Appendix F

APCD Approach Results Tables

List of Tables

- APCD-INC-PM: APCD Approach, Incinerators, Particulate Matter

- APCD-CK-PM: APCD Approach, Cement Kilns, Particulate Matter
- APCD-CK-PM/EF: APCD Approach, Cement Kilns, Emissions Factor (NSPS) Format, Particulate Matter

- APCD-LWAK-PM: APCD Approach, Lightweight Aggregate Kilns, Particulate Matter

- APCD-LFB-PM: APCD Approach, Liquid Fuel Boilers, Particulate Matter

- APCD-SFB-PM: APCD Approach, Solid Fuel Boilers, Particulate Matter

APCD-INC-PM: Control Technology (APCD) Approach, Incinerators, Particulate Matter

Source ID	Cond IDs	APCS	APCD General Class	General Class Cntrl Eff Rank	No. Runs	PM (gr/dscf) Avg	StDev	UVF	UPL 99%
3015/3011	3011C1,2,3;3015C1	SD/BH/ABS	FF	1	9	0.0007	0.0006	0.0006	0.0019
338	338C2,10	FF/VS/CD	FF	1	9	0.0009	0.0005	0.0007	0.0022
3000	3000C2	DS/FF/AB	FF	1	9	0.0010	0.0007	0.0008	0.0025
333/612	333C1,2;612C1	SD/FF	FF	1	9	0.0012	0.0008	0.0009	0.0030
341	341C1,2,10,12	DS/HE/FF	FF	1	9	0.0013	0.0013	0.0010	0.0031
327	327C1,2,3,10	CI/SD/FF/WS/WS/WESP	FF	1	9	0.0013	0.0013	0.0010	0.0032
349	349C1,2,311	AB/EC/FF/PBS	FF	1	9	0.0026	0.0019	0.0018	0.0061
3010	3010C10,11,12,13	HE/SDA/CI/FF	FF	1	9	0.0033	0.0018	0.0021	0.0075
3032	3032C1,2,3,4,5	AB/GC/C/FF	FF	1	9	0.0034	0.0014	0.0022	0.0076
3022	3022C1	Q/VS/FF	FF	1	9	0.0049	0.0044	0.0030	0.0106
3008	3008C1,2,3	C/AB/FF	FF	1	9	0.0051	0.0031	0.0031	0.0110
210/211/212	210C1,2;211C1;212C1	SD/FF/PT	FF	1	9	0.0115	0.0081	0.0060	0.0230
3012	3012C3	AB/GC/C/FF	FF	1	9	0.0192	0.0101	0.0091	0.0368
359	359C1,2,3,4,5	WHB/FF/S	FF	1	9	0.0242	0.0181	0.0110	0.0455
503	503C1,2,3,4,5,10,11	AB/HTHE/LTHE/C/FF	FF	1	9	0.0311	0.0246	0.0136	0.0573

MACT Floor	0.015
MACT Pool Average	0.003
MACT Pool Variability	0.005
No. MACT Pool Sources	12

APCD-CK-PM: Control Technology (APCD) Approach, Cement Kilns, Particulate Matter

Source ID	Cond IDs	APCS	APCD General Class	General Class Cntrl Eff Rank	No. Runs	PM (gr/dscf) Avg	St Dev	UVF	UPL 99%
302	302C10	FF	FF	1	9	0.0025	0.0006	0.0017	0.0058
200/201	200C1,4,5,10,11;201C1,10,11	FF	FF	1	9	0.0057	0.0049	0.0034	0.0122
303	303C2,7	QC/FF main, FF bypass	FF	1	9	0.0249	0.0019	0.0113	0.0467
3029	3029C11	ESP (main), FF (bypass)	ESP/FF	2	3	0.0104	0.0008		0.0148
473	473C2	ESP	ESP	2	3	0.0099	0.0016		0.0188
208	208C11	ESP	ESP	2	2	0.0204	0.0006		0.0233
322	322C8	ESP	ESP	2	3	0.0130	0.0026		0.0280
404	404C10	ESP	ESP	2	3	0.0130	0.0087		0.0389
204	204C9	ESP	ESP	2	3	0.0242	0.0041		0.0477
205	205C10	ESP	ESP	2	3	0.0180	0.0053		0.0481
319	319C1	ESP	ESP	2	3	0.0374	0.0030		0.0544
323	323B3	ESP	ESP	2	3	0.0260	0.0052		0.0555
403	403C10	ESP	ESP	2	3	0.0570	0.0034		0.0706
207	207C12	ESP	ESP	2	3	0.0298	0.0103		0.0881
228	228C11	ESP	ESP	2	3	0.0213	0.0127		0.0938
203	203C10	ESP	ESP	2	2	0.0166	0.0031		0.1070
300	300C11	ESP	ESP	2	3	0.0539	0.0160		0.1449
206	206C10	ESP	ESP	2	3	0.0360	0.0298		0.2056

