

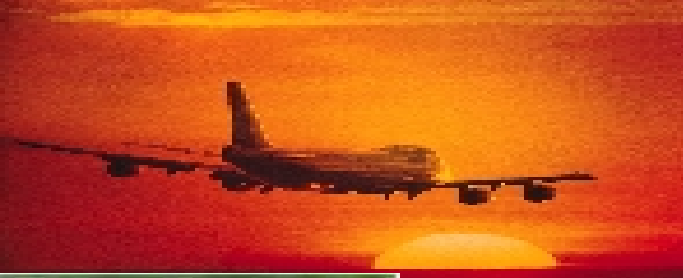
Planning for Clean Air:

An Introduction to the “SIP Process”

SIP 101

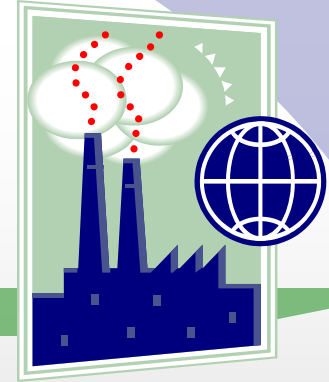


The many faces of Air Pollution!





Clean Air Act (CAA)



- ▶ **Under this law EPA sets limits on how much of a pollutant can be in the air anywhere in the U.S.**
- ▶ **Gives EPA enforcement powers (EPA can fine a company for violating the CAA).**
- ▶ **States do much of the work to carry out the Act (pollution control problems are unique to the different industries and geography areas).**
- ▶ **Allows the public to participate in the process and request EPA or states to take action against violators.**



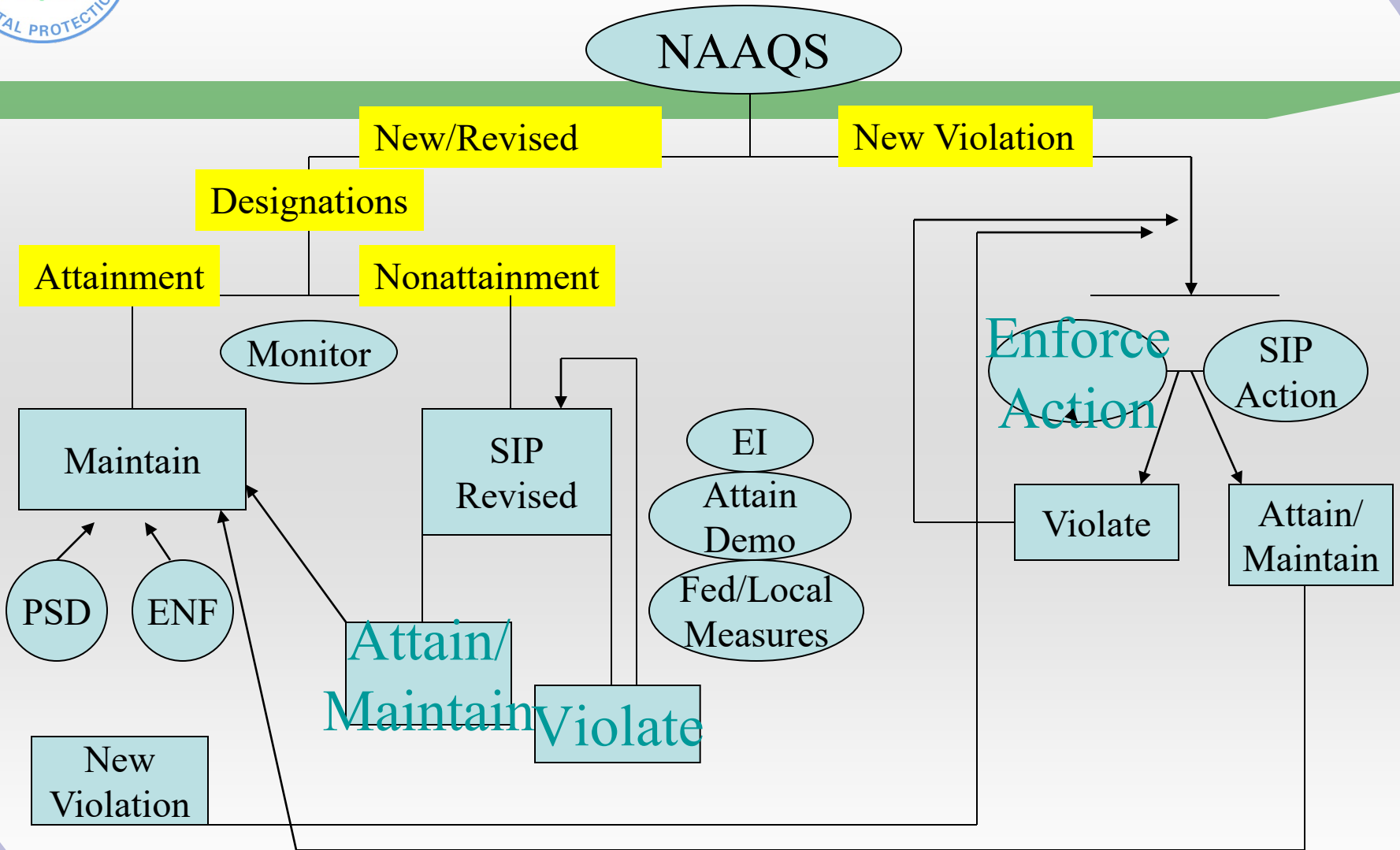
What is the “Air Quality Management” Process ?



