



NAAQS, SIPs, Implementation, Permitting & Associated Issues (Regional Perspective)

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Metro4-SESARM Meeting
Gulfport, Mississippi
October 16, 2019

Air Planning and Implementation Branch Update

U.S. Environmental Protection Agency, Region 4
Atlanta, GA



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Air Regulatory Management Section Update

ARMS Contacts – October 2019

State Contacts

Evan Adams:	Catawba, NC, & SC, & Regional Haze
Tiereny Bell:	AL, FL, & MS, & Infrastructure, Ozone & SIP Coordination
Andres Febres:	TN (state & 4 locals), & Permitting, Regional Haze, & SIP Coordination
Nacosta Ward:	NC, & Infrastructure & SIP Coordination
TBD:	GA, & Permitting, & Regional Haze
TBD:	KY (state & Louisville), & Emissions Inventory & Ozone

Experts

Brad Akers:	Particulate Matter, Opacity & Start Up, Shut Down & Malfunction (SSM)
Twunjala Bradley:	SO ₂ , NO ₂ & Transport (i.e., NOx SIP Call, CAIR, CSAPR)
Sean Lakeman:	SIPs, SIP Coordination & SIP Lean
Michele Notarianni:	Regional Haze & SO ₂ Transport
Dianna Myers:	Transportation Conformity, & Fuels & TCM SIPs
Madolyn Sanchez:	SIP Issues Resolution, SIP Coordination & Redesignations
Steve Scofield:	Multipollutant Issues & Transport (i.e., NOx SIP Call, CAIR, CSAPR)
Kelly Sheckler:	Mobile Source SIPs (e.g., I/M), & Innovative Strategies (Advance & Green Racing)
Jane Spann:	Ozone & Transport (i.e., NOx SIP Call, CAIR, CSAPR)

[^] Joel Huey provides significant support for some permitting related & SSM SIPs

^{*} Detailee from OAPQS: Gobeail McKinley – will work on MS regional haze & NOx SIP Call/CAIR Submissions



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Today's Topics for ARMS

NAAQS & Other Updates:

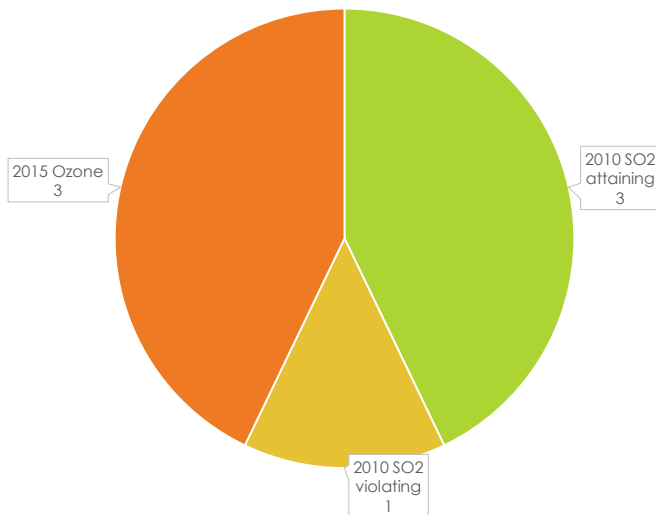
- ▶ Ozone
- ▶ Sulfur Dioxide
- ▶ Particulate Matter

Progress for SIP Processing



Region 4 Nonattainment Areas as of October 7, 2019 (7)

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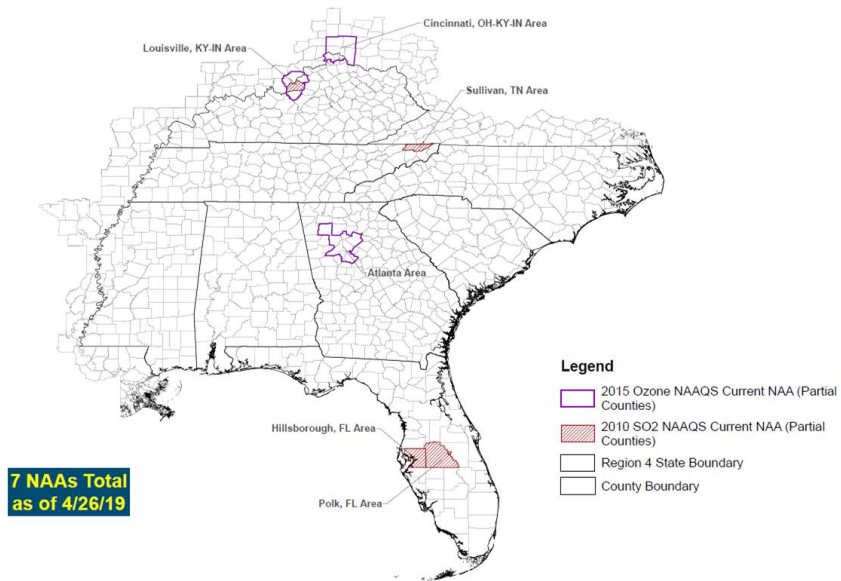
EPA Priority Goal: Reduce Number of Nonattainment Areas

