

West Coast Diesel Emissions Reductions Collaborative
Agriculture Sector Workgroup Meeting
August 30, 2004

The West Coast Diesel Emissions Reduction Collaborative Agriculture Workgroup met by conference call on August 30, 2004.

The purpose of the meeting was threefold:

1. Build a common understanding of near and mid-term Collaborative efforts
2. Provide an update and get input on the September 30th roll-out
3. Share information on emerging projects, and identify next step responsibilities

Collaborative Update

Kerry Drake, EPA Region 9, began the call by emphasizing that although the short term projects that have been previously highlighted, the emphasis will turn toward mid and long term projects. He suggested the call focus on moving forward on projects, possibly through subgroups, to define next steps.

Funding Update

Peter Murchie, EPA Region 10, followed with an update on the state of funding and initial expectations for a Collaborative press event, currently planned for September 30, 2004.

The Federal agency budget process is a bit confusing. Right now the Federal government is approaching the end of the FY04 budget season (9/30/04), Congress is debating the FY05 budget, and federal agencies will be submitting their FY06 budget requests to the Office of Management and Budget (OMB) this fall.

Therefore, for both FY04 and FY05, EPA, DOE, USDA, and DOT (as well as the states and local air districts in CA, OR, WA and AK) have all spent/will spend millions of dollars to reduce diesel emissions using existing funds. Because the Collaborative did not exist when these budgets were being developed, these are for the most part expenditures under existing programs, and not necessarily under the auspices of the Collaborative.

That said, some federal agencies (like EPA), have small amounts of discretionary funds, of which EPA was able to garner about \$500K to put towards the Collaborative. It is EPA's hope to garner even more funds in FY05 from discretionary federal funds, and possibly create the beginning of a "West Coast Diesel Emissions Reductions Fund" with the support of private resources and foundations.

In addition, as part of its FY06 budget preparations, EPA is working with its federal partners to frame new funding requests for FY06 to create dedicated federal funds specifically for the Collaborative.

Summary:

- FY04: about \$500K discretionary EPA funds redirected to high-priority Collaborative projects
- FY05: goal is to identify \$1 million in discretionary EPA funds to direct to high-priority Collaborative projects, and to complete negotiations with a foundation to create a multi-million dollar fund for Collaborative projects.
- FY06/07: goal of identifying \$100 million in dedicated Collaborative funding, and identifying a clear path to better utilize DOT CMAQ funds (\$1.5 billion nation-wide per year) for high-priority Collaborative projects.

September 30th Collaborative Press Event

At the June 15th Workshop, EPA outlined the criteria for near-term Collaborative projects:

- Announceable in 0-6 months; implementable in 0-1 yr; completed in 1-5 yrs
- Regional in scope (i.e. multi-state impacts/benefits)
- Potential to leverage other funds (fed/state/local/private/non-profit)
- Potential for real/measurable reductions
- Potential high profile announcement

As such, the Collaborative is currently planning a September 30th press event to bring attention to the impacts of diesel emissions, the efforts already underway at the state and local levels to reduce these impacts, the formation of the Collaborative to build upon these successes and leverage additional funds and efforts collectively, and to announce a few small near-term Collaborative projects.

The goals for the September press event are to:

- Show near-term regional successes from working together under the auspices of the Collaborative
- Build relationships/set the foundation for future projects
- Garner the attention of the press
- Keep the focus on IMPLEMENTING regional diesel mitigation projects

Based on the June 15th Collaborative meeting, and the sector Workgroup meetings in July, the Interim Steering Committee has identified three projects with outstanding momentum, promising outcomes, and appropriate funding needs, that may be appropriate to feature in the September press event. Although no final decisions have been made, the Committee is considering:

- I-5 anti-idling at truck stops, announcement in Portland, OR
- Locomotive equipment retrofits, announcement in Bakersfield, CA
- Port emissions reductions projects, announcement in Seattle, WA

In addition, other projects may be highlighted in related announcements at the local level, or may be included in the main Collaborative announcements, as appropriate.

Current plans for the September press event include simultaneous press events in California, Oregon, and Washington to include high-profile attendees; in addition to EPA, State and local officials. The Collaborative has approached and secured the

participation of the Governors of Oregon and Washington and is working with Governor's office in California.

It is important to remember that the September press event is just a kick-off event to begin to bring attention to - and highlight the need for funding for - diesel emission reduction projects on the west coast.

As mentioned above, in addition to the three primary press events, other projects may be highlighted in related announcements at the local level, or may be included in the main Collaborative announcements, as appropriate.

As it relates to the Agriculture Workgroup, a locomotive anti-idling project in San Joaquin Valley will be announced in Bakersfield. In addition to the locomotive announcement, there are plans to tie in successes connected to the Agriculture Workgroup, such as Carl Moyer fund information and USDA diesel irrigation engine progress. There may be other projects, for example, there is a current project focused on reducing field tilling in the central valley, which reduces the number of tractor passes, that may be a part of the September 30th event.

July 28th Meeting Recap

There were five primary areas of discussion:

- Irrigation pump efficiency projects
- Carl Moyer refunding (Assembly Bill 973 for additional funds awaiting Governor's sign-off)
- Bio-diesel - various opportunities exist worthy of exploration
- Emulsified fuel - may have additional funding opportunities for emulsified fuel
- CIRIS project - tying together rail networks in the valley to move produce by rail instead of truck

Projects Focus

The Workgroup discussed several priority areas reflecting the previous meeting

Center for Irrigation Technology (CIT) Agricultural Pumping Efficiency Program

Peter Canessa, California State University and the project manager for the Agricultural Pumping Efficiency Program, participated in the call to better explain the project to the Collaborative partners. The Agricultural Pumping Efficiency Program is currently funded through 2005 by utility ratepayers in California and is organized as a 501(c)(3) non-profit institution. However, this funding is in specific terms constrained to natural gas and electrical users and excludes diesel engines.

