

Puget Sound Clean Air Agency (PSCAA) Diesel Fleet Facility Registration Program Stakeholder Process

Meeting Summary
April 6, 2009
Seattle, WA

Participants

Name	Organization
John Chavez	Burlington Northern
Jerry Dinndorf	Association of General Contractors
Andy Fritchen	UPS
Dennis Furu (by phone)	NC Power Systems
Wayne Grotheer	Port of Seattle
Matt Hink	CalPortland
Nels Johnson	Allied Waste Services
Allen Mitchell	Snohomish County Department of Public Works
Mike Moore	Pacific Merchant Shipping Association
Gene Questad	Boeing Company
Sarah Rees	Washington State Department of Ecology
Tim Sexton	Washington State Department of Transportation
Greg Tisdell	Tiz's Door Sales

PSCAA and Support

Name	Organization
Dennis McLerran	PSCAA
Amy Fowler	PSCAA
Dave Kircher	PSCAA
Tom Beierle	Ross & Associates Environmental Consulting
Patrick Donovan	Ross & Associates Environmental Consulting
Bill Ross	Ross & Associates Environmental Consulting
Heather Rogers	Berk & Associates

Welcome and Agenda Review

Bill Ross, Ross and Associates, welcomed the stakeholder group and thanked them for their continued involvement in the development of the Diesel Fleet Facility Registration Program (DFFRP). Bill introduced Dennis McLerran, Executive Director of the Puget Sound Clean Air Agency (hereafter referred to as “Agency”).

Dennis thanked the stakeholders for their participation, reviewed the main focus of the meeting and provided a brief recap of the program overview. The main focus of the meeting, he said, is to provide the stakeholder group with a comprehensive review of the program fee proposal and to work through examples. Dennis noted the similarities between the proposed registration program and other Agency programs targeting emissions from stationary sources (e.g. boilers, gas stations, etc.). The purpose of the program, he said, is to produce a sustainable source of funding to continue the Agency’s Diesel Solutions program, which works to reduce both air emissions and the level of risk associated with diesel exhaust in the Puget Sound. Dennis explained that funding under the DFFRP would only be used to cover administrative costs of the Diesel Solutions program and that the Agency will continue to find capital funding from the U.S. Environmental Protection Agency (EPA) and other alternative sources of funding (e.g., DERA funding, CMAQ funding, debt financing and low-interest loan programs). He encouraged the group to consider the clear contrasts between California’s diesel emission reduction program and the DFFRP. Dennis reiterated that California has a regulatory diesel program that requires diesel engine retrofits within a specified amount of time. The DFFRP would require only registration (and related fee payment) and would work with registered sources on a voluntary basis to continue offering the incentive-based Diesel Solutions program to retrofit or repower diesel engines.

Following opening remarks, the stakeholders asked for clarifications on the following topics:

- Will the Agency ultimately require mandatory retrofits or repowers of diesel engines under the DFFRP?
 - Due to external factors, such as natural fleet turnover, mandatory retrofits or repowers are not likely under the DFFRP.
- What is the anticipated term of the DFFRP?
 - The program is anticipated to begin in 2010 and conclude in 2022. Stakeholders should note that the Agency has a clear history of phasing out programs once targets have been met.
- How is a “facility” defined under the DFFRP?
 - A facility is defined as any entity that owns or leases fleets of diesel vehicles.
- What is the threshold for on-road vehicles under the DFFRP?
 - On-road diesel vehicles weighing in excess of 10,000 pounds would be required to register under the program.
- Is the DFFRP a regulatory or voluntary program?
 - Under the DFFRP, registration will be mandatory. However, facilities have the voluntary choice to work with the Diesel Solutions program to retrofit their vehicles.
- From the standpoint of legal authority, are there barriers?
 - Under Washington State law, the Agency has the authority to register emission sources and require fees to support program administration. Again, the Agency has decided against pursuing a regulatory approach like California’s that would mandate emission reductions or fleet turnover.
- Is “hosting” still an element of the program design?
 - The current program design under consideration by the stakeholder group is based on ownership rather than hosting.
- Can funding from the Congestion Mitigation and Air Quality (CMAQ) program be used to support programs for diesel retrofits and replacement?

