

CHAPTER 9

CONTINGENCY MEASURES

Introduction

Level I: Contingency Measures

Level II: Further Evaluation Measures

Deleted Measures

INTRODUCTION

In order to achieve the improvement in air quality specified in the AQMP, the control measures listed in the Plan must be adopted and implemented within the timeframes set forth. In the event that implementation of the AQMP is not providing adequate progress and the interim emission reduction goals have not been met, the District must take action to bring forward measures that are scheduled for later adoption or implementation, or to implement certain "contingency" control measures. These contingency measures are control options that could be instituted in addition to the AQMP control measures. Both state and federal Clean Air Acts require that district plans include contingency measures. In addition, several measures are identified for further evaluation which could be adopted in the future if found to be feasible.

A total of 24 control measures have been identified and categorized in two groups: Level I, or contingency measures, and Level II, or further measures which are not feasible at this time but will be reevaluated to determine if these measures are needed to attain state air quality standards or potential future federal ozone and particulates air quality standards. Table 9-1 lists the Level I measures and Table 9-2 lists the Level II measures. In addition, certain control measures from the 1994 AQMP are removed from this Plan, having been determined to be infeasible. The following paragraphs provide a summary of these control measures. A complete discussion is included in Appendix IV, Section 6.

LEVEL I: CONTINGENCY MEASURES

Level I measures are actions that can be implemented given existing statutory authority. Such measures would need to be developed and adopted as rules. The responsibility to adopt and implement the Level I measures falls on the District, ARB, and U.S. EPA. The measures would be implemented in the order specified in the 1997 AQMP until the shortfall is eliminated. A ranking of the importance of each measure relative to ozone and/or carbon monoxide planning requirements under the federal Clean Air Act is provided in Table 9-1 for the Level I measures.

LEVEL II: FURTHER EVALUATION MEASURES

Level II measures are from the 1994 AQMP and have been determined as being infeasible at this time, requiring further evaluation. It has been further demonstrated that the federal ambient air quality standards can be attained within the statutory time frames, without these measures, which are listed in Table 9-2. The District will continue to assess these measures to determine if in the aggregate these measures will be beneficial in attaining state air quality standards and potential future federal air quality standards.

TABLE 9-1
Level I - Contingency Control Measures

| AQMP Measure Number | Title | Priority to Meet CAA Requirements | | | Responsible Agency | Issues |
|---------------------|---|-----------------------------------|----|------|--------------------|--|
| | | Ozone | CO | PM10 | | |
| CTY-1 | Accelerated Implementation of Control Measures | 1 | 2 | 4 | District | Resource Availability |
| CTY-2 | Command and Control Rules in Place of Educational Outreach Program Measures | 2 | 3 | 5 | District | Resource Availability/ Cost Effectiveness |
| CTY-4 | Enhanced Oxygenated Fuel Content for CO | -- | 1 | -- | ARB | Potential NO _x Emission Increases |
| CTY-12 | Emission Reductions from Paved Roads (Curb and Gutter/Chemical Stabilization) (Formerly BCM-01 (1D & 1E)) | -- | -- | 1 | District | Emissions Reduction Effectiveness |
| CTY 13 | Further Emission Reductions from Construction and Demolition Activities (Rule 403) (Formerly BCM-02) | -- | -- | 2 | District | Emissions Reduction Effectiveness |
| CTY 14 | Emission Reductions from Miscellaneous Sources (Weed Abatement) (Rule 403) (Formerly BCM-05) | -- | -- | 3 | District | Unquantified Emission Reductions |