- **Air Quality Management (AQM)** ... the process to relate National Ambient Air Quality Standard (NAAQS) air quality measurements to emissions data ... determine the reductions & control measures needed to meet the NAAQS.
- AQM is the approach, or pathway to translate measured air quality problems into a regulatory clean air plan, or State Implementation Plan (SIP).
- SIPs are the framework to provide for control measures that “clean the air” and achieve or maintain the standards.



What is the "air quality management" process ?





What is the “Air Quality Management” process ?



- **Emission inventories, monitoring and air quality models are central to air quality management, they are tools that help to:**
 - understand cause of an air quality standard violation
 - develop control strategies to reach attainment
 - demonstrate that selected strategies will lead to attainment
 - assess whether progress is made toward reaching standard



What Are The NAAQS?

- **National Ambient Air Quality Standard set for “Criteria Pollutants”.**
- **Criteria Pollutant:** A group of six widespread and common air pollutants regulated by EPA to protect health and the environment.
- **Two NAAQS Standards Primary and Secondary:**
 - NAAQS primary standard is to protect human health
 - NAAQS secondary standard, to protect public welfare and the environment



What Are The NAAQS? (continued)

- NAAQS set for ground level Ozone (smog), Particulate Matter, Carbon Monoxide, Lead, Nitrogen Dioxide and Sulfur Dioxide.
- The Act requires EPA to review these standards every five years.



What are EPA's National Ambient Air Quality Standards?

Pollutant	Primary Stds.	Averaging Times	Secondary Stds.
Carbon Monoxide	9 ppm (10 mg/m ³)	8-hour ¹	None
	35 ppm (40 mg/m ³)	1-hour ¹	None
Lead	1.5 µg/m ³	Quarterly Average	Same as Primary
Nitrogen Dioxide	0.053 ppm (100 µg/m ³)	Annual (Arithmetic Mean)	Same as Primary
Particulate Matter (PM ₁₀)	50 µg/m ³	Annual ² (Arith. Mean)	Same as Primary
Particulate Matter (PM _{2.5})	150 ug/m ³	24-hour ¹	Same as Primary
	15.0 µg/m ³	Annual ³ (Arith. Mean)	
Ozone	65 ug/m ³	24-hour ⁴	Same as Primary
	0.08 ppm	8-hour ⁵	
Sulfur Oxides	0.03 ppm	Annual (Arith. Mean)	-----
	0.14 ppm	24-hour ¹	-----
	-----	3-hour ¹	0.5 ppm (1300 ug/m ³)



What is a State Implementation Plan (SIP)?



