

Statewide Railyard Agreement
Technology Symposium

**“Revised” AGENDA
(as of June 8, 2009)**

Public Meeting to Discuss
Status of Locomotive Aftertreatment Design, Research, and Demonstrations

Location:

Cal/EPA Headquarters Building
Byron Sher Auditorium – 2nd Floor
1001 I Street
Sacramento, CA 95814

Date: June 10, 2009

Time: 8:30 am – 4:45 pm

Teleconference:

Dial-In #: (888) 989-7484
Dial-In # for International Calls:
(1) (203) 986-6884
Participant Code: 3788372
Leader Name: Harold Holmes
Email: auditorium@calepa.ca.gov
Webcast:
<http://www.calepa.ca.gov/broadcast>

8:30 am – 8:45 am

Introductions and Background

Dean Simeroth

Chief, Criteria Pollutants Branch
California Air Resources Board (ARB)

8:45 am – 9:45 am

Panel Discussion on U.S. EPA’s 2008 Locomotive Rulemaking

Moderator:
Harold Holmes

- **Status of Locomotive Remanufacturing Kits**
- **Locomotive Development: Status of Meeting New Tier 3 and Tier 4 Standards**
- **What it Takes to Bring a New Technology to Market**

Charles Moulis
(via webcast)
Ed Hall
Dave Brann

Senior Environmental Engineer, Assessment & Standards
Division, U.S. Environmental Protection Agency (U.S. EPA)
General Manager, Engine Engineering, General Electric (GE)
Manager, Emissions Compliance, ElectroMotive (EMD)

9:45 am – 10:45 am

California’s Needs to Accelerate Further Locomotive and Railyard Emissions and Risks Reductions

Harold Holmes

Manager, Engineering Evaluation Section, ARB

10:45 am – 11:00 am

Break

11:00 am – 11:15 am

UP and BNSF Opening Perspectives – U.S. EPA 2008 Locomotive Rulemaking; One Year Later

Lanny Schmid
Mark Stehly

Director, Environmental Operations, Union Pacific Railroad (UP)
Assistant Vice President, Environmental & Research
Development, Burlington Northern Santa Fe Railway (BNSF)

11:15 am – 12:00 pm **Update/Summary of Locomotive Aftertreatment Retrofits on Older Existing Freight Line Haul and Switch Locomotives and Design Concepts for Newer Freight Line Haul and Switch Locomotives**

- **Diesel Oxidation Catalysts on Freight Line Haul Locomotives**
- **Diesel Particulate Filters on Conventional Switch Locomotives**

Steve Fritz

Manager, Medium Speed Diesel Engines
Department of Emissions Research and Development
Southwest Research Institute

12:00 pm - 1:00 pm **Lunch Break**

1:00 pm - 1:20 pm **Update/Summary of Locomotive Projects**

- **Metrolink Retrofit of DPF and SCR onto an Existing Head End Power Engine**
- **Metrolink SCR Retrofit onto a Passenger Locomotive**
- **PHL Retrofit of DPF onto a Newer Switch Locomotive**

Randall Pasek

Manager, Off-Road Section,
South Coast Air Quality Management District (SCAQMD)

1:20 pm – 1:40 pm **Update/Summary of SCR Systems in Medium Duty Regional Locomotives**

Ken Hofacker

Senior Vice President, Locomotive Development, Progress Rail Services

1:40 pm – 2:00 pm **Update/Summary of Solutions for Low Emission Locomotives**

Chris Riley

Marketing Director, North America Rail
Cummins Inc.

2:00 pm – 3:00 pm **Panel Discussion on How Technology is Proven Suitable and Durable**

Moderator:
Harold Holmes

- **Field testing/when is it market ready?**
- **EPA Certification Levels**
- **CARB Verification Levels**

David Brann
Chuck Moulis

Manager, Emissions Compliance, EMD
Senior Environmental Engineer, Assessment & Standards
Division, U.S.EPA

Ed Hall
Lanny Schmid
Dave Seep

Senior General Manager, Engine Engineering, GE
Director, Environmental Operations, UP
Director, Environmental Engineering & Program Development,
BNSF

Henry Hogo

Assistant Deputy Executive Officer, SCAQMD

3:00 pm – 4:00 pm	Panel Discussion on Retrofits: Lessons Learned in the Field
Moderator: Harold Holmes	
Randall Pasek Michael Iden Dave Seep	Manager, Off-Road Section, SCAQMD General Director, Car & Locomotive Engineering, UP Director, Environmental Engineering & Program Development, BNSF
Mark Stehly	Assistant Vice President, Environment & Research Development, BNSF
4:00 pm – 4:15 pm	UP Comments on Future Locomotive Aftertreatment
Lanny Schmid	Director, Environmental Operations UP
4:15 pm – 4:30 pm	BNSF Comments on Future Locomotive Aftertreatment
Mark Stehly	Assistant Vice President, Environment & Research Development, BNSF
4:30 pm – 4:45 pm	Closing Remarks