TABLE 9-2

Level II - Control Measures for Further Evaluation

| AQMP Measure Number | Title | Pollutant | Principal Reason* |
|---------------------|--|-----------------------------------|-------------------|
| CMB-01 | Phase II RECLAIM | NO _x , SO _x | 2 |
| CMB-02 | Emission Reductions from Combustion Equipment at Non-RECLAIM Sources | NO _x | 1,2, 3 |
| CMB-08 | Control of Emissions from Gas-Fired Petroleum Refinery Process Heaters | PM ₁₀ | 1, 2, 3 |
| CMB-10 | Emission Reductions from Glass Melting Furnaces (Non-RECLAIM) | NO _x | 3 |
| CMB-11 | Emission Reductions from Non-RECLAIM Incinerators | NO _x | 3 |
| CTS-02A | Emission Reductions from Electronic Components Manufacturing | VOC | 3 |
| CTS-02D(1) | Further Emission Reductions from Marine Coating Operations (Rule 1106) | VOC | 3 |
| CTS-02D(2) | Further Emission Reductions from Pleasure Craft Coating Operations (Rule 1106.1) | VOC | 3 |
| CTS-02G | Further Emission Reductions from Paper, Fabric, and Film Coating Operations (Rule 1128) | VOC | 3 |
| CTS-02I(1) | Further Emission Reductions from Screen Printing Operations (Rule 1130.1) | VOC | 2,3 |
| CTS-02J | Further Emission Reductions from Wood Products (Rule 1136) | VOC | 2,3 |
| CTS-02K | Further Emission Reductions from Aerospace Assembly and Component Manufacturing Operations (Rule 1124) | VOC | 3 |

* 1= Not cost-effective (H&SC 40922(a))

Not economically feasible (PRC21061.1)

2=Technically infeasible (H&SC 40922(b))

Not technically feasible (PRC21061.1)

3=Minimal emission reduction potential (H&SC40922(b))

Not feasible due to social impact considerations and cost of administrative burden.
(PRC21061.1)

4=Low public acceptability (H&SC40922(b)
 Not feasible due to social impact considerations (PRC21061.1)

TABLE 9-2
 (Concluded)

| AQMP Measure Number | Title | Pollutant | Principal Reason* |
|---------------------|---|----------------|-------------------|
| CTS-02L | Further Emission Reductions from Motor Vehicle Assembly Line Coating Operations (Rule 1115) | VOC | 3 |
| PRC-02 | Further Emission Reductions from Bakeries (Rule 1153) | VOC | 3 |
| PRC-05 | Emission Reductions from Malt Beverage Production Facilities and Wine or Brandy Making Facilities | VOC | 3 |
| MON-02 | Excessive Car Dealership Vehicle Starts | VOC, CO | 2 |
| MON-04 | Excessive Curb Idling | VOC, CO | 2 |
| CTY-7 | Stringent Emission Limits for Goods Movement Activities (Aircraft, Rail, and Marine Vessels) | All Pollutants | 5 |

* 1= Not cost-effective (H&SC 40922(a))
 Not economically feasible (PRC21061.1)
 2=Technically infeasible (H&SC 40922(b))
 Not technically feasible (PRC21061.1)
 3=Minimal emission reduction potential (H&SC40922(b))
 Not feasible due to social impact considerations and cost of administrative burden.
 (PRC21061.1)
 4=Low public acceptability (H&SC40922(b))
 Not feasible due to social impact considerations (PRC21061.1)
 5=Economic concerns, implementation authority

There are 18 measures designated as Level II contingency control measures. The basis for each measure’s designation as Level II contingency is described below.

CMB-01 Phase II RECLAIM would expand the RECLAIM program to facilities with NOx and SOx emission reductions below 4 tons per year. Expanding the RECLAIM program may pose an administrative burden to the District and some of the subject facilities. However, the feasibility of this approach should be reevaluated in the future to determine if circumstances have changed.

CMB-02 This measure includes unpermitted miscellaneous combustion sources, curing and drying ovens, after burners, metal melting furnaces, and internal combustion engines. Emission reductions from non-RECLAIM combustion sources would involve the regulation of several tens of thousands of non-permitted emission sources. Implementing the control measure would require the identifying and on-going enforcement of thousands of currently unpermitted combustion sources at mostly small business sites. In addition, estimates of control technology and associated costs may be difficult due to the diverse nature of small businesses using these de minimus combustion equipment. For some devices, the control costs are also expected to be over the acceptable cost-effectiveness threshold for rule development. At this time there is no technology for further control of the internal combustion engines which would be part of this control measure. Therefore, the administrative burden and lack of control technology make this measure infeasible at this time.

