

Note: This is a reference cited in AP 42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

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**PM₁₀ EMISSION FACTOR LISTING
DEVELOPED BY
TECHNOLOGY TRANSFER
AND
AIRS SOURCE CLASSIFICATION
CODES
WITH DOCUMENTATION**

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AIRS SOURCE CLASSIFICATION CODES
PM₁₀ EMISSION FACTOR LISTING
BY TECHNOLOGY TRANSFER

INTRODUCTION

This document supplements the first edition of the "PM₁₀ Emission Factor Listing Developed by Technology Transfer and AIRS Source Classification Codes with Documentation" published in November of 1989 and prepared by Engineering Science. A companion document provides SCC/emission factor data on other air pollutants (SO_x, NO_x, VOC, CO, PM): AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, EPA-450/4-90-003, March 1990.

These documents support the EPA-required annual reporting by states of the emissions of pollutants for which EPA has established National Ambient Air Quality Standards (NAAQS). The Source Classification Codes (SCCs) are those required for storing source and emissions data in EPA's AIRS Facility Subsystem (AFS), and in States' computerized source files. The emission factors are default values, provided by EPA for use when the preferred source-specific values are not available to the reporting agency.

The PM₁₀ emission factors in this document have been compiled by technology transfer, in which a PM₁₀ emission factor is related by engineering judgement to a similar source with established PM₁₀ and PM emission factors. The PM₁₀ weight percent of the known source's PM emissions is applied to the PM emission factor of the similar source to be characterized. No judgement of the accuracy of the PM₁₀ emission factors produced by this process is attempted. Such PM₁₀ emission factors are, however, considered to be approximately as accurate as default estimates. Documentation for emission factors presented in this document is provided in the Appendix.

PM and PM₁₀ emission factor data used in this technology transfer process are derived from the information in the following three EPA publication: (1) Compilation of Air Pollutant Emission Factors, AP-42, fourth edition, through Supplement A, October 1986 and Supplement B, September 1988, Supplement C, 1990 and Supplement D, 1991; (2) Gap-Filling PM₁₀ Emission Factors for Selected Open Area Dust Sources, EPA-450/4-88-003, February 1988, and (3) Criteria Pollutant Emission Factors for the 1985 NAPAP Emissions Inventory, EPA-600/7-87-015, May 1987. Comments or questions on the emission factors should be addressed to the Criteria Emission Section (MD-14), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, 27711. The telephone number is (919) 541-5575 (FTS 629-5575).

KEY TO PM₁₀ EMISSION FACTORS

1. An "A" accompanying an emission factor means that this factor is the weighted average ash content of the fuel burned, expressed as a percent. See, for example, SCC 1-01-008-01 on the facing page. If the weighted average ash content of the coke burned were five percent (5%), then the emission factor would become 7.9×5 or 39.5 pounds of PM₁₀ emitted (before control) per ton of coke burned.
2. An "S" accompanying an emission factor means that this factor is the weighted average sulfur content of the fuel burned, expressed as a percent. See, for example, SCC 3-10-004-02 on page 35. If the weighted average sulfur content of the residual oil burned were three percent (3%), then the emission factor would become 10.3×3 or 30.9 pounds of PM₁₀ emitted (before control) per one thousand gallons of residual oil burned.

3. The entry "___" means that as yet we have no emission factor for this SCC. See, for example, SCC 1-02-002-13 on page 3.

4. The "Reference Number", in the column on the right side of the listing, identifies the respective emission factor documentation, given in the Appendix.

