Appendix

Analysis of Potential Stationary Source Measures

* * *DRAFT January 2006* * *

last updated January 31, 2006

Potential Stationary Source RACM Measures in the Metropolitan Washington Region

Quick Reference	Measure Name	Definition	RACM	Reason
CAIR Plus	Reductions from EGUs: OTC Model Rule	Adopt OTC Multipollutant Model Rule for EGUs.	No	Will not provide reductions by May 2008
Dist Generation Rule	OTC Model Rule: Distributed Generation Rule	Adopt OTC Model Rule to Require Additional Controls on Distributed Generation Sources.	No	Will not provide reductions by May 2008
Peaking Unit Rule	OTC Model Rule: Peaking Unit Rule	Adopt OTC Model Rule to Require Additional Controls on EGU Peaking Units.	No	Will not advance attainment date
ICI Stds	OTC Model Rule: ICI Boiler Standards	Adopt OTC Model Rule on Standards for Industrial, Commercial, and Institutional Boilers.	No	Will not provide reductions by May 2008
RACT Cement	RACT Update: Portland Cement	Adopt OTC Model Rule on RACT Update for Portland Cement Facilities.	No	Will not advance attainment date
Glass Facility	Mineral Products Industry Controls: Glass and Fiberglass	Control Glass and Fiberglass Facility Emissions.	No	Will not advance attainment date
MSW	Controls on Municipal Solid Waste Incinerators	Adopt OTC Model Rule on RACT Update for MSW Incineration Facilities.	No	Will not advance attainment date
Asphalt Facilities	Control Asphalt and Concrete Facilities	Require NOx emission limits on asphaltic concrete production facilities.	No	Will not advance attainment date
Polystyrene VOC	Control VOC Emissions from Polystyrene Manufacturing	Reduce VOC emission form expandable polystyrene (EPS) molding (foam blowing) operations.	No	Will not advance attainment date
Polyester Resin VOC	Control VOC Emissions from Polyester Resin Manufacturing	Reduce VOCs from polyester resin operations.	No	Will not advance attainment date
Formica VOC	Control VOC Emissions from Formica Manufacturing	Reduce VOC emissions from polyester resin operations used to manufacture Formica.	No	Will not advance attainment date
Chem VOC	Control VOC Emissions from Chemical Manufacturing	Chemical Manufacturing: More stringent standards on the manufacture of polymers, pharmaceuticals, paints, varnishes, soaps, detergents, inks, solvents, fuel additives, acids, fertilizers, and resins.	No	Will not advance attainment date
Wood Paper VOC	Control VOC Emissions from Wood and Paper Manufacturing	Reduce VOC emissions from the production of wood and paper products.	No	Will not advance attainment date
Low Nox Fuel Oil	Low NOx Fuel Oil for Stationary Sources	Require oil-burning stationary sources to burn ThermaNOx, a low-NOx No. 2 fuel oil emulsion, during ozone season.	No	Will not advance attainment date
Upwind NOx RACT	Upwind NOx Controls: Expand NOx RACT to Upwind Counties	Expand NOx RACT Requirements.	-	Under Discussion at IAQC
Upwind NOx BACT	Upwind NOx Controls: Plant-by-Plant BACT Controls	Identify and Require Additional Facility-Specific Emission Reduction Technologies.	-	Under Discussion at IAQC
Upwind VOC RACT	Upwind VOC Controls: Expand VOC RACT to Upwind Counties	Expand VOC RACT Requirements.	-	Under Discussion at IAQC
Upwind VOC BACT	Upwind VOC Controls: Plant-by-Plant BACT Controls	Identify and Require Additional Facility-Specific Emission Reduction Technologies.	-	Under Discussion at IAQC
Upwind EGU RACT	Reductions from EGUs Plant RACT/Technology-Based Approach	Identify and Require Additional Power Plant-Specific Emission Reduction Technologies.	-	Under Discussion at IAQC
Multi P Legislation	State Multipollutant Legislation	Adopt State Multipollutant Legislation.	No	Will not provide reductions by May 2008
Clear Skies	Clear Skies Act	Implement Clear Skies Legislation.	No	Requires federal legislation
Energy Efficiency	Energy Efficiency Programs	Increase Adoption of Energy Efficient Technology by Government and the Private Sector with Commensurate Retirement of EGU NOx Allowances.	No	Will not advance attainment date
Efficiency Standards	Energy Efficiency: Energy Efficiency Standards	Establish requirements for minimum energy efficiency, with Commensurate Retirement of EGU NOx Allowances.	No	Will not advance attainment date
Green Building Codes	Energy Efficiency: Green Building Code Program	Establish energy efficiency standards for building codes, with Commensurate Retirement of EGU NOx Allowances.	No	Will not advance attainment date
Renewable Portfolio	Renewable Energy: Renewable Portfolio Standards	Increase Purchases of Renewable Energy by Government and the Private Sector, with Commensurate Retirement of EGU NOx Allowances.	No	Will not advance attainment date
Solar Photovoltaics	Renewable Energy: Solar Photovoltaic Programs	Increase Purchases and Installation of Renewable Energy sources by Government and the Private Sector, with Commensurate Retirement of EGU NOx Allowances. Consider Incentive Programs.	No	Will not advance attainment date
Wind Energy	Renewable Energy: Wind Energy Purchases	Increase Purchases of Renewable Energy by Government and the Private Sector, with Commensurate Retirement of EGU NOx Allowances.	No	Will not advance attainment date
Solar Hot Water	Renewable Energy: Solar Hot Water Heating	Increase Use of Solar Hot Water Heating by Government and the Private Sector, with Commensurate Retirement of EGU NOx Allowances.	No	Will not advance attainment date
Heat Pumps	Energy Efficiency: Ground Source Heat Pump Initiative	Increase Purchases and Installation of Ground Source Heat Pumps in the Public and/or Private Sector, with Commensurate Retirement of EGU NOx Allowances.	No	Will not advance attainment date
Performance Contracting	Energy Efficiency: Energy Performance Contracting Program	Increase Use of Energy Performance Contracts in the Public and/or Private sector to Reduce Energy Consumption, with Commensurate Retirement of EGU NOx Allowances.	No	Will not advance attainment date
Enhanced Enforce Stationary	Enhanced Enforcement/Rule Compliance at Existing Stationary Sources	Step up enforcement of and compliance with existing rules for emissions control by stationary sources.	No	No creditable emission reductions
Episodic Reductions	Episodic Mandatory Facility Reductions	Require mandatory facility reductions on Air Quality Action Days. Require Curtailment Plan.	No	No creditable emission reductions

