Code Development Cycle
  - Evaluated and prioritized code change proposals
Codes and Standards

Work in progress...

- 2009-2010 ICC Code Development Cycle
  - First round of code change proposals
    - Overall positive for SPF
      - Energy / 30% Solution - DOE package won out
      - Fire Safety – thermal barrier definitions, etc
      - Air permeance / air barrier – increasing use
    - Challenges from other foam plastics and products
      - Polystyrene
      - Boardstock – polyurethane and polyisocyanurate
  - Pick the most important battle(s) to fight
Codes and Standards

Work in progress...

- California Energy Commission Title 24
  - Definitions of Medium and Low Density SPF
  - R-values
  - California Bureau of Electronics and Repair, Home Furnishings and Thermal Insulation
  - Installation guidelines
Future work for 2010…

- 2009-2010 ICC Code Development Cycle
  - Proposals divided into Group A and Group B
  - Group A Final Action Hearings scheduled for mid May 2010 in Dallas, TX
  - Group B Final Action Hearings scheduled for end of Oct 2010 in Charlotte, NC
Future work for 2010…

- ICC ES Acceptance Criteria AC377 Topics
  - Attic & Crawl Space protocol
    - Revisions necessary
      - Specimen prep (per testing laboratories)
      - Specimen design (per SPFA member companies)
  - Clarify definitions, evaluation, and acceptance language for important SPF topics
    - Air Barriers / air permeance
    - Non-prescriptive thermal barriers
    - Construction Types
Codes and Standards

Future work for 2010…

- Product Safety
- International green Construction Code (IgCC)
- Other “GREEN” topics
- Collaborative efforts with other committees
SPFA BUILDING ENVELOPE COMMITTEE (BEC)

Tom Sojak
Gaco-Western
Building Envelope

Objectives

- Expand the use of foam-in-place polyurethane insulation with the building envelope/enclosure
- Review and support development of methods for performance evaluation
- Develop, document and disseminate information on applications in different building envelopes and systems
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.

- **Assessment of Air Barrier Technologies** – Assessment of the impact of air barriers on energy and moisture control.

- **Hybrid Insulation Guidelines** – Develop guidance documents defining best practices for combining SPF with other insulation products
Completed in 2009….

- Chemical Compatibility between SPF and cPVC (Bogdan/Porter)
  - SPFA Study completed with Lubrizol on a wide range of SPF products; No environmental stress cracking observed

- Exotherm Test Procedure (Tolbert)
  - Disseminated test procedure developed by NCFI and Lubrizol

- Major cPVC suppliers have updated position on SPF
  - Lubrizol (Jan); Spears update in progress
  - ESC statements issued for code officials
Work in Progress….

- **Air Barrier Performance Study** (Duncan)
  - Participate in 2-year study with ORNL and ABAA to evaluate the energy and moisture performance of SPF used as an air barrier material/system
  - Two 4x8 test panels constructed (R19 2x6 wood frame)
    - LD panel for standard monitoring of thermal and air leakage
    - MD panel for standard monitoring of thermal and air leakage
    - The MD panel was selected by ORNL for advance monitoring to include moisture measurements
  - Test Structure was commissioned in April 2009
  - Expect to see year one data in April 2010
Building Envelope

Work in Progress....

- Hybrid Insulation Systems (Frauenkron)
  - Develop ‘best practices’ guideline document for combining SPF with other types of insulation
    - Air-permeable fibrous insulations, e.g. “flash-and-batt”
    - Reflective insulations, e.g., “flash-and–foil”
  - Document for warm climates (IECC Zones 1-3) nearly complete
    - SPF and fibrous insulations
    - SPF Air-permeability
  - Document for cold climates (IECC Zones 4-8) start Q2-2010
    - Vapor-retarders
Building Envelope

Future work for 2010…

- Continue ABAA – ORNL Research Project through 2011
- Complete Hybrid Insulation Guidelines for All Climate Zones
- Potential Collaboration with ORNL Residential Energy Retrofit program - NEW
- Initiate compatibility testing study for SPF and Low Voltage Wiring - NEW
- Liaison with Other Associations (ICAA, etc)
TECHNICAL OVERSIGHT COMMITTEE (TOC) AND ROOFING COMMITTEE (RC)

Roger Morrison
Deer Ridge Consulting
Technical Committee Reorganization

Committee Reorganization in 2009

- TOC and Roofing Committees formed out of the Technical Committee
- TOC & Roofing currently meeting as one
  - As Roofing issues develop and needs arise, committees will develop independent agendas
Roofing

Work in Progress….

