

Minutes
Fog and Smoke Working Group
Saturday, July 17, 1999
Dallas/Ft. Worth Marriott
Irving, Texas

Chairman: Larry Schoeneman; Interesting Products, Inc.; Principal; Producer
Recording secretary: Karl G. Ruling, ESTA

Members attending: Marc Gingras; MDG Fog Generators Ltd.; Principal; Producer
Eric Tishman; Rosco Laboratories; Principal; Producer
Adrian Segeren; Le Maitre Special Effects; Principal; Producer
Bill Hektner; USITT ; Principal; General interest
Brad Dittmer; Associated Theatrical Contractors; Principal; User
Mike Wood; High End Systems; Principal; Producer
Byron Ziegler; High End Systems; Alternate; Producer (voted in at this meeting)
F. Lee Iwanski; Four Star Lighting (Matthews Studio Group Companies); Principal; User
Murray Gellatly; A.C. Lighting Ltd.; Principal; General interest
Eckart Steffens; SOUNDLIGHT representing VPLT; Alternate; General interest
Martin Becker; Reel EFX; Alternate; Producer
Tim Cox; PLASA; PLASA; Principal; General interest
Edwin S. Kramer; IATSE, Local 1; Principal; User

1 Opening remarks

Larry Schoeneman called the meeting to order at 17:13 and described what we needed to do today and how the meeting would proceed.

2 Attendance and membership

2.1 Introductions of those present

People introduced themselves, proceeding around the table counter-clockwise.

2.2 Determination of quorum (6 needed)

Schoeneman announced that we have a quorum.

2.3 Recognition of alternate voting members

2.4 Requirements for membership

Except for organizational members, a member's voting status will be changed to observer if he misses two consecutive meetings, pending that member's attendance at another meeting.

2.5 Processing of new membership applications

Byron Ziegler had applied for membership as an alternate for High End Systems. Eric Tishman moved that Byron Ziegler's application be accepted. The motion was seconded. Unanimous by show of hands.

2.6 Processing of changes to observer status

None at this time.

3 Approval of minutes from the previous meeting

Bill Hektner moved that we accept minutes. The motion was seconded. Unanimous by show of hands.

4 Approval of Agenda

Brad Dittmer moved that the agenda be approved, but with the fog book being tackled as the last order of business of the meeting period, just before adjournment. The motion was seconded. Unanimous by show of hands.

5 Call for patents:

Larry Schoeneman directed all to read the anti-trust statement and the call for patents, which are printed below:

"ESTA intends to publish no standard that contains protected intellectual property, unless that property can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent disclosures to implement this intent. ESTA does not conduct patent searches and does not warrant that its standards contain no protected intellectual property.

"In keeping with the open disclosure policy, I ask if anyone present wishes to notify the working group of the existence of a patent or copyright that might protect material in a standard being developed by the working group. You need not be the holder of the patent or copyright in order to notify the working group of its existence. "

6 Anti-Trust Statement

"The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this Working Group will reject or nullify any actions that restrain trade. Anyone who feels that an action restraining trade is being or has been taken is requested to bring the matter to the attention of the chair immediately. Anyone who feels that actions in restraint of trade have been taken and not properly annulled is requested to notify the TSC chair or ESTA president immediately."

"ESTA legal counsel has informed us that any member of this working group may be found individually liable for any action that restrains trade taken by this working group. An individual convicted of a violation of the Sherman Act may be fined as much as \$100,000 and be imprisoned for up to three years. An easy to read pamphlet describing restraint of trade is available from the Technical Standards Committee."

7 Task Group Reports

7.1 Fog standard E1.5 — "Stink Test" report

Schoeneman asked to entertain a motion to accept the draft report from The Life Sciences Consultancy and send the final copy (assuming there are no substantial changes) it to the TSC with a cover letter explaining its value. Dittmer offered the motion. It was seconded. Eleven in favor, one opposed.