LED Traffic	Energy Efficiency Programs: LED Traffic Signal Retrofit Program	Increase Use Energy Efficient LED Traffic Signals.	No	Will not advance attainment date
LED Street	Energy Efficiency Programs: LED Street Light Retrofit Program	Increase Use of Energy Efficient LED Street Lights.	No	Will not advance attainment date
EStar Exit	Energy Efficiency: Energy Star Exit Signs	Increase market penetration of Energy Efficient Lighting (EXIT Signs).	No	Will not advance attainment date
Chemical Ind Controls	Chemical Industry Controls	Reduce upwind NOx emissions limits in the manufacture of chemicals.	No	No creditable emission reductions
Forest Products	Forest Product Industry Controls	Control Upwind Wood, Paper and Pulp Production Emissions.	No	No creditable emission reductions
Upwind Iron and Steel	Metallurgical Industry Controls: Iron and Steel	Control Upwind Iron and Steel Production Emissions.	No	No creditable emission reductions
Upwind Lead	Metallurgical Industry Controls: Lead	Control Upwind Lead Smelter Emissions.	No	No creditable emission reductions
Upwind Aluminum	Metallurgical Industry Controls: Aluminum	Control Upwind Aluminum Production Emissions.	No	No creditable emission reductions
Upwind Zinc	Metallurgical Industry Controls: Zinc/Copper	Control Upwind Zinc/Copper Smelter Emissions.	No	No creditable emission reductions
Upwind Lime	Mineral Products Industry Controls: Lime	Control Upwind Lime Facility Emissions.	No	No creditable emission reductions
Upwind Phosphate	Mineral Products Industry Controls: Phosphate	Control Upwind Phosphate Rock Plant Emissions.	No	No creditable emission reductions
RACT Refineries	Upwind RACT Update: Refineries	Update RACTs for Refineries in Upwind Contributing Areas.	No	No creditable emission reductions
Emission Registration	Statewide Emission Registration Program	Require a mandatory statewide registration program for all NOx and VOC emission sources.	No	Not economically feasible
Credit Retirement	Emission Reduction Credit Retirement Program	Establish program to retire emission reduction credits for stationary sources.	No	Will not advance attainment date
Local Cap Trade	Local Cap and Trade Program	Implement cap and trade program for VOC sources in region. Consider California RECLAIM program.	No	Will not advance attainment date
Mitigation Fees	Mitigation Fees: Preempted Sources	Charge emission mitigation fee to federally preempted sources.	No	No creditable emission reductions

Measure -- Reductions from EGUs: OTC Model Rule

Quick Reference: CAIR Plus
Measure Name: Reductions from EGUs: OTC Model Rule

Description:
Adopt OTC Multipollutant Model Rule for EGUs.