- Work with states to prioritize redesignation request submissions.
- Region 4 stats:
 - 3 out 51 NAA for 2015 O3
 - 4 out 31 NAA for 2010 SO2
 - 2 pending redesignation in house at R4 for processing
 - 1 redesignation under development at state/local level
 - 1 area still violating



All Current Region 4
Nonattainment Areas

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Ozone



How We Compare for Ozone Region 4 vs Nationally

Nonattainment Areas as of October 7, 2019:

1997 Ozone NAAQS – 36 areas nationally; 0 in R4

2008 Ozone NAAQS – 37 areas nationally; 0 in R4

2015 Ozone NAAQS – 51 areas nationally,* **3** in R4

<https://www.epa.gov/green-book>



Progress on Ozone Areas in R4 (as of October 7, 2019)

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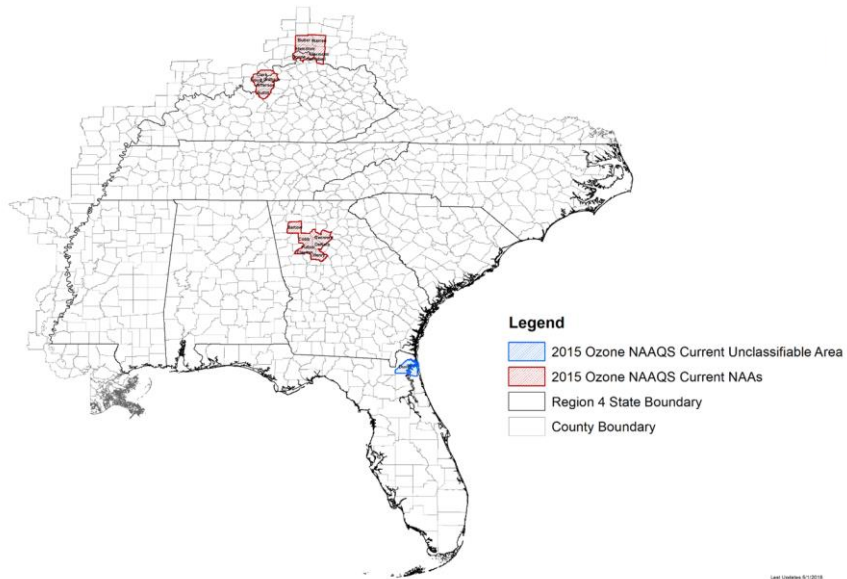
OZONE	1997 NAAQS (2004 Designations)	2008 NAAQS (2012 Designations)	2015 NAAQS (2018 Designations)
Initial Nonattainment Areas	14	5	3
Areas Redesignated to Attainment	14	5	0
Current Nonattainment Areas	0	0	3

<https://www.epa.gov/green-book>



2015 Ozone NAAQS

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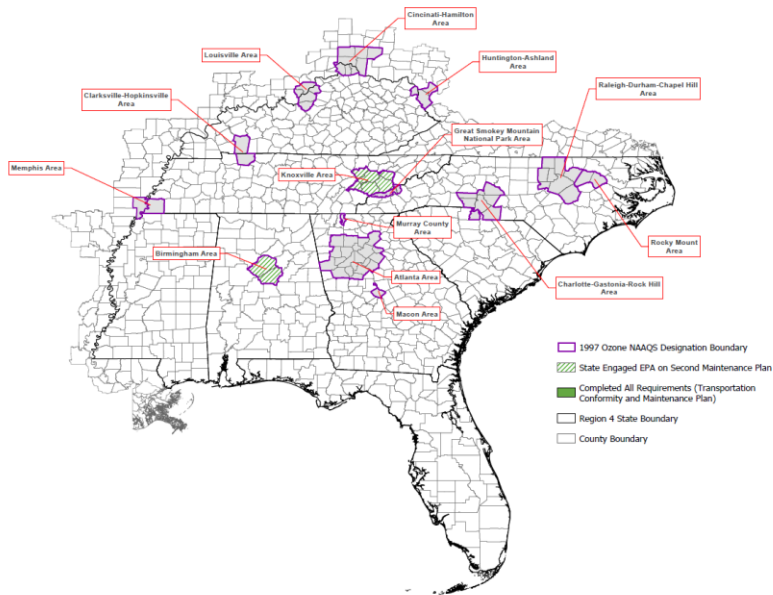
South Coast II Decision - Implications

