



PIMA COUNTY
ENVIRONMENTAL QUALITY

Pima County **Department of Environmental Quality**

Gatekeeper Regulatory Roundup

Richard Grimaldi
Deputy Director

March 22, 2018

Overview



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Ozone Values

Emission Inventory

Recent Rulemaking

Questions

Ozone

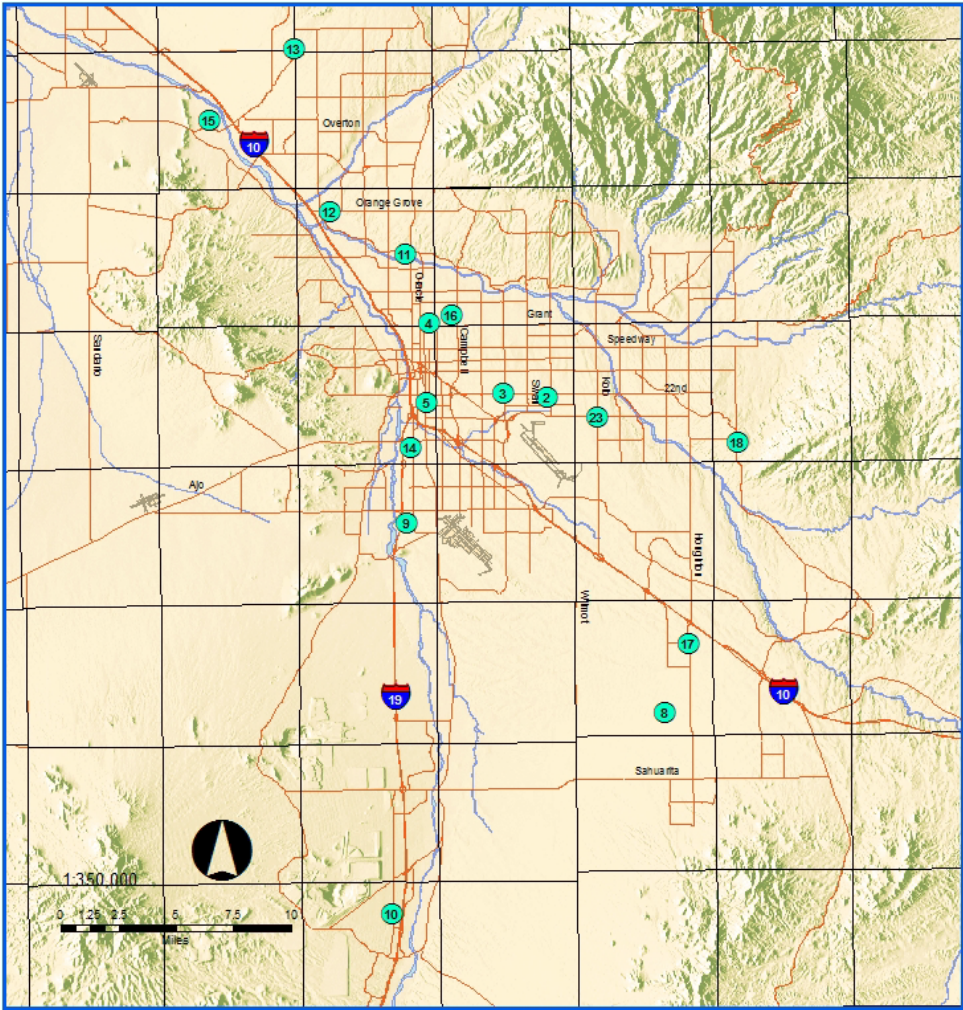
Ozone



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- * The 2008 primary standard for ozone was 0.075 ppm
- * EPA strengthened the ozone standard, in 2015 to .070 ppm
- * The revised standard is met when the three year average of the annual fourth highest daily eight hour average ozone concentration is less than or equal to 0.070 ppm
- * Pima County Currently meeting standard
- * Pima County to be designated unclassifiable by EPA - Letter to Governor. Anticipated April 2018.

Pima County Monitoring Sites

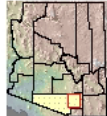


- 2 - 22nd / Craycroft
- 3 - 22nd / Alivemon
- 4 - Geronimo
- 5 - South Tucson
- 8 - Corona de Tucson
- 9 - Santa Clara
- 10 - Green Valley
- 11 - Children's Park NCore
- 12 - Orange Grove
- 13 - Tangerine
- 14 - Rose Elementary
- 15 - Coachline
- 16 - Cherry / Glenn
- 17 - Fairgrounds
- 18 - Saguaro National Park East
- 23 - Golf Links / Kolb