RACM Determination: No
Reason: Will not provide reductions by May 2008

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	<$10,000/ton
Estimated Reductions	5-10 tpd NOx

Issues

· Mandatory Program. This measure would require either state-level regulation by Maryland, Virginia and the District.

· All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Any regulation creating emission limits more stringent than CAIR would be controversial.

· After a rule is adopted, industry will require additional time to install controls.

· Year of first benefits is 2009.

Summary Analysis

Not RACM. This measure cannot deliver benefits by May 2008.

Measure -- OTC Model Rule: Distributed Generation Rule

Quick Reference: Dist Generation Rule
Measure Name: OTC Model Rule: Distributed Generation Rule

Description:
Adopt OTC Model Rule to Require Additional Controls on Distributed Generation Sources.

RACM Determination: No
Reason: Will not provide reductions by May 2008

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require either state-level regulation by Maryland, Virginia and the District.

· All three states require well over 12 months to develop, pass and require compliance with a regulation.

· After a rule is adopted, owners of distributed generation equipment will require additional time to install controls.

· Year of first benefits is 2009.

Summary Analysis

Not RACM. This measure cannot deliver benefits by May 2008.

Measure -- OTC Model Rule: Peaking Unit Rule

Quick Reference: Peaking Unit Rule
Measure Name: OTC Model Rule: Peaking Unit Rule

Description:
Adopt OTC Model Rule to Require Additional Controls on EGU Peaking Units.

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Maryland, Virginia and the District.

· All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Any regulation creating more stringent emission limits would be controversial.

· There is no certainty that prescribing a specific technology would reduce emissions below allowance levels.

· Year of first benefits is 2009.

· After a rule is adopted, owners will require additional time to install controls.

Summary Analysis

Not RACM. This measure cannot deliver benefits by May 2008 and will not advance the attainment date.

Measure -- OTC Model Rule: ICI Boiler Standards

Quick Reference: ICI Stds
Measure Name: OTC Model Rule: ICI Boiler Standards

Description:
Adopt OTC Model Rule on Standards for Industrial, Commercial, and Institutional Boilers.

RACM Determination: No
Reason: Will not provide reductions by May 2008

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require either state-level regulation by Maryland, Virginia and the District.

· All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Regulating this source could cause hardship for small companies.

· Year of first benefits is 2009.

· After a rule is adopted, owners will require additional time to install controls.

Summary Analysis

Not RACM. This measure cannot deliver benefits by May 2008 and will not advance the attainment date.

Measure -- Controls on Municipal Solid Waste Incinerators

Quick Reference: MSW
Measure Name: Controls on Municipal Solid Waste Incinerators

Description:
Adopt OTC Model Rule on RACT Update for MSW Incineration Facilities.

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require either state-level regulation by Maryland, Virginia and the District.

· All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Year of first benefits is 2009.

· EPA December 2005 proposed rule may impact this source category.

Summary Analysis

Not RACM. This measure cannot deliver benefits by May 2008 and will not advance the attainment date.

Measure -- RACT Update: Portland Cement

Quick Reference: RACT Cement
Measure Name: RACT Update: Portland Cement

Description:
Adopt OTC Model Rule on RACT Update for Portland Cement Facilities.

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure. All three states require well over 12 months to develop, pass and require compliance with a regulation.

· After a rule is adopted, owners will require additional time to install controls.

· Year of First Benefits is 2009.

· Regulating this source could cause hardship for small companies.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Information on the emissions and opportunities for emission reduction from facilities in the region is being developed.

Measure -- Mineral Products Industry Controls: Glass and Fiberglass

Quick Reference: Glass Facility

Measure Name: Mineral Products Industry Controls: Glass and Fiberglass

Description:

Control Glass and Fiberglass Facility Emissions.

RACM Determination: No

Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure. All three states require well over 12 months to develop, pass and require compliance with a regulation.

· After a rule is adopted, owners will require additional time to install controls.

· Year of First Benefits is 2009.

· Regulating this source could cause hardship for small companies.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Information on the emissions and opportunities for emission reduction from facilities in the region is being developed.

