



2064 Natural Conditions
30.9 Mm¹

Redesignation Requests & Maintenance Plans—VA's Approach

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A Preface....

- ▶ There is always more than one correct approach to any SIP submittal
- ▶ A lot of the work on any submittal to EPA is figuring out what they (Region and OAQPS and OGC) will accept
- ▶ VDEQ submitted 4 requests and plans for the 1997 ozone NAAQS that were subsequently approved:
 - ▶ Fredericksburg (2005)
 - ▶ Shenandoah/Page-Madison (2005)
 - ▶ Richmond-Petersburg (2006)
 - ▶ Hampton Roads (2006)
 - ▶ <http://www.deq.virginia.gov/air/planning/lpo.html>
- ▶ The following describes these past experiences...

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Submittal Contents



Document	CAA Citation	SIP Revision?	Comments
Redesignation Request	107(d)(3)	NO	
Inventory/ies	172(c)(3)	YES	If a base year inventory was submitted with the attainment plan, that BY inventory could satisfy at least part of this requirement
Maintenance Plan	175A	YES	Contains MVEBs 40 CFR 93.118

Three Governing Documents:

- * Clean Air Act
- * 4SEPI992 EPA memo: "Procedures for Processing Requests to Redesignate Areas to Attainment"
- * 40 CFR 93.118(b)(2)

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Redesignation Request - CAA Requirements §107(d)(3)(E)



- ▶ **Determination by Administrator of attainment**
 - ▶ Use of air monitoring data
- ▶ **Fully approved applicable implementation plan for the area**
 - ▶ General affirmative statement
- ▶ **Determination that air quality improvement is due to permanent and enforceable reductions**
 - ▶ Use of base year and attainment year inventories to show reductions in precursors/pollutant
 - ▶ Show the benefit of major control programs
- ▶ **Fully approved maintenance plan as required under §175A**
- ▶ **States have met all requirements under §110 and Part D.**
 - ▶ Detailed summary of submittals
 - ▶ Can be a lot of work for ozone; not so much for PM2.5 since few submittal requirements

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Redesignation Request - 1992 Memo Requirements



- ▶ **Determination that air quality improvement due to permanent and enforceable reductions**
 - ▶ Requires estimation of % reduction (attainment year-base year) achieved by various control programs
- ▶ **State(s) have met all requirements under §110 and Part D.**
 - ▶ No need to consider requirements due after submittal of complete redesignation request
 - ▶ Subpart D sections to address are I (general) and the pollutant specific section (PM₁₀ is 4)
 - ▶ Subpart I=CAA §171 to §179B
 - ▶ Subpart 4=CAA §188 to §190
 - ▶ Subpart 4 not really applicable-classifications
 - ▶ For metro DC, mainly permitting & conformity submittals

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Inventory Requirements- Base Year §172(c)(3)



- ▶ **SIP submittal**
- ▶ **Could be satisfied by the 2002 base year inventory in the attainment plan**
- ▶ **Updates to methodology:**
 - ▶ Mobile-MOVES2010a
 - ▶ Nonroad-NONROAD2008A
 - ▶ Area Sectors-Paved Roads
 - ▶ Application of Transport Factors to PM
- ▶ **For Redesignation Request, used to show a permanent/enforceable reduction in emissions between 2002 and 2007 of PM_{2.5}, SO₂, and NO_x**

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Inventory Requirements-Attainment and Out Year (1992 Memo)



- ▶ **Attainment EI (2007)**
 - ▶ Pseudo SIP submittal
 - ▶ ID's level of emissions in the area for attainment
 - ▶ Consistent with EPA's most recent guidance on emission inventories
 - ▶ In redesignation request, used to show % reduction in emissions from base year
- ▶ **Out year EI (2025)**
 - ▶ Crux of the maintenance demonstration
 - ▶ Future emissions of precursor/pollutant cannot exceed attainment year emissions (attainment year cap)
 - ▶ SIP quality, out year modeling may be substituted (none currently exists for 2025, unfortunately)
 - ▶ Projection for at least 10 years + 18 month review period §107(d)(3)(D)

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Inventory Requirements-Interim Year (40 CFR 93.118)



- ▶ **40 CFR 93.118(b)(2)(i):** Interim budgets remove the need for a qualitative finding in conformity determinations that no factors exist causing or contributing to a new violation
- ▶ **EPA R3** uses interim inventories as further demonstration of maintenance (interim emissions < attainment year emissions)

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Maintenance Plan - §175A

- ▶ SIP revision §175A(a)
- ▶ Minimum 10 year duration §175A(a)
- ▶ 8 years after redesignation, another maintenance plan due to EPA §175A(b)
- ▶ Contingency Provisions §175A(d)
 - ▶ Different from “Contingency Measures” under §172(c)(9)
 - ▶ Not required to be fully adopted
 - ▶ Contingency provisions are enforceable part of the SIP
 - ▶ Must be adopted “expeditiously” after being triggered
 - ▶ “Expeditiously” generally interpreted as 24 months

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Maintenance Plan – 1992 Memo

- ▶ Defines “maintenance” as:
 - ▶ Emissions demonstration such that the out year inventory is less than the attainment year inventory; or
 - ▶ Modeling results
- ▶ Monitoring network assurances
 - ▶ Continued to be operated per 40 CFR 58
- ▶ Verification of continued attainment
 - ▶ Monitoring data to AQS
 - ▶ PEI/NEI data
- ▶ Contingency Provisions/Plan
 - ▶ Identification of an “action” level
 - ▶ Early actions

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Questions?



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