- PDEQ Monitoring Sites
- Major Streets
- Washes

Revised: March 2017

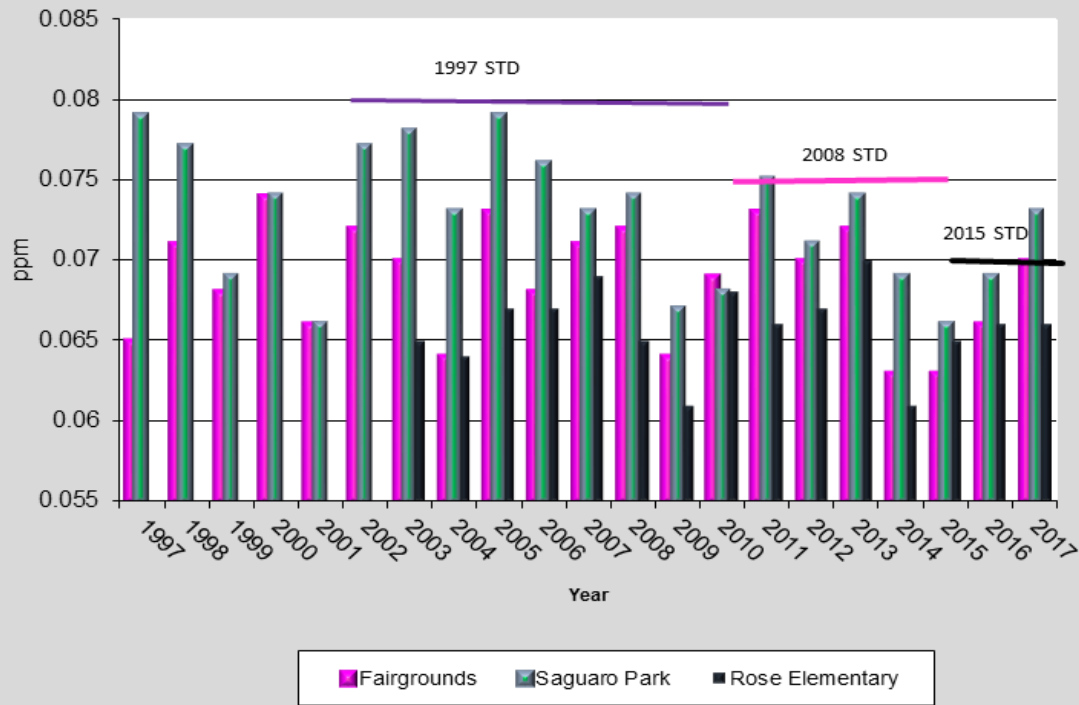
Comments
 All information is provided as is, with all faults, and without warranty of any kind, expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.



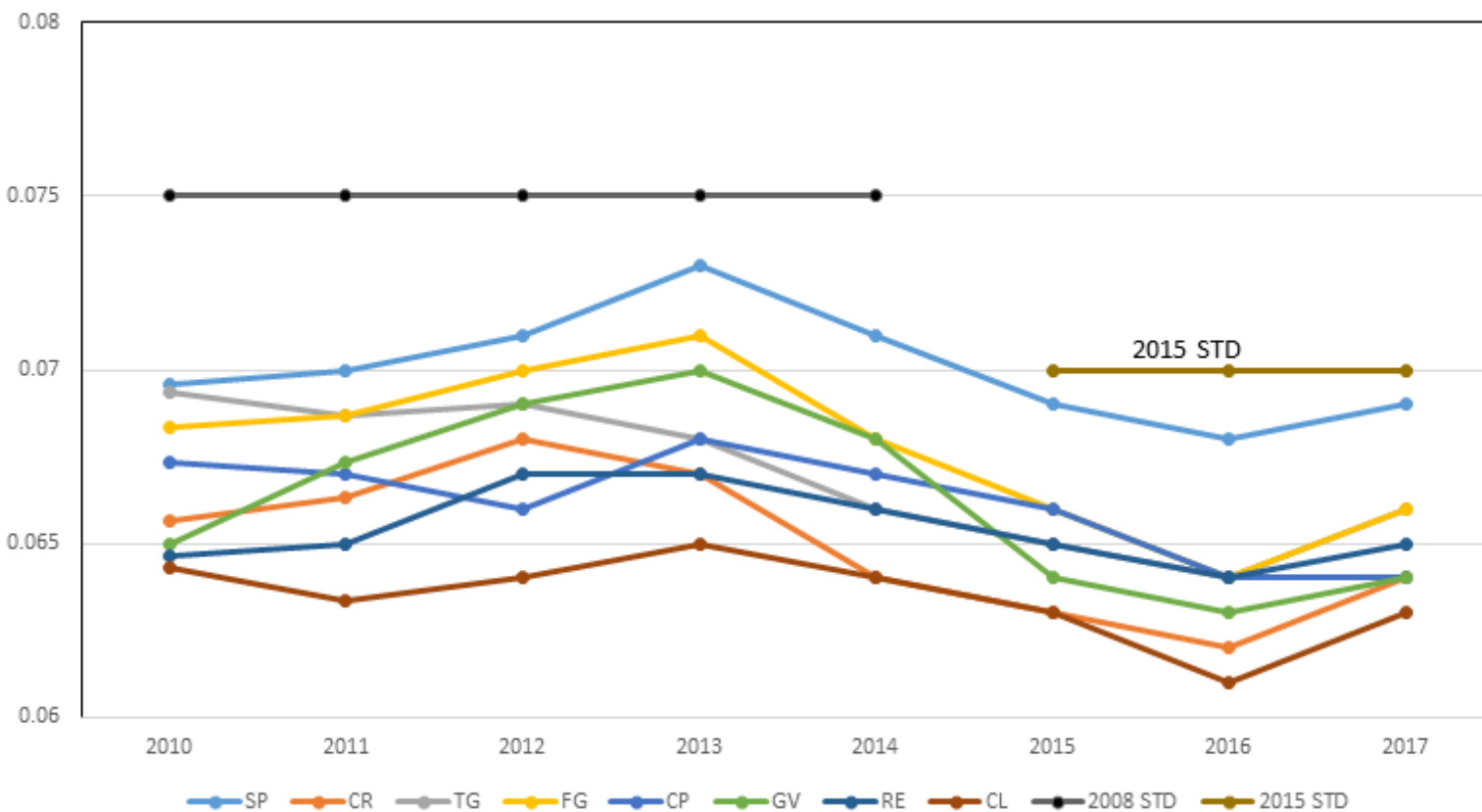
Prepared By
 Pima County Department
 of
 Environmental Quality

