DGS School Indoor Air Quality Monthly Report

Month and Year Reporting: January 2022

Building Number	School Name	Operating Air cleaners QTY	Last Classroom Filter Change (HEPA)	Next Classroom Filter Change (HEPA)	Percent of PM2.5 Events	Maximum CO2 Level Over the Month (PPM) (2)	Maximum CO2 Level Cleaned within 90 minutes (Y/N)	Average CO2 Level Over the Month (PPM) (3)	CO2 Ventilation Range Per Average CO2 (4)	Air Quality Score (Combined PM 2.5 and CO2 Ventilation) (5)	Infection Risk of Airborne Virus (Wells-Riley) (6)	Comments
202	Aiton	49	11/2021	06/2022	0%	1918	Y	505	CO2 within 10%	Excellent	-	
203	Amidon	38	11/2021	06/2022	0%	1111	Y	471	CO2 within 10%	Excellent	-	
450	Anacostia	54	11/2021	06/2022	0%	789	Y	458	CO2 within 10%	Excellent	-	(7) 592 PPM
452	Ballou/Ballou STAY	114	11/2021	06/2022	0%	1056	Y	441	CO2 within 10%	Excellent	-	(7) 690 PPM
204	Bancroft	58	11/2021	06/2022	0%	1035	Y	483	CO2 within 10%	Excellent	-	
402	Banneker	56	11/2021	06/2022	0%	1556	Y	492	CO2 within 10%	Excellent	-	
205	Barnard	53	11/2021	06/2022	0%	1447	Y	510	CO2 within 10%	Excellent	-	
206	Beers	50	11/2021	06/2022	0%	2370	Y	469	CO2 within 10%	Excellent	-	
208	Birney	54	11/2021	06/2022	0%	3973	Y	493	CO2 within 10%	Good	-	
291	Boone(fomerly Orr ES)	45	11/2021	06/2022	0%	1541	Y	500	CO2 within 10%	Excellent	-	
212	Brent	36	11/2021	06/2022	0%	3743	Y	528	CO2 within 10%	Good	-	
213	Brightwood	49	11/2021	06/2022	0%	1769	Y	460	CO2 within 10%	Excellent	-	
347	Brookland	49	11/2021	06/2022	0%	2262	Y	466	CO2 within 10%	Excellent	-	
404	Browne	73	11/2021	06/2022	0%	2016	Y	494	CO2 within 10%	Excellent	-	
296	Bruce Monroe@Park View	51	11/2021	06/2022	0%	1824	Y	472	CO2 within 10%	Excellent	-	
219	Bunker Hill	48	11/2021	06/2022	0%	1395	Y	446	CO2 within 10%	Excellent	-	
476	Burdick- Dorothy Height	37	11/2021	06/2022	0%	644	Y	456	CO2 within 10%	Very Good	-	(7) 1805 PPM
220	Burroughs	43	11/2021	06/2022	0%	1220	Y	464	CO2 within 10%	Excellent	-	
221	Burrville	37	11/2021	06/2022	0%	1270	Y	455	CO2 within 10%	Excellent	-	
360	Capitol Hill Montessori School @ Logan	41	11/2021	06/2022	0%	1669	Y	544	CO2 within 10%	Excellent	-	
454	Cardozo	81	11/2021	06/2022	0%	1771	Y	469	CO2 within 10%	Excellent	-	
224	Cleveland	32	11/2021	06/2022	0%	1394	Y	483	CO2 within 10%	Very Good	-	(7) 864 PPM
442	Columbia Heights(CHEC)	99	11/2021	06/2022	0%	748	Y	440	CO2 within 10%	Excellent	-	(7) 814 PPM
227	Cooke, H.D.	44	11/2021	06/2022	0%	1087	Y	477	CO2 within 10%	Excellent	-	
455	Coolidge HS & Wells MS	68	11/2021	06/2022	0%	2620	Y	564	CO2 within 25%	Very Good	-	(7) 704 PPM
229	Davis	43	11/2021	06/2022	0%	1675	Y	518	CO2 within 10%	Excellent	-	(7) 1174 PPM
405	Deal	77	11/2021	06/2022	0%	1650	Y	470	CO2 within 10%	Excellent	-	
231	Drew	46	11/2021	06/2022	0%	1458	Y	465	CO2 within 10%	Excellent	-	
471	Duke Ellington School of the Arts	92	11/2021	06/2022	0%	1237	Y	459	CO2 within 10%	Excellent	-	
467	Dunbar	77	11/2021	06/2022	0%	2535	Y	567	CO2 within 25%	Very Good	-	
457	Eastern	93	11/2021	06/2022	0%	935	Y	467	CO2 within 10%	Excellent	-	
232	Eaton	35	11/2021	06/2022	0%	2000	Y	642	CO2 within 45%	Good	-	(7) 910 PPM
407	Eliot-Hine	38	11/2021	06/2022	0%	999	Y	453	CO2 within 10%	Excellent	-	
