

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AMENDING THE) RESOLUTION NO. 91-1474
FY 92 UNIFIED WORK PROGRAM TO)
INCLUDE AIR QUALITY PLANNING) Introduced by
ACTIVITIES) David Knowles, Chair
Joint Policy Advisory Commit-
tee on Transportation

WHEREAS, The FY 92 Unified Work Program was adopted by
Resolution No. 91-1407; and

WHEREAS, The Clean Air Act of 1990 establishes new air
quality requirements affecting automobile emissions; and

WHEREAS, Metro is the lead agency designated to ensure
compliance with the Clean Air Act for automobile-related emis-
sions; and

WHEREAS, The Department of Environmental Quality is
responsible for ensuring overall compliance with the Clean Air
Act; and

WHEREAS, The Metro Regional Transportation Plan and
Transportation Improvement Program must be evaluated periodically
to ensure conformity with the State Implementation Plan for meet-
ing Clean Air Act requirements; and

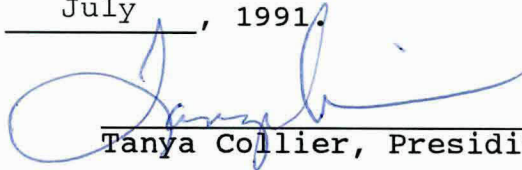
WHEREAS, The '91 Oregon Legislature has established a
Portland area Task Force on Automobile Emissions; now, therefore,

BE IT RESOLVED,

1. That the Council of the Metropolitan Service
District does hereby amend the FY 92 Unified Work Program to in-
clude air quality planning activities as reflected in Exhibit A.

2. That this work program and policy conclusions shall be coordinated with actions in Clark County, Washington.

ADOPTED by the Council of the Metropolitan Service District this 25th day of July, 1991.



Tanya Collier, Presiding Officer

ACC:lmk/6-25-91
91-1474.RES

EXHIBIT A
TO RESOLUTION NO. 91-1474

PROGRAM DESCRIPTION

In cooperation with DEQ, Metro will update current year estimates and future year forecasts of emissions to determine whether federal clean air standards can be achieved by the mandatory deadline and maintained thereafter. In cooperation with Tri-Met, the Department of Environmental Quality, the Oregon Department of Transportation, and local jurisdictions, Metro will act as the lead agency in a comprehensive analysis of alternative demand management techniques applicable in the Portland region. The objectives of demand management are to reduce vehicle miles traveled (VMT) in the region, thereby reducing the demand for transportation capital expenditures, improving air quality, improving neighborhood livability and reducing energy consumption. Appropriate evaluation methodologies will be identified or developed for an alternatives analysis of various demand management techniques. The analysis will lead to recommendations for a demand management implementation strategy for the region which may include amendments to the RTP and to local comprehensive plans and ordinances. Each technique will be evaluated for its emissions reduction potential. In addition, the "Base Case" RTP and an amended RTP to incorporate recommended measures will be evaluated.

Metro will participate in the City of Portland Transportation Management Plan. Technical assistance relating to travel demand impacts resulting from alternative measures will be provided to allow the consultant to calculate emissions. Metro will participate with DEQ to provide support for the Portland area Task Force on Automobile Emissions established by the 1991 Oregon Legislature.

PROGRAM NARRATIVE

Metro's involvement in air quality planning is precipitated by the Clean Air Act of 1990. In accordance with federal law, the standard for ozone (hydrocarbon emissions) must be met by November 1993 and carbon monoxide by November 1995. Thereafter, the standard must be maintained. Since automobile emissions are the primary source for these two pollutants, the Regional Transportation Plan and Transportation Improvement Program must conform to this requirement. The full scope of the Clean Air Act requirements will be documented as part of this work program. Metro's involvement in automobile emissions will be integrated with DEQ's proposals for stationary sources for comparison to the overall federal standard. The following major components are included in Metro's air quality work program:

1. Involvement in Portland Central City Transportation Management Plan.
2. Update to current hydrocarbon and carbon monoxide emissions inventory.
3. Evaluation of air pollution emissions of the RTP.
4. Evaluation of alternative demand management programs for inclusion in the RTP to reduce vehicle travel and air pollution emissions.
5. In cooperation with DEQ, support for the Portland area Task Force on Automobile Emissions established by the '91 Oregon Legislature.
6. In cooperation with DEQ, development of an air quality maintenance plan for ozone and carbon monoxide demonstrating ongoing attainment of the federal standard.

