US ERA ARCHIVE DOCUMENT

Additional Submittal for Detroit-Ann Arbor Area's (Southeast Michigan) Ozone Reclassification Request Appendix

Figure 1. Eight-hour Ozone Design Values for Detroit-Ann Arbor Area (Southeast Michigan) 1990 – 2004

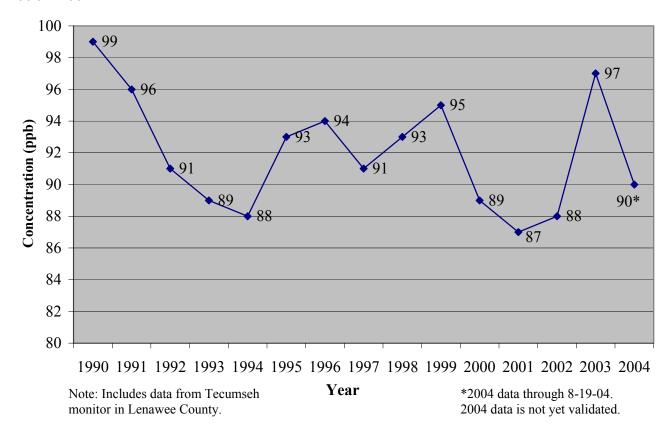


Table 1. Time Table for Southeast Michigan's June 2005 Submittal $\,$

TASK	2003		2004						2005					
NAME	SEP OCT NO	V DEC	JAN	FEB MAR A	PR MAY	JUN JUL	AUG	SEP O	CT NOV	DEC JA	AN FEB	MAR	APR MAY J	ÜΝ
Modeling														
Determine emission reductions from various control measures														
Work with SEMOS group to determine proper inputs for 2007 photochemical modeling (see below)														
Determine reductions in 2007 ozone concentrations from various control measures														
Southeast Michigan Task Force on Air Quality*														
Task force formed and first meeting held														
Discussion of ozone reclassification request														
Discussion of control measure options														
Control measure recommendations														
Fuels Group**														
Fuels Group formed and first meeting held														
Consultant's evaluation of emission reduction benefits of various gasoline and diesel fuels														
Fuels Group evaluation of "non-emission" criteria of fuels (i.e. costs, distribution, etc.)														
Fuels Group holds sorkshop/seminar with other Midwest states on consultant's results and other issues														
Submittal					_		_		_		_			
Draft														
Finalize														
Complete & Submit														

Additional Submittal for Detroit-Ann Arbor Area's (Southeast Michigan) Ozone Reclassification Request Attachments

Attachment A. Commitments from Southeast Michigan's original ozone reclassification request to EPA. Submitted July 15, 2004.

Commitment to Control Measures

The State of Michigan is committed to early compliance and maintenance of the ozone standard. As such, Michigan commits to the implementation of control measures necessary to achieve and maintain the ozone standard. The MDEQ and the SEMCOG are working with a task force with broad—based representation to evaluate the merits of several emission reduction alternatives. This includes a special study to quantify the benefits of a wide range of fuels.

The fact that the SIPs are due on the same date attainment is required for marginal areas poses a dilemma. In order to address this dilemma and consistent with the policy approach in Early Action Compacts, Michigan commits to interim milestones in advance of a 2007 SIP submittal should the EPA grant a marginal classification for Southeast Michigan. Specifically, Michigan commits to the following schedule, which will result in emission reductions and cleaner air earlier than under the current moderate classification.

1. June 2005 – Identification of additional controls

By June 2005, the MDEQ will submit to the EPA, Region 5 an analysis of various emission control strategies. In order to account for the uncertainty of predictive models, Michigan commits to additional control(s). The results of the analysis, evaluation of alternatives, and details of the control strategy, including an air quality assessment, will be in this submittal.

2. June 2006 - Adoption of rules/laws

Following the June 2005 submittal, the MDEQ will expeditiously p ursue the necessary rules and/or legislative authority to implement the control strategy for submittal to the EPA by June 2006.

3. June 2007 - Submittal of SIP

The complete SIP package will be submitted by June 2007 as specified for marginal nonattainment areas. However, reclassification based on this request places the state on a track for implementation of controls more expeditiously than for either moderate areas or marginal areas, both of which are not required to make any such commitments prior to June 2007.

