

PUGET SOUND CLEAN AIR AGENCY

Diesel Fleet Facility Registration Program Fee Structure Design: Key Parameters

Based on the program design elements discussed at the March 16, 2009 stakeholder meeting, an Excel model was developed to calculate and analyze potential fee structures. The model includes modules on program costs, fleet and facility characteristics and the resulting fees required to support the program operating costs.

PSCAA and the consultant team are in the process of developing and evaluating alternative options for the fee system. A potential fee structure (with corresponding fees) will be presented to the stakeholder group on Monday, April 6, 2009. The calculations underlying the fee structure include a number of variables and assumptions. To help stakeholders prepare for the April 6 meeting, this document provides an overview of those assumptions and variables, grouped below by topic area.

- **Program Costs**

- The analysis assumes initial program operating costs of \$842,000 (6.4 FTEs).
- The initial revenue target from fees is \$912,000 to allow for a gradual build-up of an operating reserve.
- Program costs increase during the initial years of the program, then remain relatively constant around \$1.0M. (Although the program is scaled down in its final years to 4.6 FTES in the final year, this decrease is offset by normal cost escalation over time).

- **Fee Timeline**

- Fees are collected from 2010 – 2022 (with small fleets and off-road entering the program in 2013).
- In the initial years of the program fee revenues come primarily from the on-road fleet. In the later years of the program—when the on-road fleet is substantially upgraded—fee revenues come primarily from the off-road fleet.
- The on-road/off-road revenue assumptions are set such that in any given year, the portion of costs borne by each group roughly reflects the efforts spent by the Agency on each group.

- **Fleet Turnover and Growth**

- Assumptions about normal fleet turnover have a significant impact on the fee structure and on the window of opportunity for the program to affect outcomes.
- Vehicle replacement is weighted such that older vehicles are replaced more rapidly.
- The model assumes that public fleets replace more of their fleet with 2007 and newer vehicles than large private fleets. It also assumes that small private fleets replace only a small fraction of their fleets with 2007 and newer trucks for the next several years (until 2007 models are readily available on the re-sale market).
- The total fleet grows at 1% per year.

- **Diesel Solutions Program Activity**

- Assumptions about retrofits occurring through the Diesel Solutions program are consistent with recent program history.
- The majority of Diesel Solutions’ retrofit activity is targeted at large private fleets during initial years of the program, phasing in small private fleets as they enter the program, then focusing primarily on off-road equipment towards the end of the program.
- The analysis defines a range of possible outcomes from the Diesel Solutions program, bookended by a conservative scenario and a more aggressive scenario.

- **Fee Structure**

- For the dynamic portion of the fee structure, a facility’s fleet can be broken down into four categories:

Category	Grams/Mile PM 2.5	Typical Model Year/Retrofit Status
Category 1 (“Dirty”)	>0.3 g/mile	1993 and older
Category 2 (“Early Standards”)	0.1 to 0.3 g/mile	1994-2005 without exhaust control retrofits; or 1993 and older with exhaust control retrofits
Category 3 (“Nearly Clean”)	0.02 to <0.1 g/mile	1994-2006 engines retrofitted with diesel oxidation catalyst or diesel multistage/flow-through filters
Category 4 (“Clean”)	<0.02 g/mil	2007 engine or newer; or 1994-2006 engine with diesel particulate filter

- Facilities with dirtier vehicles pay more. Fees associated with the dirtiest category increase over time, while the fee for the cleanest category decreases over time.
- No facilities that own diesel trucks larger than 10,000 pounds are exempted from the program.

- **Compliance with Fees**

- Compliance assumptions vary by facility type (public facilities have the highest compliance rates and very small private facilities have the lowest).
- Compliance improves during the first few years as facilities are included in the program. Compliance then maxes out at 50-90%, depending on the facility type.