Episode 56MT December 9, 2023. PM2.5 Snapshot of Madison, Wisconsin shows the hyperlocalization of PM2.5 above NAAQS, & a possible explanation is hyperlocalized indoor residential wood burning.

Madison Wisconsin Self-Selected PM2.5

monitoring by residents purchasing a PurpleAir PM2.5 monitor, possibly because they had an indoor residential wood burning neighbor. 3 day Average PM2.5 from 9:50AM 12/6/2023 to 10AM 12/9/2023 LaFollette High School is only above 12 micrograms per meter cubed, at 16. Lafollette's monitor is not near residential houses that could do indoor residential wood burning. Wexford Village is elder housing only above 12 micrograms per meter cubed. that is also not near residential houses that could do indoor residential wood burning. Elmside Circle is on the East Side of Madison and at 21 micrograms per meter cubed, near a cutoff measurement of 25 micrograms per meter cubed. Sasy 7a is near Sasy 1, 3 & 6 and Elmside Circle, and iat 20 micrograms per meter cubed is 15, 7, 16 & 1 below the other Sasy readings of Sasy 1, Sasy 3, Sasy 6 & Elmside Circle. Hyper localization of PM2.5 monitors show that there is great variability of air quality within the small confines of Madison, Wisconsin, which is 77 square milles of land. 18 PurpleAir PM2.5 Monitors in Madison. Wisconsin. 4 or 22% averaged above 12 ug/m3, 7 or 38% averaged above 25 ug/m3, 7 or 38 averaged above 35 ug/m3 the 24 hour NAAQS limit over 3 days. LaFollette High School A: 16 ug/m3, LAWD4 A: 32 ug/m3, LAWD 7 A: 39 ug/m3, LAWD5 A: 33 ug/me, 950 Clarence Ct A:35 ug/m3, Dudgeon-Monroe A: 35 ug/m3, LAWD6 A: 36 ug/m3, Faircrest A: 34 ug/m3, Wexford Village - Madison A: 19 ug/m3, LAWD2 A: 36 ug/m3, MNA WilMar Location A: 32 ug/m3, SASY 6 A: 28 ug/m3, SASY 1A: 20 ug/m3, Elmside Circle Park A: 21 ug/m3, Sasy 7a A: 20 ug/m3, SASY 3b A: 27 ug/m3, GoPackOutside A: 28 ug/m3, Elinor and Gary A: 42 ug/m3

PM2.5 Readings (correlated to EPA Regulatory PM2.5 monitor data with a simple mathematical formula PA times 0.504 plus 1/8314) average over 3 days to 5<sup>th</sup> 32.51015 decimal point. 16.79515 39.0639 33.26015 35.40265 35.4539 36.8014 34.41515 19.70765 36.3864 32.61515 28.7564 35.9939 21.21015 20.11515 27.3989 28.4764 42.0314

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
LaFollette	LAWD4 A	LAWD 7 A	LAWD5 A	950 Claren	Dudgeon-I	LAWD6 A	Faircrest A	Wexford V	LAWD2 A	MNA Will	SASY 6 A	SASY1A A	Elmside Ci	Sasy7a A	SASY 3b A	GoPackOu	Elinor and	Gary A
16.79515	32.51015	39.0639	33.26015	35.40265	35.4539	36.8014	34.41515	19.70765	36.3864	32.61515	28.7564	35.9939	21.21015	20.11515	27.3989	28,4764	42.0314	
Episode 56	MT Decem	ber 9, 2023	. PM2.5 Sr	apshot of M	Aadison, W	isconsin sh	ows the hy	perlocalizat	tion of PM2	2.5 above N	AAQS, & a	possible ex	planation is	hyper-load	lized indoo	r residentia	al wood bu	rning.
Madison W	/isconsin	Self-Select	ed PM2.5	monitoring l	by resident	purchasin	g a PurpleA	ir PM2.5 m	onitor. 3 da	ay Average	PM2.5 from	n 9:50AM 1	2/6/2023 to	o 10AM 12/	9/2023			
LaFollette	High Schoo	l is only ab	ove 12 mic	rograms per	meter cub	ed, at 16. I	afollette's	monitor is	not near re	sidential ho	uses that o	could do inc	door resider	ntial wood l	burning.			
Wexford V	illage is eld	er housing	only above	12 microgr	ams per me	eter cubed.	that is also	not near r	esidential l	nouses that	could do in	ndoor resid	ential wood	burning.				
Elmside Cir	cle is on th	e East Side	of Madiso	n and at 21	microgram	s per mete	r cubed, ne	ar a cutoff	measurem	ent of 25 m	icrograms	per meter o	ubed.					
Sasy 7a is r	ear Sasy 1	, 3 & 6 and	Elmside Cir	rcle, and iat	20 microgr	ams per m	eter cubed	is 15, 7, 16	& 1 below	the other Sa	asy reading	s of Sasy 1,	Sasy 3, Sas	y 6 & Elmsid	de Circle.			
Hyper loca	lizaton of F	M2.5 mon	itors show	that there is	s great vari	ability of a	r quality w	ithin the sm	all confine	s of Madiso	n, Wiscons	sin, which is	77 square	milles of lar	nd.			
18 PuprleA	ir PM2.5 M	lonitors in N	Madison. V	Visconsin. 4	or 22% ave	raged abov	ve 12 ug/m	3, 7 or 38%	averaged a	above 25 ug	/m3, 7 or 3	38 averaged	above 35	ug/m3 the 2	4 hour NA	AQS limit or	ver 3 days.	

