On November 21, 2005, the West Coast Collaborative Agricultural Workgroup met at the Stanislaus County Farm Bureau in Modesto, California. The purpose of the meeting was to consider past agricultural diesel reductions projects, explore current funding opportunities, and brainstorm about future agricultural diesel emissions reductions projects. These notes are intended to provide a summary of the day’s discussion, but are not meant to represent meeting minutes. A list of meeting attendees can be found at the end of these notes.

**Opening Remarks**
Kerry Drake, U.S. EPA Region 9, and Wayne Zipser, Stanislaus County Farm Bureau, welcomed the Agriculture Workgroup to Modesto, CA.

Peter Murchie, U.S. EPA Region 10, welcomed participants on behalf of the Collaborative, introduced everyone, and gave the meeting overview.

Following Peter’s introduction, the group briefly discussed how the Collaborative needs as much support and money as possible and how greater involvement by other agencies may be a way to increase both support and money for diesel emissions reductions projects in the Agricultural sector. The importance of seed money and pilot projects was also discussed. Some Collaborative members believe resources need to be funneled into one larger project while others believe resources spread over a few projects may be more beneficial to diesel emissions reductions, if these projects are chosen wisely. The National Clean Diesel Campaign continues to support seed money and demonstration projects. The theme of “real and true” projects begins to be discussed during this segment of the conversation and continues throughout the day.

**Past Projects**

**Diesel Agricultural Pump Efficiency Project**
*Overview by John Weddington, Center for Irrigation Technology*

See handout for project details:

The Diesel Pump Efficiency Project demonstrates the importance of testing pump efficiency, making appropriate repairs and providing rebates to farmers who are willing to make large investments to implement fuel efficient pumps immediately. So far this project has seen a 37% reduction in fuel usage and, although they currently only have funds for 11 pump repairs, this project has generated a lot of interest amongst farmers.
The Center for Irrigation Technology anticipates being able to help many more farmers who come to them with projects, but this will require more resources.

During the discussion of this project, Kerry Drake noted that this type of project shows the value of test projects because it measures savings and shows results.

**Cleaner Biodiesel for Farm Equipment Demonstration Project**

*Overview by Allen Dusault, Sustainable Conservation*

See website for project details:

The Cleaner Biodiesel for Farm Equipment Demonstration Project is researching the effectiveness of a fuel additive in lowering NOx emissions in a John Deere engine. This is important because NOx emissions have been one of the largest barriers to biodiesel use, especially in higher blends. This project is testing emissions on B5, B20, and B85 and its processes can easily be replicated by others even though it is not currently in the CARB process for verification.

During the discussion of this project, Peter Murchie highlighted the strong interest by state legislators in Oregon and Washington, where they are debating renewable fuel mandates. Many in the NW agriculture sector highlight that any biofuels legislation must benefit Washington and Oregon farmers and not just Iowa, where much of the biodiesel is currently produced. Furthermore, the topic of biodiesel production in the Pacific Northwest was discussed. It was suggested that it would be most beneficial if this region produced its own biodiesel, instead of importing it from the Midwest, but there is debate about how this would work.

**Eastern Washington Farmers Diesel Emissions Reduction Project**

*Overview by Paul Dorning, Upper Columbia Resource Conservation & Development*

The Eastern Washington Farmers Diesel Emissions Reduction Project focuses on providing incentives for farmers to decrease fuel usage by fewer tillage operations. The farm community seems to have embraced this project, local partners and conservationist are involved, and 12-15 growers are expected to participate. The practices used must meet standards and report-outs for districts involving state revolving loan funds must show gallons saved and emissions reduced.

**Voluntary Agricultural Diesel Engine Retrofit Program**

*Overview by Leonard Herr, Idaho Department of Environmental Quality*

The Voluntary Agricultural Diesel Engine Retrofit Program provides diesel oxidation catalysts to farmers at no cost. These retrofits do not economically benefit the users, but if they do not mind having the catalyst attached to their equipment, they are welcome to keep the catalyst and continue to reduce diesel emissions.
During the discussion of this project, engine manufacturing warrants were debated. It seems that some engine manufacturers will and some will not warrant a vehicle if it has an addition, i.e. a diesel oxidation catalyst. However, this may be irrelevant if most of the vehicles accepting these additions are long out of warranty anyway.