Measure -- Control Asphalt and Concrete Facilities

Quick Reference: Asphalt Facilities
Measure Name: Control Asphalt and Concrete Facilities

Description:
Require NOx emission limits on asphaltic concrete production facilities.

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	-
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure. All three states require well over 12 months to develop, pass and require compliance with a regulation.

· After a rule is adopted, owners will require additional time to install controls.

· Year of First Benefits is 2009.

· Regulating this source could cause hardship for small companies.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Information on the emissions and opportunities for emission reduction from asphalt facilities in the region is being developed.

Measure -- Low NOx Fuel Oil for Stationary Sources

Quick Reference: Low Nox Fuel Oil
Measure Name: Low NOx Fuel Oil for Stationary Sources

Description:
Require oil-burning stationary sources to burn ThermaNOx, a low-NOx No. 2 fuel oil emulsion, during ozone season.

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	-
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure. All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Year of First Benefits is 2008.

· Emissions from EGUs will be regulated under Federal and/or State programs.

· Each facility will have flexibility in how they meet mandated emissions levels. This could be one strategy selected, but emission reductions would already be captured under the overall sector approach.

Summary Analysis

Not RACM. Will not advance attainment date.

Measure -- Upwind NOx Controls: Expand NOx RACT to Upwind Counties

Quick Reference: Upwind NOx RACT

Measure Name: Upwind NOx Controls: Expand NOx RACT to Upwind Counties

RACM Determination: -

Reason: Under Discussion at IAQC

Description:

Expand NOx RACT Requirements.

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· This measure could target upwind EGU and/or non-EGU point sources.

Summary Analysis

The IAQC is currently evaluating the potential for controls on upwind sources.

Measure -- Upwind NOx Controls: Plant-by-Plant BACT Controls

Quick Reference: Upwind NOx BACT
Measure Name: Upwind NOx Controls: Plant-by-Plant BACT Controls

Description:
Identify and Require Additional Facility-Specific Emission Reduction Technologies.

RACM Determination: -
Reason: Under Discussion at IAQC

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· This measure could target upwind EGU and/or non-EGU point sources.

Summary Analysis

The IAQC is currently evaluating the potential for controls on upwind sources.

Measure -- Upwind VOC Controls: Expand VOC RACT to Upwind Counties

Quick Reference: Upwind VOC RACT

Measure Name: Upwind VOC Controls: Expand VOC RACT to Upwind Counties

RACM Determination: -

Reason: Under Discussion at IAQC

Description:

Expand VOC RACT Requirements.

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

Summary Analysis

The IAQC is currently evaluating the potential for controls on upwind sources.

Measure -- Upwind VOC Controls: Plant-by-Plant BACT Controls

Quick Reference: Upwind VOC BACT
Measure Name: Upwind VOC Controls: Plant-by-Plant BACT Controls

Description:
Identify and Require Additional Facility-Specific Emission Reduction Technologies.

RACM Determination: -
Reason: Under Discussion at IAQC

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

Summary Analysis

The IAQC is currently evaluating the potential for controls on upwind sources.

Measure -- Reductions from EGUs Plant RACT/Technology-Based Approach

Quick Reference: Upwind EGU RACT

Measure Name: Reductions from EGUs Plant RACT/Technology-Based Approach

RACM Determination: -

Reason: Under Discussion at IAQC

Description:

Identify and Require Additional Power Plant-Specific Emission Reduction Technologies.

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· There is no certainty that prescribing a specific technology would reduce emissions below emission allowance levels.

Summary Analysis

The IAQC is currently evaluating the potential for controls on upwind sources.

Measure -- State Multipollutant Legislation

Quick Reference: Multi P Legislation
Measure Name: State Multipollutant Legislation

Description:
Adopt State Multipollutant Legislation.

RACM Determination: No
Reason: Will not provide reductions by May 2008

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require either state-level legislation by Maryland, Virginia and the District.

· All three states require well over 12 months to develop, pass and require compliance with a new law.

· Year of first benefits is unknown at this time. Unlikely to be available by May 2008.

· Multipollutant Legislation has been introduced in Virginia and Maryland for the 2006 legislative session.

Summary Analysis

Not RACM. This measure will not deliver benefits by May 2008.

Measure -- Energy Efficiency Programs

Quick Reference: Energy Efficiency
Measure Name: Energy Efficiency Programs

RACM Determination: No
Reason: Will not advance attainment date

Description:
Increase Adoption of Energy Efficient Technology by Government and the Private Sector with Commensurate Retirement of EGU NOx Allowances.