Ozone 1997 - 2017

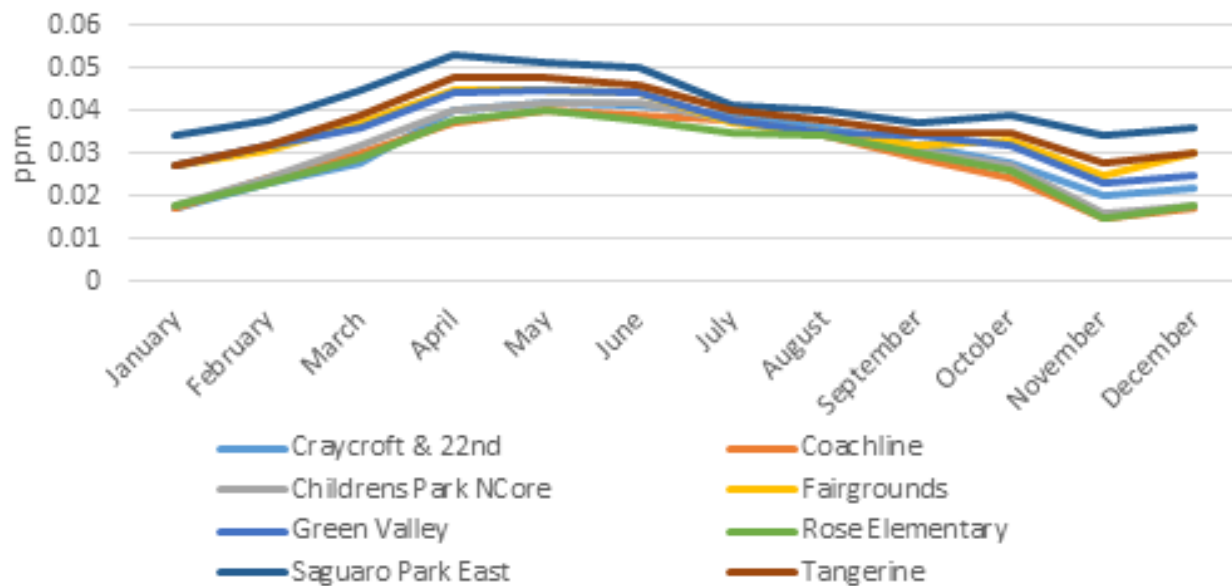
4th Highest 8-Hour Average Concentration



OZONE 3 YEAR AVERAGES OF 4th highest 8-Hr average (PPM)



Ozone 2017 Monthly Averages



Emission Inventory

ERG/PDEQ EI Preparation



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- * PDEQ contracted with Eastern Research Group (ERG) to develop a plan for the preparation of a preliminary work plan
- * Data collection included gathering data from air agencies, the National Emissions Inventory, & the Pima Association of Governments (PAG)

ERG/PDEQ EI Preparation



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- * Choosing a Baseline EI Year – 2014 Triennial NEI
- * Geographic and Temporal Domains
- * Spatial Resolution