AIRS SOURCE CLASSIFICATION CODES AND PM₁₀ EMISSION FACTOR LISTING BY
TECHNOLOGY TRANSFER

Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
<u>EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION - 4911</u>					
<u>Bituminous Coal</u>					
19	1-01-002-17	Atmospheric Fluid Bed Combustion	11.0	tons burned	1
<u>Process Gas (Specify Gas in Comments)</u>					
21	1-01-007-01	Boilers Over 100 MBtu/hr	3.0	million cu. ft. burned	2
21	1-01-007-02	Boilers under 100 MBtu/hr	3.0	million cu. ft. burned	3
<u>Coke</u>					
21	1-01-008-01	All Boiler Sizes	7.9A	tons burned	4
<u>Liquified Petroleum Gas (LPG)</u>					
21	1-01-010-01	Butane	0.28	thousand gal. burned	5
21	1-01-010-02	Propane	0.26	thousand gal. burned	6
<u>Bagasse</u>					
21	1-01-011-01	All Boiler Sizes	5.6	tons burned	7
<u>Solid Waste</u>					
21	1-01-012-02	Refuse Derived Fuel	44.0	tons burned	8
<u>Liquid Waste</u>					
	1-01-013-02	Waste Oil	51A	thousand gal. burned	9
<u>EXTERNAL COMBUSTION BOILERS - INDUSTRIAL - 1000-3999</u>					
<u>Anthracite Coal</u>					
22	1-02-001-07	Hand-Fired	5.2	tons burned	10

AIRS SOURCE CLASSIFICATION CODES AND PM₁₀ EMISSION FACTOR LISTING BY
TECHNOLOGY TRANSFER

Page Number*	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
		<u>Bituminous Coal</u>			
22	1-02-002-13	Wet Slurry	0		11
22	1-02-002-17	Atmospheric Fluidized Bed Combustion	11.0	tons burned	12
		<u>Process Gas</u>			
23	1-02-007-01	Petroleum Refinery Gas	3.0	million cu. ft. burned	13
		<u>Coke</u>			
24	1-02-008-02	All Boiler Sizes	5.5A	tons burned	14
24	1-02-008-04	Cogeneration	5.5A	tons burned	15
		<u>Wood/Bark Waste</u>			
24	1-02-009-03	Wood-Fired boiler (Over 50,000 lb steam)	7.9	tons burned	16
24	1-02-009-06	Wood-Fired Boiler (Under 50,000 lb steam)	7.9	tons burned	17
		<u>Liquified Petroleum Gas (LPG)</u>			
24	1-02-010-01	Butane	0.28	thousand gal. burned	18
24	1-02-010-02	Propane	0.26	thousand gal. burned	19
		<u>Bagasse</u>			
24	1-02-011-01	All Boiler Sizes	5.6	tons burned	20
		<u>Solid Waste</u>			
25	1-02-012-02	Refuse Derived Fuel	44.0	tons burned	21
		<u>CO Boiler</u>			
25	1-02-014-01	Natural Gas	3.0	million cu. ft. burned	22
25	1-02-014-02	Process Gas	3.0	million cu. ft. burned	23

* In "Airs Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants" dated March 1990.

AIRS SOURCE CLASSIFICATION CODES AND PM₁₀ EMISSION FACTOR LISTING BY
TECHNOLOGY TRANSFER

Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
<u>EXTERNAL COMBUSTION BOILERS - COMMERCIAL/INSTITUTIONAL - 4000-4899, 4920-9999</u>					
<u>Anthracite Coal</u>					
25	1-03-001-03	Hand-Fired	5.2	tons burned	24
<u>Bituminous Coal</u>					
25	1-03-002-14	Hand-Fired	7.8	tons burned	25
25	1-03-002-17	Atmospheric Fluidized Bed Combustion	11.0	tons burned	26
<u>Wood/Bark Waste</u>					
27	1-03-009-03	Wood-Fired Boiler	7.9	tons burned	27
<u>Liquid Petroleum Gas (LPG)</u>					
27	1-03-010-01	Butane	0.28	thousand gal. burned	28
27	1-03-010-02	Propane	0.26	thousand gal. burned	29
<u>Solid Waste</u>					
27	1-03-012-02	Refuse Derived Fuel	44.0	tons burned	30
<u>EXTERNAL COMBUSTION - BOILERS - SPACE HEATERS</u>					
<u>Industrial Space Heaters - 1000-3999</u>					
27	1-05-001-05	Distillate Oil	2.46	thousand gal. burned	31
28	1-05-001-06	Natural Gas	3.0	million cu. ft. burned	32
28	1-05-001-10	Liquified Petroleum Gas (LPG)	1.85	thousand gal. burned	33
	1-05-001-14	Waste Oil: Vaporizing Burner	2.1A	thousand gal. burned	34
<u>Commercial Space Heaters - 4000-4899, 4920-9999</u>					
28	1-05-002-05	Distillate Oil	2.46	thousand gal. burned	35