- ▶ Court Decision in 2018 – revived implementation for 1997 8-hour ozone NAAQS
 - ▶ Transportation conformity
 - ▶ No R4 transportation project halted
 - ▶ All R4 areas met requirement to demonstrate conformity for 1997 8-hour ozone NAAQS & have infrastructure in place to continue to meet these requirements as long as the continue to apply.
 - ▶ Second maintenance plan update



1997 Ozone NAAQS

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2nd Maintenance Plan for the 1997 Ozone NAAQS

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Area	Deadline for Second Maintenance Plan [#]
Birmingham, AL	6/12/2014
Atlanta, GA	1/2/2022
Macon, GA	10/19/2015
Murray County (Chattahoochee National Forest), GA	11/15/2015
Cincinnati, KY	8/5/2018
Huntington-Ashland, KY	9/4/2015
Louisville, KY	8/6/2015
Charlotte, NC	1/2/2022
Raleigh-Durham, NC	12/26/2015
Rocky Mount, NC	1/5/2015
Great Smoky Mountain National Park, NC	1/6/2018
Charlotte (York County), SC	12/26/2020
Clarksville-Hopkinsville, KY-TN	2/24/2014
Knoxville, TN	3/8/2019

[#] Originally these areas were not required to submit the second maintenance plan per EPA's ozone implementation rule. The South Coast II Court decision changed this on February 16, 2018. EPA is actively working with areas to get second maintenance plan updates as soon as possible.



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Sulfur Dioxide



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2010 SO₂ NAAQS

2010 Primary SO ₂ NAAQS	
Standard	75 parts per billion
Averaging Time	99 th percentile of 1-hour daily maximum concentrations, averaged over 3 years
At Risk Population	Children, Elderly, Asthmatics
Current (as of 10/7/19) Nonattainment Areas	36 Areas in 16 states & 2 territories

In February 2019, EPA retained the existing primary NAAQS for SO₂ based on the agency's judgment that the current NAAQS protects the public health, with an adequate margin of safety, including the health of at-risk populations with asthma.

www.epa.gov/so2-pollution/applying-or-implementing-sulfur-dioxide-standards



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2010 SO₂ Designations Process

Round 1: Completed August 2013 – EPA Region 4 designated 5 areas nonattainment based on existing monitors violating the standard*

Round 2: Completed June 30 and November 29, 2016
– EPA designated 65 areas in 24 states based on air dispersion modeling and 2013-2015 violating monitors (6 areas designated in Region 4)

Round 3: Completed December 21, 2017 and March 28, 2018 – EPA completed an additional round of designations for all remaining undesignated areas **except** where states have deployed new monitoring networks by January 1, 2017 **if** executed under the SO₂ Data Requirements Rule (DRR); one new area was designated nonattainment

Round 4: By December 31, 2020 – EPA must complete designations for all remaining areas (based on 2017-2019 monitoring data)

Rounds 1-3

EPA currently has four areas designated as nonattainment in three States in Region 4

www.epa.gov/so2-pollution/applying-or-implementing-sulfur-dioxide-standards



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How We Compare for SO₂ Region 4 vs Nationally

Nonattainment Areas as of October 7, 2019:

1971 SO₂ NAAQS – 9 areas nationally; 0 in R4

2010 SO₂ NAAQS – 36 areas nationally; 4 in R4

<https://www.epa.gov/green-book>



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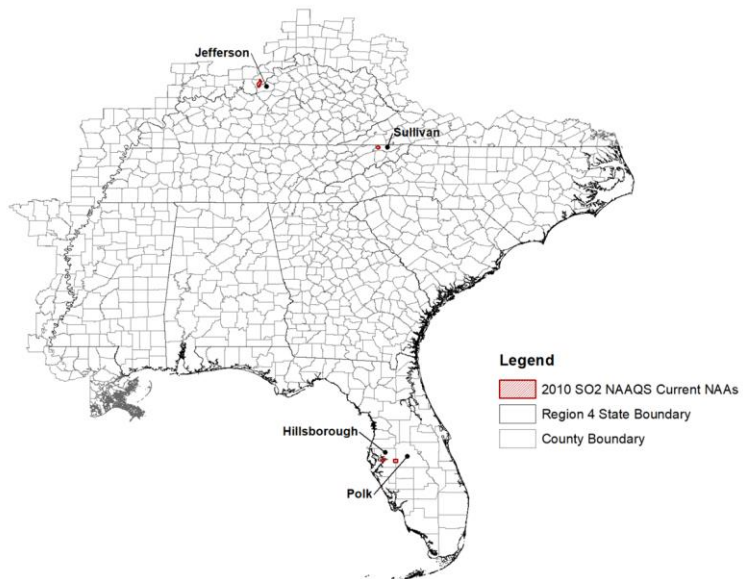
Progress on SO₂ NAAQS (as of October 2019)

SO ₂	2010 SO ₂ NAAQS (2013 Designations – Round 1)	2010 SO ₂ NAAQS (2016 Designations – Round 2)	2010 SO ₂ NAAQS (2017 Designations – Round 3)
Initial Nonattainment Areas	5	0	1
Areas Redesignated to Attainment	2	NA	0
Current Nonattainment Areas	3	0	1

<https://www.epa.gov/green-book>

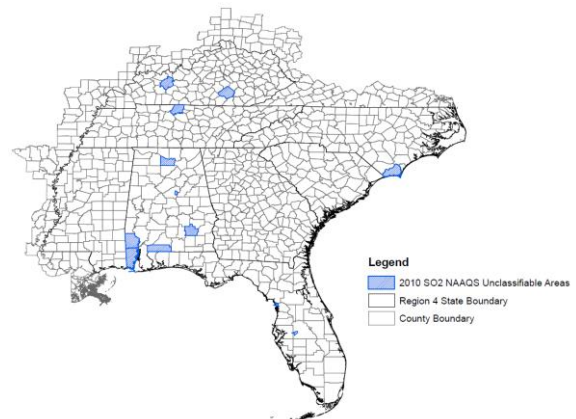
2010 SO₂ NAAQS

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R4 SO₂ Unclassifiable Areas

- ▶ 11 areas designated unclassifiable (U) in R4 between Rounds 2 & Round 3.
- ▶ Areas can be redesignated from U to attainment/unclassifiable (A/U) if deficiency corrected.
- ▶ First SO₂ redesignation from U to A/U was Independence, AK.
- ▶ R4 proposed redesignation of Mulberry, FL U to A/U on 9/9/19.





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DRR Ongoing SO₂ Data Requirements

- ▶ 40 CFR 51.1205 (b) requires SO₂ areas designated attainment based on modeling of actual SO₂ emissions to submit an annual SO₂ emissions report, for each applicable source in each such area, provide an assessment of the cause of any emissions increase from the previous year and make a determination if additional modeling analysis is needed.
 - ▶ Reports due July 1st of each year
- ▶ § 51.1205 also allows states to terminate the ongoing data requirement if an air agency provides modeling that shows air quality values at all receptors in the analysis are no greater than 50 percent of the SO₂ standard.
 - ▶ Can be submitted at any time
- ▶ For additional information please refer to the preamble of the DRR or R4 SO₂ contact, Twunjala Bradley.



A closer look at R4 Activity for SO₂ Ongoing Verification in FY19

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- ▶ 32 sources in 8 R4 states required to submit ongoing verification reports by July 1st of each year.
- ▶ FY19 – received reports from 7 states(covering 28 sources); awaiting report from 1 state covering 4 sources.
 - ▶ Terminated ongoing verification requirement for 1 source.
- ▶ To date, EPA responded to 4 states covering 12 sources; reviewing & will respond to remaining, received reports by end of the calendar year.
 - ▶ Review includes termination request for 2 sources in 1 state.



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Timeline for 2010 Primary SO₂ NAAQS Designations Process – Round 4
Areas Associated with December 31, 2020, Court Ordered Deadline

Milestone	Date
States and tribes certify 2019 SO ₂ monitoring data	No later than May 1, 2020
States and tribes may submit updated recommendations and supporting information for area designations to EPA*	No later than May 1, 2020
States submit exceptional events demonstrations for event-influenced SO ₂ monitoring data from 2017-2019	No later than May 1, 2020
EPA notifies states and tribes concerning any intended modifications to their recommendations (120-day letters)	On or about August 13, 2020
EPA publishes public notice of state and tribal recommendations and EPA's intended modifications, initiating a 30-day public comment period	On or about August 26, 2020 (No later than 120 days prior to final designations)
End of 30-day public comment period	On or about September 25, 2020
In response to EPA's intended designations, states and tribes submit additional information, if desired, to demonstrate why EPA's proposed modification in the 120-day letter to the state's recommended designation or boundary is inappropriate	No later than October 16, 2020
EPA signs notice promulgating final SO ₂ area designations for Round 4	On or about December 17, 2020 (No later than December 31, 2020)

* For any remaining undesignated area (i.e., those areas that installed and began operating EPA-approved SO₂ monitoring networks pursuant to the DRR and that have not been previously designated).