Schoeneman will ask Life Sciences Consultancy why this document is smaller than the first draft and why does it not contain information on glycerol and 1,3 butylene glycol.

7.2 Fog machine instruction manual standard

Ruling reported that he had failed to forward the one comment received on the draft standard to the working group. That comment, from Mike Wood, was:

Section 4.3

I know this is the draft USITT wording but I don't like the mention of 'allergic to dust' - this has the implication that there is solid particulate in the Fog - of course there isn't.

Recommendation - replace 'or who are allergic to dust' with 'or who suffer from allergies'

Brad Dittmer moved that Wood's recommendation should be accepted. Lee Iwanski seconded the motion. Unanimous by show of hands.

Eddie Kramer moved that this standard shall be processed as an American National Standard. The motion was seconded. Unanimous.

Mike Wood moved that we send the document to public review. Seconded. The vote will be by letter ballot.

7.3 Fog Book III comment resolution

Rose Brand post-it-style notes were used to identify resolutions in the F&S/99-3008 document the group felt needed to be discussed. The following resolutions were identified:
10, 13, 15, 16, 17, 18, 19, 21, 22, 29, 40, 53, 54, 72, 76

The resolutions to 15, 17, 22, and 76 were changed, and are marked in a new document, F&S/99-3008r1, as "Amended Resolutions:"

Mike Wood moved that the resolutions, as modified, be accepted. The motion was seconded. Unanimous by show of hands.

7.4 Responsible Product Stewardship Program

Mike Wood gave a Power Point presentation on a generic Product Stewardship Program and handed out a hard-copy version of the presentation [attached].

The program was generally well received. Some people questioned how much additional work it would entail for companies. Wood explained that probably in most cases it would require no more work other than taking the effort to document and publicize a company's attempts to make sure that its products are handled, used, and disposed of safely and responsibly.

The task group asked the working group to send comments on the draft of the program to the task group.

The task group (Mike Wood, Eric Tishman, and Adrian Segeren) were directed to further refine the program and to return the document to the group in November 1999 or January 2000.

7.5 Data collection task group

Byron Ziegler demonstrated how air samples can be taken and discussed prices. We could buy the required metering pumps for about \$500 each. Ziegler had gotten a quote from TRI/Environmental of \$30 per sample for analysis. The sampling media would cost about \$12.80. The bottom line of his presentation was that the mechanics of taking a sample are not difficult, and the cost is not prohibitive.

Bill Hektner moved that Larry Schoeneman shall approach the TSC for funding for this sampling project and shall tell them the purpose of the study. The amount requested shall be \$5,000. The motion was seconded. Unanimous support by show of hands.

Martin Becker proposed that some Dragger Tube tests should be run in parallel to check the validity of Dragger Tubes tests. These are less expensive sampling devices, and it would be helpful to know if the results with them correlate with the results from the more expensive tests.

7.6 CMA project

Larry Schoeneman noted that we are making progress toward being in a position to address the CMA.

8 Old Business

8.1 Thanks to Local 1

Larry Schoeneman reported that he had written a letter thanking Local 1 for Eddie Kramer's participation.

8.2 Hektner reported that he had said he would explore funding from USITT for F&S projects. He did, and was told that USITT already funds the TSP as a whole, and that requests for additional funding should come through the TSC.

9 Liaison Reports

9.1 PLASA

Tim Cox reported that 2,500 USD will be donated by PLASA toward the stink tests.

Tim Cox also reported that he had come across an advertising flyer that stated that the fluid advertised is made with only "PLASA approved" chemicals. Having approached the company, Tim Cox found that the employees had misinterpreted the list of chemicals

included in 'Report on Investigation into Safety of Smoke Machines' (PLASA, 1990). He received assurances that the claim would be removed from future advertising."

9.2 JATET

Schoeneman reported that he had heard no news.

9.3 VPLT

Eckart Steffens said that VPLT will donate \$1,000 to the TSC.

Larry Schoeneman agreed to write a thank you letter the President of VPLT.