It's a plan for "clean air!"

- ✓ **Clean Air Act requires a general plan to achieve the NAAQS in all areas of the country and a specific plan for each nonattainment area.**
- ✓ **Each state is responsible for developing plans to demonstrate how standards will be achieved, maintained, and enforced.**
- ✓ **These enforceable plans, SIPs are developed by States (and locals).**



What is a SIP?

(continued)

- **SIPs and associated control measures are enforceable at both the state and national levels.**
- **Plans are the framework (states recipe for success) for each state's program to protect the air.**
- **States must regularly update SIPs**



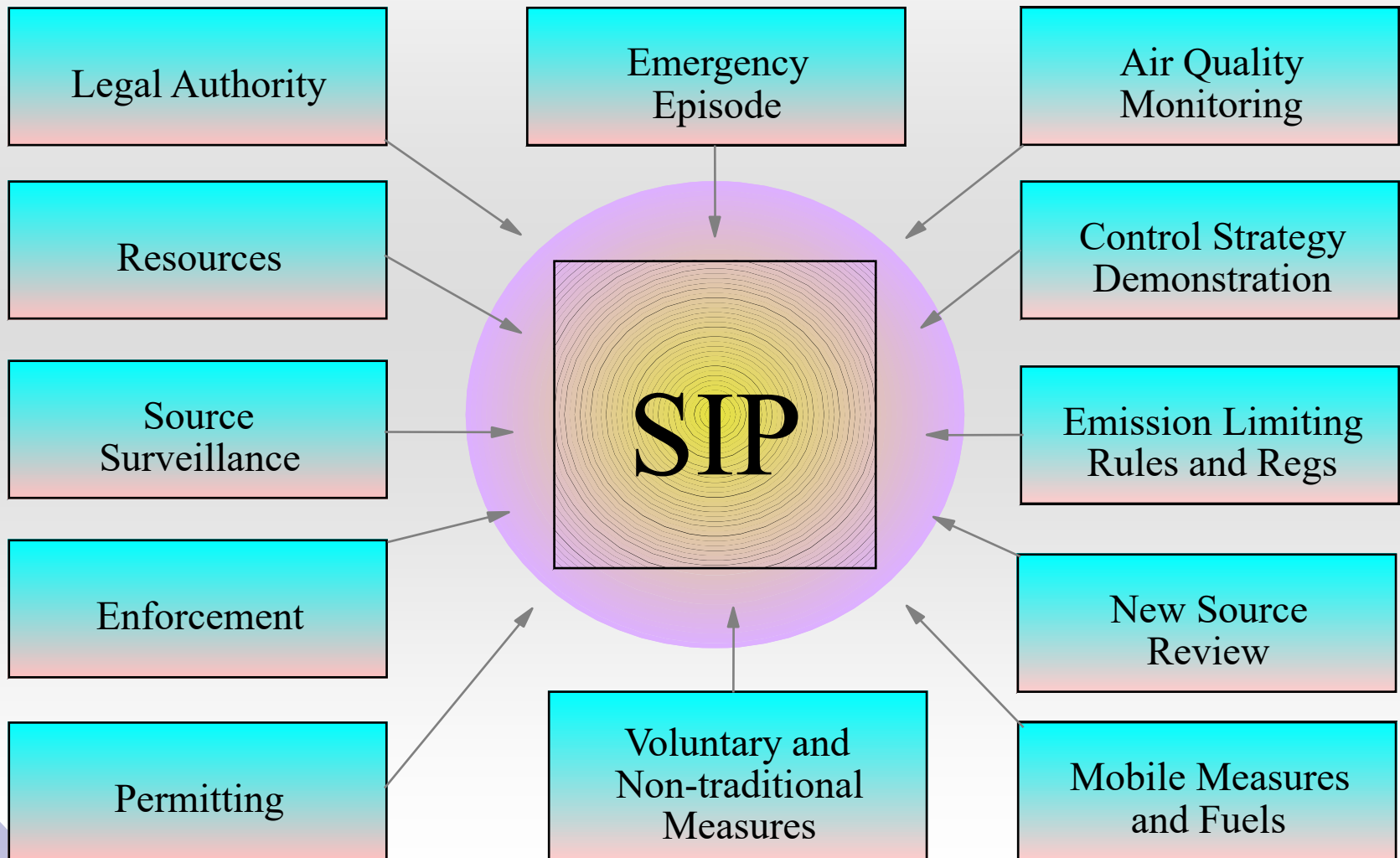


110(h) Requirement

- Not later than 5 years after the date of enactment of the Clean Air Act Amendments of 1990, and every three years thereafter, the Administrator shall assemble and publish a comprehensive document for each State setting forth all requirements of the applicable implementation plan for such State and shall publish notice in the Federal Register of the availability of such documents.



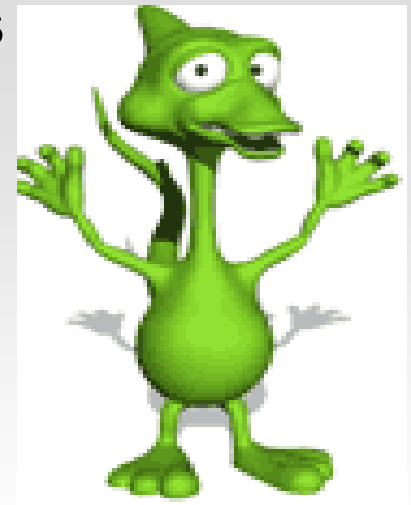
Components of a SIP





The SIP, a Living Document

- Revised by State as necessary
- Addresses unique air pollution problems in State
- Keeping SIP updated is a continuous process
- Number of submittals vary
- The different terms of SIP



Its alive