Current Funding Opportunities and the National Clean Diesel Campaign

Peter Murchie presented current funding opportunities, the National Clean Diesel Campaign and the latest federal funding developments in Washington D.C. While many of this summer’s legislative actions targeted diesel mitigation authorizations, few programs have appropriations in the federal budget (the difference being that authorizations do not commit resources, whereas appropriations do). A short summary of the different provisions in the Energy Bill and the Transportation Bills were provided (for more see: www.westcoastcollaborative.org/congress.htm).

Peter also reminded the group that the West Coast Collaborative is planning to put out an initial request for proposals in December, 2005. The WCC has approximately $500,000 for an agriculture sector project or projects and an additional $500,000 for a cleaner fuels project or projects. When available, the initial request for proposals will be posted on the WCC website www.westcoastcollaborative.org.

Congressional Staff up-dates

Dee Dee D'Adamo from Congressman Cardoza’s office and Lacy Kiriakou from Congresswoman Radanovich’s office made the following points:

- The Farm Bill provides opportunities for funding
- We need to improve and streamline our efforts to get funding to California
- We are looking at more changes to the Farm Bill’s language
- We are hoping to find a common ground, and come up with ideas of what we want to do together
- There is a major difference between authorizations and appropriations
- Letters, signed by Congressional Staff were sent to the Appropriations Committee
- These letters of support are on the web at http://www.westcoastcollaborative.org/congress-activities.htm and support the Diesel Emissions Reduction Act, which authorizes $200 million per year in available funds for all diesel emissions reductions related projects
- Current funding was due, in large part, to these letters
- We defer to stakeholders to know what prioritize
- Stakeholders should use Congressional Staff for help with projects, assuming there is a consensus on how programs should be structured
- We need agencies involved and working together

Future Projects and Next Steps
Brainstorming Session: EPA and the West Coast Collaborative would like to spur continued project development in the agriculture sector. What are feasible and cost effective diesel emissions reductions projects?

Please note that these brainstorming ideas and/or focus areas are incomplete and need additional research.

1. A second container distribution location for the Port of Oakland. There is one rail track already constructed but a second rail track may help decrease congestion and mitigate the use of trucks
2. Nighttime shipping and trucking to reduce waiting & better communication with distributors, so rail cars and trucks are never empty
3. Use of methane from dairy farms for vehicle use, also a precursor to hydrogen highway
4. Biomass energy
5. Vehicles powered by energy saved from reduced digesters use
6. More efficient fork lift use and fueling
7. Electrification at distribution centers
8. Packing houses
9. Off-road tractors
10. Revolving funds for long haul fleets to retrofit trucks – The APU loan programs are successful at reducing diesel emissions because owners make back their money fast and there is a large tax credit
11. By 2007 funding sources beyond Carl Moyer will be needed, so other programs are necessary
12. Electricity use, then diesel use during peak periods i.e. Duel power irrigation pumps
13. Electric infrastructure for substitutive energy for PG&E
14. Solar energy or biodiesel used for irrigation pumps
15. Pressure reduction for irrigation
16. Transportation for farm workers
17. Three car road trains

Our next steps are:
a) to identify which of these ideas and focus areas, or any other diesel emissions reductions ideas, need to be researched and followed-up on by Collaborative members
b) to use appropriate energy and methods to make sure partnerships form and collaborative projects develop

We would like a one page paper explaining ideas of interest. These briefing papers will be distributed as background information to those interested. They will also serve as a starting point for future discussions about specific ideas. If one of these ideas interests you, or if you have other ideas that are not included on this list but may help reduce diesel emissions reductions, please contact Peter Murchie. These ideas are only a starting point, we need to continue brainstorming and researching as much as
possible so projects and partnerships have a chance to form, especially if there is interest in the 2006 WCC funding opportunities.

### In-person Ag Sector Participants at the Nov. 21, 2005 Meeting in Modesto

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