

West Coast Diesel Emissions Reductions Collaborative
July 28, 2004—San Francisco, CA
Trucking Sector Workgroup Meeting

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I. Formal Welcome (Amy Zimpfer)

EPA Region 9 Associate Air Division Director Amy Zimpfer welcomed everyone to the meeting and thanked everyone for his or her participation.

Ms. Zimpfer reminded everyone that the best way to achieve our goal is to:

- 1) Build the Collaborative by getting the word out on these issues and this effort and providing forums for new ideas and input (such as our public workshop on June 15th in San Francisco and this meeting/call)
- 2) Implement near-term successes by working together to announce 1 or more regional projects using existing federal grants and small amounts (under \$1 million) of discretionary EPA funds as soon as possible, and
- 3) Create numerous technical papers describing the scope, costs and benefits of large-scale/long-term, regional projects that the Collaborative will implement if adequate funding becomes available.

She also outlined that today's call would focus on:

- 1) Seeing if this Sector Workgroup has any near-term projects for a) either an early September announcement, or b) that should be bumped to the front of the line for possible FY05 funding, and
- 2) Seeing which longer-term projects (meaning, projects that would need more than \$250k of funding) this Sector Workgroup would like to focus on and identify who in the group is most interesting in developing these projects.

II. Additional Welcomes

Ron Shultz from Governor Locke's Office in Washington also welcomed everyone to the call and described his efforts to work with the Governors (CA, OR and WA) Global Warming

Initiative to use the Collaborative as a stakeholder group that can provide input on major issues of concern, such as trucking and marine emissions. In this way, Mr. Shultz would like the three Governors to endorse the Collaborative, which can help implement the projects in the near term that satisfy the goals the Governors Global Warming Initiative as well as play the role of a consistent, innovative group of stakeholders committed to reducing diesel impacts.

III. Re-cap from June 15th (Michelle Roos, EPA R9)

- 1) Short-term project ideas
 - i. expand truck stop electrification
 - ii. expand truck on-board systems
 - iii. early introduction of ULSD
 - iv. cleaner fuel and retrofits
 - v. make emulsified fuel more available
 - vi. identify bio-diesel pilot for federal fleet
- 2) Mid-term projects ideas
 - b) low-resistance tires
 - c) trailer retrofits
 - d) downward swapping out program
 - e) chip reflashing beyond CA
 - f) look into Mexico trucking issues
- 3) Long-term
 - b) alternative fuel infrastructure
 - c) hybrid technology
 - d) incentives for biodiesel producers (with Ag group)
 - e) land use guidelines to address future trucking hubs and increase efficiency of transfer operations
 - f) adopt/adapt successful US programs for Mexico and Canada

IV. Report outs since June/Ideas for short-term projects

1) Expand truck stop electrification/on-board systems (Kristen Sipes, EPA OTAQ/Smartway)

Kristin Sipes gave a short overview of the EPA SmartWay Transport Partnership (www.epa.gov/smartway). SmartWay is a collaborative voluntary program between EPA and the freight industry that will increase the energy efficiency and energy security of our country while significantly reducing air pollution and greenhouse gases. The Partnership creates strong market-based incentives that challenge companies shipping products, and the truck and rail companies delivering these products, to improve the environmental performance of their freight operations. SmartWay Transport partners improve their energy efficiency, save money, reduce greenhouse gas emissions and improve air quality.

a. CARB's new idle reduction rule (John Kato, CARB)

The CA Air Resources Board just passed a rule that establishes a 5 minute idling limit for all vehicles over 10,000 pounds with few exceptions. The regulation is undergoing a 15 day

comment period with the Office of Administrative Law. Rule will likely go into effect by early 2005. They are also thinking about establishing some hard dates before that time to add clarity.

Originally the rule included an auxiliary power system/sleeper component, but that was dropped and will be revisited in September 2005. Auxiliary power systems supply power for “comfort” devices (air conditioning, microwave, computer). Some are diesel, some are battery and CARB will explore and report back to their Board in September 2005 on what might be done to reduce emissions from idling in order to power these devices.

b. I-5 Idle-Free Corridor Proposal

West Coast Governors Global Warming Initiative (Ron Shultz, Governor Locke’s Office)

In September 2003, the Governors of Washington, Oregon and California committed to a regional greenhouse gas reduction initiative (<http://www.ef.org/westcoastclimate/>). The Governors concluded that global warming will have serious adverse consequences on the economy, health and environment of the west coast states and that the states must act individually and regionally to reduce greenhouse gas emissions and to achieve a variety of economic benefits from lower dependence on fossil fuels. As an initial step, the Governors directed their staffs to develop joint policy recommendations on reduction strategies that require regional cooperation and action, including: **Highway Diesel Emissions** - Reduce emissions from diesel fuel in transportation in the use of diesel engines in trucks by creating a system of emission-free truck stops along the Interstate 5 corridor that stretches from Mexico to Canada.