What Must a SIP Revision Do?

- **Makes adjustments to state/local air quality rules to provide for attainment and/or maintenance of the NAAQS (section 110 of Clean Air Act)**



How does the SIP Process Work?

- CAA or court case mandates plan revision or State/Local decide to revise its own plan.
- State submits changes to EPA Regional Office.
- EPA reviews SIP for completeness/approvability... propose in Federal Register.
- Once approved, plan becomes Federally enforceable.



Hot off the press



What are the Steps Followed to Prepare a SIP?

- Determine emissions
- Develop strategy
- Determine emission changes
- Model to determine air quality changes
- Compare to NAAQS
- Adjust strategy as necessary and reanalyze
- Draft rules to implement strategy
- Adopt rules using state process and minimum federal public participation requirements (40 CFR Part 51)
- Submit to EPA
- EPA rulemaking



What is the State Process?

- Although not required, SIP revisions usually go through an environmental board (designated by environmental secretary).
- 30-day comment period.
- Public hearing/availability of SIP revision announced in state public forum (local newspapers).
- Public hearing.
- Response to comments.
- Legislative review (State requirement).
- Formal adoption.
- SIP submittal.



Stakeholders

- ❖ Federal, State and Local Governments
- ❖ Tribes
- ❖ Regulated Community
- ❖ Others