9.4 The Kramer and Fails Report

No report. Fails was not present and Kramer had left the meeting by this time.

10 New business

Schoeneman presented the new TSP, which was well received by the group.

11 Other business

Karl Ruling asked people to participate in the LDI fog day just as they did last year. The Nebulous Effects session will be on the Thursday immediately preceding the opening of LDI, rather than three days before the trade show. This should improve attendance.

12 Schedule for future meetings

Schoeneman announced that the next meeting will be Friday, November 19, 1999 at 19:00 at the Peabody Hotel in Orlando.

13 Adjournment

Brad Dittmer moved to adjourn. The motion was seconded. Unanimous. The meeting was adjourned at 21:38.

ESTA Product Stewardship Vision Statement

Our industry creates products and services that entertain and enlighten people's lives around the world. These benefits are, of necessity, accompanied by enduring responsibilities and commitments in the management of these products. We will make continuous progress toward the vision of no accidents, injuries or harm to the environment and will publicly report our global health, safety and environmental performance. We will lead our companies in ethical ways that increasingly benefit society, the economy and the environment while adhering to the following principles:

- < To seek and incorporate public input regarding our products and operations.
- < To provide products that can be manufactured, transported, used and disposed of safely.
- < To make health, safety, the environment and resource conservation critical considerations for all new and existing products and processes.
- < To provide information on health or environmental risks and pursue protective measures for employees, the public and other key stakeholders.
- < To work with customers, carriers, suppliers, distributors and contractors to foster the safe use, transport and disposal of products.
- < To operate our facilities in a manner that protects the environment and the health and safety of our employees and the public.
- < To support education and research on the health, safety and environmental effects of our products and processes.
- < To work with others to resolve problems associated with past handling and disposal practices.
- < To lead in the development of responsible laws, regulations and standards that safeguard the community, workplace and environment.
- < To practice Product Stewardship by encouraging and assisting others to adhere to these principles and practices.

What is Product Stewardship?

Health, Safety and Environmental Protection

Product Stewardship is the safe use and handling of products at all stages of their lifecycles. Health, safety and environmental protection must be an integral part of designing, manufacturing, marketing, distributing, using, recycling and disposing of products.

In order for your business to operate successfully and in compliance with regulatory requirements, you need to be aware of many environmental, health and safety laws and product hazards. This includes knowing how to receive, handle and store products correctly, minimize waste generation and dispose of wastes properly. When you have Product Stewardship questions concerning products or services, your supplier is the place to turn for assistance.

Product Stewardship—Responsibilities and Expectations

Product Stewardship is Everybody's Responsibility.

To fulfill management and employee commitments to our customers and suppliers, we will:

- < Meet all of our regulatory requirements;
- < Provide health and safety information through Material Safety Data Sheets (MSDS);
- < Work to minimize the environmental, health and safety risks associated with our products;
- < Train employees in the company's Product Stewardship process;
- < Respond to customer questions concerning the safe use and handling of our products;
- < Use responsible distributors, suppliers, warehouses and carriers; and
- < Respond back to customers on product health effects.

Customer and Supplier Product Stewardship Responsibilities.

We expect our customers and suppliers to be good product stewards, to operate in a safe and responsible manner and to:

- < Meet all of their regulatory requirements;
- < Provide their employees, suppliers and customers with appropriate health and safety information;
- < Use our products as intended;
- < Have appropriate equipment and qualified, trained personnel to safely receive, store, process and dispose of products;
- < Request additional information when needed; and
- < Use responsible distributors, suppliers, warehouses and carriers.

Product Stewardship Code of Practice

Purpose and Scope

The purpose of the Product Stewardship Code of Practice is to make health, safety and environmental protection an integral part of designing, manufacturing, marketing, distributing, using, recycling and disposing of our products. The Code provides guidance as well as a means to measure continuous improvement in the practice of product stewardship.