CMB-08 Control technology to reduce PM₁₀ emissions from this source category is expensive and difficult to install and operate. In addition to cost and technology considerations, the total mass emission reductions are also small from refinery process heaters, due to other controls already in place to reduce NO_x and SO_x emissions. Uncertainty as to the potential emission reduction technology prevents the District from establishing an emission reduction factor for this control measure. It is believed also that the emission reductions would be minimal. This measure is, therefore, considered neither technically nor economically feasible at this time.

CMB-10 Glass melting furnaces not subject to the RECLAIM program represent a small emission source category. Potential emission reductions from this category, even with a high control efficiency, would be low. The emission reductions expected from this control measure are less than 20 pounds per day of NO_x. The administrative burden of bringing such a rule forward, at this time, is not justifiable for the minimal emission reductions likely.

CMB-11 Non-RECLAIM incinerators represent a small emission source category. The further emission reduction potential which could be achieved by this control measure would, therefore, be relatively low regardless of the control efficiency factor. This control measure has an estimated emission reduction of 0.11 ton/day of NO_x. The administrative burden of developing a rule is not justified at this time for such a minimal emission reduction.

CTS-02A Electronic component manufacturing represents a small emission source category. The emission reduction potential which could be achieved by this control measure would be relatively low regardless of the control efficiency factor. This control measure has an estimated emission reduction of 0.17 tons/day. The administrative burden of developing a rule is not justified at this time for such a minimal emission reduction.

CTS-02D(1) and **CTS-02D(2)** These measures would further regulate emissions from marine vessel and pleasure craft coatings respectively. The emission reductions which could be expected from the two control measures combined represents a total of approximately 60 pounds of VOC per day. The administrative burden of developing a rule is not justified at this time for such a minimal emission reduction.

CTS-02G This contingency measure calls for further emission reductions from paper, fabric and film coating operations. The estimated emission reductions which might be achievable from this measure are also relatively small (340 pounds of VOC per day). Considering the costs of rule development and implementation that would be required of the District, as well as high compliance costs for minor emission reductions, implementation of this measure is not feasible at this time.

CTS-02I(1) The potential emission reductions which could be achieved from implementation of this control measure are minimal, representing a 20% reduction, when compared to the administrative burden of developing the rule. There is, however, technical uncertainty associated with the control technology to further control VOC emissions from screen printing operations. Therefore, it has been determined that this control measure is infeasible and will be delayed due to cost, and administrative burden relative to the minimal gain in emission reductions.

CTS-02J Due to concerns regarding the availability and feasibility of the required coating technology, the measure has been moved to Level II contingency status and will continue to be evaluated. Staff will propose further considerations when technology developments are found to be acceptable, cost-effective and technically feasible for this industry group.

CTS-02K Aerospace assembly and component manufacturing operations are already regulated to a great extent. The further emission reductions which would be targeted by this control measure are minimal, amounting to approximately 120 additional pounds of VOC per day. The administrative burdens of rule development are not justified at this time for such a minimal emission reduction. The measure has, therefore, been moved to a Level II contingency and will be subject to future evaluation.

CTS-02L This contingency measure would further regulate the emissions from motor vehicle assembly line operations, of which there is currently only one in the Basin. The expected emission reductions of 40 pounds per day of VOC. The administrative costs of rule development do not justify pursuing the measure at this time.

PRC-02 This measure's aim of achieving further emission reductions from bakery operations would require the application of controls on low-emitting bakeries. Larger emitting bakeries are currently controlled by the terms of existing Rule 1153. The remaining bakeries represent a small source category and the expected emission reductions would be minimal (approximately 160 pounds per day of VOC). At this time it is more cost effective to proceed with the implementation of other measures which can achieve a greater emission reduction at equal or lesser administrative cost.