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Page Number*	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
28	1-05-002-06	- Natural Gas	3.0	million cu. ft. burned	36
28	1-05-002-09	- Wood	25.0	tons burned	37
28	1-05-002-10	- Liquefied Petroleum Gas (LPG)	1.85	thousand gal. burned	38
	1-05-002-14	- Waste Oil: Vaporizing Burner	2.1A	thousand gal. burned	39
<u>INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION - 4911</u>					
<u>Distillate Oil (Diesel)</u>					
31	2-01-001-01	- Turbine	4.8	thousand gal. burned	40
31	2-01-001-02	- Reciprocating	32.0	thousand gal. burned	41
<u>Natural Gas</u>					
31	2-01-002-01	- Turbine	14.0	million cu. ft. burned	42
31	2-01-002-02	- Reciprocating	10.0	million cu. ft. burned	43
<u>Kerosene/Naphtha (Jet Fuel)</u>					
31	2-01-009-01	- Turbine	4.8	thousand gal. burned	44
31	2-01-009-02	- Reciprocating	32.0	thousand gal. burned	45
<u>INTERNAL COMBUSTION ENGINES - INDUSTRIAL - 1000-3999</u>					
<u>Distillate Oil (Diesel)</u>					
32	2-02-001-01	- Turbine	4.8	thousand gal. burned	46
32	2-02-001-02	- Reciprocating	32.0	thousand gal. burned	47
32	2-02-001-03	- Turbine: Cogeneration	4.8	thousand gal. burned	48

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
32	2-02-001-04	Reciprocating: Cogeneration	32.0	thousand gal. burned	49
		<u>Natural Gas</u>			
32	2-02-002-01	Turbine	14.0	million cu. ft. burned	50
32	2-02-002-02	Reciprocating	10.0	million cu. ft. burned	51
32	2-02-002-03	Turbine: Cogeneration	14.0	million cu. ft. burned	52
32	2-02-002-04	Reciprocating Cogeneration	10.0	million cu. ft. burned	53
		<u>Gasoline</u>			
32	2-02-003-01	Reciprocating	6.21	thousand gal. burned	54
		<u>Large Bore Engine</u>			
32	2-02-004-01	Diesel	46.0	thousand gal. burned	55
32	2-02-004-02	Dual Fuel (oil/gas)	2.0	thousand HP-hours	56
32	2-02-004-03	Dual Fuel (cogeneration)	0.032	hundred thousand brake HP-hours	57
		<u>Residual/Crude Oil</u>			
32	2-02-005-01	Reciprocating	30.8	thousand gal. burned	58
		<u>Kerosene/Naphtha (Jet Fuel)</u>			
	2-02-009-01	Turbine	4.6	thousand gal. burned	59
32	2-02-009-02	Reciprocating	32.0	thousand gal. burned	60
		<u>Liquified Petroleum Gas (LPG)</u>			
33	2-02-010-001	Propane: Reciprocating	5.0	thousand gal. burned	61

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
33	2-02-010-02	Butane: Reciprocating	5.0	thousand gal. burned	62
<u>INTERNAL COMBUSTION ENGINES - COMMERCIAL/INSTITUTIONAL - 4000-4899, 4920-9999</u>					
<u>Distillate Oil - (Diesel)</u>					
33	2-03-001-01	Reciprocating	32.0	thousand gal. burned	63
33	2-03-001-02	Turbine	4.8	thousand gal. burned	64
<u>Natural Gas</u>					
33	2-03-002-01	Reciprocating	10.0	million cu. ft. burned	65
33	2-03-002-02	Turbine	14.0	million cu. ft. burned	66
<u>Gasoline</u>					
33	2-03-003-01	Reciprocating	6.21	thousand gal. burned	67
<u>Liquified Petroleum Gas (LPG)</u>					
33	2-03-010-01	Propane: Reciprocating	5.0	thousand gal. burned	68
33	2-03-010-02	Butane: Reciprocating	5.0	thousand gal. burned	69
<u>INTERNAL COMBUSTION ENGINES - ENGINE TESTING - 3500-3599, 3700-3799</u>					
<u>Aircraft</u>					
33	2-04-001-01	Turbojet	11.3	thousand gal. burned	70
33	2-04-001-02	Turboshaft	11.3	thousand gal. burned	71
<u>Turbine</u>					
34	2-04-003-01	Natural Gas	14.0	million cu. ft. burned	72