Attachment B. Membership List for SEMCOG's Task Force on Air Quality

EPA ARCHIVE DOCUMENT

SENCOG...Local Governments Advancing Southeast Michigan

Southeast Michigan Council of Governments • 535 Griswold Street • Suite 300 • Detroit, Michigan 48226 • (313) 961-4266 • Fax (313) 961-4869 www.semcog.org

SEMCOG's Task Force on Air Quality

As of August 5, 2004

Chair:

Gordon Allardyce, Councilmember City of Orchard Lake Village

Vice Chair:

Rhonda Ross, Attorney Warner, Norcross & Judd

Members:

Christine M. Bates, Director, Regulatory/Legislative Group Environmental Services General Motors Corporation

Mary Lynn Becker, Public Affairs Officer Canadian Consulate General

Brian Blaesing, Director of Planning and Development Road Commission for Oakland County

Skiles Boyd, Director, Environmental Affairs Department DTE Energy

Stephen Cassin, Executive Director Macomb County Planning and Economic Development Department

James R. Cramer, Transportation Planning Engineer Federal Highway Administration

John Czarnecki, Vice President, Community Services Michigan Economic Development Corporation

Dan Dirks, General Manager SMART, Suburban Mobility Authority for Regional Transportation

Karen East, Science Research Analyst Legislative Service Bureau, Michigan Science and Technology Division Katherine K. Edgren, Project Manager Community Action Against Asthma

David Gard, Energy Policy Specialist Michigan Environmental Council

John Griffin, Executive Director Associated Petroleum Industries of Michigan

Kurt Heise, Director Wayne County Department of Environment

Daniel P. Hunter, Planning Manager Oakland County Development & Planning Division

Duane Johnson, Environmental Quality Office Ford Motor Company

Mike Johnston, Director of Regulatory Affairs Michigan Manufacturers Association

Diana J. Kolakowski, Commissioner Macomb County

Ralph Kummler, Dean, College of Engineering Wayne State University

Sarah Lile, Director City of Detroit, Department of Environmental Affairs

Royce R. Maniko, Director Monroe County Planning Department

John Mooney, Environmental Specialist Environmental Protection Agency, Region 5

William Morris, President Monroe County Industrial Development Corporation

Matthew Naud, Environmental Coordinator City of Ann Arbor

Phillip Pavlov, Commissioner St. Clair County

Lou Pocalujka, Senior Environmental Planner Consumers Energy Company

Kathryn Savoie, Environmental Program Director ACCESS, the Arab Community Center for Economic and Social Services

Mary Snow-Cooper, Specialist, Air Compliance DaimlerChrysler

David Tyler, Assistant to the Director Wayne County Community Development

Anthony VanDerWorp, Director Washtenaw County Department of Planning and Environment

Kathy Vosburg, Commissioner Macomb County

Sebastian Wade, Senior Director of Policy Detroit Regional Chamber

William D. Wagoner, Director Livingston County Planning Department

Kathleen Wendler Southwest Detroit Business Association

Heaster Wheeler, Executive Director, Detroit Branch NAACP, the National Association for the Advancement of Colored People

George Wolff, Principal Scientist General Motors Corporation

Support Staff:

Michigan Department of Environmental Quality Michigan Department of Transportation SEMCOG

Attachment C.

Agendas from Air Quality Task Force where ozone reclassification request was discussed and/or results of control strategy analyses.

SEMCOG's TASK FORCE ON AIR QUALITY

Thursday, February 19, 2004

9:30 a.m. – Noon SEMCOG Buhl Building 535 Griswold, Suite 300 Detroit, MI

In order to assist us in preparing for this meeting, please contact Ken Bishop at 313-961-4266 or bishop@semcog.org if you plan to attend.

AGENDA

Time Page (Minutes)

I. Welcome and Introductions

Gordon Allardyce, Chair

5 II. Meeting Overview and Purpose

Gordon Allardyce, Chair

Meeting Purposes:

- To update the group on regulatory developments pertaining to the implementation of the eight-hour ozone and PM_{2.5} standards.
- To review information on current and future mobile source emission estimates, and
- To inform the group about the purpose and recent activities of the Fuels Subgroup.

10 3 III. Update on the Nonattainment Boundaries for the Eight-hour Ozone and PM_{2.5} Standards Attachment A

G. Vinson Hellwig, Chief, Air Quality Division, Michigan Department of Environmental Quality (MDEQ)

Information will be provided about the following events, which have occurred since the last meeting:

- EPA's (Environmental Protection Agency) response to MDEQ and SEMCOG's eight-hour ozone nonattainment boundary recommendation, and
- The $PM_{2.5}$ nonattainment boundary recommendation.

^{*}Parking is available in the structure adjacent to the Buhl Building. Bring your parking ticket to the receptionist at SEMCOG's front desk so that it can be validated.