MACT Floor	0.028
MACT Pool Average	0.011
MACT Pool Variability	0.007
# MACT Pool Sources	5

APCD-CK-PM/EF: Control Technology (APCD) Approach, Cement Kilns, Emission Factor (NSPS) Format, Particulate Matter

Source ID	Cond ID	APCS	PM Emissions (lb/hr)				Dry Raw Material (tons/hr)				PM NSPS lb/ton dry raw feed							
			R1	R2	R3	R4	R1	R2	R3	R4	R1	R2	R3	R4	Avg	StDev	UVF	99%ile
200 / 201		FF													0.070	0.031	0.036	0.140
302	302C10	FF	1.4	0.9	1.5		50.1	50.8	50.6						0.025	0.006	0.016	0.055
303	303C7	FF	42.6	34.8	41.6		256.0	256.0	256.0						0.155	0.017	0.070	0.290
3029	3029C11	ESP	23.6	23.5	26.1		252.8	252.8	252.8		0.093	0.093	0.103		0.097	0.006		0.130
473	473C2	ESP	6.1	5.2	4.6		71.0	73.0	80.0		0.086	0.071	0.057		0.071	0.015		0.154
																	MACT Floor	0.202
																	MACT Pool Average	0.084
																	MACT Pool Variability	0.048
																	# Sources in MACT Pool	5
322	322C8	ESP	4.5	3.2	4.8		36.3	36.3	36.3		0.124	0.088	0.133		0.115	0.023		0.248
204	204C9	ESP	60.8	59.9	67.7		267.2	259.8	245.5		0.228	0.231	0.276		0.245	0.027		0.398
404	404C10	ESP	7.1	20.4	6.7	4.7	84.5	85.0	86.0	86.3	0.084	0.240	0.078	0.054	0.114	0.085		0.408
323	323B3	ESP	13.7	13.6	9.3		52.3	52.3	52.3		0.262	0.260	0.178		0.233	0.048		0.506
319	319C1	ESP	53.8	51.8	45.1		145.0	145.0	145.0		0.371	0.357	0.311		0.346	0.031		0.525
205	205C10	ESP	20.8	13.5	11.4		79.4	80.0	81.2		0.262	0.169	0.140		0.190	0.064		0.553
204	204B3	ESP	58.3	27.2	32.7		208.1	210.8	246.2		0.280	0.129	0.133		0.181	0.086		0.671
403	403C10	ESP	32.8	38.8	36.1	29.8	60.3	65.8	62.6	64.7	0.544	0.590	0.577	0.461	0.543	0.058		0.744
491	491C1	ESP	39.7	40.7	35.3		70.0	70.0	70.0		0.567	0.582	0.504		0.551	0.041		0.785
207	207C12	ESP	7.2	11.0	5.8		24.9	25.2	24.9		0.291	0.435	0.231		0.319	0.105		0.916
203	203C10	ESP	10.8	14.5	outlier		95.8	94.8	96.9		0.113	0.152			0.132	0.028		0.952
228	228C11	ESP	10.2	20.4	5.5		61.1	58.2	58.9		0.167	0.350	0.093		0.203	0.132		0.957
206	206C10	ESP	16.8	42.2	95.6		298.3	298.6	292.8		0.056	0.141	0.326		0.175	0.138		0.960
300	300C11	ESP	30.6	30.1	10.7		70.0	70.0	70.0		0.437	0.430	0.153		0.340	0.162		1.262
208	208C11	ESP	9.5	19.3	18.3													