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. However, this measure would require state-level regulation by Virginia and the District. In order to take credit for an energy effiency program, the state must retire NOx Allowances.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· Year of first benefits is 2007 or 2008.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Measure -- Energy Efficiency: Energy Efficiency Standards

Quick Reference: Efficiency Standards
Measure Name: Energy Efficiency: Energy Efficiency Standards

Description:
Establish requirements for minimum energy efficiency, with Commensurate Retirement of EGU NOx Allowances.

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. However, this measure would require state-level regulation or legislation by Maryland, Virginia and the District to set or modify efficiency standards.

· All three states require well over 12 months to develop, pass and require compliance with new requirements.

· In order to take credit for an energy effiency program, the state must retire NOx Allowances.

· Year of First Benefits is 2008. However, the full benefits of new standards won't be realized until existing equipment in the marketplace is replaced.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Measure -- Energy Efficiency: Green Building Code Program

Quick Reference: Green Building Codes
Measure Name: Energy Efficiency: Green Building Code Program

Description:
Establish energy efficiency standards for building codes, with Commensurate Retirement of EGU NOx Allowances.

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. However, this measure would require local jurisdictions to change building codes to improve building efficiency.

· All three states require well over 12 months to develop, pass and require compliance with a regulation.

· In order to take credit for an energy effiency program, the state must retire NOx Allowances.

· Year of First Benefits is unknown at this time. The benefits of this measure will be realized as new commercial and residential buildings are built. The measure would likely not address existing structures.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Measure -- Renewable Energy: Renewable Portfolio Standards

Quick Reference: Renewable Portfolio
Measure Name: Renewable Energy: Renewable Portfolio Standards

RACM Determination: No
Reason: Will not advance attainment date

Description:
Increase Purchases of Renewable Energy by Government and the Private Sector, with Commensurate Retirement of EGU NOx Allowances.

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

·Voluntary Measure. However, this measure would require state governments to establish renewable portfolio standards. Maryland and the District have enacted standards.

· All three states require well over 12 months to develop, pass and require compliance with a regulation. The standards phase in slowly over time.

· In order to take credit for a renewables program, the state must retire NOx Allowances. Currently, only Maryland has a regulation enabling NOx allowance retirement.

· Year of First Benefits is 2008. However, the full benefits of requirements won't be realized until the requirements are phased in.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Measure -- Renewable Energy: Solar Photovoltaic Programs

Quick Reference: Solar Photovoltaics
Measure Name: Renewable Energy: Solar Photovoltaic Programs

RACM Determination: No
Reason: Will not advance attainment date

Description:
Increase Purchases and Installation of Renewable Energy sources by Government and the Private Sector, with Commensurate Retirement of EGU NOx Allowances. Consider Incentive Programs.

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. However, this measure would require state governments to develop regulations to retire NOx Allowances. Currently, only Maryland has a regulation enabling NOx allowance retirement.

· All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Year of First Benefits is 2008. However, the full benefits of requirements won't be realized until a significant number are installed.

Summary Analysis

Not RACM. Measure will not advance attainment date.

May be included in the voluntary bundle. Strong candidate for combining with energy performance contracting.

Measure -- Renewable Energy: Wind Energy Purchases

Quick Reference: Wind Energy
Measure Name: Renewable Energy: Wind Energy Purchases

RACM Determination: No
Reason: Will not advance attainment date

Description:
Increase Purchases of Renewable Energy by Government and the Private Sector, with Commensurate Retirement of EGU NOx Allowances.

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. This measure would require state governments to develop regulations to retire NOx Allowances. Currently, only Maryland has necessary regulations in place.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The cost effectiveness of wind energy purchases is >$10,000/ton.

· Year of First Benefits is 2008.

Summary Analysis

Not RACM. Measure will not advance attainment date.

May be included in the voluntary bundle.

Measure -- Renewable Energy: Solar Hot Water Heating

Quick Reference: Solar Hot Water
Measure Name: Renewable Energy: Solar Hot Water Heating

RACM Determination: No
Reason: Will not advance attainment date

Description:
Increase Use of Solar Hot Water Heating by Government and the Private Sector, with Commensurate Retirement of EGU NOx Allowances.

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. This measure would require state governments to develop regulations to retire NOx Allowances. Currently, only Maryland has necessary regulations in place.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· Year of First Benefits is 2008.

Summary Analysis

Not RACM. Measure will not advance attainment date.

May be included in the voluntary bundle. Possible candidate for energy performance contracting.