The Portland Central City Transportation Management Plan is underway to update the key element of the carbon monoxide state implementation plan, the downtown parking policy. A consultant will develop an air pollution emissions model and evaluate the air quality effects of alternative Central City transportation management plans. Metro and Portland staff will provide travel forecasts to the consultant to estimate emissions. In addition, the consultant will provide the air pollution emissions model to Metro and Portland to incorporate into the regional models for ongoing use.

The Demand Management Program is intended to study the benefits and constraints of a comprehensive and regionwide strategy of demand management activities. The study element would have two major goals:

1. Identify and evaluate various demand management strategies from both a technical and policy level. Evaluation criteria would include reductions in VMT, improvements to air quality and consistency with land use goals and policies; and
2. Develop a regional demand management program of strategies for the Portland region. The program would include adoption, implementation, enforcement, and evaluation procedures for selected alternative strategies. The program and analysis would supplement and be incorporated into Metro's Urban Growth Management and Regional Transportation Planning efforts.

Major tasks include:

- . Identify regional demand management issues and objectives consistent with the study goals.
- . Conduct a literature search to identify a comprehensive list of demand management alternatives, both "traditional" (existing) and "innovative."
- . Develop an evaluation methodology to analyze the list of demand management techniques. The methodology will evaluate the techniques for their ability to achieve study goals for VMT reduction, air quality improvements, etc. and will evaluate other technical, legal, policy and locational implications. A benefit/cost analysis will be used to measure the effectiveness of demand management on capital expenditure requirements.
- . Conduct an alternatives analysis of the various demand management techniques using the methodology developed above.
- . Prepare a report describing the study alternatives, the relationship to Clark County, Washington air quality actions, the results of analysis and a recommended strategy for demand management in the Portland region.

Metro's RTP-related air quality analysis will involve evaluating the conformity of the overall plan to air quality standards, with and without the addition of new demand management programs. This work will satisfy requirements to update the current year automobile emissions inventory and as input to an amendment to the State Implementation Plan (SIP) to demonstrate that the standard can be maintained after attainment. Actual preparation of the SIP amendment will carry forward to the FY 92-93 Unified Work Program.

TASK BUDGET

| | |
|--|---------------|
| 1. Central City Plan Support | \$ 65,260 |
| 2. Demand Management Program | 121,500 |
| 3. RTP Emissions | 12,000 |
| 4. Portland Area Task Force on Automobile Emissions. | <u>30,000</u> |
| | \$228,760 |

Expenses

Revenues

METRO

Personal Services \$168,760
Materials & Services. . . 10,000
\$178,760

DEQ/EPA* \$204,460
Metro 12,150
ODOT. 12,150
\$228,760

PORTLAND

Personal Services \$ 10,000
Materials & Service . . . 40,000
\$ 50,000

TOTAL \$228,760

*Subject to approval of EPA and the Legislative Emergency Board.

ACC:lmk
91-1474.RES
7-1-91

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 91-1474 FOR THE PURPOSE OF AMENDING THE FY 92 UNIFIED WORK PROGRAM TO INCLUDE AIR QUALITY PLANNING ACTIVITIES

Date: June 25, 1991

Presented by: Andrew Cotugno

PROPOSED ACTION

This resolution would amend the FY 92 Unified Work Program to include the following air quality planning activities:

1. Development of an automobile emissions forecasting model.
2. Estimation of current and future automobile-related emissions.
3. Support for the Central City Transportation Management Plan to meet carbon monoxide standards in downtown Portland.
4. Evaluation and adoption of demand management programs for inclusion in the RTP to reduce automobile-related emissions.
5. Staff support with DEQ to the Portland area Task Force on Automobile Emissions created by the '91 Oregon Legislature.