APCD-LWAK-PM: Control Technology (APCD) Approach, Lightweight Aggregate Kilns, Particulate Matter

Source ID	Cond IDs	APCS	APCD General Class	General Class Cntrl Eff Rank	No. Runs	PM (gr/dscf) Avg	Std Dev	UVF	UPL 99%
Cascade	311C1,10,11 ; 312C1,2,10,11 ; 336C3,5,10 ; 474C1,10,11	FF	FF	1	9	0.0052	0.0042	0.0031	0.011
Norlite	307C1,2,3,4,10,11	FF	FF	1	9	0.0115	0.0076	0.0060	0.023
Arvonia	313C1,10,11,12 ; 314C1,3,10,11 ; 476C1,10,11	FF	FF	1	9	0.0199	0.0150	0.0094	0.038

MACT Floor	0.029
MACT Pool Average	0.012
MACT Pool Variability	0.007
# MACT Pool Sources	3

APCD-LFB-PM: Control Technology (APCD) Approach, Liquid Fuel Boilers, Particulate Matter

Source ID	Cond IDs	APCS	APCD General Class	General Class Cntrl Eff Rank	No. Runs	PM (gr/dscf) Avg	Std Dev	UVF	UPL 99%
901	901C1,2	SD/FF/PBS/RH/HEPA	FF/HEPA	0.5	9	0.0037	0.0043	0.0023	0.0082
771	771C1,2	FF	FF	1	9	0.0038	0.0012	0.0024	0.0084
763	763C1	FF	FF	1	9	0.0055	0.0006	0.0033	0.0118
813	813C2	FF	FF	1	9	0.0266	0.0020	0.0119	0.0496
819	819C1	ESP	ESP	2	2	0.0179	0.0011		0.0508
818	818C11	ESP	ESP	2	2	0.0230	0.0030		0.1107
849	849C3	VS/WS	HEWS	3	3	0.0117	0.0006		0.0149
811	811C11	VS	HEWS	3	2	0.0281	0.0018		0.0815
812	812C2	Q/WS	LEWS	4	3	0.0025	0.0003		0.0043
1016	1016C1	WS	LEWS	4	3	0.0034	0.0006		0.0065
2002	2002C2	Q/HClABS/CWS	LEWS	4	3	0.0066	0.0016		0.0154
724	724C1	Q/ME	LEWS	4	3	0.0048	0.0028		0.0207
2001	2001C4	HCl/ABS/CWS	LEWS	4	3	0.0310	0.0010		0.0367
777	777C10	QC/WS	LEWS	4	3	0.0427	0.0005		0.0454
776	776C10	QC/WS	LEWS	4	3	0.0379	0.0038		0.0597
2003	2003C1	Q/HClABS/CWS	LEWS	4	3	0.0200	0.0075		0.0629
232	232C11	None	None	10	3	0.0010	0.0001		0.0014
836	836C11	None	None	10	3	0.0008	0.0002		0.0017
822	822C2	None	None	10	3	0.0016	0.0001		0.0022
835	835C12	None	None	10	3	0.0012	0.0002		0.0024
743	743C10	None	None	10	3	0.0011	0.0003		0.0027
912	912C4	None	None	10	3	0.0015	0.0002		0.0028
733	733C1	None	None	10	3	0.0018	0.0004		0.0043
746	746C10	None	None	10	3	0.0013	0.0006		0.0044
1015	1015C10	None	None	10	3	0.0044	0.0003		0.0060
756	756C11	None	None	10	3	0.0021	0.0011		0.0085
754	754C10	None	None	10	3	0.0025	0.0012		0.0094
729	729C1	None	None	10	3	0.0049	0.0009		0.0100
772	772C10	None	None	10	3	0.0031	0.0013		0.0103
814	814C2	None	None	10	3	0.0076	0.0009		0.0127
1001	1001C1	None	None	10	2	0.0029	0.0004		0.0131
2006	2006C2	None	None	10	3	0.0093	0.0014		0.0171

APCD-LFB-PM: Control Technology (APCD) Approach, Liquid Fuel Boilers, Particulate Matter

