Anticipated NAAQS Revisions and Monitoring Network Changes

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Air Quality Advisory Council Meeting

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Monitoring Network Changes

- Current Site Status
- Last FY's Network Changes
- Next FY's Network Changes
- Recent Challenges

Site Status

- 35 Total Sites – 1 under construction, 1 used as storage

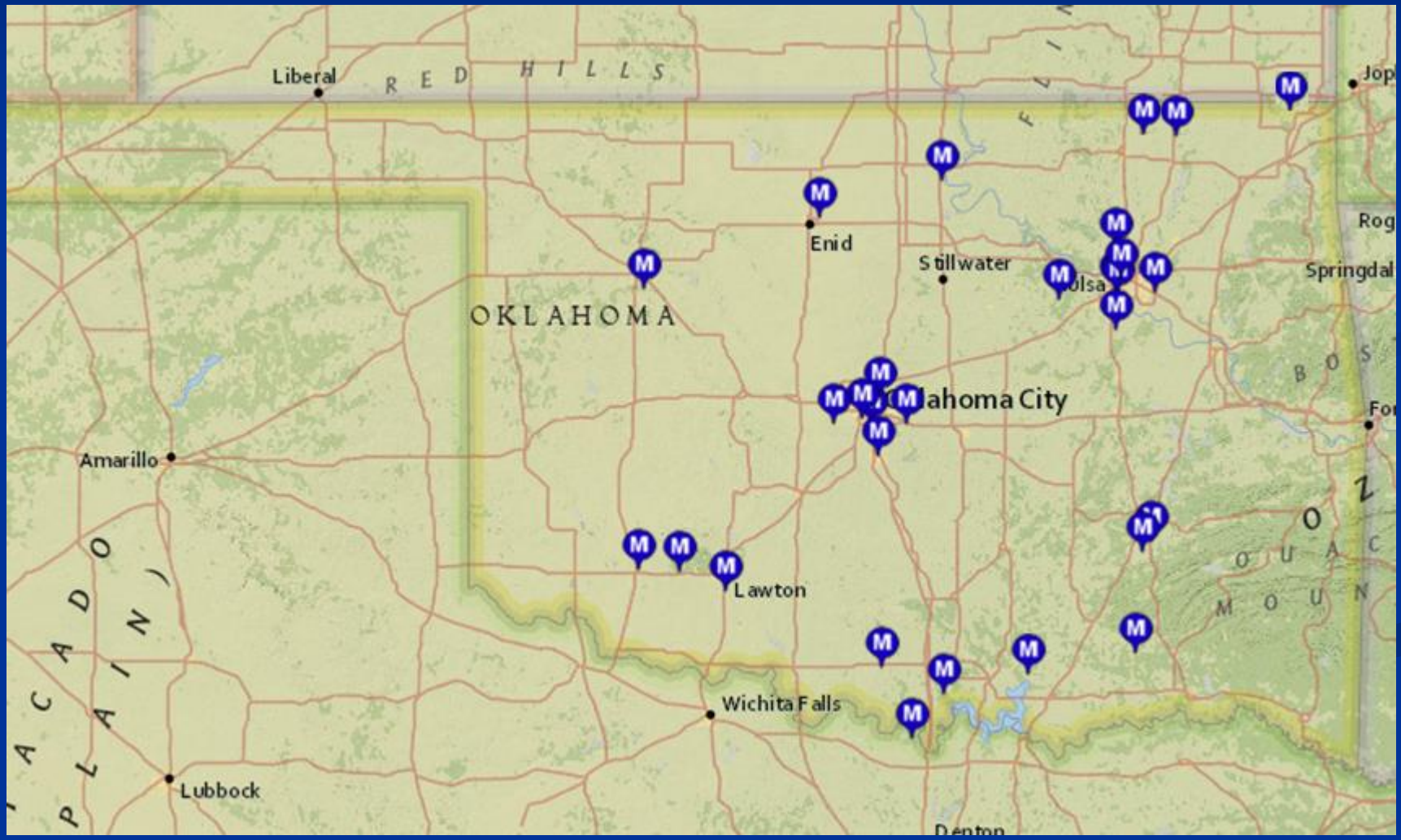
	OKC Metro Sites		
Site #	Site Name	City	Pollutants
035	OKC Firestation	OKC	PM10, PM2.5
049	Moore	Moore	O3, PM2.5
096	Choctaw	Choctaw	O3
097	Will Rogers Park	OKC	CO, PM2.5, NO2, Black Carbon
101	Yukon	Yukon	O3
1037	OKC	North OKC	CO, O3, PM10, PM2.5, SO2, NO2, Toxics
VG	Myriad Garden	OKC	O3, PM2.5

	Tulsa Metro Sites		
Site #	Site Name	City	Pollutants
144	Mannford	Mannford	O3
174	Glenpool	Glenpool	O3, PM2.5
175	Tulsa	Tulsa	SO2, H2S
178	Lynn Lane	East Tulsa	O3
179	Tulsa Riverside	Tulsa	Storage
235	Tulsa	Tulsa	SO2, H2S, Toxics
226	Skiatook	Skiatook	O3
1127	Tulsa(NCore)	North Tulsa	CO, NO2, NOy, O3, PM10, PM2.5, SO2, NATTS Toxics

