## **DGS School Indoor Air Quality Monthly Report**

Month and Year Reporting: November 2021



Building Number	School Name	Operating Air deaners 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 CO <sub>2</sub> Level Cleared within 90 minutes (Y/N)	Average CO <sub>2</sub> Level Over the 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
202 203	Aiton Amidon	49 38	11/2021 11/2021	06/2022 06/2022	0% 0%	1854 906	Y Y	436 481	CO2 within 10% CO2 within 10%	Excellent Excellent	2.2% 1.8%	
450 452	Anacostia Ballou/Ballou STAY	54 114	11/2021 11/2021	06/2022 06/2022	0% 0%	1952 1286	Y	596 404	CO2 within 10% CO2 within 10%	Excellent Excellent	3.3% 2.8%	
204 402	Bancroft Banneker	58 56	11/2021	06/2022 06/2022	0% 0%	1222 1496	Y Y	410 546	CO2 within 10%	Excellent Very Good	1.9%	
205	Barnard	53	11/2021	06/2022	0%	2188	Y	594	CO2 within 45%	Good	2.0%	
206 208	Beers Birney	50 54	11/2021 11/2021	06/2022 06/2022	0% 0%	2454 4840	Y	521 550	CO2 within 25% CO2 within 25%	Very Good Very Good	2.1%	
291 212	Boone(fomerly Orr ES)  Brent	45 36	11/2021 11/2021	06/2022 06/2022	0%	1365 3377	Y	416 481	CO2 within 10% CO2 within 10%	Excellent Excellent	2.0%	
213 347	Brightwood Brookland	49 49	11/2021 11/2021	06/2022 06/2022	0% 0%	1227 919	Y	534 473	CO2 within 25% CO2 within 10%	Very Good Excellent	1.9%	
404 296	Browne	73 51	11/2021	06/2022	0%	2449 1411	Y Y	527 626	CO2 within 25%	Very Good	2.0%	(7) 550 ppm
219	Bruce Monroe@Park View Bunker Hill	48	11/2021 11/2021	06/2022 06/2022	0% 0%	706	Y	407	CO2 within 10%	Excellent Very Good	1.7%	(7) 500 ppm
476 220	Burdick- Dorothy Height  Burroughs	37 43	11/2021 11/2021	06/2022 06/2022	0% 0%	521 1143	Y	442 442	CO2 within 10% CO2 within 10%	Very Good Excellent	2.2%	(7) 422 ppm
221 360	Burrville Capitol Hill Montessori School @ Logan	37 41	11/2021 11/2021	06/2022 06/2022	0% 0%	1218 2270	Y	468 453	CO2 within 10% CO2 within 10%	Very Good Excellent	2.4%	(7) 853 ppm
454 224	Cardozo Cleveland	81 32	11/2021 11/2021	06/2022 06/2022	0% 0%	1326 967	Y	399 378	CO2 within 10%	Excellent Very Good	2.8%	(7) 700 ppm
442	Columbia Heights(CHEC)	99	11/2021	06/2022	0%	631	Y	490	CO2 within 10%	Excellent	1.8%	
227 455	Cooke, H.D. Coolidge HS & Wells MS	44 68	11/2021 11/2021	06/2022 06/2022	0% 0%	1178 1810	Y	510 545	CO2 within 25% CO2 within 10%	Very Good Excellent	2.2%	(7) 634 ppm
229 405	Davis Deal	43 77	11/2021 11/2021	06/2022 06/2022	0% 0%	2098 1472	Y	291 483	CO2 within 10% CO2 within 10%	Very Good Very Good	2.2% 1.9%	(7) 438 ppm (7) 408 ppm
231 471	Drew Duke Ellington School of the Arts	46 92	11/2021 11/2021	06/2022 06/2022	0% 0%	1432 1085	Y	399 467	CO2 within 10% CO2 within 10%	Excellent Excellent	2.3%	
467 457	Dunbar Eastern	77 93	11/2021	06/2022	0%	2012	Y	549 531	CO2 within 25% CO2 within 10%	Very Good Very Good	3.1%	(7) 520 ppm
232	Eaton	35	11/2021	06/2022	0%	1077	Y	478	CO2 within 10%	Excellent	2.0%	(7) 791 ppm
407 409	Eliot-Hine School Without Walls @ Francis-Stevens	38 50	11/2021 11/2021	06/2022 06/2022	0% 0%	945 1063	Y	474 446	CO2 within 10% CO2 within 10%	Excellent Excellent	1.9% 2.1%	(7) 471 ppm
208 239	Garfield Garrison	44 38	11/2021 11/2021	06/2022 06/2022	0% 0%	1296 1046	Y	458 331	CO2 within 10%	Very Good Excellent	2.2% 1.9%	(7) 517 ppm