TPAC and JPACT have reviewed the FY 92 UWP amendment and recommend approval of Resolution No. 91-1474.

FACTUAL BACKGROUND AND ANALYSIS

The Portland region is currently designated in non-attainment of air quality standards for ozone (resulting from hydrocarbon emissions) and carbon monoxide (resulting from internal combustion engines). The automobile is the principal source of these pollutants. In accordance with the Clean Air Act of 1990, the region must attain the ozone standard by November 15, 1993 and the carbon monoxide standard by December 31, 1995. Upon attainment, the standard must be maintained thereafter. The Metro RTP and TIP must be periodically evaluated to ensure these plans and programs as a whole meet and maintain the standards. With certain exceptions, individual projects can only be implemented if the total plan can be shown in conformity. Failure to meet these and various other requirements can result in sanctions including withholding of highway funds and additional mandatory control measures. A summary of Clean Air Act requirements is included as Attachment A to this Staff Report.

The work program includes the following key areas of activity:

Central City Transportation Management Plan

The automobile emissions model for the region will be developed through consultant support for this task. Metro and Portland staff will provide technical support for traffic forecasts to be used for calculating vehicle emissions. The final product will be the carbon monoxide implementation and maintenance plan for the Central City area.

Base Automobile Emissions Estimates

Estimates will be made for automobile emissions of carbon monoxide and hydrocarbons for the current year and for an RTP and TIP base condition. Current estimates are a required submission to EPA by 1993. RTP and TIP estimates are required to establish conformity and to include in a plan to demonstrate that the standards can be maintained upon attainment.

Demand Management Program

This is the major area that is anticipated will be needed to reduce automobile emissions in the RTP and TIP. A comprehensive evaluation of demand management and system management techniques will be evaluated to determine their feasibility and effectiveness in reducing emissions and assisting with other objectives relating to congestion and mobility. The result will be an implementation program, including responsibilities and cost for inclusion in the RTP and TIP.

Portland Area Task Force on Automobile Emissions

The '91 Legislature established this task force to develop recommendations for reducing automobile emissions while maintaining mobility with particular emphasis on alternative forms of transportation. The Metro demand management analysis will be a major input to their review. Their recommendations will be considered for inclusion in the Metro/DEQ State Implementation Plan and will be forwarded to the relevant Interim Committee in September 1992 and to the '93 Oregon Legislature.

This activity will be continued to the FY 93 Unified Work Program which will include tasks to prepare required implementation and maintenance plans to the Environmental Protection Agency (EPA).

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of Resolution No. 91-1474.



METRO

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ATTACHMENT A

Clean Air Act of 1990

- I. Classify areas according to severity of air pollution problem (see Attachment A-1).
- II. Mandatory programs required to be implemented according to severity of the area's air pollution problem (see Attachments A-2 and A-3).

OZONE is an areawide pollutant (smog) formed by the reaction of volatile organic compounds (such as gasoline or solvents) with heat and sunlight. Violations occur downwind of the metropolitan area as a result of total metropolitan emissions.

Must meet ozone standard by November 15, 1993.

Corrections to the New Source Review Program must be implemented by November 15, 1992.

"Fix-ups" to existing RACT controls must be implemented by May 15, 1991 (RACT = Reasonably Available Control Technology on industrial sources).

Corrections or implementation of vehicle inspection program must be implemented immediately.

An updated inventory of existing stationary, area-wide and transportation sources of emissions must be submitted by November 15, 1992.

CARBON MONOXIDE is a localized pollutant resulting from combustion (principally from autos). Violations occur at "hot spots" where there is too high a concentration of pollutant in one location. Downtown Portland has historically been the violation area. However, no violations have been recorded recently and violations have been occurring in Vancouver and on 82nd Avenue.

Must meet CO standard by December 31, 1995.

Vehicle inspection program must be implemented.

Oxygenated fuels required (depending upon availability from suppliers; more severe areas have priority).

An updated inventory of emission sources due November 15, 1992.