- Yes. The U.S. Department of Transportation’s CMAQ improvement program provides funding for projects that contribute to an improvement in air quality and/or a reduction in congestion.

Program Cost and Fee System: Focus on On-Road

Heather Rogers, Berk & Associates, provided an overview of a cost and fee model for the registration program, including key assumptions and results. She discussed slides 2 through 19 of the program cost and fee PowerPoint presentation and emphasized the following points:¹

- The fee model is based on program design feedback from the March 16 stakeholder group meeting.
- Program fees are linked directly to a facility’s emission levels, with dirty facilities paying more over time.
- Initially program revenue targets are set so as to build up an operating reserve.
- The “conservative” program scenario parallels recent Agency program history by assuming 700 retrofits annually. The program is designed to initially focus on large facilities and then transition resources to smaller facilities and non-road equipment over time.
- The “aggressive” program scenario accounts for external partnerships with organizations and programs such as Cascade Sierra Solution’s (CSS) low-interest loan and debt financing programs.
- Program revenue targets assume that non-road equipment will be phased in over time to help cover a portion of the cost of the program.
- Compliance assumptions vary by facility type with a high level of compliance assumed for large private facilities and a low level of compliance assumed for smaller facilities.
- The fee model assumptions associated with fleet turnover do account for the natural turnover of fleets and assume that older vehicles tend to turnover at a faster rate than newer vehicles.

Heather emphasized the following points when discussing fee calculation examples.

- Fee examples 1 and 2 are identical in structure and principles; however, they use different approaches to weight fees across both facility size and vehicle emissions categories.
- Fees are based on where a facility’s diesel vehicles fall within the emission level and size categories, using a proportional allocation.
- Many different weighting approaches could be used to structure the program fee system. Stakeholders are encouraged to provide feedback on what key points the Agency should focus on when developing the fee system.

The group discussed the process of determining facility fees in addition to the separate fee examples. Dennis indicated that program fees are set to achieve a certain level of funding needed to sustain the operating budget of the program. Stakeholders raised concerns about how the fee system would apply to different types of facilities and ownership structures. For example, there is potential for fees to be charged to facilities that “own” fleets within the four-county area but operate them outside the Agency’s jurisdiction.

The group further discussed the fee system and its applicability to facilities over time. Bill Ross emphasized that the program will initially necessitate for a small group of facilities to cover program revenues and that over time program costs will shift to newly registered facilities. Furthermore, Bill noted that under both fee examples, cleaner fleet facilities receive significant fee reductions over time while fees for dirty facilities increase. Dennis McLerran noted that the Agency Board advocates for the “polluter pays” methodology to be incorporated into the program.

¹ http://www.pscleanair.org/programs/dieselsolutions/registration/stakeholders/documents/PSCAA_DFFRP_slides_meeting3.pdf

Stakeholders provided the following comments and questions with respect to the cost and fee structure examples:

- Stakeholders need to see how the fee structure translates into a cost-per-gram of pollutant emitted.
- Natural gas powered vehicles should be included in the “clean” category. [Note that non-diesel-fueled vehicles would be exempt when determining a facility’s fleet size, so natural gas-fueled vehicles would not be included in any fee calculation.]
- The number of facility fleet size categories should be expanded to include larger categories.
- The program needs a concrete definition of what a facility is and how it fits into fee system categories.
- The fee system should explore the possibility of including a “straight category” that would eliminate the need for facilities to calculate fees by apportioning their vehicles across emission categories. The fee could be based entirely on the number of facilities or vehicles.
- The Agency should determine and review the cost differential between an entity with diesel fleets located at one primary facility and an entity with diesel fleets located at multiple facilities.
- Fees could be aggregated for multiple facilities associated with one entity while maintaining the Agency’s per-facility fee and lookup table.
- The Agency should have a graph that just shows natural turnover and program turnover comparison.
- A transparent fee system will aid in achieving a higher rate of program compliance.
- Assumptions associated with each fee example should be clearly defined and presented to the stakeholder group.
- Emissions reductions resulting from the DFFRP should be compared to emission reductions associated with natural fleet turnover. Results should depict the benefits of the DFFRP in terms of overall advances in retrofits and emission reductions.
- Will facilities pay more under the DFFRP or under the Agency’s existing registration program for crushers?
 - Based on the level of risk facilities are likely to pay more under the DFFRP. However, fees under the DFFRP will be scaled back over time while fees under the crusher registration program will remain relatively constant.
- With limited compliance during the initial years of the program will a disproportionate amount of the fees be placed on identified small fleet size facilities to cover revenue requirements?
 - This is a valid issue for stakeholders to address. The DFFRP could stipulate that any facility under a certain threshold size will be included in the program until otherwise proven. This may increase revenues received from the small fleet size category.
- Has the Agency considered using Washington State businesses licenses to located facilities?
 - Yes. The Agency currently uses this method in addition to other methods (e.g. yellow-pages).
- What elements of the DFFRP are considered to be voluntary?
 - The choice of whether to retrofit vehicles is voluntary. Registration under the program is mandatory.
- Will any credits or fee reductions be given to facilities that have already retrofitted their fleets?
 - Fee credits and reductions for facilities with retrofitted fleet vehicles are built into the fee system design and are reflected by the reduction of fees for clean facilities.
- Will the Agency make funds available to convert diesel engines to natural gas?
 - The conversion of diesel engines to natural gas aids in the reduction of nitrogen oxide (NOx) emissions. The Agency has limited experience with obtaining funding for natural gas conversions due to low levels of NOx in the Puget Sound Region. The focus of the DFFRP is on reducing the emission of particulate matter (PM) and volatile organic compounds (VOC). The Agency may focus on natural gas conversions as associated costs become more competitive. The U.S. Department of Energy has grant funding available for natural gas conversions through the Puget Sound Clean Cities Coalition.²
- Is the assumption of 700 annual retrofits a conservative estimate?
 - Yes, but it is subject to continued availability of grant funding for retrofit projects. Even with a large portion of the public fleet retrofitted, immediate opportunities exist to work with the

² <http://www.pugetsoundcleancities.org/GrantOpportunities.htm>

- private sector on retrofitting fleets including the clean truck program at the ports of Seattle and Tacoma and the Cascade Sierra Solution (CSS) long haul truck program.
- According to inventory data collected for on-road and non-road vehicles to date what is the ratio of private to public sector fleets?
 - Data collected to date estimates this ratio be 90:10 or 90% private and 10% public.
 - Under the aggressive program scenario, does the retrofit estimate include natural fleet turnover?
 - No. The estimate describes retrofits and replacements as a result of the program, above and beyond natural fleet turnover.
 - In the graphic titled *On-Road Composition and Turnover Assumptions* on slide 12 of the PowerPoint presentation, what factors cause category-2 diesel vehicles to remain large and category-3 to remain small over time?³
 - The category-2 fleet vehicles remain large over time because it contains all un-retrofitted diesel engines. The program assumes most category-2 diesel vehicles will be replaced with category-4 diesel vehicles (rather than category-3).
 - Has the Agency conducted a cancer risk assessment within the Puget Sound region on a per-facility basis?
 - No. The Agency does not have data that associates emission risk levels with a particular facility. Risk assessment for the Puget Sound is based on EPA national air toxic assessments and Washington State DOE air toxics monitoring data. Combined, this information provides the Agency with a clear sense of where the highest risk levels are located.
 - What controls and measures does the Agency have to reach fee and emission reduction targets by 2020?
 - The DFFRP is a nested program within a set of Agency and State programs aimed at reducing diesel emissions within the Puget Sound area. This specific issue will be further covered during the 4th stakeholder group meeting on April 29, 2009.
 - Should the stakeholder group consider adding “equity” as another key program principle? The program could achieve equity by devoting 100% of retrofit funding for private sector fleets during the initial years of the program and eventually returning the program to a 90:10 split between private and public fleets.
 - The structure of the proposed fee model maintains funding levels for private fleet retrofits at 90% or above.
 - How is a facility defined under the DFFRP?
 - A facility is currently defined under the DFFRP as any entity that owns a facility with diesel fleets.
 - How will an entity with multiple fleets owned in the four-county area be dealt with under the fee system?
 - The Agency will explore the idea of rolling-up fees for entities with multiple facilities in the four-county region into a single aggregated fee.