242 246	Goding Hardy	46 56	11/2021 11/2021	06/2022 06/2022	0% 0%	2902 1237	Y Y	303 540	CO2 within 10%	Very Good Very Good	2.4%	(7) 883 ppm
247	Harris, C.W.	37	11/2021	06/2022	0%	778	Y	373	CO2 within 10%	Excellent	2.2%	(7) 409 ppm
413 258	Hart Hearst	82 35	11/2021 11/2021	06/2022 06/2022	0% 0%	1208 871	Y	541 455	CO2 within 25% CO2 within 10%	Very Good Excellent	2.0% 1.9%	
249 251	Hendley Houston	43 46	11/2021 11/2021	06/2022 06/2022	0% 0%	1113 1100	Y	481 362	CO2 within 10% CO2 within 10%	Excellent Excellent	1.8% 2.2%	(7) 480 ppm
252 254	Hyde-Addison Janney	31 55	11/2021 11/2021	06/2022 06/2022	0% 0%	1421 1208	Y	535 477	CO2 within 25%	Very Good Excellent	1.8%	(7) 880 ppm
415 416	Jefferson Middle School Academy	50	11/2021	06/2022	0%	1985 953	Y	455 273	CO2 within 10%	Excellent	2.0%	(7) 404
421	Johnson, John Hayden Kelly Miller	54	11/2021 11/2021	06/2022 06/2022	0%	1111	Y	436	CO2 within 10%	Very Good Excellent	2.2%	(7) 481 ppm
257 272	Ketcham Key	40 33	11/2021 11/2021	06/2022 06/2022	0% 0%	2129 2318	Y	475 527	CO2 within 10% CO2 within 25%	Excellent Very Good	1.9% 2.1%	
259 344	Kimball King, M.L.	40 41	11/2021 11/2021	06/2022 06/2022	0% 0%	1058 790	Y	518 373	CO2 within 25% CO2 within 10%	Very Good Excellent	1.9% 2.2%	
417 261	Kramer Lafayette	45 65	11/2021 11/2021	06/2022 06/2022	0% 0%	1118 1035	Y	486 328	CO2 within 10%	Excellent Excellent	1.9% 1.9%	(7) 602 ppm
262	Langdon	44	11/2021	06/2022	0%	1825	Y	414	CO2 within 10%	Excellent	2.0%	
418 264	Langley LaSalle-Backus	51 44	11/2021 11/2021	06/2022 06/2022	0% 0%	2640 683	Y	578 435	CO2 within 45% CO2 within 10%	Good Excellent	2.5% 1.8%	
266 271	Ludlow-Taylor	45 44	11/2021 11/2021	06/2022 06/2022	0%	1481 1903	Y	393 336	CO2 within 10% CO2 within 10%	Excellent Excellent	2.1%	
884 420	Luke C. Moore Alternative  MacFarland	32 47	11/2021 11/2021	06/2022 06/2022	0% 0%	687 3250	Y	358 519	CO2 within 10% CO2 within 25%	Very Good Very Good	3.3% 1.9%	(7) 471 ppm
308 273	Malcolm X @ Green	47 40	11/2021 11/2021	06/2022 06/2022	0% 0%	1022 625	Y	256 411	CO2 within 10%	Excellent Excellent	2.0% 1.9%	
284 274	Marie Reed	47	11/2021	06/2022	0%	1763	Y	407	CO2 within 10%	Excellent	1.8%	(7) 445
458	Maury McKinley	49 50	11/2021 11/2021	06/2022 06/2022	0% 0%	1932 1341	Y	350 471	CO2 within 10% CO2 within 10%	Very Good Excellent	1.9% 2.7%	(7) 445 ppm
278 280	Meyer Miner	44	11/2021 11/2021	06/2022 06/2022	0% 0%	1690 2817	Y	520 511	CO2 within 25% CO2 within 10%	Very Good Very Good	2.2%	(7) 458 ppm
285 287	Moten Murch	59 55	11/2021 11/2021	06/2022 06/2022	0% 0%	1735 964	Y	448 471	CO2 within 10%	Excellent Excellent	2.2% 1.9%	(7) 462 ppm
288 290	Nalle Noyes	49 34	11/2021 11/2021	06/2022 06/2022	0% 0%	845 773	Y	327 453	CO2 within 10% CO2 within 10%	Excellent Excellent	2.2% 1.9%	(7) 455 ppm
201	Oyster-Adams Bilingual School (Adams)	36	11/2021	06/2022	0%	1177	Y	337	CO2 within 10%	Excellent	1.8%	(1) 100 pp.
294	Oyster-Adams Bilingual School (Oyster) Patterson, W. B.	31 39	11/2021 11/2021	06/2022 06/2022	0%	1480	Y	381	CO2 within 10%	Excellent Excellent	2.1%	
295 301	Payne Peabody(Capitol Hill Cluster)	50 25	11/2021 11/2021	06/2022 06/2022	0% 0%	1708 1726	Y	527 531	CO2 within 25% CO2 within 25%	Very Good Excellent	2.0%	