Measure -- Energy Efficiency: Ground Source Heat Pump Initiative

Quick Reference: Heat Pumps
Measure Name: Energy Efficiency: Ground Source Heat Pump Initiative

RACM Determination: No
Reason: Will not advance attainment date

Description:
Increase Purchases and Installation of Ground Source Heat Pumps in the Public and/or Private Sector, with Commensurate Retirement of EGU NOx Allowances.

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. This measure would require state governments to develop regulations to retire NOx Allowances. Currently, only Maryland has necessary regulations in place.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· Year of First Benefits is 2008.

Summary Analysis

Not RACM. Measure will not advance attainment date.

May be included in the voluntary bundle. Possible candidate for energy performance contracting.

Measure -- Energy Efficiency: Energy Performance Contracting Program

Quick Reference: Performance Contracting
Measure Name: Energy Efficiency: Energy Performance Contracting Program
RACM Determination: No
Reason: Will not advance attainment date

Description:
Increase Use of Energy Performance Contracts in the Public and/or Private sector to Reduce Energy Consumption, with Commensurate Retirement of EGU NOx Allowances.

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. This measure would require state governments to develop regulations to retire NOx Allowances. Currently, only Maryland has necessary regulations in place.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· Year of First Benefits is 2008.

Summary Analysis

Not RACM. Measure will not advance attainment date.

May be included in the voluntary bundle.

Measure -- Enhanced Enforcement/Rule Compliance at Existing Stationary Sources

Quick Reference: Enhanced Enforce Stationary

Measure Name: Enhanced Enforcement/Rule Compliance at Existing Stationary Sources

RACM Determination: No

Reason: No creditable emission reductions

Description:

Step up enforcement of and compliance with existing rules for emissions control by stationary sources.

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	No

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Stationary sources in the nonattainment area are generally in compliance with all emissions regulations.

· It is anticipated that no creditable emissions reductions would result from implementation of this measure.

· Year of First Benefits is 2008.

Summary Analysis

Not RACM. No additional emissions reductions are anticipated to result from adoption of this measure. The measure would not advance the attainment date.

Measure -- Episodic Mandatory Facility Reductions

Quick Reference: Episodic Reductions
Measure Name: Episodic Mandatory Facility Reductions

Description:
Require mandatory facility reductions on Air Quality Action Days. Require Curtailment Plan.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure, implemented as an episodic measure.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· Year of First Benefits is 2009.

Summary Analysis

Not RACM. No creditable emissions reductions are anticipated to result from adoption of this measure. The measure would not advance the attainment date.

Measure -- Energy Efficiency Programs: LED Traffic Signal Retrofit Program

Quick Reference: LED Traffic

Measure Name: Energy Efficiency Programs: LED Traffic Signal Retrofit Program

Description:

Increase Use Energy Efficient LED Traffic Signals.

RACM Determination: No

Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. However, this measure would require state governments to develop regulations to retire NOx Allowances. Currently, only Maryland has necessary regulations in place.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· Year of First Benefits is 2008.

Summary Analysis

Not RACM. Measure will not advance attainment date.

May be included in the voluntary bundle.

Measure -- Energy Efficiency Programs: LED Street Light Retrofit Program

Quick Reference: LED Street

Measure Name: Energy Efficiency Programs: LED Street Light Retrofit Program

RACM Determination: No

Reason: Will not advance attainment date

Description:

Increase Use of Energy Efficient LED Street Lights.

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	-
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. However, this measure would require state governments to develop regulations to retire NOx Allowances. Currently, only Maryland has necessary regulations in place.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· Year of First Benefits is unknown at this time.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Unclear if the technology will be available before 2008.

Measure -- Mitigation Fees: Preempted Sources

Quick Reference: Mitigation Fees
Measure Name: Mitigation Fees: Preempted Sources

Description:
Charge emission mitigation fee to federally preempted sources.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	-
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· State and local governments are preempted from regulating certain sources. It is not clear what authority states would have to implement a fee program.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· Year of First Benefits is unknown at this time.

Summary Analysis

Not RACM. No creditable emission reduction.

Measure -- Chemical Industry Controls

Quick Reference: Chemical Ind Controls
Measure Name: Chemical Industry Controls

Description:
Reduce upwind NOx emissions limits in the manufacture of chemicals.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	-
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· Year of First Benefits is unknown at this time.

Summary Analysis

More information is needed on the emissions and opportunities for emission reduction from the chemical industry upwind of the region.

Measure -- Clear Skies Act

Quick Reference: Clear Skies
Measure Name: Clear Skies Act

Description:
Implement Clear Skies Legislation.