Time Page (Minutes) 10-15 6 IV. Update on EPA's Regulatory Schedule for the Eight-hour Ozone and PM_{2.5} Standards Attachment B Chuck Hersey, SEMCOG An update will be provided on EPA's regulatory schedule for implementing the new standards. General information will also be presented about EPA's recently proposed transport rule and its effect on SIP planning. 20 8 V. **Mobile Source Emissions** Attachment C Elena Berg, SEMCOG Joan Weidner, SEMCOG At each of the next few meetings, staff will be presenting background information to help prepare for future discussions about control measures. First on our list is EPA's new model for estimating vehicle emissions. EPA requires that this model be used for air quality planning. Staff has been working with this model and will present emission results and discuss implications. 5 10 VI. Fuels Subgroup Attachment D Gordon Allardyce, Fuels Subgroup The Fuels Subgroup was created in order to assist in our understanding of fuels issues. A brief overview of the purpose and recent activities of the Fuels Subgroup will be presented. 10-15 VI. **Public Comment** VII. **Next Steps**

SEMCOG'S TASK FORCE ON AIR QUALITY

Wednesday, May 19, 2004

9:30 a.m. – Noon SEMCOG Buhl Building 535 Griswold, Suite 300 Detroit, MI

In order to assist us in preparing for this meeting, please contact Ken Bishop at 313-961-4266 or bishop@semcog.org if you plan to attend.

AGENDA

Time (Minutes)	Page		
5		I.	Welcome and Introductions Gordon Allardyce, Chair
5		II.	Meeting Overview and Purpose Gordon Allardyce, Chair
			 Meeting Purposes: To update the group on regulatory developments pertaining to the implementation of the eight-hour ozone and fine particulate matter (PM_{2.5}) standards, To review a draft time line of the tasks needed for State Implementation Plan (SIP) development, To review information about current and future stationary source emission estimates, To gain a basic understanding of PM_{2.5}, and To inform the group about the purpose and recent activities of the Detroit Air Toxics Initiative.
10	3	III.	Update on the Nonattainment Boundaries for the Eight-hour Ozone and PM _{2.5} Standards Attachment A Elena Berg, SEMCOG

A brief update will be presented on the following items:

- Southeast Michigan's final eight-hour ozone nonattainment boundary, and
- The Environmental Protection Agency's (EPA) schedule for finalizing PM_{2.5} nonattainment boundaries.

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Time (Minutes)	Page		
20	6	IV.	EPA's Final Eight-hour Ozone Implementation Rule Attachment B Chuck Hersey, SEMCOG
			EPA released the first phase (of two) of its final eight-hour ozone implementation rule on April 15. The rule outlines the classifications for eight-hour ozone nonattainment areas. These classifications, in turn, affect an area's planning requirements. A brief overview will be presented.
10	7	V.	Time Line for SIP Development <u>Attachment C</u> Bob Irvine, Michigan Department of Environmental Quality (MDEQ)
			The draft time line, found on page 8, addresses tasks such as emissions inventory development, air quality modeling, and rule-making activities. A brief overview will be presented to give members a sense of what will be transpiring over the next several years.
20	9	VI.	Emission Inventory Development for Stationary Sources Attachment D John Schroeder, MDEQ
			At the last meeting, the task force discussed mobile source emissions. In an effort to continue our discussion of emission sources, John will present an overview of the development of current and future emission inventories for stationary sources. This will include information about how growth and control measures will be estimated.
20		VII.	Overview of PM _{2.5} George T. Wolff, General Motors Corporation
			 Dr. Wolff, an expert on PM_{2.5} and member of EPA's Clean Air Scientific Advisory Committee, will provide a basic overview of PM_{2.5}. This presentation will address questions such as: What is PM_{2.5}? How is it formed? What are the components of PM_{2.5}? What are the issues that complicate planning for PM_{2.5} attainment?
10	10	VIII.	Detroit Air Toxics Initiative Attachment E Cathy Simon or Bob Sills, MDEQ
			This MDEQ initiative will assess the risks of exposure to air toxics in the Detroit area using the air toxics monitoring data from the Detroit Pilot Project. Then, risk reduction measures will be evaluated with the assistance of a community stakeholder group. A brief overview will be presented.
10-15		IX.	Public Comment
10		X.	Next Steps

SEMCOG's TASK FORCE ON AIR QUALITY

Tuesday, June 29, 2004 9:30 a.m. – Noon SEMCOG Buhl Building 535 Griswold, Suite 300 Detroit, MI

In order to assist us in preparing for this meeting, please contact Ken Bishop at 313-961-4266 or bishop@semcog.org if you plan to attend.

