



**West Coast Collaborative  
Construction Sector Workgroup  
March 12, 2008 – Teleconference Summary**

**Diesel Retrofit Project for CARB Level 3 Devices on Motor Graders**

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*Chris Kundert, CalTrans*

Chris Kundert provided an overview of a CalTrans project, funded by EPA, which sought to retrofit fourteen motor graders with California Air Resources Board (CARB) level 3 devices. The EPA grant was for a total of \$280,000, \$200,000 of which went to purchasing Donaldson filtration technology for 14 motor graders. The remaining \$80,000 was used to purchase additional retrofits. The first retrofit was installed in October/November 2007 in order to ensure full winter use. Unfortunately, the data logger that was installed to measure temperature, shorted during the winter, and CalTrans was unable to get any useful data. As a remedy, Donaldson installed “push-button” data loggers that are now taking temperature measurements; however, the new data won’t be available until late March/early April. Chris added that the remaining passive filtration systems will be installed this spring.

In response to several questions from the sector partners, Chris said that there have been no problems associated with the new technology and that the motor graders are driving well and their off-road use has not affected their performance. The typical drive cycle for the motor graders depends on the snowfall (they are also employed to do shoulder work during the summer). The filters require cleaning annually, and Caltrans has done maintenance beyond the annual cleaning (the cleanings run from \$300-\$500). Other upkeep is generally included in the contract. In response to a question about the capacity of the data loggers, Chris explained that the data loggers are generally inexpensive, but can only store smaller amounts of information as they are limited by their memory capacity.

In closing, Chris said that the motor graders met their use targets and expectations in Northern California during the heavy storms in 2007/2008. He added that the purpose of data logging to collect data rather than meet compliance provisions. The filtration technology will meet the 20 percent requirement of the California Operable Rule, not the NO<sub>x</sub> Regulations. The data logging is simply a tool use to find out whether the tool is a good fit for a particular engine.

**Off-Road Construction Equipment Diesel Exhaust After-Treatment Demonstration**

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*Jim Schaad, City of Fresno*

Jim Schaad briefly discussed his experiences retrofitting a Komatsu scraper with a Cleaire level 2 filter and added that the City of Fresno initially installed a Cleaire device on one scraper, which failed, and then decided to use a Cleaire after-treatment device. The City also installed a Cummins retrofit on a CAT 623 scraper and they don’t anticipate any mechanical problems. Jim said that the typical drive cycle for the scrapers is 8-10 years (they run five days a week in the summer). He added that the Cummins retrofit costs about \$250 and this were funded in part by a local California air agency. The City of Fresno also has sixty trash trucks with Cleaire Longviews that mostly use liquid natural gas.



## **Biodiesel Use Survey of Construction Companies and Projects**

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*Ria Berns, Ross & Associates Environmental Consulting*

Ria Berns and Wayne Elson provided an overview of a matrix that lists construction companies and projects using biodiesel on the West Coast (this document was distributed in a March 12 e-mail). As described, the matrix is a cursory overview of construction companies using biodiesel and includes notes on the blend rate, equipment used, location of company/project, and contact information. Ria and Wayne noted that the matrix is incomplete and requested that partners send additional information to Wayne Elson at [elson.wayne@epa.gov](mailto:elson.wayne@epa.gov). The partners expressed overwhelming support for this type of information compendium and noted that this is a useful tool and “living resource,” especially if contact information is included.

Clifford Rudolf, of Parker, Smith & Feek Inc said that there is a lot of interest in this type of information. He added that while the insurance companies haven’t yet begun lowering premiums for construction companies using biodiesel, biodiesel use could lower energy premiums, and the underwriter should be told if biodiesel is used on site.

The call participants had a brief discussion around additional information to include in the matrix. One participant suggested including a note about the type of feedstock, as lower grade feedstock can greatly effect how the engines run. Another participant suggested adding a notation around whether after-treatment was used.