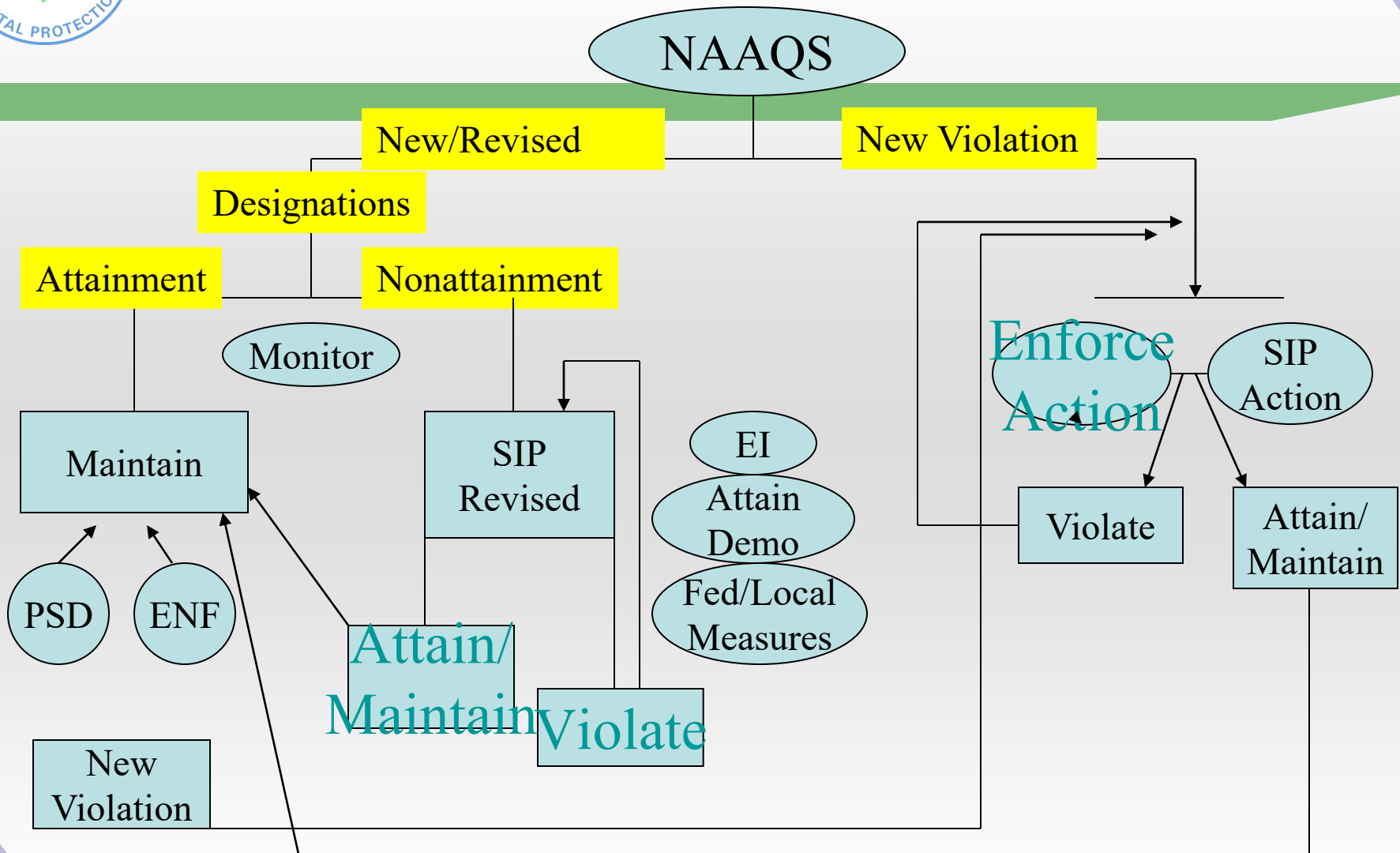


Other Organizations involved in SIP Process

- **Metropolitan Planning Organizations (MPOs)**
- **Other state agencies (transportation, energy)**
- **Ozone Transport Commission (OTC)**
- **Center for Clean Air Policy (CCAP)**
- **STAPPA/ALAPCO**



What is the “air quality management” process ?





How Long Does A SIP Revision Typically Take?

- **State Evaluation** **6 months to 1 year**
- **State Rulemaking** **6 months to 2 years**
- **EPA Approval** **6 months to 18 months**



What is the SIP approval process?



- **SIP submittals come from State to EPA Regional Offices.**
- **EPA Regional Administrators have been delegated authority to approve most SIPs.**
- **EPA determines whether a SIP meets the requirements of the CAA and EPA regulations ... approve or disapprove in Federal Register.**



Consistency

- **When a Region pursues an action that requires a change in the way a regulation or policy has been applied in the past, or has not been developed.**
- **Develop a Consistency Issue Paper (Region should work with their OAQPS Desk Officer).**
- **Desk Officer determines if there is an applicable work group to address the issue.**



What are the steps in EPA's Rulemaking Process?

