



SUPPLIERS PARTNERSHIP
FOR THE ENVIRONMENT

**Suppliers Partnership for the Environment (SP)
Responsible Battery Work Group
October 26, 2020**

DRAFT MEETING MINUTES

Kellen Mahoney, SP, called the SP Responsible Battery Work Group meeting to order at 2:00pm EDT. He reviewed SP's antitrust guidelines and recommended that everyone indicate in their notes of the meeting that the guidelines were reviewed and that they would be complied with. There was an update on progress related to noted action items in the work group's July meeting, including:

- developing collective SP feedback regarding the GBA Battery Passport initiative. Noted that members met in September and developed a letter outlining key questions on GBA's Battery Passport strategy and approach that was submitted to Mathy Stanislaus earlier this month.
- identifying opportunities to work with other industry groups to address DOT exception for Li-On batteries, modeled after existing exception for Lead batteries. Noted that SP reviewed and shared information with members on a PRBA petition to PHMSA seeking to amend 49 CFR 173.159(e).
- forming a subcommittee to identify and share common challenges faced by EV battery recyclers and identify potential opportunities that could be considered related to design for disassembly / recycling. Noted that members met in September and began discussion of common challenges and opportunities for collaboration related to design for recycling.

Mark Bauer, General Motors Materials Engineering and Chair of the CR3 Industry Advisory Board, introduced the Center for Resource Recovery and Recycling (CR3) as a cooperative research center focused on sustainable stewardship of the earth's resources. He discussed CR3's core competencies, membership and focus areas, and highlighted completed research projects related to EV battery recycling. A few publicly available resources published by CR3 related to battery design for disassembly include:

- [Repurposing Used Electric Car Batteries: A Review of Options](#)
- [Battery Design for Disassembly in Support of Materials Reuse](#)
- [Optimizing Disassembly of Electric Car Battery Packs at End-of-Life](#)

Kunal Phalpher, Li-Cycle, discussed trends related to increased production of EVs, increased demand for battery materials and increasing expectations for sustainability across value chain. He then introduced Li-Cycle's hub and spoke recycling process for lithium-ion batteries, including current operations and locations in North America, and the end products Li-Cycle is generating from those operations.

Bashar Kirma and Matt Boback, Henkel, introduced a removable adhesive sealing solution for EV batteries. They discussed how the adhesive was designed to be easily removed and re-applied to allow EV battery packs to be efficiently disassembled for servicing. A video demonstrating the product was shown and can be viewed at: <https://www.henkel-adhesives.com/us/en/insights/all-insights/videos/henkel-lab-chats/improving-battery-pack-perimeter-seal.html>

Lauren Roman, Everledger, provided an update on the Team EVBs project of the US DOE Lithium Ion Battery Recycling Prize, which includes participation from Ford, Retrie and Global Battery Solutions, and noted that SP has joined the team as an advisory member. She then discussed a white paper that NAATBatt's Exchange and Tracking Subcommittee is developing on EVB Tracking. It was noted that SP would be contributing to the white paper, and that contributions from individual SP members are welcomed. She also provided an update on the Global Battery Alliance's battery passport project. Lauren mentioned that Everledger would be onboarding OEM batteries to its platform starting early next year and would also be launching an EV Battery Exchange to assist repurposers and recyclers in finding end of first life batteries and garages and battery recyclers in finding outlets for EVBs in their possession.

Kellen then briefly reviewed key themes of work group meeting sessions this year and invited input on those issues that members would most like to see the group address going forward. A quick poll was put out on Zoom

to request input on the topic participants would be most interested in seeing addressed in upcoming SP RBWG meetings, and the responses were as follows:

- EVB Collection / Transportation / Logistics (38% selected)
- EVB Recycling Processes / Models (31% selected)
- EVB Design for Recycling / Disassembly (19% selected)
- EVB Traceability (6% selected)
- EVB Safe Handling Practices (3% selected)
- Managing Non-Cell Materials (3% selected)

SP's Chair Kevin Butt, Toyota, suggested the work group consider what tangible project(s) members could work together on in the areas discussed, in addition to information sharing. It was suggested that SP seek input from OEM members on key issues they would most like to see addressed and then follow up with the full work group for additional ideas and input to move these issues forward.

ACTION ITEMS

- SP to organize a follow up meeting with interested OEM members to identify key issues OEMs would most like to see the work group address, and then report back to full work group.
- Members should contact Lauren Roman (lauren@everledger.io) if interested in contributing to the NAATBatt white paper.
- SP to organize next full work group meeting in late January in connection with SP's Q1 2021 meeting.
- Members ideas and input on issues to be considered by the work group going forward are always welcome, please feel free to reach out to Kellen with additional feedback.

The meeting adjourned at 3:45pm EDT.

Respectfully submitted,
Kellen Mahoney
Program Director

ATTENDEES

Jeff Spangenberger	Argonne
Linda Gaines	Argonne
Emil Nusbaum	Automotive Recyclers Association
Sandy Blalock	Automotive Recyclers Association
Steve Fletcher	Automotive Recyclers Canada
Joe Bush	Battery Resources
Dawn New Echlin	Battery Solutions
Lisa Dry	BCI
Roger Miksad	BCI
Doug Robinson	Bosch
Jeff Haltrecht	Call2Recycle
Caitlin Korvela	Challenge
Hiroko Kawai	Clarios
Lea Malloy	Cox Automotive
Denise Jarrus	DEKRA
Grant Gilezan	Dykema
Donna Snyder	East Penn
Kevin Smith	East Penn
Troy Greiss	East Penn
Gary Vegh	ERA

John Bradburn	ERA
Erin Manitou	ERA
Lauren Roman	Everledger
Nakia Simon	FCA
Dan Esch	Ford
Hilda Arellano	Ford
Laura Wagner	Ford
Thomas Brynolf	FTS
Geovanni Marta	GEN
Kris Hunter	Global Battery Solutions
Maria Scherer	GM
Mark Bauer	GM
Mike Schafran	GM
Pablo Fernández	GM
Bashar Kirma	Henkel
Matt Boback	Henkel
Kurt Wirgau	Heritage
Kristan Longsdorf	Honda
Phil Cozad	Honda
Todd Coy	KBI
Alan Ferguson	Li-Cycle
Kunal Phalpher	Li-Cycle
Jon Weisman	Li-Cycle
Shayne Hare	Nalco Water
Tony Mackovski	Nalco Water
John Howes	Redland Energy
Leah Pilarski	Rivian
Michael Barber	Rivian
Mark Drezdson	RSR
Kellen Mahoney	SP
Shannon Hellem	SP
Steve Hellem	SP
Joe Day	TerraCycle
Sean O'Day	Titan AES
Eric Anderson	Toyota
John Redman	Toyota
Kevin Butt	Toyota
Mark Yamauchi	Toyota
Emmanuel Reymond	UGN
Dana Cooper-Hayes	US BCSD
Paola Urbina	US Ecology Mexico
Greg Pool	Verogy
Vickie Lewis	VMX
Jerid Shuryan	WM