## **State Surplus Off-Road Opt-in for NO<sub>x</sub> (SOON) Program funding**

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*Julie Kercher (TIAX), South Coast Air Quality Management District*

Julie Kercher discussed the state Surplus Off-road Opt-in for NO<sub>x</sub> (SOON) program funding and said that she is working with the South Coast Air Quality Management District to get the word out to fleets in the south coast. The SOON program has \$30 Million allocated to accelerating clean-up of off-road diesel vehicles and focuses on enrolling large versus medium sized contractors (approximately 20,000 HP or more). She noted that this is a complicated program to meet a complicated regulation (the NO<sub>x</sub> reduction regulations). The program will help eligible fleets to secure funding, understand the rule, and become compliant for next year. Julie added that these activities will likely become mandatory next year. The application deadline is May 2, 2008. More information can be found at <http://www.aqmd.gov/tao/Implementation/SOONProgram.htm>

## **Collaborative Activities, RFPs, Diesel Emission Reduction Act (DERA) Funding**

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*Wayne Elson, EPA*

Wayne Elson announced that the Region 9 RFP has closed, applications are being reviewed, and decisions will be made shortly. Wayne also noted that the new Diesel Emission Reduction Act (DERA) will be released at the end of the month. There is \$5.1 Million for all of the West Coast Collaborative, including school buses.



## Upcoming Conferences

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Upcoming Conferences Include:

- March 10-15, 2008: CONEXPO- CON/AGG & AGC Annual Convention- Profit through Participation—Las Vegas, NV. Info at: <http://www.conexpoconagg.com/> and [http://www.agc.org/galleries/meetings/08Convention\\_brochure.pdf](http://www.agc.org/galleries/meetings/08Convention_brochure.pdf). CON/AGG Expo will have more than 2,000 exhibitors and 125,000 industry professionals, including: contractors, construction producers and public officials.
- May 5-7, 2008: Brownsfields 2008: Road Map to Revitalization—Detroit, MI. Info at: <http://www.brownfields2008.org/en/index.aspx>
- Aug. 17-20, 2008: The Best Show in Public Works – New Orleans. Info at: <http://www.apwa.net/meetings/congress/2008/>
- Oct. 16, 2008: AASHTO Annual Meeting—Hartford, CT. Info at: <http://www.transportation.org/meetings/93.aspx>
- Oct. 28-31, 2008: Association of Metropolitan Planning Organizations (AMPO) –Seattle, WA. Info at: <http://www.ampo.org/events/>
- November 2008: Greenbuild Expo—TBD. Info at: <http://www.greenbuildexpo.org/>

## Adjourn

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The next Construction Sector conference call will be Wednesday May 14, 2008 at 10:00 AM.



## Participants

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Apologies if full names and organizations are not captured correctly. If you have a correction to the participant list, please inform Ria Berns at Ross & Associates ([ria.berns@ross-assoc.com](mailto:ria.berns@ross-assoc.com)).

Mike Bednarz, US DOE NSTL  
Ria Berns, Ross & Associates  
Mike Boyer, Washington State Department of Ecology  
Josh Clements, Whole Energy  
Wayne Elson, EPA Region 10  
Jim Eleron, Affiliation Unknown  
Jerry Ferdon, G & R Brock  
Jorge Garcia, Idaho Department of Environmental Quality  
John Hakel, AGC of California  
Steve Hope, Affiliation Unknown  
Bryan Kasin, Affiliation Unknown  
Julie Kercher, TIAX  
Chris Kundert, CalTrans  
Dan Rice, EPA Region 9  
Scott Rollins, Affiliation Unknown  
Clifford Rudolph, Parker, Smith & Feek Inc  
Antonio Santos, Manufacturers of Emission Controls Association (MECA)  
Bob Saunders, Washington State Department of Ecology  
Jim Schaad, City of Fresno  
David Yuen, Metro Vancouver  
Mitch White, Mansfield Construction