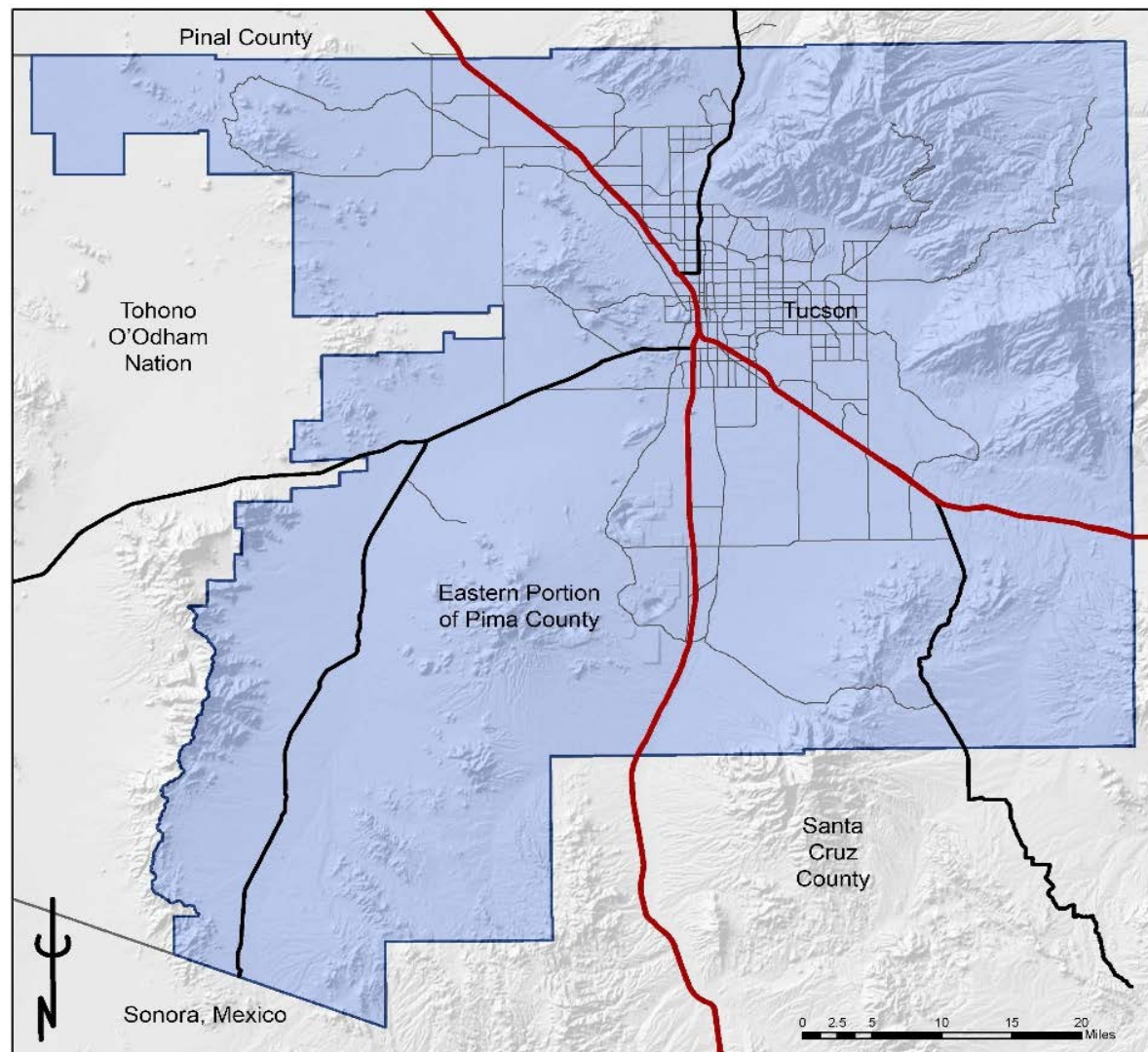
ERG/PDEQ EI Preparation

Geographic Domain



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- * Eastern Pima County – excluding Tribal Land



ERG/PDEQ EI Preparation

Temporal & Spatial Resolution



- * Temporal resolution: Annual EI for 2014 as well as ozone season day (OSD) emissions for the ozone season (April through October)
 - * There are 214 days in the ozone season
- * Spatial resolution: possible future modeling guided the choice of the EI domain.

ERG/PDEQ EI Preparation

Types of Sources & Source of Data



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- * Point Sources: Data submitted by sources annually
Potential to Emit and/or actual emissions
- * PDEQ data: 13 – Class I Sources & 3- non-Class I sources
- * ADEQ Data – 1 Source

ERG/PDEQ EI Preparation

Types of Sources & Source of Data



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- * Area Sources: Numerous activities including industrial & residential fuel combustion, wastewater treatment, bakeries, etc.
- * State level data, County level data, estimates from 2014 NEI, Emission factors (i.e. AP-42, EPA Estimation Tool, Emission Inventory Improvement Program (EIIP), etc.)
- * Industrial fuel combustion data

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Types of Sources & Source of Data



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- * On-Road Motor Vehicles: Passenger cars, light commercial trucks, buses, refuse trucks, etc.
 - * PAG – MOVES 2014a model
- * Nonroad Mobile Sources: construction, recreational, lawn & garden, railroads (excluding locomotives), etc.

