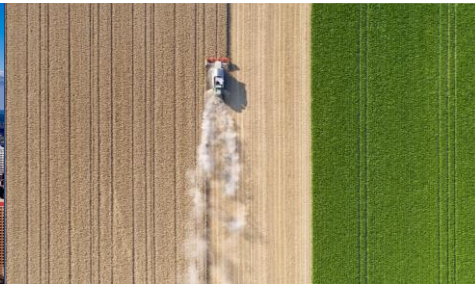# Data Review Kick-Off for the 2022 Emissions Modeling Platform
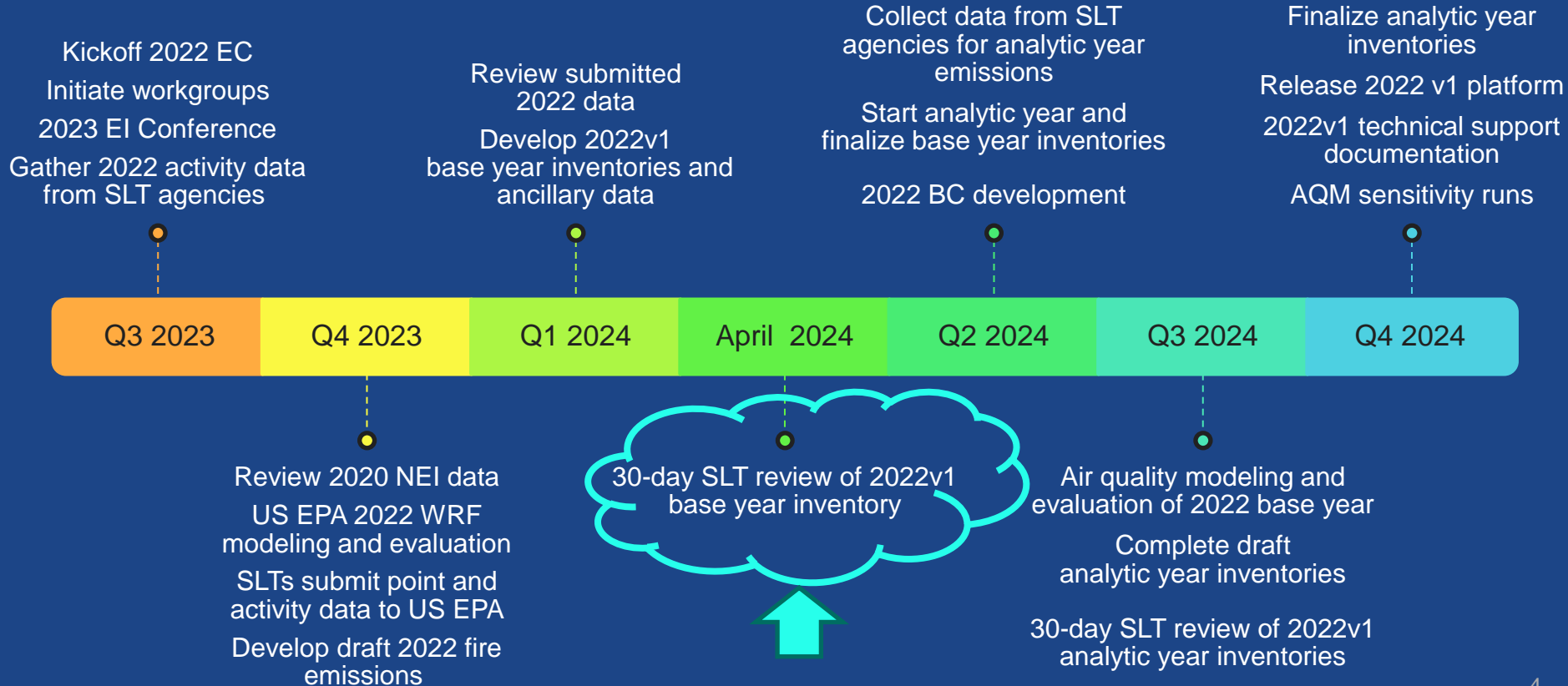
March 27, 2024

Purpose of Today's Meeting

- Review the needs and schedule for developing the 2022v1 EMP.

- Review how stakeholders can access the 2022v1 EMP emissions and related analysis products.

- Review how stakeholders can submit questions or make comments on the 2022v1 EMP.