409	School Without Walls	50	11/2021	06/2022	0%	2058	Y	484	CO2 within 10%	Excellent	-	
208	Garfield	44	11/2021	06/2022	0%	1376	Y	485	CO2 within 10%	Very Good	-	(7) 777 PPM
239	Garrison	38	11/2021	06/2022	0%	772	Y	467	CO2 within 10%	Excellent	-	
242	Goding	46	11/2021	06/2022	0%	3089	Y	553	CO2 within 25%	Very Good	-	
246	Hardy	56	11/2021	06/2022	0%	1126	Y	480	CO2 within 10%	Excellent	-	
247	Harris, C.W.	37	11/2021	06/2022	0%	949	Y	460	CO2 within 10%	Excellent	-	
413	Hart	82	11/2021	06/2022	0%	1512	Y	429	CO2 within 10%	Excellent	-	(7) 786 PPM
258	Hearst	35	11/2021	06/2022	0%	863	Y	453	CO2 within 10%	Excellent	-	
249	Hendley	43	11/2021	06/2022	0%	1357	Y	460	CO2 within 10%	Excellent	-	
251	Houston	46	11/2021	06/2022	0%	2652	Y	554	CO2 within 25%	Very Good	-	
252	Hyde-Addison	31	11/2021	06/2022	0%	2108	Y	510	CO2 within 10%	Excellent	-	
254	Janney	55	11/2021	06/2022	0%	1287	Y	496	CO2 within 10%	Excellent	-	(7) 797 PPM
415	Jefferson Middle School Academy	50	11/2021	06/2022	0%	1703	Y	466	CO2 within 10%	Excellent	-	
416	Johnson, John Hayden	51	11/2021	06/2022	0%	830	Y	433	CO2 within 10%	Excellent	-	(7) 673 PPM
421	Kelly Miller	54	11/2021	06/2022	0%	1293	Y	456	CO2 within 10%	Excellent	-	
257	Ketcham	40	11/2021	06/2022	0%	1138	Y	455	CO2 within 10%	Excellent	-	
272	Key	33	11/2021	06/2022	0%	2233	Y	480	CO2 within 10%	Excellent	-	
259	Kimball	40	11/2021	06/2022	0%	1019	Y	484	CO2 within 10%	Excellent	-	
344	King, M.L.	41	11/2021	06/2022	0%	1378	Y	446	CO2 within 10%	Excellent	-	
417	Kramer	45	11/2021	06/2022	0%	1174	Y	463	CO2 within 10%	Excellent	-	
261	Lafayette	65	11/2021	06/2022	0%	1702	Y	498	CO2 within 10%	Excellent	-	
262	Langdon	44	11/2021	06/2022	0%	1535	Y	470	CO2 within 10%	Excellent	-	
418	Langley	51	11/2021	06/2022	0%	2407	Y	495	CO2 within 10%	Excellent	-	
264	LaSalle-Backus	44	11/2021	06/2022	0%	971	Y	463	CO2 within 10%	Excellent	-	
266	Leckie	45	11/2021	06/2022	0%	1677	Y	478	CO2 within 10%	Excellent	-	
271	Ludlow-Taylor	44	11/2021	06/2022	0%	2151	Y	491	CO2 within 10%	Excellent	-	
884	Luke C. Moore Alternative	32	11/2021	06/2022	0%	925	Y	452	CO2 within 10%	Excellent	-	
420	MacFarland	47	11/2021	06/2022	0%	2104	Y	493	CO2 within 10%	Excellent	-	
308	Malcolm X @ Green	47	11/2021	06/2022	0%	1633	Y	478	CO2 within 10%	Excellent	-	
273	Mann	40	11/2021	06/2022	0%	1532	Y	460	CO2 within 10%	Excellent	-	
284	Marie Reed	47	11/2021	06/2022	0%	2206	Y	518	CO2 within 10%	Excellent	-	
274	Maury	49	11/2021	06/2022	0%	1130	Y	593	CO2 within 25%	Very Good	-	(7) 619 PPM
458	McKinley	50	11/2021	06/2022	0%	1612	Y	465	CO2 within 10%	Excellent	-	
278	Meyer	44	11/2021	06/2022	0%	2549	Y	503	CO2 within 10%	Excellent	-	
280	Miner	48	11/2021	06/2022	0%	1684	Y	495	CO2 within 10%	Excellent	-	
285	Moten	59	11/2021	06/2022	0%	1696	Y	439	CO2 within 10%	Excellent	-	
287	Murch	55	11/2021	06/2022	0%	1631	Y	472	CO2 within 10%	Excellent	-	
288	Nalle	49	11/2021	06/2022	0%	970	Y	452	CO2 within 10%	Excellent	-	
290	Noyes	34	11/2021	06/2022	0%	867	Y	441	CO2 within 10%	Excellent	-	
201	Oyster-Adams Bilingual School (Adams)	36	11/2021	06/2022	0%	1231	Y	470	CO2 within 10%	Excellent	-	