AGENDA

			AGENDA
Time (Minutes)	Page		
5		I.	Welcome and Introductions Gordon Allardyce, Chair
5		II.	Meeting Overview and Purpose Gordon Allardyce, Chair
			 Meeting Purposes: To update the group on the regulatory developments pertaining to the implementation of the fine particulate matter (PM_{2.5}) standard, To update the group on the status of Southeast Michigan's eight-hour ozone reclassification request, To discuss estimates of emission reductions from various on-road mobile source control measures, and To learn more about the work of the fuels sub-group.
10		III.	Update on the PM _{2.5} Nonattainment Boundary for Southeast Michigan Mary Maupin, Michigan Department of Environmental Quality (MDEQ)
			In June, EPA plans to propose $PM_{2.5}$ nonattainment boundaries. An update on Southeast Michigan's boundary will be provided at the meeting.
15	3	IV.	Update on the Ozone Reclassification Request for Southeast Michigan Attachment A Chuck Hersey, SEMCOG
			At the last meeting, MDEO and SEMCOG shared their plans for requesting

At the last meeting, MDEQ and SEMCOG shared their plans for requesting that EPA reclassify Southeast Michigan's eight-hour ozone nonattainment area from moderate to marginal nonattainment. An update will be provided on the status of this work and the supporting information that will be provided to EPA. The request must be submitted to EPA by July 15.

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Time	Page		
(Minutes) 25	4	V.	Emission Reductions from Various On-road Mobile Source Controls Attachment B Elena Berg and Joan Weidner, SEMCOG
			Using EPA's Mobile6.2 model and SEMCOG's local travel data, SEMCOG staff estimated the range of emission reductions that can be obtained from various on-road mobile source control measures, such as a vehicle emissions testing program and improved public transit. These results will be presented at the meeting.
15	5	VI.	Overview of Fuels Evaluation <u>Attachment C</u> John Griffin, Associated Petroleum Industries of Michigan
			John Griffin, a member of the fuels sub-group, will discuss the matrices that were developed by the sub-group to help evaluate fuels. These matrices can be found on pages $6-8$. He will also discuss the timetable for completing the fuels evaluation.
15		VII.	Alternative-Fueled Vehicles
			Information will be presented about the emission reduction benefits of these vehicles, including hybrid vehicles.
10-15		VIII.	Public Comment
10		IX.	Next Steps

SEMCOG's TASK FORCE ON AIR QUALITY

Tuesday, September 14, 2004

9:30 a.m. – Noon SEMCOG Buhl Building 535 Griswold, Suite 300 Detroit, MI

In order to assist us in preparing for this meeting, please contact Ken Bishop at 313-961-4266 or bishop@semcog.org if you plan to attend.

AGENDA

Time (Minutes)	Page		
5		I.	Welcome and Introductions Gordon Allardyce, Chair
5		II.	Meeting Overview and Purpose Gordon Allardyce, Chair
			 Meeting Purposes: To update the group on the regulatory developments pertaining to the implementation of the eight-hour ozone and fine particulate matter (PM_{2.5}) standards, To update the group on the status of Southeast Michigan's eight-hour ozone reclassification request, To discuss estimates of emission reductions from various stationary source control measures, and To overview the group's next steps.
5		III.	Recognition of New Members Gordon Allardyce, Chair
15	3	IV.	Update on the PM _{2.5} Nonattainment Boundary and Ozone Implementation Rule Attachment A Mary Maupin, Michigan Department of Environmental Quality (MDEQ)

A map of EPA's proposed $PM_{2.5}$ nonattainment boundary and MDEQ's recommended $PM_{2.5}$ nonattainment boundary can be found on page 4 of this agenda packet. MDEQ provided a detailed, technical response to EPA's proposed nonattainment boundary on September 1. An update on this response and the status of the second and final phase of EPA's eight-hour ozone implementation rule will be provided at the meeting.

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Time (Minutes)	Page		
15	5	V.	
			MDEQ and SEMCOG submitted a request to EPA on July 15 asking that Southeast Michigan's eight-hour ozone nonattainment area be reclassified

MDEQ and SEMCOG submitted a request to EPA on July 15 asking that Southeast Michigan's eight-hour ozone nonattainment area be reclassified from moderate to marginal, the next lower classification. Since then, SEMCOG and MDEQ submitted additional supporting information to EPA. EPA is expected to respond to this request by September 15. An overview of the additional submittal and an update on the status of EPA's response will be provided at the meeting.