RACM Determination: No
Reason: Requires federal legislation

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure. EPA and/or the States would need to develop regulations to implement a Congressionally mandated program.

· Year of First Benefits is unknown at this time. This measure requires Congressional action. Not clear if legislation would be passed prior to May 2008.

Summary Analysis

Not RACM. Requires federal legislation.

Measure -- Energy Efficiency: Energy Star Exit Signs

Quick Reference: EStar Exit
Measure Name: Energy Efficiency: Energy Star Exit Signs

Description:
Increase market penetration of Energy Efficient Lighting (EXIT Signs).

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Voluntary Measure. However, this measure would require state governments to develop regulations to retire NOx Allowances. Currently, only Maryland has necessary regulations in place.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· Year of First Benefits is 2008.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Measure -- Forest Product Industry Controls

Quick Reference: Forest Products
Measure Name: Forest Product Industry Controls

Description:
Control Upwind Wood, Paper and Pulp Production Emissions.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· Year of First Benefits is unknown at this time.

Summary Analysis

Not RACM. No creditable emission reductions.

More information is needed on the emissions and opportunities for emission reduction from this industry sector upwind of the region.

Measure -- Metallurgical Industry Controls: Iron and Steel

Quick Reference: Upwind Iron and Steel
Measure Name: Metallurgical Industry Controls: Iron and Steel

Description:
Control Upwind Iron and Steel Production Emissions.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· Year of First Benefits is unknown at this time.

Summary Analysis

More information is needed on the emissions and opportunities for emission reduction from this industry sector upwind of the region.

Measure -- Metallurgical Industry Controls: Lead

Quick Reference: Upwind Lead
Measure Name: Metallurgical Industry Controls: Lead

Description:
Control Upwind Lead Smelter Emissions.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· Year of First Benefits is unknown at this time.

Summary Analysis

More information is needed on the emissions and opportunities for emission reduction from this industry sector upwind of the region.

Measure -- Metallurgical Industry Controls: Aluminum

Quick Reference: Upwind Aluminum
Measure Name: Metallurgical Industry Controls: Aluminum

Description:
Control Upwind Aluminum Production Emissions.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· Year of First Benefits is unknown at this time.

Summary Analysis

More information is needed on the emissions and opportunities for emission reduction from this industry sector upwind of the region.

Measure -- Metallurgical Industry Controls: Zinc/Copper

Quick Reference: Upwind Zinc
Measure Name: Metallurgical Industry Controls: Zinc/Copper

Description:
Control Upwind Zinc/Copper Smelter Emissions.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· Year of First Benefits is unknown at this time.

Summary Analysis

More information is needed on the emissions and opportunities for emission reduction from this industry sector upwind of the region.

Measure -- Mineral Products Industry Controls: Lime

Quick Reference: Upwind Lime
Measure Name: Mineral Products Industry Controls: Lime

Description:
Control Upwind Lime Facility Emissions.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· Year of First Benefits is unknown at this time.

Summary Analysis

More information is needed on the emissions and opportunities for emission reduction from this industry sector upwind of the region.

Measure -- Mineral Products Industry Controls: Phosphate

Quick Reference: Upwind Phosphate
Measure Name: Mineral Products Industry Controls: Phosphate

Description:
Control Upwind Phosphate Rock Plant Emissions.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require state-level regulation by Virginia, or other upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· Year of First Benefits is unknown at this time.

Summary Analysis

More information is needed on the emissions and opportunities for emission reduction from this industry sector upwind of the region.

Measure -- Control VOC Emissions from Chemical Manufacturing

Quick Reference: Chem VOC
Measure Name: Control VOC Emissions from Chemical Manufacturing

RACM Determination: No
Reason: Will not advance attainment date

Description:
Chemical Manufacturing: More stringent standards on the manufacture of polymers, pharmaceuticals, paints, varnishes, soaps, detergents, inks, solvents, fuel additives, acids, fertilizers, and resins.

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure. All three states require well over 12 months to develop, pass and require compliance with a regulation.

· After a rule is adopted, owners will require additional time to install controls.

· Year of First Benefits is 2009.

· Regulating this source could cause hardship for small companies.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Information on the emissions and opportunities for emission reduction from facilities in the region is being developed.

Measure -- Control VOC Emissions from Polystyrene Manufacturing

Quick Reference: Polystyrene VOC

Measure Name: Control VOC Emissions from Polystyrene Manufacturing

Description:

Reduce VOC emission form expandable polystyrene (EPS) molding (foam blowing) operations.