  - What is the scope of comments we are expecting?

  - How will we address comments that are submitted?

Needs for the 2022 Platform

- A version of the 2022 base year will be used to support AirToxScreen in 2025.

- In addition to base year modeling, the 2022-based platform will support analytic year modeling for 2026, 2032, and 2038.

  - States will use 2026 to develop ozone NAAQS SIPs for Serious nonattainment areas which are due by early CY 2026.

  - 2032 is the appropriate analytic year for areas classified as Severe or will be bumped up to severe in 2027.

  - EPA and states will likely need to perform modeling for 2032 to support PM NAAQS implementation.

  - 2038 is intended to support states in modeling for their third planning period Regional Haze SIPs, which are currently due in summer 2028.

Timeline for 2022v1 Platform Development

Kickoff 2022 EC

Initiate workgroups

2023 EI Conference

Gather 2022 activity data from SLT agencies

Review submitted 2022 data

Develop 2022v1 base year inventories and ancillary data

Collect data from SLT agencies for analytic year emissions

Start analytic year and finalize base year inventories

2022 BC development

Finalize analytic year inventories

Release 2022 v1 platform

2022v1 technical support documentation

AQM sensitivity runs

| Q3 2023 | Q4 2023 | Q1 2024 | April 2024 | Q2 2024 | Q3 2024 | Q4 2024 |

Review 2020 NEI data

US EPA 2022 WRF modeling and evaluation

SLTs submit point and activity data to US EPA

Develop draft 2022 fire emissions

30-day SLT review of 2022v1 base year inventory

Air quality modeling and evaluation of 2022 base year

Complete draft analytic year inventories

30-day SLT review of 2022v1 analytic year inventories

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Why Participate in this Data Review?

- For multiple years, state, local, and tribal agencies have asked for the opportunity to review emissions data prior to its use in regulatory air quality modeling.

    - Due to this, the 2022 Coordination Committee planned to include the data reviews in the process of developing each version of the platform.

- Due to upcoming regulatory needs, the 2022v1 platform is being developed a year earlier than it would have if the normal schedule for base year platforms was followed (*e.g.*, for AirToxScreen).

- The review provides an opportunity for you to ensure that the most accurate data possible is included in the platform.

Status of 2022v1 Base Year Emissions Development

Modeling Platform Sector	Date Available
afdust (Area Fugitive Dust)	April 1
airports	April 1
biogenics	April 1
cmv_c1c2	April 5 or 8
cmv_c3	April 5 or 8
fertilizer	Summer 2024
livestock	April 1
nonpt	April 1
nonroad	April 1
np_oilgas	April 5 or 8

Modeling Platform Sector	Date Available
np_solvents	April 1
onroad	April 1
pt_oilgas	April 1
ptagfire	April 5 or 8
ptegu	April 1
ptfire-rx	April 5 or 8
ptfire-wild	April 5 or 8
ptnonipm	April 1
rail	April 5 or 8
rwc	April 1

Accessing the 2022v1 EMP

- Annual CAP emissions for the base year of the 2022v1 EMP will be available for the April review. Emissions for analytic years will be available in late summer (Q3) of 2024.

- 2022v1 EMP Data Retrieval Tool

  - All onroad, nonroad, and nonpoint data are available at the County-/SCC-level in the "County Level Data" tab.

  - All point data are available at the facility-level in the "Facility Data" tab.

  - Filter data using the magnifying glass icon and sort data by clicking on the header of a column.

  - Download the data by right clicking on the table and selecting "Export data".

- EPA's 2022v1 Emissions Modeling Platform website.

  - Click on "2022v1 Data Files and Summaries" to access FTP site with all EMP data files.

Accessing the 2022v1 EMP Web Site

Air Emissions Modeling

Air Emissions Modeling/Home

Emissions Modeling Platforms

2020-2022 Air Emissions Modeling Platforms

2017-2019 Air Emissions Modeling Platforms

2014-2016 Version 7 Air Emissions Modeling Platforms

2011 Version 6 Air Emissions Modeling Platforms

2022v1 Emissions Modeling Platform

The 2022 Emissions Modeling Platform is based on the 2020 National Emissions Inventory released in the spring of 2023 with updates to better represent 2022. It is being created as a product of the National Emissions Inventory Collaborative and will support multiple regulatory and non-regulatory applications. The modeling platform will contain emissions inventories for 2022, spatial surrogates, temporal profiles, and other ancillary files. The platform will include projection years as well. Version 1 of the 2022 platform is currently being developed. Version 2 of the platform is scheduled to be developed in 2025.