Executive Officer
Rena Cusma

Metro Council

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Presiding Officer
District 9

Jim Gardner
Deputy Presiding
Officer
District 3

Susan McLain
District 1

Lawrence Bauer
District 2

Richard Devlin
District 4

Tom DeJardin
District 5

George Van Bergen
District 6

Ruth McFarland
District 7

Judy Wyers
District 8

Roger Buchanan
District 10

David Knowles
District 11

Sandi Hansen
District 12

- III. Failure to meet attainment schedule causes slippage to the next highest classification of severity with additional mandatory requirements.
- IV. Upon attaining standards, an area can petition for designation as an attainment area and must submit a plan defining how standards will be maintained over time.
- V. Annual Transportation Improvement Program (TIP) must be evaluated for "conformity" with air quality standards (i.e., does the total pollutant load with the TIP implemented meet the standard?).

Amendments to TIP or changes to proposed projects require a project-specific air quality analysis.

VI. Sanctions

Current

Sanctions imposed due to failure to submit State Implementation Plan (SIP).

EPA could withhold highway funding from the state and urban area.

Proposed

Sanctions imposed due to failure to submit any required submission or failure to implement any SIP provision.

EPA can withhold highway funding from the jurisdiction failing to act; improvements that are for safety, rehabilitation or beneficial to air quality are exempt.

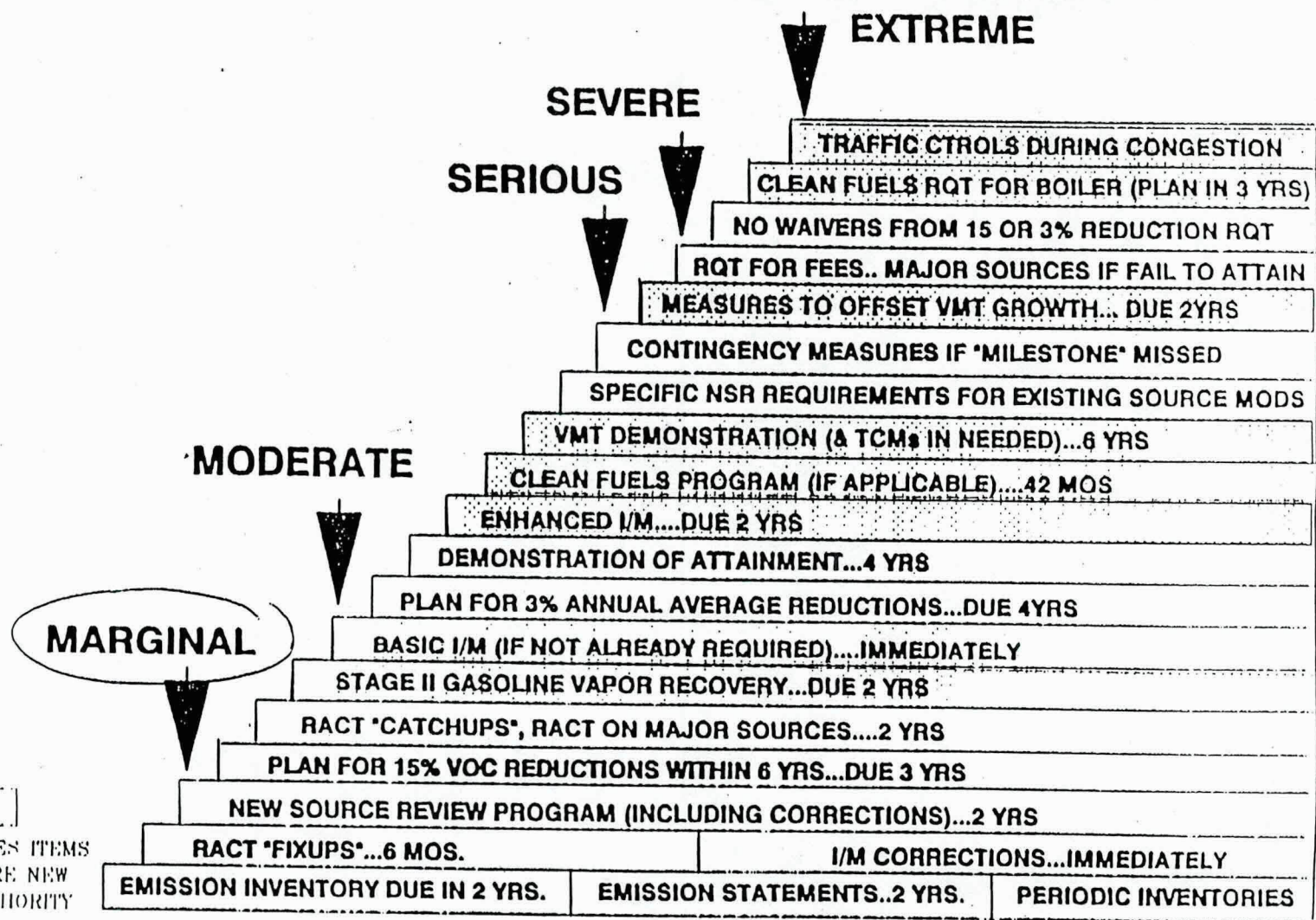
- VII. EPA defines standards for calculating vehicle miles traveled upon which vehicle emission estimates are based.
- VIII. Clean Air Act moves toward a market-based approach to air pollution control -- \$25.00 per ton of emission imposed on industry.
- IX. Additional actions will be required in the Portland metropolitan area to maintain standards after attainment, to avoid slippage into a more severe category and to accommodate future growth. Interstate coordination of control measures is essential.

