



**NASFM Pallet Working Group meeting
May 13, 2009, Washington, DC**

Attendees:

Jim Narva – NASFM

Bob Davidson – Davidson Code Concepts

David Deal – CHEP

Loren Caudill – On Board Engineering

LeRoi Cochran – IFCO Systems N.A., Inc

Edgar Deomano – National Wooden Pallet and Container Association (not a Working Group member)

Tom LaCorte – Chubb

Thomas McCarty – FM Approvals

Rodney McPhee – Canadian Wood Council (member of NFPA 13 Committee, but not speaking for NFPA 13)

Bruce Scholnick – National Wooden Pallet and Container Association

Dan Stepan – Underwriters Laboratories

Karen Suhr – NASFM (not a Working Group member - assisted with note taking)

Lewis Taffer – iGPS

David Tyler – Alaska State Fire Marshal, NASFM Model Codes Committee

Absent: Tim Testerman – Proctor & Gamble

- **Goal of Working Group:** Mr. Narva stated that the goal of the Pallet Working Group was to develop training and education for code officials to inspect adequacy of fire protection systems where pallets are involved. He said that while the meeting had no formal agenda, he wanted the group to address the deliverables that were outlined in the letter “to all interested parties” from NASFM dated April 15, 2009:

Deliverable 1: Plan and budget to finalize the NASFM Code Application Bulletin and conduct at least seven regional pallet fire safety workshops to educate code enforcement officials, pallet companies and major users about the existing rules. The Working Group is expected to recommend a curriculum, materials, presenters and locations. A web-based approach may be proposed to augment the workshops.

Deliverable 2: Validation of statements about the fire performance of wood pallets – 1) that the fire performance of all wood pallets does not vary much; and 2) that there is no evidence of major fire incidents involving pallets.

- **Timing of deliverables:** Mr. Narva said an update was due to the NASFM Board and members at NASFM's annual conference in June, and it was hoped that a draft of the training package could be presented by then. Mr. Davidson said that it would be feasible to have the training package finished by the end of the summer, given that several organizations have data and training models on which the form and format of the package can be based. Group members suggested taking advantage of existing training from other organizations on warehouse sprinkler protection and plan approvals.
- **Where pallet training module fits into the larger issue of warehouse sprinkler protection:** Mr. Davidson said the Code Application Bulletin (CAB) was envisioned by NASFM to be the first phase of the program, followed by a 2-hour training session attached to ongoing and existing meetings to spark code officials' interest, and then backed up with a web-based module with resources for more in-depth information. The group agreed that a 2-hour training session would be a good meeting enhancement tool, but would only scratch the surface of the information that needed to be covered. NASFM will also seek to have the trainings provide continuing education units for attendees.

Mr. Davidson said the focus of the training is about how the types of pallet being used, and the way they are being used, affect the design of the fire protection system as specified in NFPA 13. The focus is on pallets because there have been changes in the requirements in NFPA 13 (for example, in 2002 and 2007 the minimum density requirements for idle pallet storage changed). But the session will need to also address the overall design of the system and the fire load beneath that system, of which the pallet is one part. The course will encourage code officials to look at the bigger picture of what is in a warehouse, which may lead to other training modules.

- **Code Application Bulletin:** The CAB is not focused only on plastic pallets. It is intended to be a working tool that provides a path through the code, with background and guidance on how to apply the code. The Group recommended that the CAB be changed to note that AHJs have the ability to accept data from any nationally recognized testing labs, including UL and FM Approvals. The Group also suggested changing the initial subhead from "The Problem" to "The Concern" or "The Issue" and after stating the issue and how NASFM is address it, then moving on to Frequently Asked Questions or a similar format. The Group talked about whether the CAB should give enough information to encourage the training, but not so much information that the code official does not feel the need to take the course. Mr. Davidson pointed out the need for the CAB to be a guidance document.

Mr. McCarty made a motion (not acted upon) to amend the title of CAB to "Plastic Pallet Fire Loading Impact on Sprinkler Design." Mr. Scholinck pointed out that there are other pallet materials beyond plastic – such as corrugated, rubber, etc., that also may be cause for concern.

The Group agreed that once the outline of the training program is completed to everyone's satisfaction, the CAB will be revised to align with the program, since it

will summarize the training program. There was discussion about having different CABs for different audiences, such as warehouse managers and users of pallets.