	Other Sites		
Site #	Site Name	City	Pollutants
207	Okla Union School	Lenapah	O3, PM2.5
217	Copan	Copan	O3
297	Healdton	Healdton	O3, PM2.5
300	Burneyville	Burneyville	O3
313	OU Bio Station	Willis	O3 - Under Construction
324	Tish - Murray St.	Tishomingo	O3
415	McAlester	McAlester	O3, PM2.5, PM10
416	Savanna	Savanna	Lead
555	Kremlin	Kremlin	SO2
604	Ponca City	Ponca	SO2, PM2.5
651	Lawton	Lawton	O3, PM2.5
671	Waurika	Waurika	O3
711	Great Plains	Mountain Park	O3, NO2
860	Seiling	Seiling	O3, PM2.5
1074	Kessler	Woody Chapel	O3
522	Commerce	Commerce	Toxics
OK01	McGee Creek	Lane	Hg
OK04	Lake Murray	Ardmore	Hg
OK06	Wichita Mtns	Cache	Hg
OK31	Copan	Copan	Hg

Site Status

- 35 Total Sites – Map View



Last FY's Network Revisions

- **Red River Ozone**

Out - Burneyville, Great Plains

In - Tishomingo, Healdton, Waurika

- **Commerce Site**

Toxics monitoring partnership with the Quapaw Nation.

- **Savanna and Glenpool Relocation**

Needed due to siting criteria issues.

Next FY's Network Revisions

- **Flint Hills Special Purpose**

Out – Union Site

In – Copan Site

- **PAMS Expansion** at Tulsa NCore Site 1127

>1 mil population CBSA

- **Tulsa Near Road** (NO2/PM2.5/Bk Carbon)

>500 K population CBSA & traffic count

Recent Challenges

- **Personnel woes**

From the beginning of FY22 to the end of FY22, total Monitoring staff experience declined from 192 years to 62 years (now back up to 78 years).

- **Instruments, repairs and supply delays**

Supply chain and purchasing problems have increased the time to get the network up and running smoothly. Constant need to be proactive!

Anticipated NAAQS Revisions

New Proposed $PM_{2.5}$ NAAQS Standard

- On January 6, 2023, EPA announced its proposed revision to the annual $PM_{2.5}$ standard from its current level of 12.0 µg/m^3 to within the range of 9.0 to 10.0 µg/m^3. EPA also proposed not to change the current:
  - secondary (welfare-based) annual $PM_{2.5}$ standard,
  - primary and secondary 24-hour $PM_{2.5}$ standards, and
  - primary and secondary PM_{10} standards.
- In addition, EPA proposed revisions to other key aspects related to the PM NAAQS, including revisions to the Air Quality Index (AQI) and monitoring requirements

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Calculation and Anticipated Timeline

- Annual mean, averaged over 3 years.
  - Ex:

Site #		2020 Mean	2021 Mean	2022 Mean	Annual Design Value
40-109-0035	N.W. 5TH AND SHARTEL, OKLAHOMA CITY	7.2	8.4	7.4	7.7

- The anticipated level is still under consideration by EPA.
  - Public comments have been received.
  - EPA expects to issue a final decision on the PM standards next year.
  - Attainment designations are generally made within 2 years of setting/revising a NAAQS.

Current Standing vs Anticipated

Site #	Location	2020 Mean	2021 Mean	2022 Mean	Annual Design Value
40-019-0297	Healdton	9.2	9.0	7.7	8.7
40-027-0049	Moore	9.9	11.1	9.9	10.3
40-031-0651	Lawton	7.4	8.6	8.1	8.0
40-043-0860	Seiling	7.3	7.9	7.8	7.7
40-071-0604	Ponca City	9.4	11.7	8.6	9.9
40-109-0035	Oklahoma City @ Downtown	7.2	8.4	7.4	7.7
40-109-0097	Oklahoma City @ Will Rogers Park	9.6	11.2	9.4	10.1
40-109-1037	Oklahoma City @ Oklahoma Chistian Campus	9.9	10.7	9.5	10.0
40-121-0415	McAlester	8.2	9.7	8.8	8.9
40-143-0174	Glenpool	8.9	10.1	8.5	9.2
40-143-1127	Tulsa @ 36th & Peoria	8.1	9.9	9.0	9.0

Complications

- Continuous particulate analyzers originally designated as being equivalent to the Federal Reference Method have been seen to have a high bias.
- EPA has permitted the manufacturer of these devices to release firmware that will correct this going forward.
- This will not be retroactive, and will not correct already collected data.
  - However, EPA has taken comments on this issue from many states, and has expressed that they do plan to address this in the final rule.

Questions?

- Ryan Biggerstaff – 405-702-4141 (Monitoring East)
- Bryan Sims – 405-702-4139 (Monitoring West)