ERG/PDEQ EI Preparation

Types of Sources & Source of Data

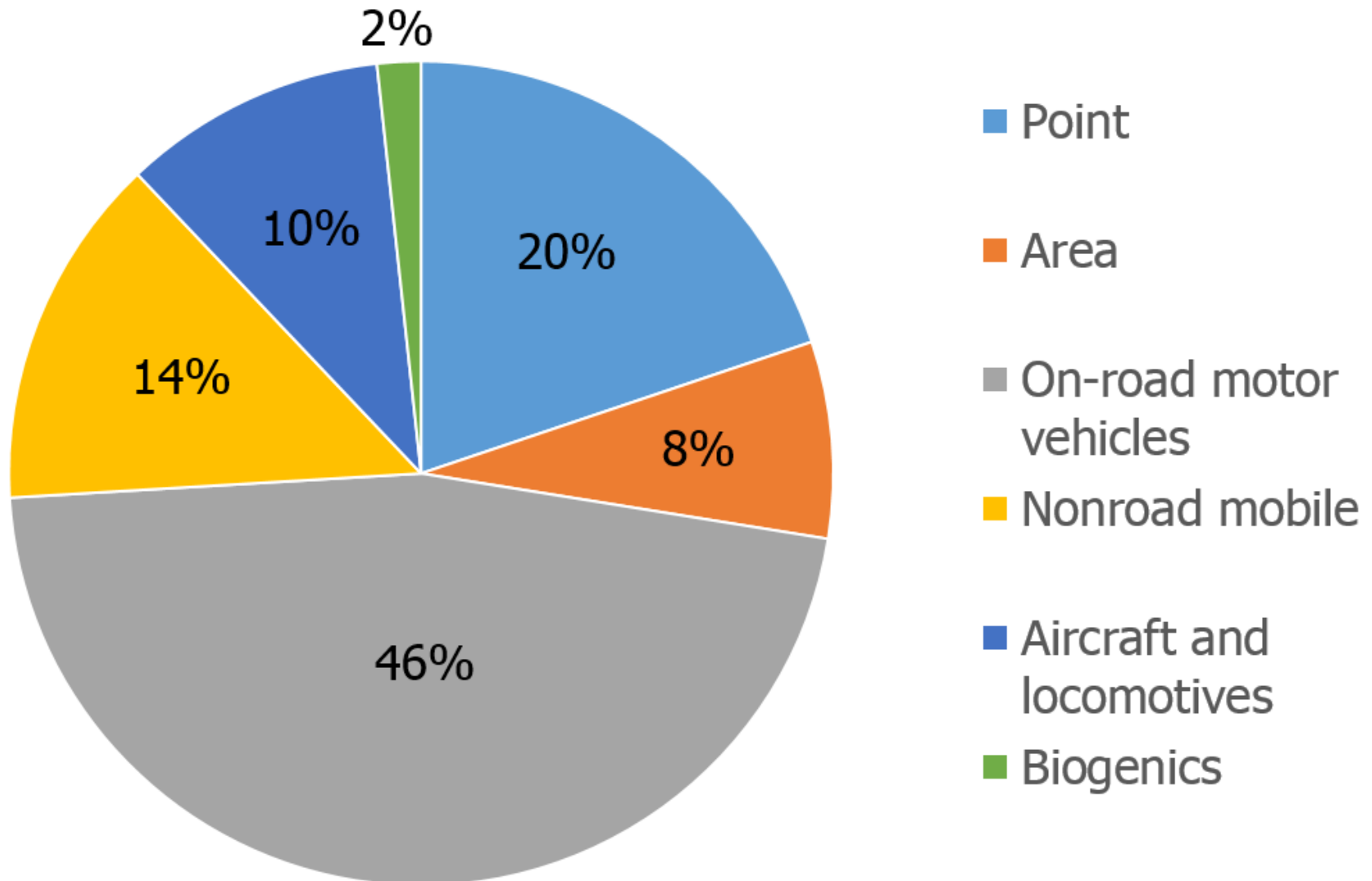


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- * Aircraft & Locomotives: 20 airports located within the geographic domain of the inventory. 3 types of locomotive emissions.
 - * 2014 NEI
- * Biogenic Sources: natural sources – vegetation and soils
 - * 2014 NEI