- **International Fire Code:** The Group discussed the concern that the International Fire Code has not caught up to NFPA 13, and that the IFC does not address the commodity bump for plastic pallets at all, yet provides guidance on design densities. Thus, buildings are getting built per the IFC that are believed to be in compliance but may be a problem.
- **Draft course outline:** The Group reviewed and revised the draft course outline, which will be used as guidance for development of the course (not as a document to be distributed beyond the Working Group). Mr. Deal made a motion to propose a decision tree (seconded by Mr. Scholnick and approved by the Group) as a path forward to dealing with NFPA 13 requirements. The decision tree has been incorporated into the draft course outline. It is anticipated that there would be two or three presenters: one representing the code community, one representing industry (user or manufacturer), and possibly one subject matter expert on NFPA 13.
- **Budget and contributions:** Mr. Caudill and Mr. Davidson presented a draft budget as a starting point. Mr. Narva noted that the administrative costs would need to be increased given the amount of effort and time in coordinating training sessions, and meeting/facility costs would be difficult to estimate. The Group discussed the importance of this program being made available to code officials for free. Several Working Group members indicated their willingness to fund the course in line with others. Additionally, it was suggested that the sprinkler industry and the Warehouse Educational Research Council might be approached as a funding source.

It was suggested that one way to make the program self-sustaining would be to provide the training to code officials for free, but to architects or other industry/professional groups for a fee. The pallet industry also might be willing to pay to provide the course to their customers, who may benefit from information about consequences of not using listed/approved pallets.

- **Data on fire performance of CHEP's composite wood pallet:** Mr. Deal shared data confidentially that indicated that CHEP's composite wood pallet is a wood equivalent in fire performance of idle pallet storage based on testing in accordance with ANSI/FM 4996, and the pallet has gained approval from FM Approvals. Mr. McCarty pointed out that composite materials used in the construction of pallets, using thermoset plastic in their composite construction, and in unspecified ratios of composite/wood, cannot be simply lumped together as equivalent to wood. Test results are specific to the item tested.

Wood pallets are not required to be listed/approved. The Group discussed how, if a composite wood pallet is not listed or approved, it comes down to data, which has to be provided to the AHJ, who must make a decision about its acceptability. But Mr. Steppan and Mr. McCarty pointed out that even with data, it is important to "look for the mark," because having data does not mean that the composite wood pallet is OK in actual use. The Group talked about the value of having a joint statement from

insurers saying that listed/approved pallets in general are all OK as long as there is appropriate sprinkler coverage.

▪ **Next steps and action items:**

- NASFM will post a summary of the May 13 meeting on its website, along with a list of the full membership of the Working Group.
- The draft course outline will not be posted on the NASFM website, because it is a “work in progress.”
- The Working Group will have a chance to review and approve what gets posted on the NASFM website regarding the activities of the Working Group.
- At the NASFM annual conference, Mr. Narva said that the NASFM Board and NASFM membership would be provided with an overview of progress to date. There was a question of whether the Annual Conference session would be open to Working Group members/stakeholders, but it was subsequently decided that NASFM members would be provided an update on Working Group activities without the opportunity for open discussion.
- The pallet industry representatives of the Working Group will consider the possibility of seeking clarification from NFPA about how wood and plastic pallets are defined in NFPA 13.
- Mr. Caudill and Mr. Davidson will work on fleshing out the course content.
- Mr. Narva will work on fleshing out the proposed budget, including more specific information on proposed sites for the initial round of training after receiving the draft training program with additional information on delivery mechanism and locations. NWCPA offered to provide assistance on the budget development as well. It was suggested that going to states with the biggest audiences first will help sell the program and develop enthusiasm for it through word of mouth.
- The Group agreed that the next face-to-face meeting would be to present the course material as a dry run. Mr. Scholnick offered NWCPA’s office for future face-to-face meetings. Mr. Narva also raised the possibility of web-based meetings when it was not necessary to meet in person.
- UL and FM Approvals will each provide 5-10 PowerPoint slides for the course that describe their standards, plus any video that they have.
- UL and FM Approvals will provide copies of their standards to Mr. Davidson for use only by instructors, but students will be given information about where the standards can be purchased.
- Mr. Scholnick will send fire performance data from Sonoco.
- Mr. Davidson encouraged all Working Group members to send content for the course to him or to Mr. Caudill.
- NASFM will work with the International Fire Marshals Association (IFMA) to disseminate the program once it is developed.
- Mr. Narva will lead efforts to prepare a standalone document explaining the course and the need for funding, to be used by potential funders within their organizations with input from Working Group members.
- Mr. Narva will follow up individually with Working Group members about their willingness to fund the development and implementation of the training course.