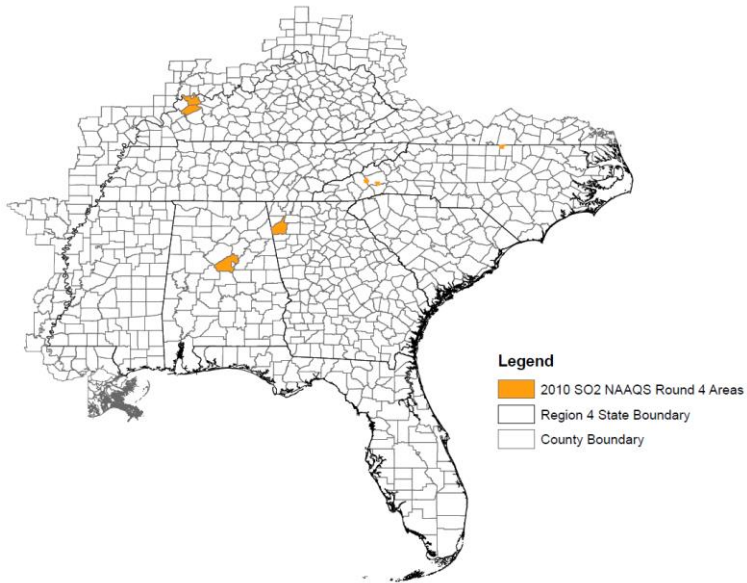
Round 4 SO₂ NAAQS Area Designations

- EPA must designate all remaining portions of the U.S. by December 31, 2020.
- Round 4 Process Guidance Memo issued September 5, 2019.



2010 SO₂ NAAQS

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Round 4: R4 Areas for Designations

- By December 31, 2020 – EPA must complete designations for all remaining areas (based on 2017-2019 monitoring data)

State	Facility Name	County
Alabama	Lhoist North America of Alabama - Montevallo Plant	Shelby
Georgia	International Paper – Rome	Floyd
Kentucky	Robert A. Reid Station/Henderson Municipal Power and Light (HMP&L) Station 2/ Green Station Landfill - Big Rivers Electric Corporation	Webster
	Century Aluminum Sebree LLC	Henderson
North Carolina	Asheville Steam Electric Plant - Duke Energy Progress, Inc.	Buncombe
	Canton Mill - Blue Ridge Paper Products	Haywood
	Roxboro Plant - Duke Energy Progress, LLC	Person



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Particulate Matter



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2006 Primary 24-Hour PM_{2.5} NAAQS

2006 Primary 24-hour PM _{2.5} NAAQS	
Standard	35 micrograms per cubic meter
Averaging Time	98 th percentile of 24-hour daily maximum concentrations, averaged over 3 years
At Risk Population	Children, Elderly, Asthmatics
Current Nonattainment Areas	14 Areas in 7 States

<https://www.epa.gov/pm-pollution/2006-national-ambient-air-quality-standards-naaqs-particulate-matter-pm25>



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How We Compare for Particulate Matter Region 4 vs Nationally

Nonattainment Areas as of October 7, 2019:

1997 PM_{2.5} NAAQS – 4 areas nationally; 0 in R4

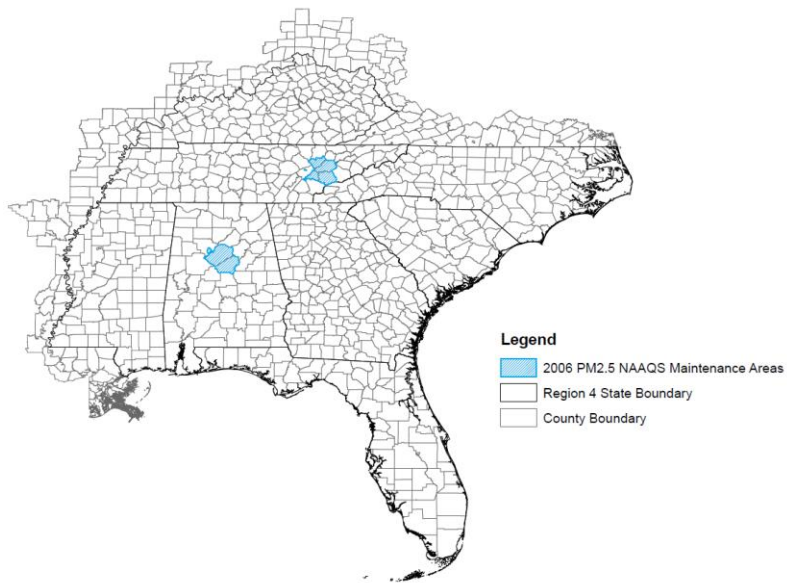
2006 PM_{2.5} NAAQS – 14 areas nationally; 0 in R4