478 299	Phelps ACE Plummer	57 40	11/2021 11/2021	06/2022 06/2022	0% 0%	837 1847	Y	323 <b>425</b>	CO2 within 10% CO2 within 10%	Very Good Excellent	3.2% 2.1%	(7) 580 ppm
300 316	Powell Randle Highlands	48 44	11/2021	06/2022 06/2022	0% 0%	2291 1235	Y Y	519 550	CO2 within 25%	Very Good Very Good	1.9%	
304 436	River Terrace	39 50	11/2021	06/2022 06/2022	0%	1022	Y	490 517	CO2 within 10% CO2 within 25%	Excellent	2.2%	(7) 570 ppm
459	Ron Brown College Preparatory Roosevelt STAY	75	11/2021	06/2022	0%	2000	Y	545	CO2 within 10%	Very Good Excellent	3.0%	
305 307	Ross Savoy	16 48	11/2021 11/2021	06/2022 06/2022	0% 0%	910	Y	462 420	CO2 within 10% CO2 within 10%	Excellent Very Good	2.2%	(7) 556 ppm
243 309	School Without Walls HS Seaton	39 50	11/2021 11/2021	06/2022 06/2022	0% 0%	1307 2342	Y	437 460	CO2 within 10% CO2 within 10%	Excellent Very Good	3.1% 2.0%	(7) 760 ppm
313 315	Shepherd Simon	41 36	11/2021 11/2021	06/2022 06/2022	0% 0%	1336 1081	Y Y	439 473	CO2 within 10%	Excellent Excellent	2.0% 1.9%	(7) 475 ppm
256 427	Smothers Swing(Kenilworth) Sousa	36 58	11/2021	06/2022	0%	1575 899	Y	291 409	CO2 within 10% CO2 within 10%	Excellent Excellent	2.2%	
319	Stanton	53	11/2021	06/2022	0%	3833	Y	557	CO2 within 25%	Very Good	1.9%	
320 321	Stevens Stoddert	26 39	11/2021	06/2022	0%	1695 1919	Y	427 469	CO2 within 10%	Excellent Excellent	1.9%	(7) 775 ppm
428 324	Stuart-Hobson(Capitol Hill Cluster) Takoma	51 61	11/2021 11/2021	06/2022 06/2022	0% 0%	1988 1164	Y	424 500	CO2 within 10%	Excellent Excellent	1.8%	(7) 679 ppm
325 326	Thomas, Neval Thomson, Strong John	51 39	11/2021 11/2021	06/2022 06/2022	0% 0%	2000 824	Y	799 409	CO2 within 10% CO2 within 10%	Excellent Excellent	2.0%	(7) 553 ppm
327 328	Truesdell Tubman	40	11/2021	06/2022	0%	2407	Y	527	CO2 within 25%	Very Good Very Good	2.2%	(7) 514 ppm
329	Turner	51	11/2021	06/2022	0%	2090	Y	474	CO2 within 10%	Excellent	2.2%	(7) 314 bbiii
330 331	Tyler Van Ness	52 48	11/2021 11/2021	06/2022 06/2022	0% 0%	1293 643	Y	506 430	CO2 within 25% CO2 within 10%	Very Good Excellent	2.1% 1.9%	
332 333	Walker-Jones Watkins (Capitol Hill Cluster)	63 43	11/2021 11/2021	06/2022 06/2022	0% 0%	907 920	Y	458 479	CO2 within 10% CO2 within 10%	Very Good Excellent	2.2%	(7) 438 ppm (7) 464 ppm
312 337	West Elementary Wheatley	39 48	11/2021 11/2021	06/2022 06/2022	0% 0%	1749 916	Y Y	492 419	CO2 within 10%	Excellent Very Good	2.2%	(7) 750 ppm
338 339	Whittier Wilson, J.O.	53 48	11/2021	06/2022 06/2022	0%	1641 1189	Y	532 443	CO2 within 10% CO2 within 10%	Very Good Excellent	2.3%	(7) 467 ppm (7) 403 ppm
463	Wilson, Woodrow	94	11/2021	06/2022	0%	1563	Y	502	CO2 within 10%	Very Good	3.0%	(7) 403 ppm (7) 490 ppm
464	Woodson, H.D.	64	11/2021	06/2022	0% Overall Sch	1349	Υ .	346	CO2 within 10%	Excellent	2.6%	

Overall School System Average 456.2 (PPM)

(1) PMZ.5 Events are based on alarms received from the school sensors that detect particulate levels above the threshold measured in ug/m²(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 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.

(7) Maximum CO2 in ppm data received in December 2021 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, to create a ventilation profile for assessment.