- 2022v1 Data Files and Summaries
- 2022 National Emissions Collaborative Wiki ↗
- View the 2022v1 Emissions Data [coming April 1]

https://www.epa.gov/air-emissions-modeling/2022v1-emissions-modeling-platform

Spreadsheets, data, and maps on the FTP site

Index of /Air/emismod/2022/v1/draft

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[DIR]	oilgas/	2024-02-14 14:18	-	
[DIR]	onroad/	2024-03-25 18:14	-	
[DIR]	point/	2024-03-25 18:14	-	
[DIR]	reports/	2024-03-25 18:14	-	
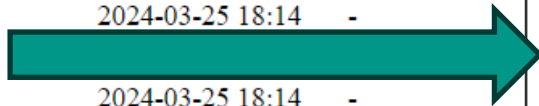
Index of /Air/emismod/2022/v1/draft/point

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[ ]	2022 point out of co..>	2024-02-09 09:17	47K	
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[ ]	SmokeFlatFile_2022_P..>	2024-02-05 14:23	284M	
[ ]	nonegu_norailyard_20..>	2024-02-09 09:49	102M	
[ ]	oilgas_2022_point_20..>	2024-02-09 09:42	37M	
[ ]	point_fac_comparison..>	2024-02-09 09:28	42M	
[ ]	point_unit_compariso..>	2024-02-09 09:30	57M	
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[ ]	railyard_fac_compari..>	2024-02-09 17:24	541K	
[TXT]	railyard_noprojectio..>	2024-02-09 17:29	19M	

Additional information is available on the FTP site for some sectors – specific files vary by sector; gridded maps to be posted after mid-April

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The 2022v1 EMP Data Retrieval Tool: County-Level Data

2022v1 EMP Data Retrieval Tool

Overview   **County Level Data**   Facility Data

2022 County-Level Process Data for Mobile and Nonpoint Emissions

EPA Region	State	State-County	Pollut...	Emission...	SCC C...	EIS Sector
4	North Carolina	NC - Durham	PM25	174.78	2302002200	Commercial Cooking
4	North Carolina	NC - Durham	PM25	155.60	2296000000	Dust - Unpaved Road Dust
4	North Carolina	NC - Durham	PM25	153.78	2294000000	Dust - Paved Road Dust
4	North Carolina	NC - Durham	PM25	89.59	2811015002	Fires - Prescribed Fires
4	North Carolina	NC - Durham	PM25	89.51	2311020000	Dust - Construction Dust
4	North Carolina	NC - Durham	PM25	86.28	2610030000	Waste Disposal
4	North Carolina	NC - Durham	PM25	85.81	2610000500	Waste Disposal
4	North Carolina	NC - Durham	PM25	53.49	2102008000	Fuel Comb - Industrial Boilers, ICEs - Biomass

The 2022v1 EMP Data Retrieval Tool: Facility Data

2022v1 EMP Data Retrieval Tool

| Overview | County Level Data | Facility Data |

2022 Facility-Level Data for Point Emissions

EPA Reg...	State	State-County	Pollut...	Emissio...	Site Name
4	North Carolina	NC - Durham	PM2.5	88.970	MP Durham, LLC (Landfill Gas-to-Energy Proje...
4	North Carolina	NC - Durham	PM2.5	78.890	Duke University
4	North Carolina	NC - Durham	PM2.5	41.844	EAST DURHAM
4	North Carolina	NC - Durham	PM2.5	10.648	Wolfspeed Durham
4	North Carolina	NC - Durham	PM2.5	5.480	Aisin North Carolina Corporation
4	North Carolina	NC - Durham	PM2.5	4.671	Carolina Sunrock LLC - Muirhead Distribution ...
4	North Carolina	NC - Durham	PM2.5	3.484	SCM Metal Products, Inc.
4	North Carolina	NC - Durham	PM2.5	2.673	LAKE RIDGE AERO PARK

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Suggestions for Data Review

1. Use the 2022v1 EMP Data Retrieval Tool and filter inventory for your geographic area of interest (State, County, etc.).

    a) If you are interested in reviewing a particular sector (e.g., O&G) or data category (e.g., onroad), further filter the inventory.