292	Oyster-Adams Bilingual School (Oyster)	31	11/2021	06/2022	0%	1231	Y	467	CO2 within 10%	Excellent	-	
294	Patterson, W. B.	39	11/2021	06/2022	0%	1416	Y	500	CO2 within 10%	Excellent	-	
295	Payne	50	11/2021	06/2022	0%	1616	Y	513	CO2 within 10%	Excellent	-	
301	Peabody(Capitol Hill Cluster)	25	11/2021	06/2022	0%	1760	Y	477	CO2 within 10%	Excellent	-	
478	Phelps ACE	57	11/2021	06/2022	0%	1427	Y	446	CO2 within 10%	Excellent	-	
299	Plummer	40	11/2021	06/2022	0%	1255	Y	520	CO2 within 10%	Excellent	-	
300	Powell	48	11/2021	06/2022	0%	2051	Y	507	CO2 within 10%	Excellent	-	
316	Randle Highlands	44	11/2021	06/2022	0%	933	Y	453	CO2 within 10%	Excellent	-	
304	River Terrace	39	11/2021	06/2022	0%	982	Y	471	CO2 within 10%	Excellent	-	
436	Ron Brown College Preparatory	50	11/2021	06/2022	0%	1471	Y	468	CO2 within 10%	Excellent	-	
459	Roosevelt STAY	75	11/2021	06/2022	0%	1188	Y	463	CO2 within 10%	Excellent	-	(7) 639 PPM
305	Ross	16	11/2021	06/2022	0%	1693	Y	500	CO2 within 10%	Excellent	-	
307	Savoy	48	11/2021	06/2022	0%	1079	Y	466	CO2 within 10%	Excellent	-	
243	School Without Walls HS	39	11/2021	06/2022	0%	1963	Y	534	CO2 within 10%	Excellent	-	
309	Seaton	50	11/2021	06/2022	0%	2342	Y	460	CO2 within 10%	Very Good	-	(7) 680 PPM
313	Shepherd	41	11/2021	06/2022	0%	1248	Y	476	CO2 within 10%	Excellent	-	
315	Simon	36	11/2021	06/2022	0%	1077	Y	451	CO2 within 10%	Excellent	-	
256	Smothers Swing(Kenilworth)	36	11/2021	06/2022	0%	1575	Y	291	CO2 within 10%	Very Good	-	(7) 813 PPM
427	Sousa	58	11/2021	06/2022	0%	1106	Y	436	CO2 within 10%	Excellent	-	
319	Stanton	53	11/2021	06/2022	0%	3793	Y	529	CO2 within 10%	Very Good	-	
320	Stevens	26	11/2021	06/2022	0%	1059	Y	471	CO2 within 10%	Excellent	-	
321	Stoddert	39	11/2021	06/2022	0%	2312	Y	502	CO2 within 10%	Excellent	-	
428	Stuart-Hobson(Capitol Hill Cluster)	51	11/2021	06/2022	0%	1970	Y	508	CO2 within 10%	Excellent	-	
324	Takoma	61	11/2021	06/2022	0%	1194	Y	481	CO2 within 10%	Excellent	-	
325	Thomas, Neval	51	11/2021	06/2022	0%	1468	Y	483	CO2 within 10%	Excellent	-	
326	Thomson, Strong John	39	11/2021	06/2022	0%	954	Y	445	CO2 within 10%	Excellent	-	
327	Truesdell	40	11/2021	06/2022	0%	2456	Y	515	CO2 within 10%	Very Good	-	
328	Tubman	47	11/2021	06/2022	0%	1165	Y	474	CO2 within 10%	Excellent	-	(7) 763 PPM
329	Turner	51	11/2021	06/2022	0%	1076	Y	497	CO2 within 10%	Excellent	-	
330	Tyler	52	11/2021	06/2022	0%	1293	Y	506	CO2 within 10%	Very Good	-	(7) 1191 PPM
331	Van Ness	48	11/2021	06/2022	0%	1334	Y	480	CO2 within 10%	Excellent	-	
332	Walker-Jones	63	11/2021	06/2022	0%	852	Y	441	CO2 within 10%	Excellent	-	(7) 626 PPM
333	Watkins (Capitol Hill Cluster)	43	11/2021	06/2022	0%	1948	Y	470	CO2 within 10%	Excellent	-	
312	West Elementary	39	11/2021	06/2022	0%	1749	Y	492	CO2 within 10%	Very Good	-	(7) 562 PPM
337	Wheatley	48	11/2021	06/2022	0%	916	Y	443	CO2 within 10%	Excellent	-	
338	Whittier	53	11/2021	06/2022	0%	1641	Y	532	CO2 within 10%	Very Good	-	(7) 825 PPM
339	Wilson, J.O.	48	11/2021	06/2022	0%	1152	Y	449	CO2 within 10%	Excellent	-	
463	Wilson, Woodrow	48	11/2021	06/2022	0%	1141	Y	492	CO2 within 10%	Excellent	-	(7) 900 PPM
464	Woodson, H.D.	64	11/2021	06/2022	0%	1243	Y	492	CO2 within 10%	Excellent	-	