PRC-05 The malt beverage, wine and brandy producing facilities within the District's jurisdiction represent a minimal emissions source category. The anticipated emission reductions from this control measure would be less than 20 pounds per day. The administrative burden of proceeding with implementation of this measure is not at this time justified by the minimal emission reductions that would be gained.

MON-02 This control measure seeks emission reductions due to excessive starts of new and used vehicles at car dealerships. The measure would be implemented either through District regulations or local ordinances. There were no emission reduction estimates for this measure in the 1994 AQMP. Enforcement issues do not justify pursuing this measure at this time.

MON-04 This control measure seeks emission reductions due to excessive curb idling. The measure would be implemented through local ordinances. There were no emission reduction estimates for this measure in the 1994 AQMP. Enforcement issues do not justify pursuing this measure at this time.

CTY-07 This contingency measure seeks further emission reductions through limiting goods movement activity if the Basin does not attain an applicable federal air quality standard. Several concerns are raised with such a program including economic impacts to the region and the appropriate implementation authority. As such, further evaluation to the feasibility and cost-effectiveness of this measure is needed.

DELETED MEASURES

Table 9-3 lists the measures contained in the 1994 AQMP which are recommended for deletion. These measures have been determined to be infeasible, based on cost, technical, social acceptability, legal authority, and administrative factors.

TABLE 9-3
Measures Removed*

| AQMP Measure Number | Title | Pollutant | Principal Reason** |
|---------------------|---|--|--------------------|
| CMB-05 | Clean Stationary Fuels | NO _x , SO _x , PM ₁₀ | 2, 3 |
| CTS-01 | VOC RECLAIM | VOC | 4 |
| CTS-02F | Further Emissions Reductions from Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations (Rule 1151) | VOC | 1 |
| CTS-02I(2) | Further Emission Reductions from Graphic Arts Operations (Rule 1130) | VOC | 1 |
| ISR-01 | Special Event Centers | VOC, NO _x , SO _x | 4 |
| ISR-02 | Shopping Centers | CO, PM ₁₀ | 4 |
| ISR-03 | Registration and Commercial Vehicles | CO, PM ₁₀ | 4 |
| ISR-04 | Airport Ground Access | CO, PM ₁₀ | 4 |
| ISR-05 | Trip Reduction for Schools | CO, PM ₁₀ | 4 |
| PRC-04 | Emission Reductions from Rubber Products Manufacturing | VOC, PM ₁₀ | 3 |

* These measures and the reasons for their removal from the Plan are further discussed in the Environmental Impact Report for the AQMP.

- ** 1 = Not cost-effective (H&SC 40922(a))
 Not economically feasible (PRC21061.1)
 2 = Technically infeasible (H&SC 40922(b))
 Not technically feasible (PRC21061.1)
 3 = Minimal emission reduction potential (H&SC 40922(b))
 Not feasible due to social impact considerations and cost of administrative burden.
 (PRC21061.1)
 4 = Low public acceptability (H&SC 40922(b))
 Not feasible due to social impact considerations (PRC21061.1)
 5 = Limited authority per SB 772 (Hurtt) and SB 437 (Lewis)

TABLE 9-3

(Concluded)

| AQMP Measure Number | Title | Pollutant | Principal Reason** |
|---------------------|---|----------------|--------------------|
| RFL-01 | Emission Reductions from Utility Equipment Refueling Operations | VOC | 3 |
| RFL-03 | Emission Reductions from Pleasure Boat Fueling Operations | VOC | 2 |
| FSS-01 | Stage I Episode Plans | All Pollutants | 5 |
| CTY-06 | Parking Cash-Out for Employers Having 25 or more Employees | All Pollutants | 5 |

* These measures and the reasons for their removal from the Plan are further discussed in the Environmental Impact Report for the AQMP.

** 1 = Not cost-effective (H&SC 40922(a))

Not economically feasible (PRC21061.1)

2 = Technically infeasible (H&SC 40922(b))

Not technically feasible (PRC21061.1)

3 = Minimal emission reduction potential (H&SC 40922(b))

Not feasible due to social impact considerations and cost of administrative burden.