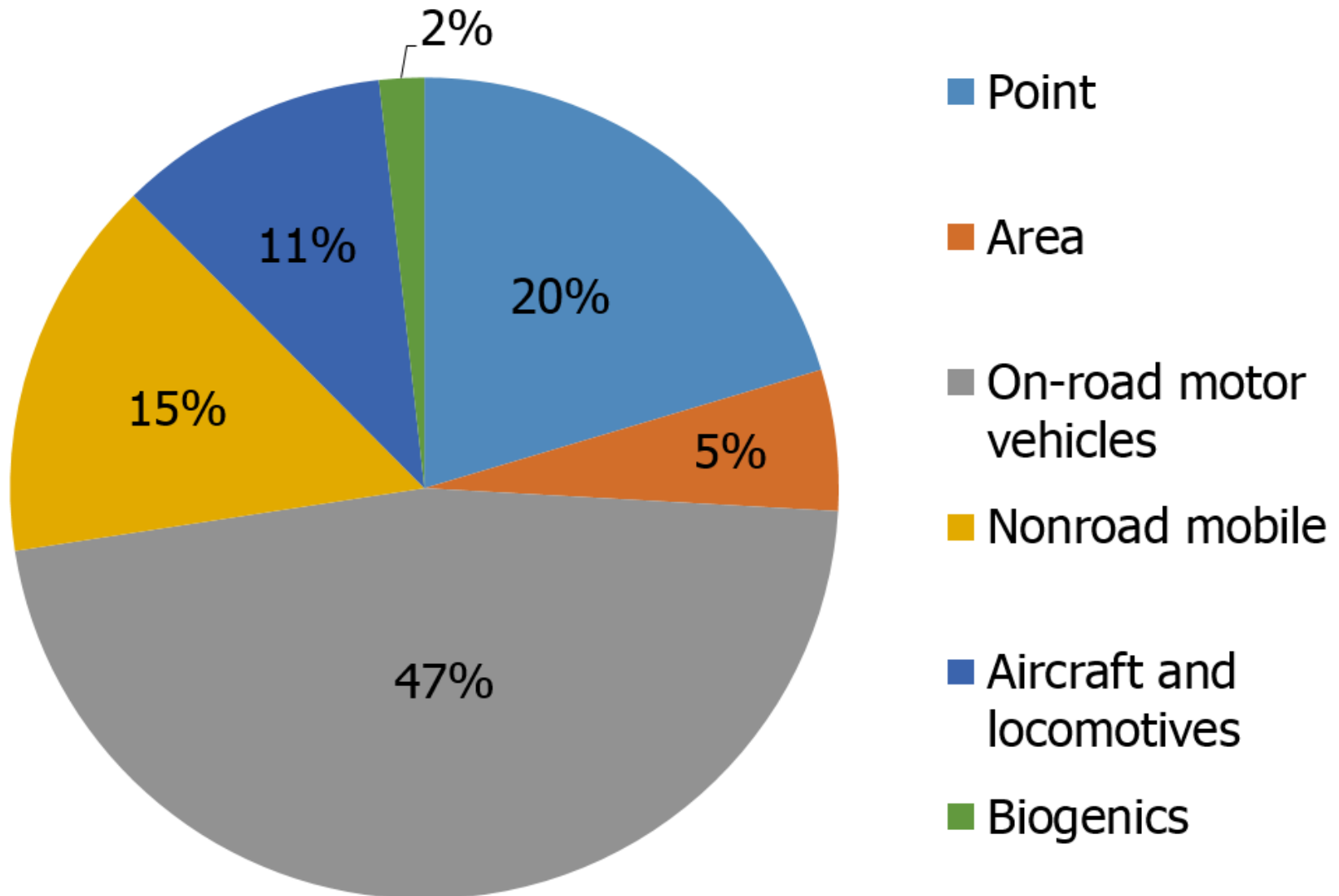
ERG/PDEQ EI Summary

Annual Nitrogen Oxide Emissions Summary



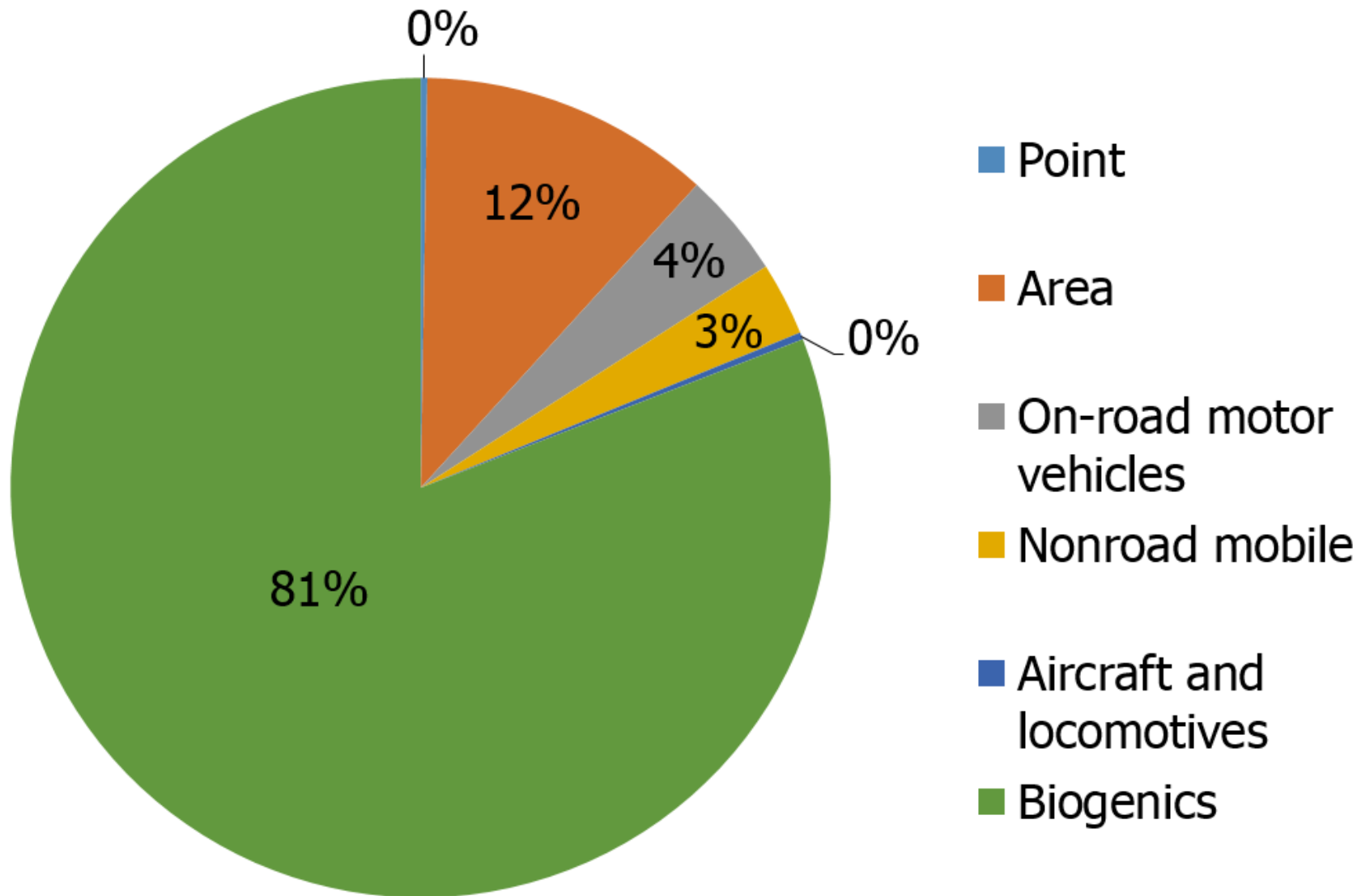
ERG/PDEQ EI Summary

NO_x Pounds per Ozone Season Day



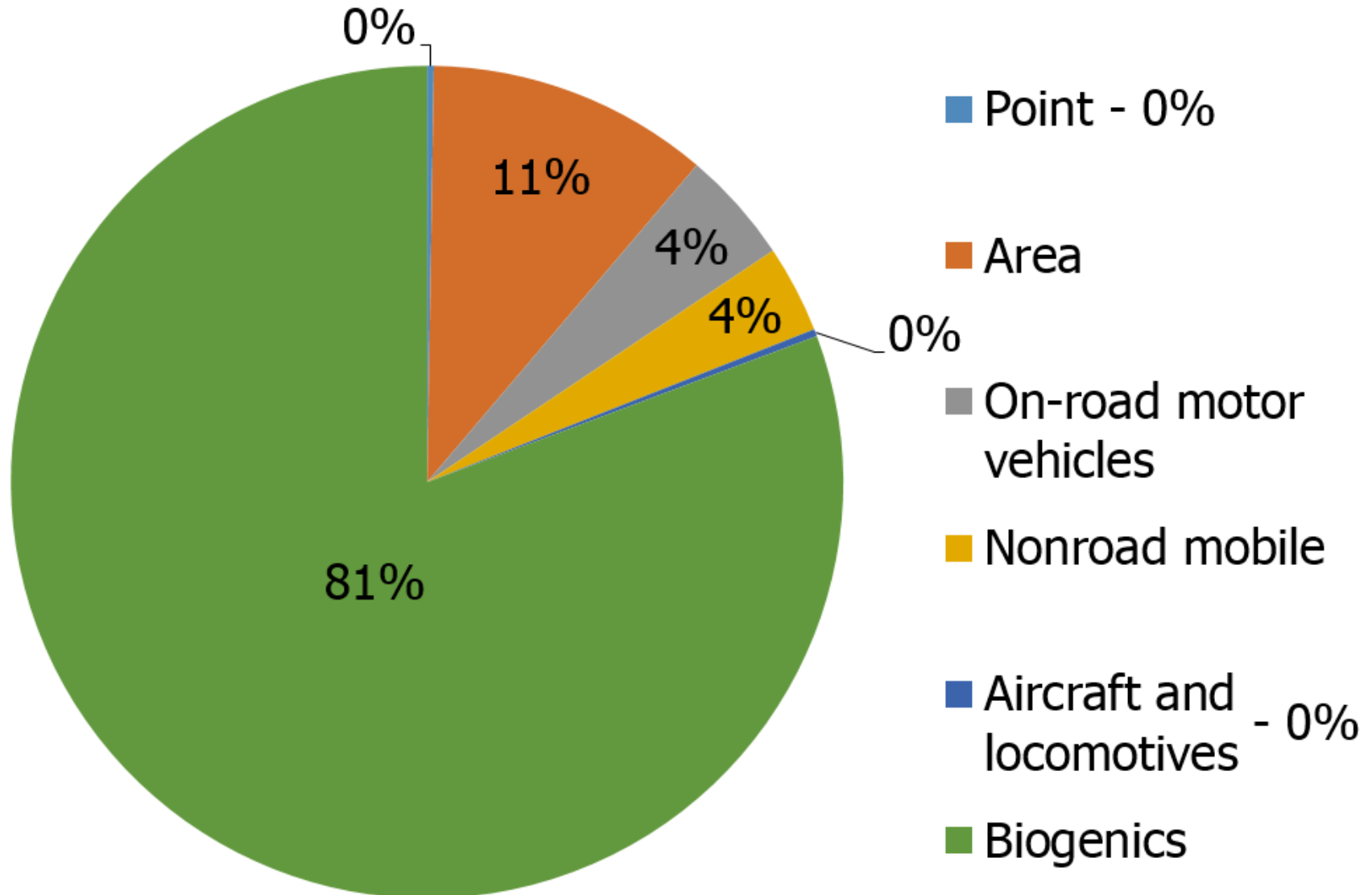
ERG/PDEQ EI Summary

Annual VOC Emissions Summary



ERG/PDEQ EI Summary

VOC Pounds per Ozone Season Day



Future Challenges



- * Transport of ozone from other areas
- * Atmospheric chemistry unknown – Local research will need to be done on how ozone forms in our area (NO_x vs. VOC) and how to limit formation
- * Funding

Rule Making

Proposed Rulemaking Packages



Rule Packages in Next two Years

1. Current PCC Title 17 Re-Organization (SIP Preparation)
Completed November 2017
2. New Source Review and Registration Permit
Summer 2018
3. NSPS/NESHAP Update
Fall 2018

Background on SIP



- * Pima County Rules were initially approved into the SIP in 1972 to meet requirements of the Clean Air Act
- * Pima County submitted revisions to the SIP in the late 1970's which were approved by EPA in 1980
- * 1994 Pima County submitted major revisions to SIP requesting to replace 1970 rules with the rules current at the time. Requested EPA Make a Low Priority