- RICOWI (Roof Industry Committee on Weather Issues)
  - SPFA is a sponsor member with Morrison as representative. SPFA has committed to supporting a hail incident investigation (awaiting a triggering hail event) and tentatively support a 5th wind investigation.

- Gravel Blowoff
  - SPFA has been working with other roofing trade associations to develop better building code language for loose-laid gravel.
Technical Oversight

Meetings in 2009

- Conference Calls
  - June 11
  - June 23
  - June 30
  - September 8

- 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.
- In development and/or update:
  - Cold weather coating application
  - Gun cleaner update
  - Hose maintenance and troubleshooting
  - Maintaining material temperatures
  - Exotherm and related fire hazards
  - Photovoltaics and SPF
  - Safety/Health (assigned to other committees)
    - Gloves, MSDSs, Damaged drums, Project ventilation
Technical Oversight

**Other Activities…**

- Intumescent Coatings: Develop descriptive language to be incorporated into SPFA documents as needed.
- Intermediate Density SPFs: Develop a new product protocol in preparation to acquire technical data and information for use in SPFA documents for SPFs which do not readily fit into current definitions.
- Documents being updated/reviewed:
  - AY 119 Glossary
  - AY 102 Elastomeric Protective Coatings
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.
Final Thoughts….

- Thanks to all of our volunteer members for making the SPFA Technical Program a success in 2009!!

- We encourage feedback and most importantly participation in all of our technical projects. Technical Committees, as well as Project Teams and Task Groups are open to all SPFA Members

- If you are interested in joining any or all of our committees, teams or groups, please contact Rick Duncan or any one of our Committee Chairs
The Purpose of Accreditation

The purpose of the SPFA Accreditation Program is to provide the industry with up to date training in the application of spray polyurethane foams and coatings, and good business practices through education.
The Purpose of Accreditation

Why take the Accreditation Courses?

If you’re a supplier or distributor…

Credentials
Sales Assistance
Prestige
The Purpose of Accreditation

Why take the Accreditation Courses?

If you’re a Contractor…

Credentials
Sales Assistance
Prestige
Trained Personnel
The Purpose of Accreditation

Why take the Accreditation Courses?

If you’re a Contractor…

$$$$ Marketing Tool $$$$

Businesses and consumers don’t buy on price alone.

Stand out from your competition by marketing your SPFA credentials to secure the price you are worth.
The Purpose of Accreditation

Why take the Accreditation Courses?

If you’re a Contractor…

$$$ Marketing Tool $$$

Customers want value for the money and that could include paying more for the benefits or advantages they gain from buying your services.
101 Course- Fundamentals of Spray Polyurethane Foam

Chapter 1 was updated and rewritten. This effort reflects SPFA’s current emphasis on contractor health, safety and the environment when applying spray polyurethane foam and coverings.
Accreditation Course Updates

Building Science Course (BSC)

Now included as an official SPFA Accreditation course.

SF09 participants will be grandfathered into the program pending test completion.
Accreditation Course Updates

Equipment and Material Course (E&M)

Current list of approved E&M providers updated and posted on SPFA website.
Building Envelope Accreditation

SPFA BE Contractor program is completed and operational.

BE Contractor Program Booklet posted on SPFA website.

Newly combined Inspector Booklet for Roofing and BE posted on SPFA website.
2010 Accreditation Goals

**BE Inspectors**

*Limited number of BE inspectors at this time.*
2010 Accreditation Goals

BE Inspectors

Expand the Accredited BE Inspectors in the following ways:

1) Contacting member manufacturers and suppliers for a list of inspectors currently in use that would be interested in becoming SPFA BE Accredited Inspectors.
2010 Accreditation Goals

BE Inspectors

Expand the Accredited BE Inspectors in the following ways:

2) SPFA 101-I BE training course pathway.
2010 Accreditation Goals

BE Inspectors

Expand the Accredited BE Inspectors in the following ways:

3) Contacting ABAA and RESNET for experienced BE inspectors. Coordinating training as required to meet SPFA inspection criteria.
2010 Accreditation Goals

Expanding SPFA Accreditation Training

Options Include:

1) Independent or third party training throughout 2009.
2010 Accreditation Goals

Expanding SPFA Accreditation Training

Options Include:

2) Partnering with existing manufacturer and supplier training programs.
   - train the trainer approach
   - qualify by training their existing company personnel to teach SPFA Accreditation courses.
2010 Accreditation Goals

Expanding SPFA Accreditation Training

Options Include:

3) Online and on demand training courses