Source ID	Cond IDs	APCS	APCD General Class	General Class Cntrl Eff Rank	No. Runs	PM (gr/dscf) Avg	Std Dev	UVF	UPL 99%
815	815C2	None	None	10	3	0.0094	0.0017		0.0188
1006	1006C3	None	None	10	3	0.0077	0.0023		0.0208
1005	1005C1	None	None	10	2	0.0071	0.0006		0.0235
761	761C3	None	None	10	3	0.0123	0.0023		0.0252
834	834C11	None	None	10	3	0.0147	0.0022		0.0274
759	759C1	None	None	10	2	0.0129	0.0006		0.0293
911	911C7	None	None	10	3	0.0191	0.0021		0.0311
833	833C10	None	None	10	3	0.0174	0.0035		0.0370
740	740C10	None	None	10	3	0.0343	0.0005		0.0372
1007	1007C1	None	None	10	3	0.0375	0.0008		0.0421
1004	1004C2	None	None	10	2	0.0109	0.0011		0.0438
1002	1002C2	None	None	10	2	0.0079	0.0013		0.0449
843	843C1	None	None	10	3	0.0170	0.0078		0.0614
1017	1017C5	None	None	10	3	0.0185	0.0076		0.0617
2021	2021C1	None	None	10	3	0.0389	0.0040		0.0617
753	753C11	None	None	10	2	0.0231	0.0013		0.0621
737	737C3	None	None	10	2	0.0498	0.0005		0.0641
721	721C10	None	None	10	3	0.0451	0.0034		0.0644
774	774C1	None	None	10	2	0.0238	0.0014		0.0649
840	840C3	None	None	10	0	0.0463	0.0010		0.0753
778	778C10	None	None	10	2	0.0555	0.0007		0.0760
739	739C10	None	None	10	2	0.0277	0.0017		0.0770
738	738C1	None	None	10	2	0.0464	0.0011		0.0772
760	760C1	None	None	10	2	0.0209	0.0020		0.0784
1000	1000C1	None	None	10	2	0.0465	0.0012		0.0824
1003	1003C3	None	None	10	2	0.0215	0.0021		0.0831
910	910C1	None	None	10	2	0.0367	0.0018		0.0880
1018	1018C10	None	None	10	2	0.0409	0.0017		0.0902
2000	2000C1	None	None	10	2	0.0271	0.0023		0.0948
741	741C1	None	None	10	2	0.0300	0.0028		0.1122
767	767C1	None	None	10	2	0.0335	0.0035		0.1362
2008	2008C1	None	None	10	2	0.0134	0.0045		0.1428

APCD-LFB-PM: Control Technology (APCD) Approach, Liquid Fuel Boilers, Particulate Matter

Source ID	Cond IDs	APCS	APCD General Class	General Class Cntrl Eff Rank	No. Runs	PM (gr/dscf) Avg	Std Dev	UVF	UPL 99%
2013	2013C2	None	None	10	3	0.0441	0.0265		0.1947
735	735C3	None	None	10	2	0.0330	0.0068		0.2302
764	764C3	None	None	10	3	0.0783	0.0629		0.4362

MACT Floor	0.032
MACT Pool Average	0.014
MACT Pool Variability	0.008
# Sources in MACT Pool	9

APCD-SFB-PM: Control Technology (APCD) Approach, Solid Fuel Boilers, Particulate Matter

Source ID	Cond IDs	APCS	APCD General Class	General Class Cntrl Eff Rank	No. Runs	PM (gr/dscf) Avg	Std Dev	UVF	UPL 99%
1013/1014	1013C10;1014C10	FF	FF	1	9	0.0210	0.0048	0.0098	0.0402
1012	1012C1	ESP	ESP	2	1	0.0248	0.0087		0.0481
719	719C10	ESP	ESP	2	1	0.0274	0.0096		0.0532
1009	1009C2	ESP	ESP	2	3	0.0354	0.0045		0.0610
1011	1011C1	ESP	ESP	2	2	0.0262	0.0160		0.4904
908	908C1	ESP	ESP	2	2	0.0371	0.0207		0.6389

MACT Floor	0.062
MACT Pool Avg	0.027
MACT Pool Variability	0.014
# MACT Pool Sources	5