VI. Estimates of Emission Reductions from Various Stationary Source Controls

Bob Irvine, MDEQ

At the last meeting, SEMCOG presented its estimates of the emission reductions resulting from various on-road mobile source controls. As a follow-up to that discussion, MDEQ will present its estimates of the emission reduction potential resulting from various stationary source controls.

15 VII. Upcoming Discussion Topics

Elena Berg, SEMCOG

At the next several meetings, the group will focus on the following topics:

- Results from fuels sub-group's analyses (this is likely to focus on gasoline results first and then diesel results at a later meeting),
- Latest air quality monitoring data,
- Preliminary discussion of photochemical modeling results and sensitivities,
- Ozone reclassification request (if decision not made by September 14 meeting), and
- Requirements under Phase 2 of eight-hour ozone implementation rule (dependent on the timing of this action).

10-15 VIII. Public Comment

Attachment D. Members of SEMCOG and MDEQ Fuels Group

SEMCOG'S FUELS GROUP

As of June 25, 2004

Gordon Allardyce - Chair, SEMCOG's Task Force on Air Quality

Marshah-Reaff Barrett - Mitsubishi

Loren Beard, Ph.D. – Daimler Chrysler

Tom Darlington – President, Air Improvement Resource, Inc.

Bob Elvert – Exxon Mobil

Bill Geubelle – Conoco Phillips

John Griffin – Associated Petroleum Industries of Michigan

Peg Gutmann – Ford Motor Company (Dominic DiCicco as alternate)

Jeremy Heiken – Air Improvement Resource, Inc.

Vinson Hellwig – Michigan Department of Environmental Quality

Gary Herwick – General Motors

Bob Irvine – Michigan Department of Environmental Quality

Bob Leidich – British Petroleum (BP)

Mike Leister – Marathon Ashland Petroleum

Peter Lidiak – American Petroleum Industries

Mary Maupin – Michigan Department of Environmental Quality

John Mooney – U.S. Environmental Protection Agency, Region 5

Pete Porciello – Michigan Department of Transportation

H.J. Reed – Conoco Phillips

John Reese – Shell Oil Products US

Bob Rusch – Michigan Department of Environmental Quality

Bill Schedel - Marathon Ashland Petroleum

Ellen Shapiro – Alliance of Automobile Manufacturers

Mary Snow-Cooper – DaimlerChrysler

Tim White – Michigan Department of Agriculture (Bill Spitzley as alternate)

George Wolff – General Motors Corporation

SEMCOG Staff:

Elena Berg

Chuck Hersey

Joan Weidner

Attachment E. Gasoline and diesel fuel matrices developed by SEMCOG's Fuels Group to assist in evaluations.

Notes

Matrix for Gasoline Fuels SEMCOG

December 12, 2003			- 1,000	
Fuel Type and				
Criteria for	RFG	RVP lower than 7.8 psi	Oxygenated fuels	< 10 ppm Sulfur Gasoline
Evaluation	, and	it i i i i i i i i i i i i i i i i i i	Oxygenated facis	To ppin Surui Gusoniic
% Change in NOx				
Emission Rate Using				
Fuel (g/mi)				
% Change in VOC				
Emission Rate Using				
Fuel (g/mi)				
% Change in PM2.5				
Emission Rate Using				
Fuel (g/mi)				
Proportional Ozone				
Benefit				
Proportional PM2.5				
Benefit				
Timing				
Toxics Benefits?				
Haze Benefits?				
GHG Benefits?				
Cost per Gallon				
Cost per Ton of				
Reduction				
Implementation				
Issues				
Refining Issues				
Distribution Issues				
Uncertainty Factors				
Disbenefits?				
Other?				

Name:

Matrix for Diesel Fuels
SEMCOG
February 2, 2004

Name:

reducity 2, 2004					
Fuel Type and					
Criteria for	CARB Diesel	50 Cetane	Diesel Retrofits	Biodiesel (B5)	Biodiesel (B20)
Evaluation					
% Change in NOx					
Emission Rate					
Using Fuel (g/mi)					
% Change in VOC					
Emission Rate					
Using Fuel (g/mi)					
% Change in					
PM2.5 Emission					
Rate Using Fuel					
(g/mi)					
Proportional Ozone					
Benefit					
Proportional					
PM2.5 Benefit					
Timing					
Toxics Benefits?					
Haze Benefits?					
GHG Benefits?					
Cost per Gallon					
Cost per Ton of					
Reduction					
Implementation					
Issues					
Refining Issues					
Distribution Issues					
Uncertainty					
Factors					
Disbenefits?					
Other?					
Notes					