- Review state submittal (EPA Regions)
 - “Complete” findings
 - Partial approval
 - Limited approval/disapproval
 - Conditional approval
 - Approval
 - Disapproval



What are the steps in EPA's Rulemaking Process? (continued)

- Prepare technical support document
- Propose action in Federal Register
- Allow for comment period
- Respond to comments
- Publish final action in Federal Register



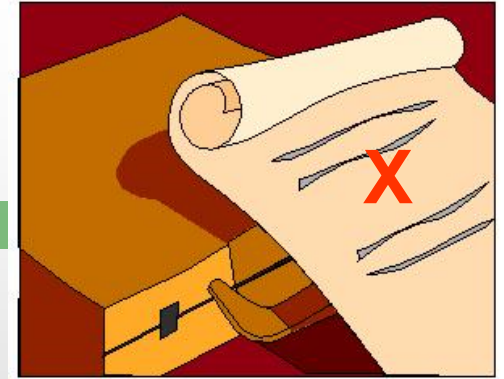
Federal Register Requirements

The SIP Processing Workgroup will post new requirements on EPA's On-Line SIP Processing Manual and incorporate all new requirements into their Regional Templates. Check with your Regional SIP Processing Workgroup Contact regarding the location of Regional Templates and Boilerplate Language.

- Federal Register Daily Index and Documents (1998 – Now).
<http://www.gpoaccess.gov/fr/index.html>
- EPA Air Federal Register Monthly Index (appendix to EPA's On-Line SIP Processing Manual).
<http://newaruba.pes.com/icode/sipman/>
- Federal Register Public Inspection Page, one day prior to publication.
http://www.archives.gov/federal_register/public_inspection/public_inspection_list.html
- Federal Registers 1936-1998 (HeinOnline through EPA's Desktop).
<http://www.heinonline.org/HOL/Index?collection=fedreg>
- “Federal Register Do's and Don'ts” (EPA's On-Line SIP Processing Manual SIP Message Board).
<http://newaruba.pes.com/icode/sipman/>
- “Federal Register Document Drafting Resources.”
http://www.archives.gov/federal_register/publications/document_drafting_resources.html
- Action Development Process Library (ADP Library).
<http://intranet.epa.gov/adplibrary/>
- Regional Material in eDocket (RME) and Federal eRulemaking Portal (Agency internal and public sites).



Problems Impacting the Approval of SIPs



- **Plans that do not meet CAA or EPA rules and Guidelines ... or not consistent with court case**
- **Regulations that are vague, missing test methods, or technical justification ... incomplete**
- **Regulatory relaxation without justification**



What Happens if a SIP Revision is Not Submitted/Disapproval?

- **New Source Review permitting sanctions:**
 - After 18 months sanctions clock
 - 2 to 1 offset
- **Highway funding sanctions:**
 - After 24 months sanctions clock
- **Federal Implementation Plan (FIP):**
 - Within 24 month sanction clock
 - Not permanent



How Do Sanctions Work?

- **SIP revision required by a set date.**
- **EPA finding of failure to submit starts 18-month clock.**
- **After 18 months New Source permitting sanctions imposed.**
- **After 24 months FHWA is required to impose funding moratorium for all but exempt projects (safety, mass transit).**
- **State air grants are subject to moratorium also.**
- **Within 24 months EPA to promulgate federal rules to correct SIP deficiency.**



What the CAA says about backsliding....