RACM Determination: No

Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure. All three states require well over 12 months to develop, pass and require compliance with a regulation.

· After a rule is adopted, owners will require additional time to install controls.

· Year of First Benefits is 2009.

· Regulating this source could cause hardship for small companies.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Information on the emissions and opportunities for emission reduction from facilities in the region is being developed.

Measure -- Control VOC Emissions from Polyester Resin Manufacturing

Quick Reference: Polyester Resin VOC

Measure Name: Control VOC Emissions from Polyester Resin Manufacturing

RACM Determination: No

Reason: Will not advance attainment date

Description:

Reduce VOCs from polyester resin operations.

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure. All three states require well over 12 months to develop, pass and require compliance with a regulation.

· After a rule is adopted, owners will require additional time to install controls.

· Year of First Benefits is 2009.

· Regulating this source could cause hardship for small companies.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Information on the emissions and opportunities for emission reduction from facilities in the region is being developed.

Measure -- Control VOC Emissions from Formica Manufacturing

Quick Reference: Formica VOC
Measure Name: Control VOC Emissions from Formica Manufacturing

Description:
Reduce VOC emissions from polyester resin operations used to manufacture Formica.

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure. All three states require well over 12 months to develop, pass and require compliance with a regulation.

· After a rule is adopted, owners will require additional time to install controls.

· Year of First Benefits is 2009.

· Regulating this source could cause hardship for small companies.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Information on the emissions and opportunities for emission reduction from facilities in the region is being developed.

Measure -- Control VOC Emissions from Wood and Paper Manufacturing

Quick Reference: Wood Paper VOC

Measure Name: Control VOC Emissions from Wood and Paper Manufacturing

RACM Determination: No

Reason: Will not advance attainment date

Description:

Reduce VOC emissions from the production of wood and paper products.

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Measure. All three states require well over 12 months to develop, pass and require compliance with a regulation.

· After a rule is adopted, owners will require additional time to install controls.

· Year of First Benefits is 2009.

· Regulating this source could cause hardship for small companies.

Summary Analysis

Not RACM. Measure will not advance attainment date.

Information on the emissions and opportunities for emission reduction from facilities in the region is being developed.

Measure -- Upwind RACT Update: Refineries

Quick Reference: RACT Refineries
Measure Name: Upwind RACT Update: Refineries

Description:
Update RACTs for Refineries in Upwind Contributing Areas.

RACM Determination: No
Reason: No creditable emission reductions

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· This measure would require state-level regulation by upwind states.

· States require well over 12 months to develop, pass and require compliance with a regulation.

· The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· Year of First Benefits is 2009.

Summary Analysis

More information is needed on the emissions and opportunities for emission reduction from this industry sector upwind of the region.

Measure -- Statewide Emission Registration Program

Quick Reference: Emission Registration
Measure Name: Statewide Emission Registration Program

Description:
Require a mandatory statewide registration program for all NOx and VOC emission sources.

RACM Determination: No
Reason: Not economically feasible

RACM Criterion Summary

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	No
No Adverse Impacts	No
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. States require well over 12 months to develop, pass and require compliance with a regulation.

· Costs to administer a registration program may be prohibitive.

· Year of First Benefits is unknown at this time.

Summary Analysis

Not RACM. Will not advance attainment date. May not be economically feasible due to administrative costs.

Measure -- Emission Reduction Credit Retirement Program

Quick Reference: Credit Retirement
Measure Name: Emission Reduction Credit Retirement Program

Description:
Establish program to retire emission reduction credits for stationary sources.

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	-
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. This measure would require either state-level legislation by Maryland, Virginia and the District.

· All three states require well over 12 months to develop, pass and require compliance with a new law.

· Year of first benefits is unknown at this time. Could be available by May 2008.

Summary Analysis

Not RACM. Will not advance attainment date.

Measure -- Local Cap and Trade Program

Quick Reference: Local Cap Trade
Measure Name: Local Cap and Trade Program

Description:
Implement cap and trade program for VOC sources in region. Consider California RECLAIM program.

RACM Determination: No
Reason: Will not advance attainment date

RACM Criterion Summary

Implementation by May 2008	-
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

· Mandatory Program. States require well over 12 months to develop, pass and require compliance with a regulation.

· Costs to administer a small-scale VOC cap and trade program may be prohibitive.

· Year of First Benefits is unknown at this time.

Summary Analysis

Not RACM. Will not advance attainment date. May not be economically feasible due to administrative costs.