Discussion:

A Federal Highway Administration study (<http://www.tfrc.gov/safety/pubs/01158/>) states that trucks prefer to stop for extended rest at rest areas six percent of the time and truck stops 78 percent of the time; however, less formal surveys in California indicate that truckers stop for extended rest in all sorts of places (the side of the road, near weigh stations, etc...whenever their hours are up and they are mandated to stop driving).

This may be a problem unique to CA due to the shortage of truck stop spaces. For example, in South Coast, there are approximately 40,000 - 50,000 sleepers and only approximately 3- 4,000 truck stop spaces.

Right now truck stop electrification is prohibited by federal law from public rest areas because of commercialization issues.

A commercialization exemption for idling mitigation infrastructure(23 U.S.C.A. 111) is proposed in Section 1608 of S. 1072. This exemption only appears in the Senate version of the highway bill, which must still go through conference committee. The highway bill is likely going to be extended for another year when Congress returns in September.

The truckstop industry opposes ALL exemptions to the federal ban on commercialization.

Everybody Wins Program (Sharon Banks, Lane Regional Air Pollution Authority) Funded by a low interest loan from the Oregon Energy Office, Lane Regional Air Pollution Authority has put out an RFP (due Friday, July 30) for Auxiliary Power Unit producers to supply

installation, maintenance and infrastructure to primarily owner operators. LRAPA is doing a bottom up advertising approach to get at the dirtiest engines. These primarily owner operators (although there are also 3 fleets) can choose a monthly lease to own or a 35% tax credit on purchase (through the state of OR). There is a November 1st installation date target.

This group is seeking funding for diesel oxidation catalysts, at \$1,000/unit, that could be installed at the same time.

Revolving Loan/Interest Payment (Paul Bubbosh, US EPA) EPA is currently exploring ways to loan funds supporting idling reduction activities, and is talking to their General Counsel about options. EPA is working on developing a model for truck stops/truck owners to get Section 129 loans through state DOTs. Another idea that they've explored is having the federal government paying the interest on a loan – although, this concept does not seem to work within the parameters of the Clean Air Act. Yet another possibility is to set up privately funded security for a low interest/no interest loan with a private bank. Lastly, possibly the simplest way is to mandate that the cost savings be reinvested in another mitigation project. EPA will continue to work with its partners on this.

c. Early introduction of ULSD/Cleaner Diesel

Clean Corridor Project (Bryan Manning, EPA HQ, OTAQ)

The concept of this possible initiative is to establish “clean corridors” (ie I-5) that would push ahead of the ULSD 2006/2007 deadline. There are numerous obstacles to trying to convince fleets and/or refiners and/or truck stops to make ULSD available/convince folks to use it, including: cost differential (\$.03 - \$.25/gal) and the fact that fleet testing with the new fuel will only be done in small numbers in small areas (not creating a large enough market to drive supply). Both Dave Kircher from Puget Sound and Dipankar Sarkar from South Coast offered to help Bryan identify areas where ULSD is available at a relatively small cost differential.

South Coast Fleet Rules (Kurt Wiese, South Coast Air Quality Management District)

The South Coast Fleet Rules were adopted in 2001 under state statute for fleets of more than 15 vehicles to purchase clean vehicles/engines. It was challenged by the Western States Petroleum Association and the Engine Manufacturers Association that establishing vehicle emissions standards was the authority of the EPA (or the state of CA under a waiver). The 9th Circuit upheld the rules but the Supreme Court reversed the decision, saying that South Coast had no authority for the private fleet. South Coast is now working with CARB to pursue a waiver.

Oregon ULSD (Kevin Downing, ODEQ)

Although there are no refiners in the state, there is ULSD in Oregon. However, it's more expensive and at low volumes the infrastructure can't be effectively used to minimize the cost. One idea is to create enough of a market to set up a bulk terminal for distribution. Mr. Downing has identified 12 million gallons (and possibly up to 25 million gallons) of demand, which appears to exceed the 10 million gallon threshold for a bulk terminal, but there are still barriers to introduction raised by the oil refiner that are being addressed in negotiation.

Discussion:

Chet Rielly, Broadway Truck Stops, emphasized the need to understand this highly technical complicated issue. We need to make sure we really understand this issue.

Dana Lowell, NJ Bradley, described his success in NYC in creating a critical mass of folks to drive the market, but there is certainly a chicken and egg dilemma. You need to make the business case for the investment.

d. Possible Retrofit Projects (Jack Broadbent, Bay Area)

Interested in working with postal service/carriers for postal service to retrofit short haulers or long haulers. Possibility to work with Matheson.

Also, CA Trucking Association is interested in looking at 10-truck carriers and possibly identifying large companies with rental fleets that could commit to assuming the costs of cleaning up these fleets.

Supplemental Vendor Supplied Information:

Claire Technologies submit the following projects directly to EPA staff for consideration. Information was not available for distribution prior to the conference call. All estimates of benefits and costs are from Claire; EPA staff has not independently verified the data.