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Page Number*	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
34	2-04-003-02	Diesel/Kerosene	4.8	thousand gal. burned	73
		<u>Reciprocating</u>			
34	2-04-004-01	Gasoline	6.21	thousand gal. burned	74
34	2-04-004-02	Diesel/Kerosene	32.0	thousand gal. burned	75
<u>CHEMICAL MANUFACTURING - MAJOR GROUP 28</u>					
<u>Adipic Acid - 2869</u>					
37	3-01-001-01	General	0.037	tons of product	76
37	3-01-001-05	Adipic Acid Refining	0.004	tons of product	77
37	3-01-001-06	Adipic Acid Drying/Loading and Storage	0.032	tons of product	78
<u>Ammonia Production - 2873</u>					
37	3-01-003-06	Primary Reformer: Natural Gas Fired	0.144	tons of ammonia produced	79
37	3-01-003-07	Primary Reformer: Oil Fired	0.86	tons of ammonia produced	80
<u>Carbon Black Production - 2895</u>					
37	3-01-005-01	Channel Process	---	tons produced	81
38	3-01-005-03	Gas Furnace Process (Main Process Vent)	3.2	tons produced	82
38	3-01-005-04	Oil Furnace Process (Main Process Vent)	6.53	tons produced	83
38	3-01-005-06	Transport Air Vent	0.58	tons produced	84
38	3-01-005-07	Pellet Dryer	0.45	tons produced	85
38	3-01-005-08	Bagging/Loading	0.06	tons produced	86
38	3-01-005-09	Furnace Process: Fugitive Emissions	0.2	tons produced	87

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
		<u>Charcoal Manufacture - 2861</u>			
38	3-01-006-03	Batch Kiln	255.4	tons produced	88
38	3-01-006-04	Continuous Furnace	255.4	tons produced	89
38	3-01-006-05	Briquetting	24.1	tons produced	90
		<u>Explosives - Trinitrotoluene - 2892</u>			
39	3-01-010-15	Batch Process: Red Water Incinerator	23.5	tons produced	91
39	3-01-010-23	Continuous Process: Red Water Incinerator	0.24	tons produced	92
		3-01-010-30 - Open Burning: Waste	142	tons TNT burned	93
		<u>Phosphoric Acid: Thermal Process - 2874</u>			
41	3-01-017-03	Absorber w/Packed Tower	2.14	tons P ₂ O ₅	94
41	3-01-017-04	Absorber w/Venturi Scrubber	2.53	tons P ₂ O ₅	95
41	3-01-017-05	Absorber w/Glass Mist Eliminator	0.69	tons P ₂ O ₅	96
41	3-01-017-06	Absorber w/Wire Mist Eliminator	5.46	tons P ₂ O ₅	97
41	3-01-017-07	Absorber w/ High-pressure Mist Eliminator	0.11	tons P ₂ O ₅	98
41	3-01-017-08	Absorber w/Electrostatic Precipitator	1.66	tons P ₂ O ₅	99
		<u>Plastics Production - Specific Products - 2821</u>			
41	3-01-018-01	Polyvinyl Chlorides and Copolymers: General	23.0	tons product	100
42	3-01-018-02	Polypropylene and Copolymers: General	2.0	tons product	101
		3-01-018-07 - Polyethylene (High Density): General	2.0	tons product	102
		3-01-018-12 - Polyethylene (Low Density): General	2.0	tons product	103