2. Download the data you filtered and perform review.

    a) For example, compare the magnitude of emissions across sectors and/or SCCs. Do results match expectations?

Live Tutorial of
2022v1 EMP Data Retrieval Tool

Submitting comments on the 2022v1 EMP

- To organize and triage comments for the 2022v1 EMP, EPA is using a SharePoint site.

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Gaining Access to the SharePoint

- Access to the site must be granted by EPA staff:

  - To gain access, please send an email to emissionsmodeling@epa.gov with "2022v1 EMP Comment Access" in the title.

  - Please include your name and the email address you would like the access link to be sent to.

  - Your access will be limited to the general site, submitting a comment, editing your comments, reading all comments, and downloading all comments.

  - If you need to delete a comment, please email emissionsmodeling@epa.gov.

Gaining Access to the SharePoint

- You will then receive an email from either Karl Seltzer, Alison Eyth, or Lindsay Dayton with a title: "Seltzer, Karl is inviting you to collaborate on Comments on the 2022v1 EMP" (or similar).

- The contents of the email will be short, and the SharePoint can be accessed by clicking on the "Comments on the 2022v1 EMP" hyperlink.

Here's the site that Seltzer, Karl shared with you.

Go to Comments on the 2022v1 EMP

Follow this site to get updates in your newsfeed.

The 2022v1 EMP SharePoint

- The main page features buttons that link to the form for submitting comments, a document on comment submitting instructions, a link to the Data Retrieval Tool, a FAQ document, and a link to the 2022v1 Wiki.

- The posting date of modeling platform sectors to the Data Retrieval Tool will be included in a table on the main page.


Comment on the 2022v1 EMP
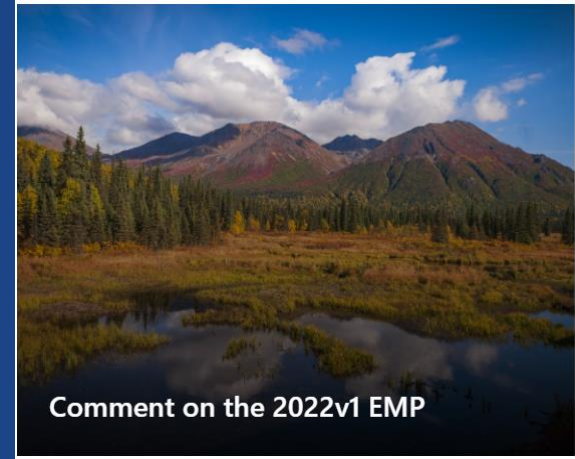
Sectors now available for comment:

Modeling Platform Sector	Date Available
afdust (Area Fugitive Dust)	
airports	
biogenics	
cmv_c1c2 (C1 & C2 Commercial Marine Vehicles)	
cmv_c3 (C3 Commercial Marine Vehicles)	

How to Submit Comments on the 2022v1 EMP

- After clicking on the "Comment on the 2022v1 EMP" button, users will be taken to an interactive table of existing comments. Users can sort, filter, or download all existing comments (this may help you in your review, as well).

Submit a 2022v1 EMP Comment ☆ ⊘				
Name ∨	Date ↓ ∨	Organization ∨	Email ∨	EIS Sector ∨
Karl Seltzer	03/20/2024 01:40 PM	USEPA	seltzer.karl@epa.gov	Dust - Paved Road Dust
Karl Seltzer	03/14/2024 03:49 PM	USEPA	seltzer.karl@epa.gov	Mobile - Non-Road Equipment - Ga

- To submit a comment, a user must click the **+ New** button at the top.

Submitting a Comment

- A form will pop-up (see right) and the user should enter their name, organization, email, the EIS Sector associated with their comment, geographic scope of their comment, and a brief description (< 3 sentences).

  - Please submit a separate form entry for each comment.

  - Please attach spreadsheet (5 MB limit) to submission with data downloaded from the Retrieval Tool associated with comment.

Live Tutorial of 2022v1 EMP SharePoint

Prioritizing/Informing Your Review

- Focus on your emission sectors of expertise and important sources in your region.

- Consider discussing priority sectors for review with your MJO.

- If you submitted data, verify that they are included / reflected.

- Confirm that the emissions are reasonable for your region.

- Review the provided documentation to understand how the emissions were developed.

Scope of Expected Comments and Responses

- EPA will review comments in May – June, have follow up discussions with commenters, as needed, and make appropriate updates to the inventory.