2012 PM_{2.5} NAAQS – 8 areas nationally; 0 in R4

<https://www.epa.gov/green-book>

2006 PM_{2.5} NAAQS

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Closer Look at R4 PM_{2.5} 2006 Areas

Area	Date Redesignation	Second Maintenance Plan Due Date
Birmingham	1/25/2013 (eff. 2/25/2013)	2/25/2021
Knoxville	8/23/2017 (eff. 9/27/2017)	9/27/2025

Options

- Traditional maintenance plan with motor vehicle emissions budgets
- Limited maintenance plan (if area qualifies)



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SIP Planning



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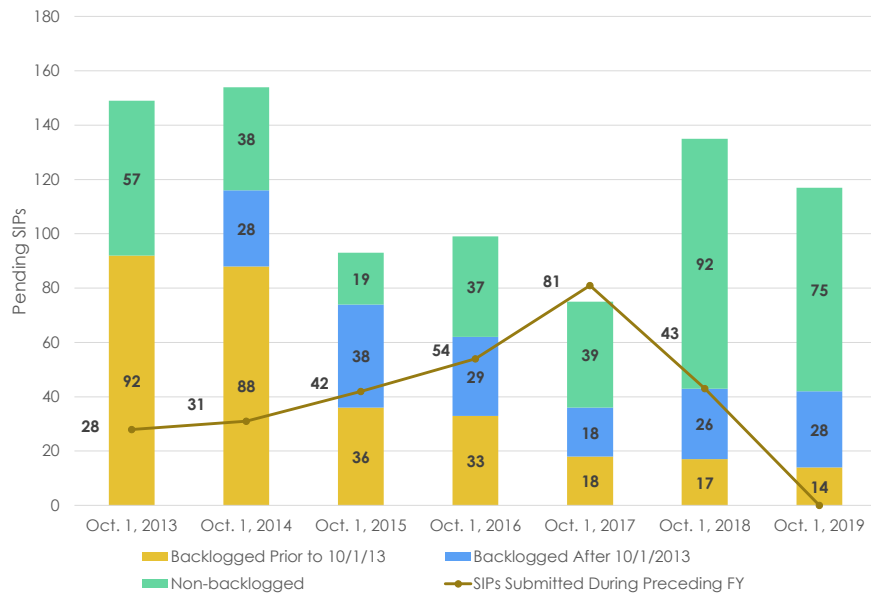
SIP Process Improvements

- ▶ Focus on reducing the SIP backlog and improving SIP processing times
- ▶ Trends in SIP processing
- ▶ SIP Process Improvement Activities
 - ▶ Promoting early engagement between EPA and air agencies during SIP development
 - ▶ Ongoing communication to ensure EPA takes action on the SIP submittals that matter most for air quality – using management plans and SIP planning conversations
 - ▶ Continued investment in the State Plan Electronic Collaboration System (SPeCS) for use of draft and final submittals
 - ▶ Continued commitment to providing timely guidance on SIP development issues



SIPs Pending EPA Review – 2013 to October 1, 2019

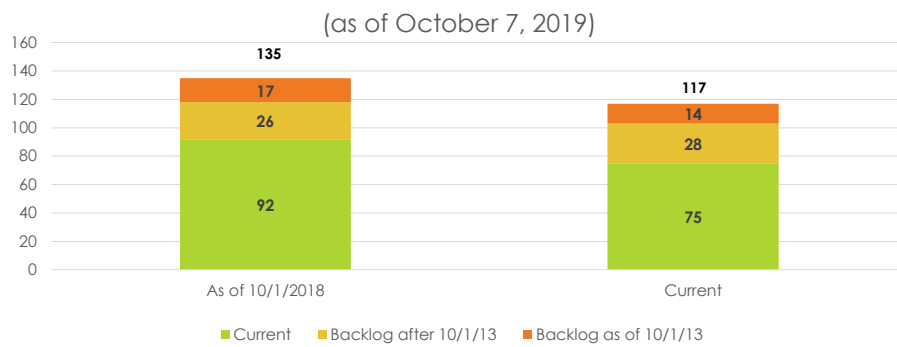
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Region 4 SIP Activity