California Tank Lines/Chemical Transfer Company

- Long-haul trucks hauling chemicals throughout 8 Western states (Washington, Oregon, California, Arizona, Nevada, Idaho & Montana)
- Fleet of 50 trucks (propose retrofitting 10)
- Terminals in Los Angeles, Stockton and Portland
- 100K miles per year per truck
- Project cost \$190K

Pollutant	Annual Emission Reductions (tpy)	5-year Cost-effectiveness (\$/t)
PM	0.19	\$221,442
NOx	3.69	\$11,237
VOC	0.98	\$42,250
CO	3.95	\$10,510
PM+NOx+VOC	4.86	\$8,534

Coach USA

- Motor coaches providing tour bus service throughout the BAAQMD, SFNA and San Joaquin areas
- Fleet of 80 motor coaches (propose retrofitting 30)
- Terminal in San Francisco; scheduled operations to Carmel, Muir Woods, Reno, Tahoe, Yosemite

- 60,000 miles per year per motor coach
- Project cost \$570,000

Pollutant	Annual Emission Reductions (tpy)	5-year Cost-effectiveness (\$/t)
PM	0.51	\$246,047
NOx	9.47	\$13,140
VOC	1.77	\$70,417
CO	7.11	\$17,516
PM+NOx+VOC	11.75	\$17,516

Orchard Supply Hardware

- Heavy-duty Long-haul trucks distributing hardware throughout Northern and Central California
- Fleet of 29 tractors (propose retrofitting 15)
- Terminal in Tracy with 60 stores in Northern and Central California
- 90,000 miles per year per truck
- Project cost \$285,000

Pollutant	Annual Emission Reductions (tpy)	5-year Cost-effectiveness (\$/t)
PM	0.25	\$246,047
NOx	4.99	\$12,486
VOC	1.33	\$46,925
CO	5.33	\$11,677
PM+NOx+VOC	6.56	\$9,483

Sierra Pacific Industries

- Long-haul trucks hauling milled lumber products throughout Northern and Central California
- Propose retrofitting 10 trucks
- 16 lumber & mill work locations in Northern California
- 125,000 miles per year per truck
- Project cost \$190,000

Pollutant	Annual Emission Reductions (tpy)	5-year Cost-effectiveness (\$/t)
PM	0.23	\$177,154
NOx	4.62	\$8,990
VOC	1.23	\$33,800

CO	4.94	\$8,408
PM+NO _x +VOC	6.08	\$6,828

Waste Management

- Heavy-duty waste transfer trucks hauling municipal waste from San Leandro to a landfill on Altamont Pass
- Fleet of 58 (propose retrofitting 35)
- Transfer station in San Leandro, landfill on Altamont Pass
- 142,000 miles per year per truck
- Project cost \$770,000

Pollutant	Annual Emission Reductions (tpy)	5-year Cost-effectiveness (\$/t)
PM	1.10	\$152,286
NO _x	21.25	\$7,913
VOC	5.58	\$33,495
CO	20.18	\$8,332
PM+NO _x +VOC	27.38	\$6,143

e. Bio-diesel (Barbara Lither, US EPA R10)

The Federal Network for Sustainability (www.federalsustainability.org) promotes cost-effective, energy- and resource-efficient operations across all branches of government. Through individual initiatives and joint ventures, we shall strive to better our understanding of the interrelationship between energy use, economics, and environmental impact. We are mindful of our heirs and successors, who will rely on our responsible stewardship today. By leadership and example, we intend to educate and guide others in reducing Federal expenditures, while simultaneously advancing the principles of sustainability throughout the public and the private sectors.

Barbara is working within FNS to come with some collaborative biodiesel projects, describe them and submit a short proposal to be submitted to the West Coast Diesel Collaborative for possible funding and implementation. She is looking to show that federal agencies can work together and be leaders in this area. One idea they have is to build a fueling station for joint use by several agencies in the states of California, Oregon and Washington.

V. Next Steps

The group decided to focus on gathering more information, possibly in the form of short prospectuses or draft language, in 5 areas before the next Workgroup meeting in August. Please contact the below mentioned lead to volunteer to help out. One suggestion might be for

each of these “subgroups” to have a meeting/conference call. Please contact Michelle Roos if you need help setting that meeting up.

Create a plan for idle reduction/reducing unnecessary idling along the I-5 Corridor/in the West (lead: Michelle Roos/Peter Murchie and *tent* Paul Bubosh/Kristen Sipes from EPA)

Continue to explore early introduction of ULSD (*tent* Bryan Manning, US EPA and Kevin Downing, ODEQ)

Develop a few possible short-term (\$50-100k), medium-term (a few \$100k) and long-term (over \$1 million) projects to mitigate diesel truck emissions (fuel and engine) (lead: Jack Broadbent/Michael Murphy, Bay Area)

Develop a few possible short-term (\$50-100k), medium-term (a few \$100k) and long-term (over \$1 million) projects to mitigate diesel truck emissions using bio-diesel for federal agencies/federal fleets (lead: Barbara Lither, US EPA R10)

Continue to explore opportunities to reduce emissions from Mexican Trucks/emissions along the border (Amy Zimpfer, US EPA)