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Date: September 29, 2003
To: Distribution
From: Rick Charbonneau, Storage Tech, Chair ECE TIG
Bob Pfahl, NEMI
David Godlewski, NEMI
Chuck Richardson, NEMI
Subject: Minutes of NEMI September 16, 2003 Meetings on Environmental Initiatives
Attendees: Attachment 1.0
Meeting presentations: http://www.nemi.org/projects/ese/Envi_initiatives_meetings.html

NEMI and all the attendees would like to thank Rick Charbonneau for conducting the forum, Jim Arnold and Motorola for hosting, and all the attendees for their contributions and suggestions for initiatives and projects developed from the forum.

Rick Charbonneau called the meeting to order at 8:00 AM on September 16. The day was divided into three separate meetings: "Transition to Pb-free Assembly Forum," "Process for Communication of Materials Content Data" and "Testing Standards for Materials Content Data". Agendas and minutes for each meeting follow.

TRANSITION TO PB-FREE ASSEMBLY FORUM

Time	Topic	Discussion Leader
8:00 AM	Introduction, Review Agenda Environmentally Conscious Electronics (ECE) Gap Analysis	Rick Charbonneau, StorageTek
8:30 AM	Individual Presentations An OEM's View Toward RoHS Compliance Pb-Free Issues of Concern Key Issues Lead-Free Infrastructure Transition Environmental Materials Declaration Workshop (Overview of EIA Guide)	Jerry Gleason, HP Rich Parker, Delphi Linda Scala, Celestica Krystin Keene, Solectron Steve Scheifers, Motorola
9:30 AM	Break	
9:45 AM	Break into 2 working groups Technical Issues Supply Chain Issues	
12:00 PM	Working Lunch	
1:00 PM	Reconvene Groups, Review Output & Plan	Ning-Chen Lee, Indium, and Leo Quintero, Dell
2:00 PM	Adjourn	

Summary

The group formed “Technical” and “Supply Chain” issue working groups. Each group’s goal was to review, add and modify the list of ECE gaps, as identified by NEMI’s 2002 Roadmap and select areas for potential collaborative efforts. The group’s recommendations for future possible collaboration follow:

- **Standardization of Product Specifications / Process**
Participant interest: Nortel, Tyco, and Solectron
- **Part Number Change Management**
Participant interest: Texas Instruments
- **Component Compliance Roadmap for Pb-free & Temperature**
Participant interest: HP, Nortel and Jabil
- **Technical issues surrounding 260 degrees and associated reliability**
Participant interest: Lucent, Cookson and Dell
- **Optional Alloy Investigation**
Participant interest: StorageTek, Indium, Dell

The next step is to develop project straw-man requirements documents.

Action Items

Rick Charbonneau, Chuck Richardson, and David Godlewski will work with the interested members to develop the straw-man document and set up a “call for participation” membership teleconference to move each project forward.

PROCESS FOR COMMUNICATION OF MATERIALS CONTENT DATA

Time	Topic	Discussion Leader
2:05 PM	Introduction & Review Meeting Purpose	Rick Charbonneau, StorageTek
	Automotive Experience	Brenda Baney, Delphi
	RosettaNet	Barbara Goldstein, NIST
	Supply Chain Readiness: <i>GCG Material</i>	Jim Dills, The GoodBye Chain Group
	<i>Declaration Wizard</i>	
3:15 PM	Discuss Scope of Emulators and Plans	
4:00 PM	Adjourn	

Summary:

- Rick Charbonneau suggested that product emulators be used in a project that uses different reporting tools
- Emulators could run the gamut from component level to assemblies
- StorageTek is interested in such a project and would like completion to be less than one year
- Comment to engage suppliers in project from day one
- StorageTek suggested a teleconference of interested companies – StorageTek, Tyco and Solectron
- Japanese /AeA use XL spreadsheets
- Component suppliers should include disclosure of materials content by weight on data sheets/websites; project should include all RoHS materials as a minimum

TESTING STANDARDS FOR MATERIALS CONTENT DATA

Time	Topic	Discussion Leader
4:00 PM	Introduction	Bob Pfahl, NEMI
4:05 PM	Analytical Protocol for Motorola Product Content (Overview of Motorola's Approach to Testing)	Steve Scheifers, Motorola
4:30 PM	Review of EMT Testing Capabilities	Keith Grey, EMT
4:40 PM	Discuss and Develop Action Plan	All
5:30 PM	Adjourn	

Summary:

- Best practices sharing by Motorola and EMT
- Assay technology described and capabilities explained by EMT
- Proactive approach to knowing materials content of products carries risks and benefits
- NEMI might want to put together a list of labs and/or specifications for members; suggested preferred approach is to place the burden on the suppliers
- Accreditation by NELAC should be a requirement for any lab
- EMT website is www.emt.com - presently 19 metals/elements on Motorola's list of requirements
- International standard for testing would be logical next step
- NEMI will call for interest in a future teleconference

Attachment 1.0

Meetings on Environmental Initiatives, September 16, 2003

Revision Date 09-23-03

Avaya
Bourns, Inc
Brush Wellman, Inc
Celestica, Inc.
Cinch Connectors, Inc.
Cookson Electronics
Dell
Environmental Monitoring and Technologies, Inc.
HP
Indium Corporation of America
IPC
Jabil Circuit, Inc.
Kester Northrop Grumman
LACE Technologies
Littelfuse, Inc.
Lucent Technologies, Inc.
Mitsui Comtek Corp.
Motorola
National Institute of Standards and Technology (NIST)
NEMI Secretariat
Nortel Networks - BAN1 Facility
Plexus Electronic Assembly
Solectron Technology, Inc.
StorageTek
Sun Microsystems, Inc.
Texas Instruments Incorporated
The GoodBye Chain Group (GCG, LLC)
Tyco Electronics
Vitronics Soltec
Zebra Technologies Corporation