The scope of the Code covers all stages of a product's life. Successful implementation is a shared responsibility. Everyone involved with the product has responsibilities to address society's interest in a healthy environment and in products that can be used safely. All employers are responsible for providing a safe workplace, and all who use and handle products must follow safe and environmentally sound practices.

The Code recognizes that each company must exercise independent judgment and discretion to successfully apply the Code to its products, customers and business.

Relationship to Guiding Principles

Implementation of the Code promotes achievement of several of the Vision Statement Principles:

- < To make health, safety and environmental considerations a priority in our planning for all existing and new products and processes;
- < To develop and produce products that can be manufactured, transported, used and disposed of safely;
- < To extend knowledge by conducting or supporting research on the health, safety and environmental effects of our products, processes and waste materials;
- < To counsel customers on the safe use, transportation and disposal of products;
- < To report promptly to officials, employees, customers and the public, information on health or environmental hazards and to recommend protective measures;
- < To promote the principles and practices of Responsible Care by sharing experiences and offering assistance to others who produce, handle, use, transport or dispose of products.

Management Practices

Each company shall have an ongoing product stewardship process that includes:

Management Leadership and Commitment

- 1 LEADERSHIP: Demonstrates senior management leadership through written policy, active participation and communication.
- 2 ACCOUNTABILITY and PERFORMANCE MEASUREMENT: Establishes goals and responsibilities for implementing product stewardship throughout the organization. Measures performance against these goals.

- 3 **RESOURCES:** Commits resources necessary to implement and maintain product stewardship practices.

Information and Characterization

- 4 **HEALTH, SAFETY and ENVIRONMENTAL INFORMATION:** Establishes and maintains information on health, safety, and environmental hazards and reasonably foreseeable exposures from new and existing products.
- 5 **PRODUCT RISK CHARACTERIZATION:** Characterizes new and existing products with respect to their risk using information about health, safety, and environmental hazards and reasonably foreseeable exposures. Establishes a system that initiates re-evaluation.

Risk Management

- 6 **RISK-MANAGEMENT SYSTEM:** Establishes a system to identify, document, and implement health, safety, and environmental risk-management actions appropriate to the product risk.
- 7 **PRODUCT and PROCESS DESIGN and IMPROVEMENT:** Establishes and maintains a system that makes health, safety and environmental impacts-including the use of energy and natural resources-key considerations in designing, developing and improving products and processes.
- 8 **EMPLOYEE EDUCATION and PRODUCT USE FEEDBACK:** Educates and trains employees, based on job function, on the proper handling, recycling, use, and disposal of products and known product uses. Implements a system that encourages employees to feed back information on new uses, identified misuses or adverse effects for use in product risk characterization.
- 9 **CONTRACT MANUFACTURERS:** Selects contract manufacturers who employ appropriate practices for health, safety and environmental protection for the operations under contract, or works with contract manufacturers to help them implement such practices. Provides information and guidance appropriate to the product and process risk to foster proper handling, use, recycling and disposal. Periodically reviews performance of contract manufacturers.
- 10 **SUPPLIERS:** Requires suppliers to provide appropriate health, safety and environmental information and guidance on their products. Factors adherence to sound health, safety, and environmental principles into procurement decisions.
- 11 **DISTRIBUTORS:** Provides health, safety and environmental information to distributors. Commensurate with product risk, selects, works with and periodically reviews distributors to foster proper use, handling, recycling, disposal and transmittal of appropriate information to downstream users. When a company identifies improper practices involving a product, it will work with the distributor to improve those practices. If, in the company's independent judgment, improvement is not evident, then the company should take further measures -- up to and including termination of the business relationship.
- 12 **CUSTOMERS AND OTHER DIRECT PRODUCT RECEIVERS:** Provides health, safety and environmental information to direct product receivers. Commensurate with product risk, works with them to foster proper use, handling, recycling, disposal, and transmittal of appropriate information to downstream users. When a company identifies improper practices involving a product, it will work with the product receiver to improve those practices. If, in the company's independent judgment, improvement is not evident, then the company should take further measures -- up to and including termination of product sale.