(PRC21061.1)

4 = Low public acceptability (H&SC 40922(b))

Not feasible due to social impact considerations (PRC21061.1)

5 = Limited authority per SB 772 (Hurtt) and SB 437 (Lewis)

The rationale for deleting these 1994 AQMP control measures from the 1997 AQMP is explained in the following paragraphs.

CMB-05 This control measure was intended to achieve emission reductions by requiring the use of clean fuels in stationary sources. The NO_x emission reductions which were expected from this control measure will be achieved through the implementation of existing NO_x control rules. Additionally, due to issues of safety and operating requirements, it is not feasible in all circumstances to completely eliminate the option for stationary sources to use standard fuels as a back up fuel during emergencies or other unexpected situations.

CTS-01 The proposal to implement a RECLAIM program for VOC emissions has been placed on hold at this date. In place of CTS-01, substitution control measures from the 1994 AQMP are proposed to be implemented in the 1997 AQMP. This measure is not considered socially feasible at this time.

CTS-02F This control measure calls for further control of sources currently regulated under Rule 1151 sources. The measure would affect a large number of very small operations. The costs of implementing the measure, estimated at \$50,600 per ton, are high and the emission reduction potential is minimal in comparison to the number of sources involved. The measure is, therefore, not considered to be feasible due to its high impact on small operations and the costs of implementation.

CTS-02I(2) The further control of emissions from graphic arts operations was found not to be cost effective. The estimated cost per ton would exceed \$100,000. Given the existing control on graphic arts operations and the control cost this additional measure would place on these operations compared to the amount of emission reductions that would be achieved, the measure has been dropped.

ISR-01 through **ISR-05** These control measures would have required actions by indirect sources to reduce emissions resulting from vehicle trips. These indirect sources do not have any control over the actions of motorists driving to their facility, unlike employers. Moreover, except in the case of schools, there is not a continuing, repetitive pattern of trips to these sources. For these reasons, it is much more difficult for these sources to reduce trips through ridesharing programs than it is for larger employers. Over the last few years, the legislature has consistently restricted, and bills have been introduced, to abolish district authority over indirect sources. This contributes to the conclusion that these measures are infeasible due to social considerations. In addition, 1996 state legislation eliminated the specific transportation performance standards which motivated the inclusion of these measures in previous plans.

PRC-04 The emission reduction potential from control of rubber products manufacturing envisioned in this measure is below 20 pounds per day. The minimal emission reduction potential of this measure is outweighed by the costs and administrative burden of adopting the measure.

RFL-01 This control measure would require the design and use of a fuel tank interface for utility equipment to accept only an interlocking fuel spout. In addition, gasoline dispensing facilities would be required to only dispense gasoline into approved non-spill containers. Further evaluation of this measure indicates that at this time, this measure is not cost-effective and is administratively burdensome relative to the potential emission reductions. Enforcement of this control measure would require monitoring thousands of consumers that fill small fuel containers and then transfer that fuel into utility equipment, such as lawn and garden equipment. The cost and time required for the District or ARB to certify or approve fuel tanks or nozzles is not an effective use of resources at either agency or the industry, given the modest potential emission reduction of 80 pounds per day. Thus, the administrative burden and cost to enforce this control measure would be extensive relative to the minimal emission reduction potential of this measure.

RFL-03 Upon further analysis, implementation of this measure has been determined to be technically infeasible and not cost-effective. Through various meetings, the U.S. Coast

Guard has raised issues regarding regulating pleasure boat refueling operations and has expressed concern for public safety. In addition, it has become apparent that most pleasure boat fueling operations occur at conventional gasoline dispensing facilities as compared to marinas, which typically have only one fueling facility.

FSS-01 This further study measure was proposed to develop programs to reduce emissions under Stage I episode conditions. State law has removed the District's authority to require rideshare programs. As such, this measure has been removed from the 1997 AQMP.

CTY-06 This contingency measure was proposed to reduce emissions through implementation of parking cash-out programs for employers having 25 or more employees. State law has removed the District's authority to require rideshare programs. As such, this measure has been removed from the 1997 AQMP.