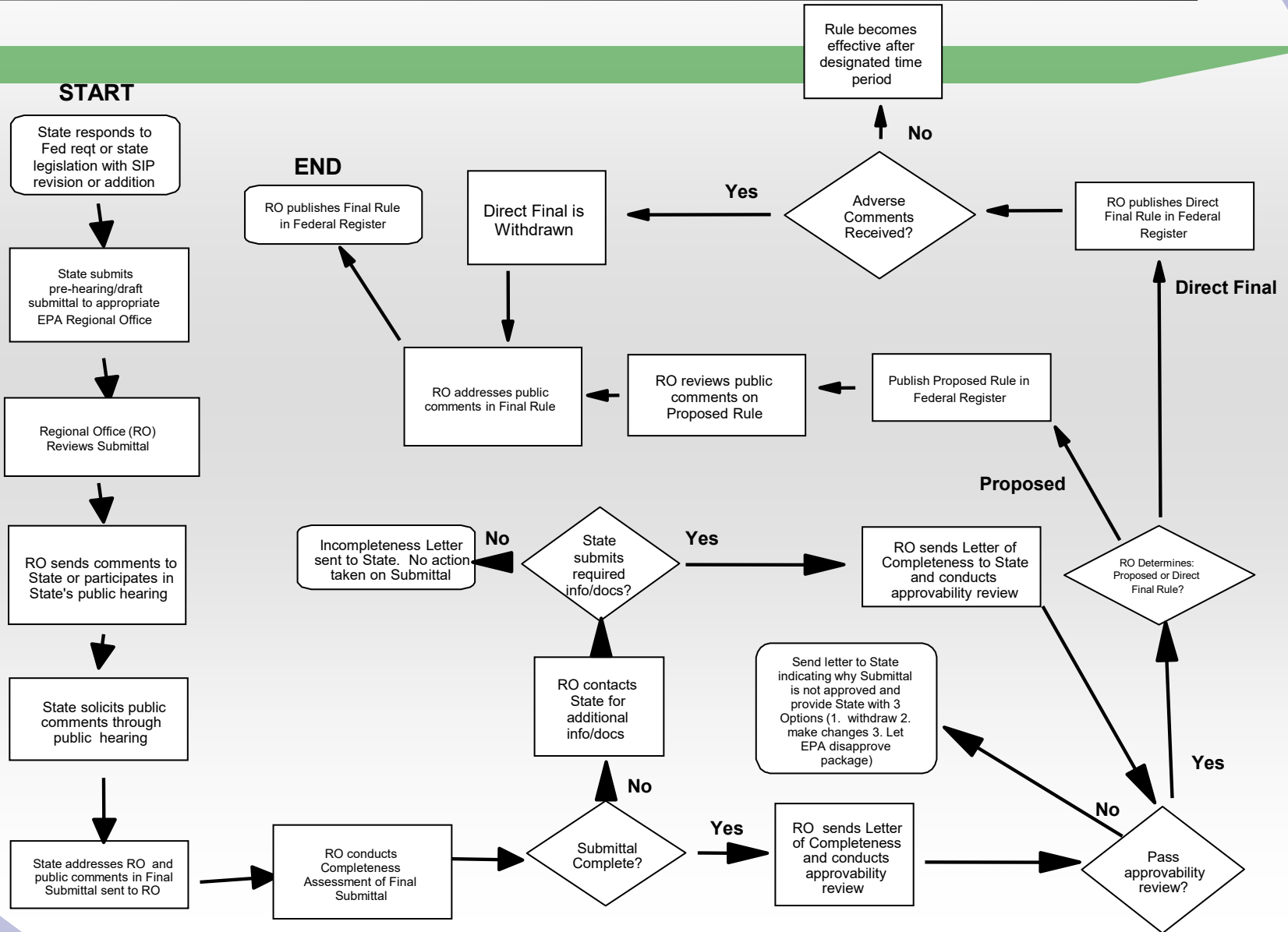
Section 110(I)



“The Administrator shall not approve a revision to a Plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171), or any other applicable requirement of this Act.”