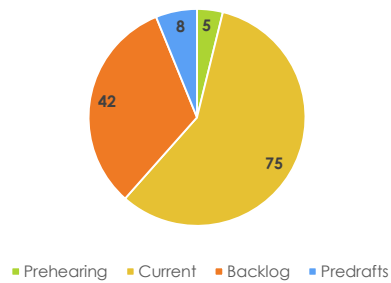




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Region 4 Inventory of SIPs

Activity as of October 7, 2019

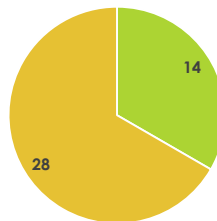




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Deeper Look at R4 Backlog SIPs

FY20 (as of October 7, 2019): Universe is 42 Submittals



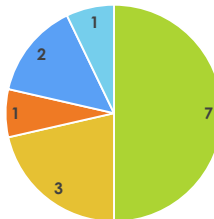
■ Backlogged as of 10/1/13 ■ Backlogged after 10/1/13



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SIPs Backlogged as of October 1, 2013

FY20 (as of October 7, 2019): Universe is 14 Submittals



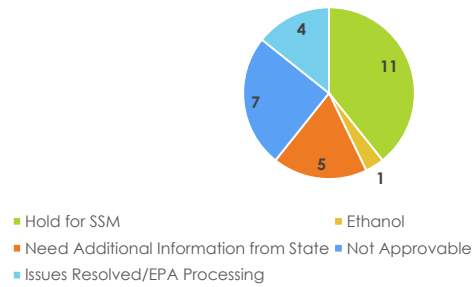
■ Ethanol ■ Responding to Adverse Comments ■ Waiting on Information From State ■ EPA processing ■ SSM



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SIPs Backlogged After October 1, 2013

FY20(as of October 7, 2019): Universe is 28 Submittals



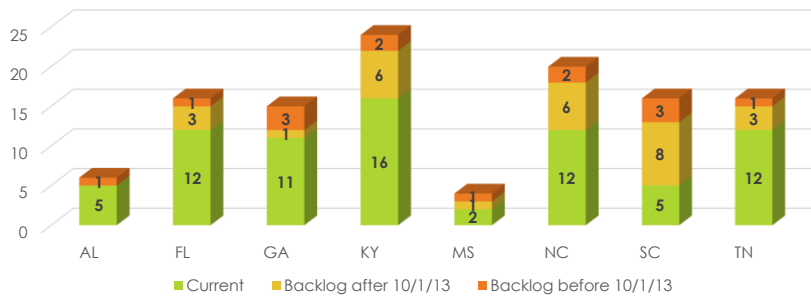


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R4 SIP Status by State

Total SIPs = 117 (42 backlogged)

Region 4 SIPs (as of 10/7/2019)



SIP Development Plans and Early Engagement

- ❖ As discussed during the August 2019 monthly calls and visits, EPA is rolling out its new Early Engagement process.
- ❖ It is a voluntary process where the Regional Office and State air agency will collaborate in the development of an annual work plan for the upcoming fiscal year (FY) SIPs revisions the State agencies anticipate being submitted.
- ❖ EPA expects to be working with the air agency from the time the air agency begins planning for the development of the SIP to the time the SIP is formally submitted to EPA for review.
- ❖ This will allow the Regional Office to assign a SIP Lead/SIP Team (SIP Team - more complex submissions may require experts from EPA Headquarters and Legal) to each anticipated submission.
- ❖ Once the Agency is ready to begin the SIP development process they will have a Regional counterpart (SIP Lead/SIP Team) who can assist in drafting and finalizing a **SIP Development Schedule** that will help define the scope and schedule for the SIP project.

SIP Development Plans and Early Engagement

- ❖ To accomplish this goal, the air agency must be willing to provide a complete “early engagement” draft SIP to EPA for review prior to the air agency’s public comment period and allow sufficient time for EPA’s thorough review and comment (30 days or 60 days for complex submissions).
- ❖ The idea here is that if EPA can provide approvability feedback on an “early engagement” draft SIP. Then after addressing EPA’s comments, the air agency goes out for public comment and simultaneously submits the draft SIP to EPA for review again, preferably through SPeCS.
- ❖ Following the public comment period and State adoption process, it is formally submitted to EPA, preferably through SPeCS.
- ❖ The goal is to have the approvability issues resolved prior to the official submission and for EPA to process each submission within the 18 month statutory timeframe.