There are four aspects of the program:

- 1) Education - uses a mobile outreach unit to demonstrate various technologies
- 2) Information or Energy audit - subsidized analysis of pump efficiency upon request
- 3) Technical Assistance - providing technical expertise about improving pump plant efficiency

- 4) Incentive Rebates – rebates for pump repair or replacement based on annual energy use for pumping plant, the average rebate \$3,000 (about 25%-35% of total projects costs)

The program is established and there is an opportunity to add diesel engines to the program. From a diesel emissions reduction standpoint, the more efficient pumps complete the job with less running time. The goal of the program is twofold: encourage the use of highly efficient equipment combined with effective behavior management.

Full scale repairs over the course of the year suggest cost effectiveness in the area of \$1400/ton for NOx. Ancillary benefits to increased pump efficiency for agriculture include improved water quality and water resources. For more information, see www.pumpefficiency.org.

Next steps

If additional funding or authorization to expand work to diesel engines, the existing process is in place to begin immediately in California. Since the program is fairly well defined, there is no need for subgroup work.

Initial expectations are that Washington and Oregon aren't using as many diesel pumps because electricity has always been cheap and available, so this may not be worth extending to the Pacific Northwest. However, Mexico likely has a large number of diesel pumps and this type of program would be relevant.

Carl Moyer News

- Assembly Bill 923 was passed by the California legislature earlier this month. The bill adds the provision that local air district can use up to \$2 for vehicle registration toward Carl Moyer style programs. For instance, in the San Joaquin Valley, this could amount to about \$4-5 million per year and estimates statewide suggest it could be \$30 - \$50 million per year.
- A mitigation fee per tire has increased by \$0.75 that goes toward emissions reductions for tires under the Carl Moyer program; contributing up to \$30 million per year. The bill is not yet signed, but it has good support.
- These two increases, AB 923 and the mitigation fee, will likely increase Carl Moyer funds to over \$120 million for ten years (\$61M committed + \$30M AB923 + \$30M tires). The California Governor's administration estimates the state needs \$200 million to get to federal standards.
- Also, there was a rule change so that in the event that a rule is passed to require equipment action, projects can continue to receive Carl Moyer funding for 3 years or until the compliance date – as opposed to the previous rule which halted funding as soon as the rule passed. Bounded by best feasible technology as it's already been implemented in California.

Equipment Projects

In the mid-term repowers are possible, while pump projects are more likely in longer term. Tillage projects are not currently eligible for funding, but some ideas suggest this may be another option for project focus. The Workgroup proposed a subgroup for further exploration – especially in areas like cost effectiveness.

The volunteering (or volunteered) partners for an equipment project subgroup were:

- Tom Jordan & Seyed Sadredin, San Joaquin Valley Air Pollution Control District
- Western States Petroleum Association representative
- Peter Canessa CIT
- Cynthia Cory, California Farm Bureau Federation
- Joe Lapka, EPA Region 9
- Peter Murchie, EPA Region 10

Emulsified fuel

PuriNOx fuel was approved by CARB as Tier 2 which means it's approved for greater than 50% reduction in PM and 15% in NOx. Extensive use in various applications, such as marine and bus sectors, provides confidence in the emissions results. However, there are tests planned in agriculture equipment for operability starting in November. The primary question for Agriculture is for powering up and tests will use a solar collector and marine battery for powering-up.

PuriNOx is made up of 77% diesel, 20% water, and 3% additives. The price for PuriNOx is \$0.15-\$0.20 higher per gallon than conventional fuel. The fuel provides 10% less power. No retrofit is required except to change out the fuel filters (and a second filter change 48 hours earlier).

Emulsified fuel is not so much a project idea – the funding is in place, testing is taking place, and the technology has been demonstrated. The issue as it relates to the Workgroup is potentially one of outreach and dissemination. It is unclear how important additional outreach will be given other involvement, like RV Jenson is planning to have an October/November grand opening in Fresno to spread the word about PuriNOx and other clean air programs.

Nonetheless, because an equipment solution could be some combination of fuel and equipment technology, for instance using PuriNOx with an oxidation catalyst or PM trap, this issue will be part of the first equipment projects subgroup for the time being.

Biodiesel

Both environmental and agriculture groups have indicated an interest to explore the opportunities in biodiesel. Environmental groups have plans to talk amongst themselves before being ready to enter into a dialogue.

The Collaborative could be a useful venue for such a dialogue because of the potential resources, but others are not sure it's the best format. Any subgroup would also consider efforts going on in parallel, such as CEC and CED biodiesel dialogues. At a minimum, the Workgroup would like to have communication with other dialogue groups.

In general the Workgroup expressed interest in moving ahead, and the Collaborative is willing to support in any way helpful.

A final note, biomethane is not on the agenda, but may also be appropriate for a fuels subgroup.

CIRIS Project

This project proposes \$12 million to upgrade rail lines and spurs in the San Joaquin Valley to enable produce to be moved by rail to the Port of Oakland instead of by truck. A second piece of the project is the connection to LNG trucks to long hauling trucks. No further information was available on the call, but the Workgroup will keep the CIRIS project on the radar screen.

Wrap-Up

The Workgroup will establish two subgroups – one for equipment projects and one for fuels projects. Several Collaborative partners have already volunteered or been nominated. Workgroup partners are encouraged to be in touch with, Peter Murchie (murchie.peter@epa.gov), or Kerry Drake (drake.kerry@epa.gov) to further participate.

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