Working Group Membership at the End of the Meeting:

Name	Company	Parent co./ org rep.	Voting Status	Interest cat.
Murray Gellatly	A.C. Lighting Ltd.	A.C. Lighting Ltd.	P	G
Hugh A. Rose	Alliance of Motion Pict. & Television Prod.	Alliance of Motion Pict. & Television Prod.	O	G
Brad Dittmer	Associated Theatrical Contractors	Associated Theatrical Contractors	P	U
Patrick O'Rourke	Big Apple Lights	Big Apple Lights	O	U
Gary Crawford	C.I.T.C.	C.I.T.C.	O	P
Gary Fails	City Theatrical, Inc.	City Theatrical, Inc.	P	P
Norman Wright	Group One	Group One	O	P
Lowell Fowler	High End Systems	High End Systems	A	P
Byron Ziegler	High End Systems	High End Systems	A	P
Mike Wood	High End Systems	High End Systems	P	P
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	P	U
Larry Schoeneman	Interesting Products, Inc.	Interesting Products, Inc.	P	P
Jack Suesse	J.R. Clancy, Inc.	J.R. Clancy, Inc.	O	G
Greg Meeh	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	O	P

Name	Company	Parent co./ org rep.	Voting Status	Interest cat.
Randy Segeren	Le Maitre Special Effects	Le Maitre Special Effects	A	P
Adrian Segeren	Le Maitre Special Effects	Le Maitre Special Effects	P	P
Jon Petts	Jem Smoke Machine Co, Ltd.	Martin Professional A/S	O	P
F. Lee Iwanski	Four Star Lighting	Matthews Studio Group Companies	P	U
Martin Michaud	MDG Fog Generators Ltd.	MDG Fog Generators Ltd.	A	P
Marc Gingras	MDG Fog Generators Ltd.	MDG Fog Generators Ltd.	P	P
Monona Rossol	Monona Rossol	Monona Rossol	O	G
Tony Douglas-Beveridge	PLASA Standards Office	PLASA	A	G
Tim Cox	PLASA	PLASA	P	G
George Sabbi	PRG Lighting Group	PRG	O	U
Martin Becker	Reel EFX, Inc.	Reel EFX	A	P
Jim Gill	Reel EFX, Inc.	Reel EFX	P	P
Dan Faulkner	Rosco/ Entertainment Technology	Rosco Laboratories	A	P
Eric Tishman	Rosco Laboratories	Rosco Laboratories	P	P
Heinz Siller	RST Prsentations-systeme	RST Prsentations-systeme	O	G

Name	Company	Parent co./ org rep.	Voting Status	Interest cat.
Beverly Huggins	SFX Design, Inc.	SFX Design, Inc.	O	P
Nathan Kahn	Theatre Effects, Inc.	Theatre Effects, Inc.	O	P
Thomas Costello	TJC and Associates	TJC and Associates	O	G
Colin Waters	TMB Associates	TMB Associates	O	G
James F. Foley	UCISCO, Inc.	UCISCO, Inc.	O	P
Rob Schneider	University of Arizona, Department Of Theatre	University of Arizona, Department Of Theatre	O	U
Bill Hektner	USITT Vice Commissioner for Smoke and Fog Safety	USITT	P	G
Eckart Steffens	SOUNDLIGHT	VPLT	A	G
Gunther Schaidt	Safex Chemie	VPLT	A	P
Florian Von Hofen	VPLT	VPLT	P	G
Jeffrey Lind	Walt Disney Imagineering	Walt Disney	O	U
Michael Zilz	Zilz International GmbH	Zilz International GmbH	O	G

Voting Status

- P Principal voting representative for a company or organization
- A Alternate voting representative for a company or organization
- I Individual representing no organization other than himself or herself
- O Observer; non-voting

Interest Categories

- P Producer (manufacturer) of fog or smoke effects
- U User of fog or smoke effects
- G General interest in fog or smoke effects