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## TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

*Protecting Texas by Reducing and Preventing Pollution*

June 22, 1998

Ms. Lois Platte  
U.S. Environmental Protection Agency  
Assessment and Modeling Section  
2000 Traverwood Drive  
Ann Arbor, Michigan 48105

Re: Comments on *Description and Documentation for Interim Vehicle Clean Screening Credit Utility* (EPA 420-P-98-008)

Dear Ms. Platte:

As a member of the Modeling Technical Advisory Committee, I appreciate the opportunity to comment on your clean screening guidance. As background, Texas is probably more interested, at this point, in model year exemptions as a clean screening method than clean screening or low emission profiling (LEP) techniques. The state's primary emphasis with remote sensing continues to be identifying polluting vehicles as required by our state implementation plan (SIP). In regard to this clean screening guidance, my main concern relates to how a modeler calculates "credits" for inspection/maintenance (I/M) programs. Using the MOBILE model, we can run two scenarios with and without I/M to calculate the air quality benefits. These scenarios are misleading because the credits can contain the impacts of TIER 1 and local fuels (reformulated, low vapor pressure), requiring at least three separate runs. The exact amount of credit will change depending on the order of the control scenarios. While the internal computer code contains the true credits based upon the "sawtooth" algorithm, the document might be revised to quantify how external credits work in reality (page 10), especially when dealing in tons-per-day instead of percentages.

Another issue is how to calculate credit losses for 1990 and newer vehicles using result standard deviation (RSD). As explained in the document, credit losses can be higher for this category than for older vehicles because of several factors, including the arbitrary nature of RSD technology and cutpoint selection. This seems to be contrary to the new findings on deterioration rates which show that deterioration rates for post-1990 vehicles are very low, so perhaps there is very little credit loss.

I agree with you that more work should be done on LEP screening, especially with regard to model year dependencies. As discussed in the recent Mobile Modeling meeting, perhaps RSD could be used in conjunction with an initial LEP to validate shifts in credit losses over time. As for your request for data on credit retention, we do not have hard data to offer at this point in time (page 16).

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Re: Comments on *Description and Documentation for Interim Vehicle Clean Screening Credit Utility*  
(EPA 420-P-98-008)

Thank you for the opportunity to submit these comments. Please call me at (512) 239-1441 if you desire to talk more about my concerns.

Sincerely,

Sam Wells  
Engineering Specialist  
Air Quality Planning and Assessment Division

SW/ec

# GORDON-DARBY

June 23,1998

Mr. Joe Somers  
U.S. Environmental Protection Agency  
Assessment and Modeling Division  
2000 Traverwood Drive  
Ann Arbor, MI 48105

Dear Mr. Somers:

We have received and reviewed your draft guidance on the interim use of clean screening methodologies in state inspection and maintenance (I/M) programs that was released on May 7,1998.

As President of Gordon-Darby, I am actively involved in technical research in the I/M industry and have been for the past 15 years.

We have grave concerns about the document. We understand that it is an edited version of an earlier document that addressed remote sensing only. Although it might not blatantly endorse remote sensing, the way it is written certainly gives that impression. It at least came close enough for Envirotest to claim in a press release that it was an endorsement.

As you know, it is possible to exempt vehicles from I/M testing based on model year and incur virtually no cost to identify those vehicles. There is a strong scientific basis for that position. The remote sensing data that is referenced in your draft has not been peer reviewed. Earlier remote sensing data that was peer reviewed showed it to be an unsound approach that results in a significantly greater loss in emissions benefits for a given level of vehicle exemptions than if vehicles were simply exempted based on model year.

As you also know, the monopoly on remote sensing technology is held by Envirotest, a publicly traded company whose chairman is a Washington political insider.

We urge you to rewrite the draft to clearly explain that the desired result, reducing the vehicles that must be tested without appreciably reducing air quality benefits, can be simply and cost effectively achieved without using questionable monopolistic procedures. According to the guidance, "clean screening is aimed at making I/M programs more cost effective by focusing inspections on cars more

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U.S. Environmental Protection Agency  
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likely than others to be high emitters in need of repair." (emphasis added) However, the guidance does not acknowledge the tremendous disparity in cost that exists between using remote sensing technology for clean screening versus the two other approaches (model year exemptions and vehicle emissions profiling) mentioned in the guidance. It thus makes it appear that all three approaches are equally cost effective in reducing vehicle test volumes in an I/M program.

We hope that the EPA will avoid further political influence in this area and support good science and good public policy. You do not want to be accused of promoting a sham against the motoring public. This should be resolved technically before it is escalated to a media and political battle.

Sincerely,

S. Jay Gordon, Jr.  
President

cc: Gay MacGregor, U.S. EPA, Regional and State Programs Division

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July 10, 1998

Joe Somers  
U.S. EPA  
Assessment and Modeling Division  
2000 Traverwood Drive  
Ann Arbor, MI 48105

Dear Mr. Somers:

Thank you for the opportunity to comment upon the "Program User Guide for Clean Screening Credit Utility". Several items deserve Comment.

The regression analysis comparing Remote Sensing Devices (RSD) readings to IM240 emissions readings is actually a comparison of RSD readings *to* only the moderate load acceleration portion of the I/M240 test. Since the acceleration mode is only one of the driving modes included in the IM240 test, the correlation between the transformed acceleration mode readings and the IM240 readings is biased. This should decrease the level of confidence in the SIP credit calculations for the use of RSD clean screening.

The Washington Department of Ecology recently conducted an EPA funded RSD study in the Puget Sound region. RSD readings were compared to emissions checkpoint test results of the Puget Sound Basic I/M program. RSD data were gathered using similar criteria as the Colorado Greeley study. The Center of Statistical Consulting at the University at Washington used inverse regression analysis to calculate the correlation between RSD readings and emissions checkpoint readings.

Valid RSD readings were gathered on 64,000 vehicles during the summer of 1996. 4500 of these vehicles recorded three or more RSD readings and tested with the YM program within at least 90 days of one of the RSD readings. The correlation between RSD and the cruise emissions test results was 0.36 for both HC and CO. This data did not allow determination of reliable cutpoints for either clean screening or gross emitter identification. The report is currently being finalized.

We believe that EPA should be cautious in using only the Greeley Study to assign SIP credits, especially for either ASM or Basic I/M programs. We believe that EPA should not reach any final conclusions on the use of RSD until additional information is available. EPA needs to emphasize that the usefulness of RSD has not yet been determined in order to offset recent press releases that have proclaimed RSD as a proven and valuable tool for state's I/M programs.

Thank you for the opportunity to comment. For additional information, please contact Michael Bayer, Air Quality Program, (360-407-7119).

Sincerely  
Stu Clark, Acting Program Manager

From: Tom Wenzel <tpwaps@dante.lbl.gov>  
To: Joe Somers <Somers Joseph@epamail.epa.gov>  
Date: 7/21/98 1:06 pm  
Subject: Guidance comments

If it's not too late, here are my comments on the draft guidance.

The guidance overstates the potential fleet coverage of RSD. If two valid readings are required, I think 50% coverage is a reasonable assumption. Only Greeley achieved anything close to 80% coverage (72%), and that was based on only one valid RSD; the coverage dropped to 45% when two were required. The number of useable sites is a big constraint on the coverage.

Some may perceive the lack of coverage of a RSD clean screen as inequitable; the screen would reward those that drive their clean cars frequently past the sensors, and punish drivers of clean cars that don't drive them frequently. This could be mitigated by publicizing the location of a sensor, to allow owners of clean cars to voluntarily "apply" for a clean screen

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