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
<u>Phthalic Anhydride - 2865</u>					
44	3-01-019-02	o-Xylene Oxidation: Pre-treatment	12.2	tons produced	104
44	3-01-019-06	Naphthalene Oxidation: Pre-treatment	4.7	tons produced	105
<u>Printing Ink Manufacture - 2893</u>					
	3-01-020-05	Pigment Mixing	1.7	tons pigment	106
<u>Sodium Carbonate - 2812</u>					
45	3-01-021-02	Solvay: Handling	10.5	tons produced	107
45	3-01-021-06	Rotary Dryer: Gas-Fired	17.6	tons product	108
45	3-01-021-14	Rotary Dryer: Steam Tube	14.0	tons produced	109
<u>Synthetic Organic Fiber Mfg. - Specific Products - 2824</u>					
	3-01-024-01	Nylon #6 Staple	.01	tons fiber spun	110
	3-01-024-02	Polyester Staple	33.3	tons fiber spun	111
	3-01-024-03	Polyester Yarn	.04	tons fiber spun	112
	3-01-024-06	Nylon #66 Controlled	---	tons of fiber	113
	3-01-024-07	Nylon #66 Uncontrolled	.66	tons of fiber	114
	3-01-024-14	Polyolfin: Melt Spun	.01	tons of fiber	115
<u>Ammonium Nitrate Production - 2873</u>					
48	3-01-027-04	Neutralizer	4.35	tons produced	116
48	3-01-027-08	Pan Granulator	0.05	tons produced	117
	3-01-027-09	Bulk Loading (general)	.02	tons produced	118
	3-01-027-10	Bagging of Product	.16	tons produced	119
48	3-01-027-11	Neutralizer (high density)	4.35	tons produced	120
48	3-01-027-12	Prilling Tower (high density)	3.0	tons produced	121
48	3-01-027-14	Prilling Coolers (high density)	0.01	tons produced	122
48	3-01-027-17	Evaporator/Concentrator (high density)	0.49	tons produced	123

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Page Number*	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
48	3-01-027-18	Coating (high density)	3.4	tons produced	124
48	3-01-027-21	Neutralizer (low density)	4.35	tons produced	125
48	3-01-027-27	Evaporator Concentrator (low density)	0.49	tons produced	126
49	3-01-027-28	Coating (low density)	3.4	tons produced	127
		<u>Inorganic Pigments - 2816</u>			
52	3-01-035-01	Titanium TiO ₂ Sulfate Process: Calciner	27.6	tons produced	128
52	3-01-035-06	Lead Oxide: Barton Pot	0.64	tons produced	129
52	3-01-035-07	Lead Oxide: Calciner Furnace	15.0	tons produced	130
52	3-01-035-10	Red Lead	1.0	tons produced	131
53	3-01-035-15	White Lead	0.69	tons produced	132
	3-01-035-20	Lead Chromate	0.2	tons produced	133
53	3-01-035-51	Ore Dryer	6.9	tons produced	134
		<u>Urea Production - 2873</u>			
53	3-01-040-02	Solution Concentration (controlled)	0.011	tons produced	135
53	3-01-040-03	Prilling	3.57	tons produced	136
53	3-01-040-04	Drum Granulation	4.82	tons produced	137
53	3-01-040-05	Coating	3.4	tons produced	138
	3-01-040-06	Bagging	0.16	tons produced	139
	3-01-040-07	Bulk Loading	0.017	tons produced	140
		<u>Lead Alkyl Manufacture - (Sodium/Lead Alloy Process) - 2869</u>			
54	3-01-042-01	Recovery Furnace	59.3	tons produced	141
	3-01-042-04	Sludge Pits	1.9	tons produced	142
		<u>Boric Acid - 2800</u>			
56	3-01-113-01	Dryer	0.58	tons dried	143