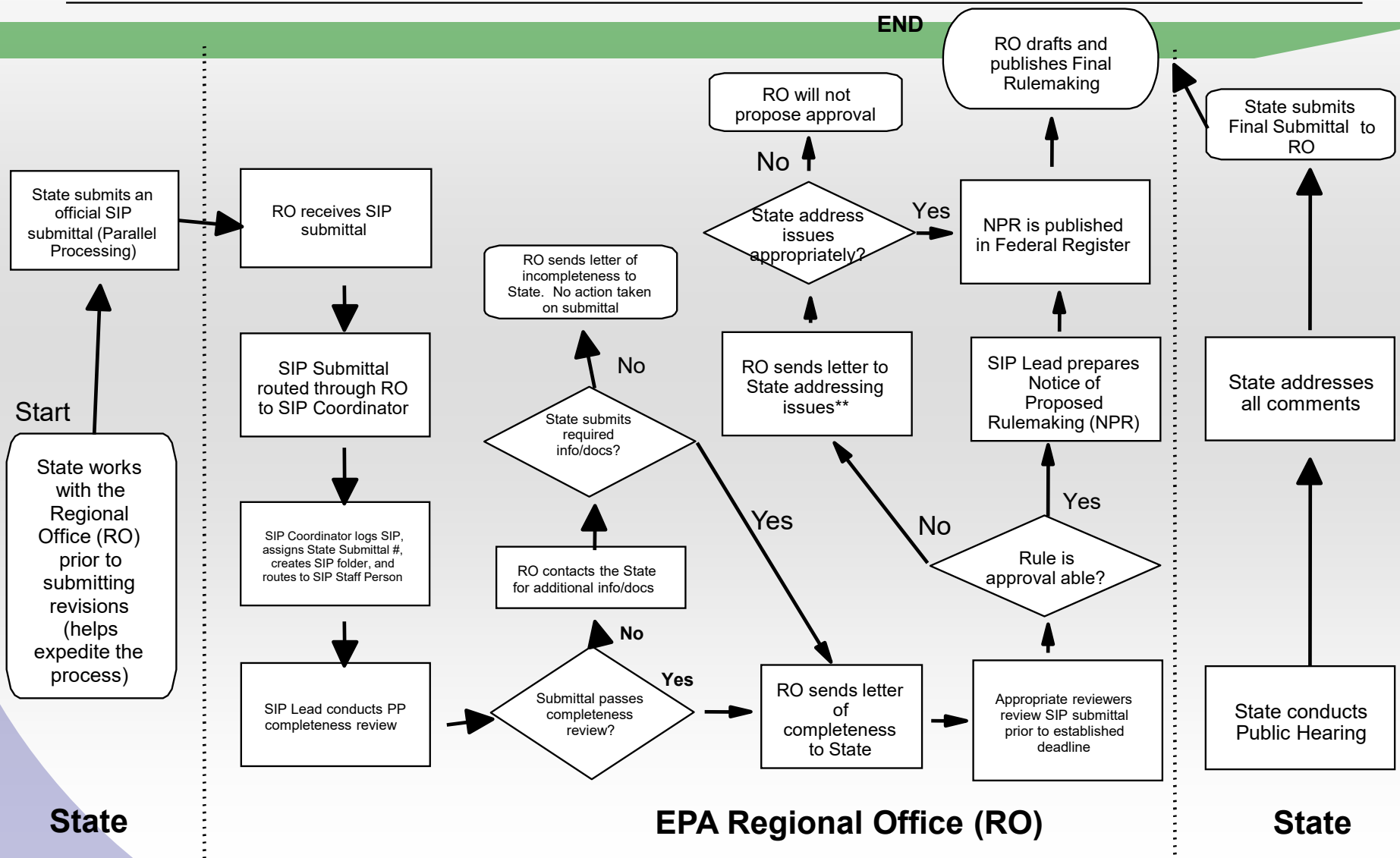


Typical SIP Process Flow





Parallel Processing Submittals





Summary ...How the SIP process works

**CAA or court case mandates plan submittal ,
or State/Local decides to revise its own SIP**

State/Local prepares and adopts plan after public hearing

State submits SIP to EPA Regional office

EPA reviews SIP for completeness ... if complete ... propose in FR

EPA approves/disapproves plan after considering public comments

After SIP approval, the plan becomes Federally enforceable

If SIP Federally mandated and disapproved ... then FIP promulgated



The End