Key

Overall School System Average (PPM)   498

(1) PM2.5 Events are based on alarms received from the school sensors that detect particulate levels above the threshold measured in ug/m^(3). This threshold must exceed and stay exceeded for over 90 minutes.

(2) Maximum level for CO2 that was reached in the month at any single sensor in the school.

(3) Average baseline CO2 levels for the reporting month aggregating all sensors installed in the school.

(4) CO2 Ventilation compares each school with the Overall School System Average (PPM). Ex: School A avg. CO2 = 451 ppm. School system avg. = 446. CO2 range is (451-446)/446 = 1.1% from system range. Report indicates CO2 is within 10% of system average.

(5) Air quality score is based on combined percent CO2 Ventilation percent, maximum CO2 and the number of PM 2.5 threshold events. "Good" will be based on CO2 ppm within 45% of avg, max level under 4000 and less than 45% PM 2.5 events, "Very Good" will be based on CO2 ppm within 25% of avg and less than 25% PM 2.5 events, "Excellent" will be based on CO2 ppm within 10% of avg and less than 10% PM2.5 events. IAQ outside of these parameters will be defined as "Fair".

(6) Wells- Riley estimates under 10% are considered excellent for a closed space. Many factors, such as older kids, more infectors or more time of exposure shall effect the risk index. The Wells-Riley calculation method is used to enhance the school's HVAC upgrades and align with the CDC and ASHRAE guidance on ventilation. Wells-Riley calculations are considered inapplicable due to the risk of infection not accounting for the new COVID-19 variant, Omicron, quanta generation number.

(7) Maximum CO2 in ppm data received in January 2022 via mobile sensors to account for readings in areas where a subset of sensors is under repair. Please note that in the scenario in which mobile sensors have been used, the overall rating incorporates data from different points and the building control systems in time across months, including the prior month's average CO2 and Maximum CO2 level, to create a ventilation profile for assessment.