- * Pima County must revise the SIP to incorporate the current rules

Background on SIP



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- * Pima County must address issues with respect to pre-construction review in the new unitary permit scheme program and submit to EPA (through the State) for approval
 - ADEQ has worked with stakeholders and EPA to correct these issues
 - Pima County will mirror ADEQ's approach to make the current rules approvable

Permit Classes in PCC Title 17



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- * Class I – Major Sources
- * Class II – Minor sources subject to federal NSPS (CAA Section 111) or federal NESHAP (CAA Section 112) standards
- * Class III – Minor Sources subject to local standards only
- * *Class IV – Registration (To Be Developed)*
- * Activity Permits – Fugitive Dust & Asbestos
- * Open Burn Permits

Re-Organization of Title 17



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OLD FORMAT

- * Chapter 17.12: Permits and Permit Revisions
 - * One chapter covered all Permits and Classes of Permits

NEW FORMAT

- * Chapter 17.11: General Provisions
- * Chapter 17.12: Class I Sources
- * Chapter 17.13: Class II and III Sources
- * Chapter 17.14: Activity Permits

New Source Review and Registration Permit



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- * Proposed for Summer 2018
- * Adopt Similar Program to ADEQ for
 - * New Source Review (NSR)
 - * Registration Program (Registration Permit)
- * Needed to Address EPA Region 9 NSR and Minor Source Permitting Deficiencies
- * Submit as Entire Pima County Code Permitting Provisions as SIP Revision to EPA
 - * Sip Submittal Will Have Major and Minor Source Programs Separately
 - * No Redaction Within a Rule for SIP



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WebPage

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- Mr. Grimaldi has been with the Pima County Department of Environmental Quality (PDEQ) for over 20 years. During his time with PDEQ, he has managed the air quality compliance and inspection program, air permitting, environmental rule writing, solid waste and water quality programs.
- Mr. Grimaldi is currently the Deputy Director for PDEQ with oversight of the air, water, and waste programs. Mr. Grimaldi received a Bachelors Degree in Hydrology for the University of Arizona.