SIP Development Schedule

- ❖ The purpose of the SIP Development Schedule is to answer the following questions:
 - ❖ What is the scope of the SIP Revision (in 1-3 sentences)?
 - ❖ Are there known technical, legal or policy issues that need resolution? Y/N If yes, what:
 - ❖ Is there a required deadline for the SIP submission or other timing considerations for the submission? Y/N If yes, what is it?
 - ❖ Is the air agency requesting that EPA finalize action on the submission by certain date? Y/N If yes, by what date and why?
- ❖ Region 4 would like the states to develop these plans and discuss during the November 2019 monthly call.

Annual Region 4 Advance Forum November 5-7, 2019 Atlanta, GA

- ▶ ½ day Workshop
- ▶ 2 days of presentation/discussion sessions
- ▶ Local tour of various strategies
- ▶ Networking opportunities

ADVANCE
A U.S. Environmental Protection Agency Program



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Air Permits Section Update

Heather Ceron (on detail)	Section Chief
Kelly Fortin	Acting Section Chief
Yolanda Adams	Title V Program Expert
Gloria Diaz	Mississippi
Art Hofmeister	Kentucky
Terry Johnson	North Carolina
Eva Land	Tennessee
Ana Oquendo	Florida
James Purvis	South Carolina & Georgia
Lori Shepherd	NSR/PSD Review Coordinator
Randy Terry	Alabama
Mario Zuniga	Tennessee Locals
Natasha Hazziez	On detail through 3/2020

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Air Permits Section

State Contacts

10/2019

Title V Petitions

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Recently Signed Order:

- Mill Creek – Kentucky
 - October 3, 2019
 - Denial

Currently Working on:

- Drummond ABC Coke – Jefferson County, AL
 - Received 6/21/2019

Title V Program Evaluations & Fee Reviews

FY19

- Shelby County, TN – August 7-8
- Kentucky – August 20-23

FY20

- Alabama & Jefferson County, December 9-13
- TBD – Spring 2020

Representing the Southeast

- ▶ Serve on National workgroups to represent the Southeast's perspective:
 - ▶ *Biogenic CO₂*
 - ▶ *NSR & TV LEAN (streamlining)*
 - ▶ *MM2A Workgroup - (Once in Always in)*
 - ▶ *Part 70 Revisions Workgroup*
 - ▶ *NSR Training Workgroup*
 - ▶ *PAL Guidance Workgroup*
 - ▶ *Smart Sector – Automotive Manufacturing*
 - ▶ *Outer Continental Shelf Permitting Workgroup*
 - ▶ *Electronic Permitting System*
- ▶ Completed 3 a year rotation as Title V sublead in September

Electronic Permitting System (EPS)

What is EPS?

- ▶ EPS IS:
- ▶ An online CDX database system
- ▶ Designed to facilitate information exchange between EPA and permit authorities &
- ▶ Streamline EPA receipt and review of state/local/and tribal permits.

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Electronic Permitting System

Key Features:

- ▶ Central depository of permits issued by permitting agencies
- ▶ Automatic workflow updates and status of EPA review
- ▶ Optional dashboard for permitting authorities to use for public participation
- ▶ Piloted by State volunteers and ECOS since January 2019

Capabilities:

- ▶ Clearinghouse for permitting documents
- ▶ Facility Registry – stores facility information for future entries
- ▶ File Upload – applications, public comments, propose permit, etc.
- ▶ Customized notifications – upload and release documents on state timeline.

Available to all States in early 2020

Benefits for Permitting Agencies:

- ▶ Streamlined document management & EPA Review Process
- ▶ Immediate notification that EPA has received permit submittals
- ▶ Track status of EPA review online (EPA Received/Will Not Review/Comments Submitted/No Comments)
- ▶ Electronic Tracking/Status Updates & Automatic Workflow notifications
- ▶ Information Exchange: Facilitate permitting of complex cases if similar permit action has taken place elsewhere.
- ▶ Reduced Data Storage Costs for PAs who use EPS as document management system
- ▶ Eliminate reporting data on permit processing (EPA TOPS)
- ▶ Replaces RACT/BACT/LAER Clearinghouse – allows centralized reporting

Contact Terry Johnston: Johnston.Terry@epa.gov

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THANK YOU