- The base year inventory will be finalized before the end of June.

- Time will not permit us to make "large" (e.g., methodological) updates to emissions estimates or the inventory.

- Examples of comments that could be addressed in the May – June window:

  - Remove duplicated rows for airports
  - Use 2020 NEI "as is" for RWC
  - Apply consent decrees for facilities
  - Abandoned oil and gas wells were capped
  - Expected decrease but saw increase

  - Facility name needs updating
  - CMV emissions >> 2020 NEI; why?
  - List of facility or unit closures
  - Prescribed fires missing

To Update Point Sources for which your Agency is Responsible for Submitting

- If you need to make updates to point source facility inventory or emissions for which your agency is responsible, you can upload changes directly into the Emissions Inventory System (EIS).

    - This includes changes to facility information (e.g., name, stack parameters, stack locations), installed control devices, and emissions.

- EPA will determine whether PM and HAP augmentation needs to be updated.

- Please submit a comment to the tracking system so that we are aware that changes were made.

- If you notice an issue for a point source that you are not responsible for, please submit a comment.
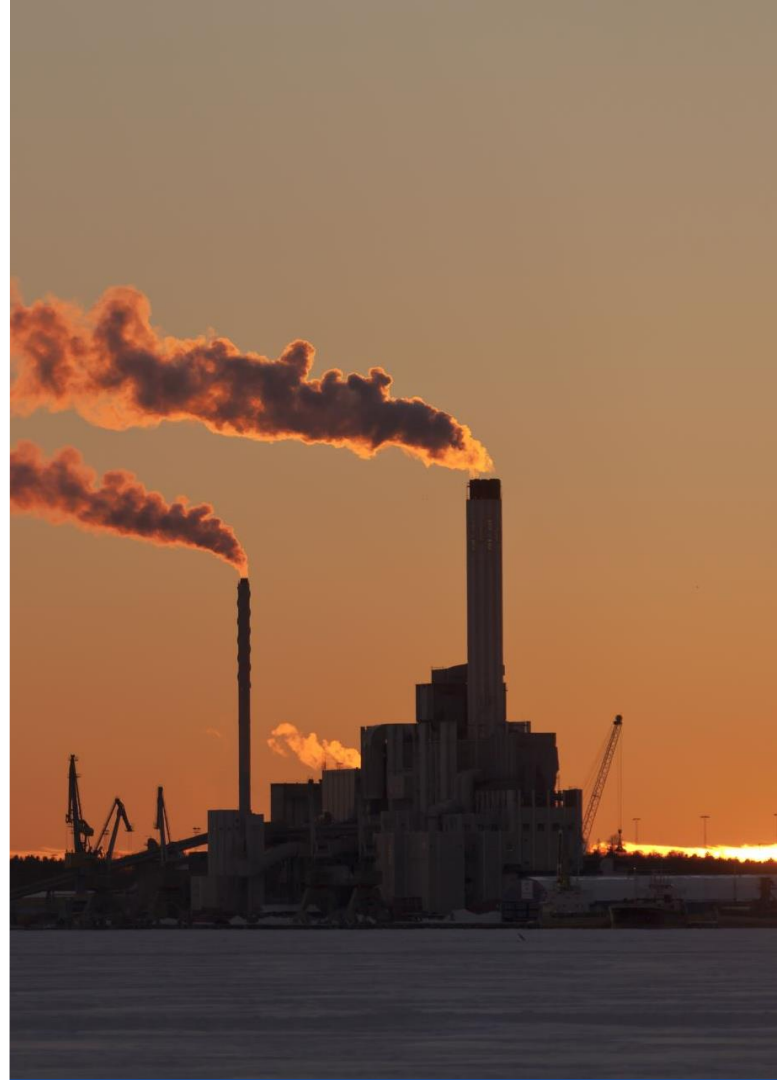
Point source emissions not submitted for 2022 and not closed are pulled forward from 2021 or 2020