CLASSIFICATION OF AREAS

| | CLASS | LEVEL - PPM | ATTAINMENT DATE |
|---|----------|----------------|---------------------------------------|
| Ozone | Marginal | .121 to .138 | 3 years ← Portland/Vancouver |
| | Moderate | .138 to .160 | 6 years |
| | Serious | .160 to .180 | 9 years |
| | Severe 1 | .180 to .190 | 15 years |
| | Severe 2 | .190 to .280 | 17 years |
| | Extreme | .280 and above | 20 years |
| Carbon Monoxide | Moderate | 9.1 to 16.4 | 12/31/95 ← Portland/Vancouver |
| | Serious | 16.5 and up | 12/31/00 |
| <i>For ozone and CO: Adjustment Possible Based On 5% Rule; EPA May Grant Two One-Year Extensions of Attainment Date</i> | | | |
| PM-10 | Moderate | N/A | 12/31/94 6 years for future areas |
| | Serious | N/A | 12/31/01 10 years for future areas |

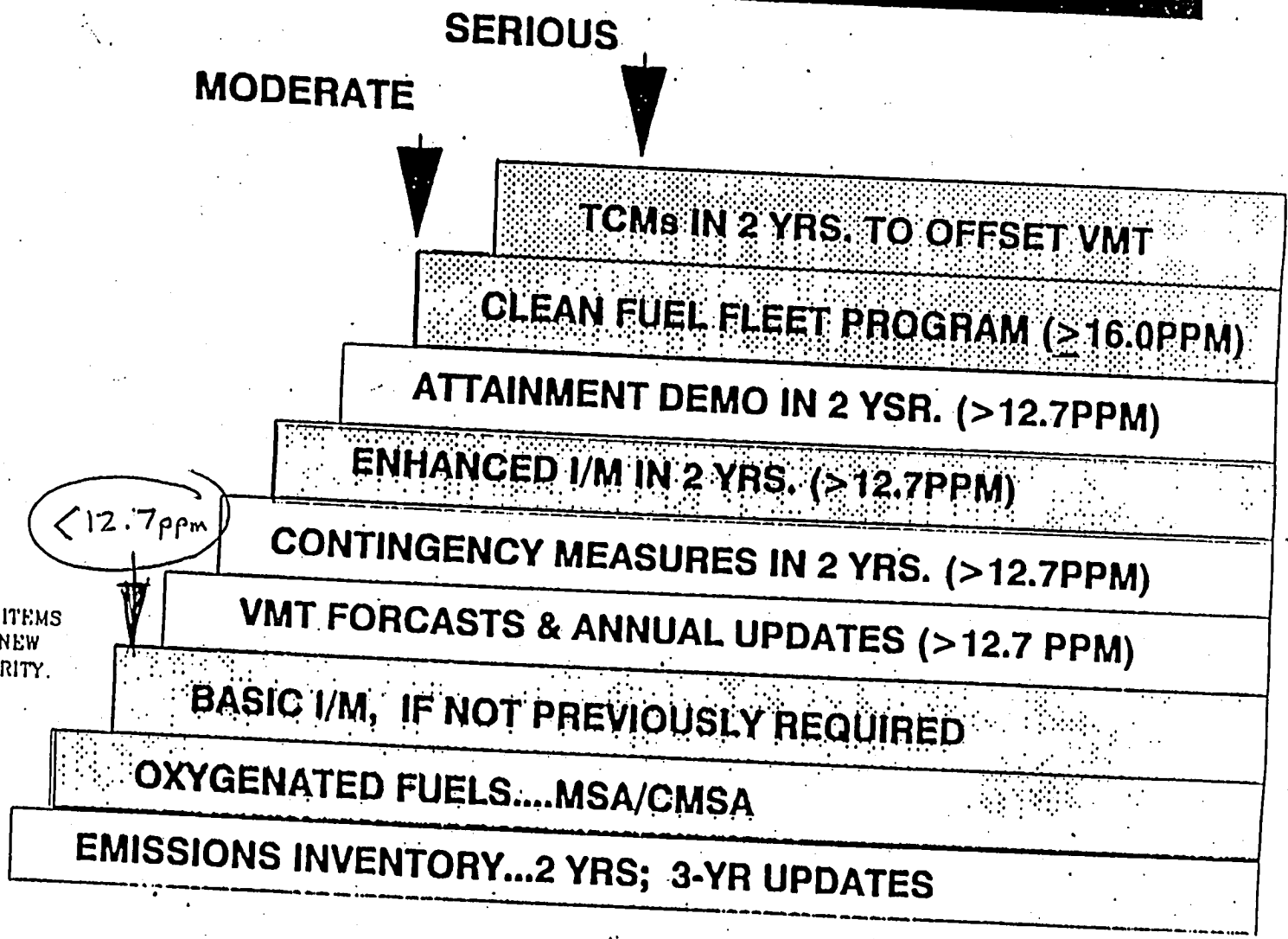
Possible Extension of Attainment Date Up to Five Years for Serious Areas

REQUIREMENTS FOR OZONE PLANS



SHADING INDICATES ITEMS THAT MAY REQUIRE NEW STATE LEGAL AUTHORITY

REQUIREMENTS FOR CO PLANS



SHADING INDICATES ITEMS THAT MAY REQUIRE NEW STATE LEGAL AUTHORITY.

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TRANSPORTATION AND PLANNING COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 91-1474, AMENDING
THE FY 91-92 UNIFIED WORK PROGRAM TO INCORPORATE AIR
QUALITY PLANNING TASKS

Date: July 11, 1991

Presented by: Councilor Gardner

COMMITTEE RECOMMENDATION: At the July 9, 1991 meeting, the Transportation and Planning Committee voted 3-0 to recommend Council adoption of Resolution No. 91-1474. Voting in favor were Councilors Devlin, Gardner and McLain. Councilors Bauer and Van Bergen were excused.

COMMITTEE DISCUSSION/ISSUES: Transportation Director Andy Cotugno presented staff's report. He explained that as a result of federal legislation, activities not anticipated during the budget process must be added to the work program. Metro will be responsible for developing a plan to deal with hydrocarbons and carbon monoxide, both related to automobile emissions.

Councilor Van Bergen asked how the work program relates to a previous federal grant to study emissions. Mr. Cotugno explained that similar work was conducted in response to the 1977 Clean Air Act, and that particulates were targeted in subsequent studies. He said that the 1990 Clean Air Act sets new standards and a new deadline to which Metro must respond.

Councilor Van Bergen also asked why Metro is the lead agency for this activity. Mr. Cotugno said that Metro has been designated as lead agency by EPA, because automobiles are the predominant source of these two pollutants. He said that although DEQ could serve as the lead agency rather than Metro, Metro is obligated to participate in its capacity as a Metropolitan Planning Organization.