Review of Non-Road Data and Information Needs

Tom Beierle, Ross & Associates, provided an overview of non-road data sources and information collected for the DFFRP to date. Additionally, he led a brief discussion on remaining information needs and data sources. Tom discussed slides 20 through 29 of the program cost and fee PowerPoint presentation and emphasized the following points:⁴

- The primary source used to obtain non-road data for the DFFRP is the EPA NONROAD 2005 model.
- Non-road equipment will be phased into the program over time.
- Non-road vehicles will be part of the program for at least 10 years before the program is phased out.
- Reporting and program design issues associated with the non-road portion of the program will be resolved as it evolves (e.g. how to reach and identify nonroad sources, non-road fees, etc)
- Stakeholders are encouraged to advise the Agency about what range of engine horsepower the program should focus on to capture the largest segment of the non-road population.

³ http://www.pscleanair.org/programs/dieselsolutions/registration/stakeholders/documents/PSCAA_DFFRP_slides_meeting3.pdf

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- The threshold for non-road equipment could be based on fuel use or total hours used, however both of these options create administrative complexity issues for both the Agency and the reporting facility.

Stakeholders had the following comments and questions with respect to non-road equipment:

- The MacKay & Company data should be updated as non-road heavy equipment characteristics have changed drastically since 2003.
- The threshold for non-road equipment covered by the program should be set at 50 horsepower and above (one stakeholder said it should be slightly lower).
- The threshold for non-road equipment should be set after the Agency identifies the administrative costs associated with locating and registering all non-road equipment identified within the EPA NONROAD 2005 Model.
- Will the program framework for non-road equipment mimic that of the on-road portion of the DFFRP?
 - Yes. However, stakeholders are encouraged to assist the Agency in identifying unique issues relevant to non-road that may not have been covered by the on-road portion of the program.
- Is the EPA NONROAD 2005 model a national model?
 - The EPA NONROAD model is a computer-based national model that estimates emissions for non-road mobile sources using local environmental factors.
- Are stationary generators regulated under any of the Agency's current programs?
 - No. Stationary generators would be captured under the non-road portion of the program within the 1000 horsepower and above category.
- Will harbor craft be included within the non-road portion of the program?
 - No.

The stakeholders briefly discussed whether or not it was logically sound to phase non-road equipment into the program over time. The group generally agreed that phasing non-road was logical and necessary. However, they expressed concerns regarding both the thresholds and data sources used to develop the non-road inventory. Stakeholders indicated that a reliable inventory of non-road equipment is necessary to accurately identify what equipment exists within the four-county area and where to initially focus program resources.

Approach for Developing Stakeholder Report:

Bill Ross led a discussion on the development of the final stakeholder report that will be given to the Agency Board. He briefly explained that the intent of the final report is to outline in as much detail the thoughts and key decisions of the stakeholder group as a whole. Bill indicated that the content of the final report would be best presented as an integrated description of the program and how it evolved over the course of the stakeholder process—along with any recommendations and critiques from the group. Bill indicated that, if necessary, a 5th stakeholder group meeting could be organized to allow stakeholders an opportunity to solidify their final recommendations. Stakeholders agreed that the 4th stakeholder group meeting should be used as a time to comment on draft recommendations and then finalize them during a 5th stakeholder group meeting. Dennis McLerran reminded the stakeholders that the charge of the group was not to reach a consensus or a final vote on how to present the program to the Board.

Wrap Up & Next Steps

Bill noted that the next meeting will be on April 29, 2009, at the Puget Sound Clean Air Agency and will mainly focus on the “whole package” of program design.