C	D	E	H	I	J	K	N	Q	T	U	X
region_	facility_name	facility_	poll	val_2020f	val_2021	val_2022	ci_2022	ds_2022	cy_2022	fst_2020f	fstdesc_2020ha
01097	THEODORE	14422411	NOX	9.36	9.36	9.83		2020EPA_Rail	2020	151	Rail Yard
01097	Caterpillar, Inc.	16642911	NOX	5.75	0.00	0.00		2021ADEM;2021EPA_PM	2021		2021 pulled forward
01101	CHESTER	14422911	NOX	9.36	9.36	9.83		2020EPA_Rail	2020	151	Rail Yard
01101	DC Alabama, Inc.	867511	NOX	137.20						167	Ferroalloy Plant
01101	DC Alabama, Inc.	867511	PM25-PRI	84.78		Closed before 2021		Facility source type:		167	Ferroalloy Plant
01101	DC Alabama, Inc.	867511	SO2	168.23						167	Ferroalloy Plant
01117	CALERA	14423611	NOX	9.36	9.36	9.83		2020EPA_Rail	2020	151	Rail Yard
01117	Grede II LLC - Columbiana	888911	PM25-PRI	7.58	7.58	7.58		2020ADEM;2020EPA_PM	2020	139	Foundries, Iron and Ste
01117	Grede II LLC - Columbiana	888911	VOC	4.10	4.10	4.10		2020ADEM;2020EPA_PM	2020	139	Foundries, Iron and Ste
04013	Honeywell International Inc	1090911	NOX	36.72	36.72	36.72		2020Maricopa	2020	160	Aircraft, Aerospace, or
04013	Honeywell International Inc	1090911	VOC	24.94	24.94	24.94		2020Maricopa	2020	160	Aircraft, Aerospace, or
04013	Trendwood Inc	1120311	VOC	33.05	33.05	33.05		2020Maricopa	2020		2020 pulled forward
04013	Butterfield Station Facility	1120511	NOX	18.35	18.35	18.35	217	2020Maricopa	2020	104	Landfill
04013	Butterfield Station Facility	1120511	VOC	12.71	12.71	12.71	217	2020Maricopa	2020		Rail yards, landfills,
04013	Oak Canyon Manufacturing Inc	1121211	VOC	78.34	78.34	78.34		2020Maricopa	2020		military pulled forward
04013	Luke AFB - 56th Fighter Wing	1134911	NOX	4.40	4.40	4.40	99	2020Maricopa	2020	102	Military Base
04013	Luke AFB - 56th Fighter Wing	1134911	PM25-PRI	3.96	3.96	3.96	99	2020Maricopa	2020	102	Military Base
04013	Luke AFB - 56th Fighter Wing	1134911	VOC	8.73	8.73	8.73	99	2020Maricopa	2020	102	Military Base
04013	APS West Phx Power Plant	1139111	PM25-PRI	9.05	4.60	4.60		2021Maricopa	2021	125	Electricity Generation
04013	Salt River Project - Agua Fria Gene	1139311	PM25-PRI	3.55	3.34	3.34		2021Maricopa	2021	125	Electricity Generation
04013	Salt River Project - Kyrene Genera	1139411	NOX	50.66	50.66	0.52		2020Maricopa	2020	125	Electricity Generation
04013	Salt River Project - Kyrene Genera	1139411	PM25-PRI	20.77	20.77	0.40		2020Maricopa	2020	125	Electricity Generation

Data source

2021 pulled forward

See cy_2022 in the point_fac_comparison.xlsx at https://gaftp.epa.gov/Air/emismod/2022/v1/draft/point/

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Upcoming Opportunities for Engagement through May 1

- EGU task force / workgroup meeting: March 28 and April 25 at 2PM Eastern

- Marine / air / rail task force meeting: March 28 and April 25 at 3PM Eastern

- National Oil and Gas Workgroup: April 11 at 2PM Eastern

- MJO MOVES workgroup: April 18 at 2PM Eastern

- 2022 Platform Fire workgroup: April 29 at 2PM Eastern

- Review of spatial, temporal and speciation data (contact Byeong Kim at GA DNR)

- National Emissions Collaborative Quarterly Report Out: May 1 at 2PM Eastern
  - In addition to emissions, this call will also include information on meteorological data, boundary conditions, and plans for air quality modeling; **Click here to join the meeting**

- If you need one of these invites, email emissionsmodeling@epa.gov

Best Practices for Submitting Comments

- If you think you are likely to submit comments or want to see other people's comments, get your SharePoint access set up early (even this week) so that you have it when you are ready to submit your comments.

- This is a less formal process than submitting comments to regulations.gov, so the earlier we see the comments and questions the more time we will have to ask clarifying questions and address them – please don't wait until April 30.

- Be ready to get started April 1