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
		<u>Potassium Chloride - 2800</u>			
57	3-01-114-01	Dryer	2.68	tons product	144
		<u>Ammonium Sulfate - 2873</u>			
61	3-01-130-05	Fluid Bed Dryer	21.8	tons product	145
 <u>FOOD AND AGRICULTURE - MAJOR GROUPS 01, 02, 07, 20, 21, 42, 44, AND 51</u>					
		<u>Instant Coffee Products - 2095</u>			
79	3-02-003-01	Spray Dryer	0.93	tons of green beans	146
		<u>Cotton Ginning - 0724</u>			
	3-02-004-01	Unloading Fan	0.75	bales of cotton	147
	3-02-004-02	Seed Cotton Cleaning System	0.05	bales of cotton	148
	3-02-004-03	Stick/Burr Machine	0.03	bales of cotton	149
	3-02-004-04	Miscellaneous (Lint Cleaner/Battery Condensers/Master Trash/Overflow/Mote Fans)	0.23	bales of cotton	150
	3-02-004-10	General (Entire Process, Alternative to Above)	1.0	bales of cotton	151
		<u>Feed and Grain Terminal Elevators - 5153, 4221, 4491</u>			
	3-02-005-12	Terminal Elevators: General	1.65	tons of grain shipped or received	152
		<u>Feed and Grain Country Elevators - 5153, 4221, 4491</u>			
80	3-02-006-08	Elevator Legs (Headhouse)	0.23	tons of grain processed	153
80	3-02-006-10	Elevator Legs (Headhouse)	0.7	tons of grain shipped or received	154
		<u>Rye Milling - 2041</u>			
81	3-02-007-24	Millhouse	42.7	tons of grain received	155

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Page Number*	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
		<u>Wheat Milling - 2041</u>			
	3-02-007-33	Cleaning House	2.1	tons of grain received	156
82	3-02-007-34	Millhouse	42.7	tons of grain received	157
		<u>Corn: Wet Milling - 2046</u>			
	3-02-007-54	Dryers	0.29	tons of grain received	158
		<u>Oat Milling - 2041</u>			
	3-02-007-60	General	1.5	tons of grain received	159
		<u>Soybean Mills - 2075, 2041</u>			
	3-02-007-83	Grain Cleaning	1.8	tons of grain received	160
		<u>Feed Manufacture - 2082</u>			
	3-02-008-05	Grinding	0.13	tons of grain received	161
	3-02-008-06	Pellet Coolers	0.1	tons of grain received	162
	3-02-008-15	Grinding	0.06	tons grain processed	163
	3-02-008-16	Pellet Cooler	0.06	tons grain processed	164
		<u>Beer Production - 2082</u>			
	3-02-009-05	Malt Dryer	0.027	tons grain dried	165
		<u>Fish Processing - 2077, 2091</u>			
85	3-02-012-05	Steam Tube Dryer	1.05	tons fish scrap	166
85	3-02-012-06	Direct Fire Dryer	1.68	tons fish scrap	167
		<u>Cereal - 2043</u>			
88	3-02-040-01	Dryer	0.66	tons dried	168

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Page Number*	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
<u>PRIMARY METAL PRODUCTION - MAJOR GROUPS 10 AND 33</u>					
<u>Aluminum Ore - Bauxite - 1099</u>					
89	3-03-000-02	Drying Oven	0.7	tons of ore	169
<u>Aluminum Ore: Electro-Reduction - 3334</u>					
89	3-03-001-01	Prebaked Reduction Cell	54.5	tons of molten aluminum produced	170
89	3-03-001-04	Materials Handling	5.8	tons of molten aluminum produced	171
90	3-03-001-10	Vertical Stud Soderberg: Fugitive Emissions	3.7	tons of molten aluminum produced	172
<u>Aluminum Hydroxide Calcining - 3334</u>					
90	3-03-002-01	Overall Process	24.0	tons of alumina produced	173
<u>By-Product Coke Manufacturing - 3312</u>					
	3-03-003-05	Coal Unloading	5.4 x 10 ⁻⁵	tons of coal charged	174
90	3-03-003-08	Oven/Door Leaks	0.48	tons of coal charged	175
90	3-03-003-10	Coal Crushing	0.05	tons processed	176
90	3-03-003-12	Coke: Crushing/Screening/Handling	0.04	tons processed	177
90	3-03-003-14	Topside Leaks	0.08	tons of coal charged	178
<u>Coke Manufacture: Beehives - 3312</u>					
90	3-03-004-01	General	97.8	tons of coal charged	179

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
<u>Primary Copper Smelters - 3331</u>					
91	3-03-005-02	Multiple Hearth Roaster	23.8	tons of concentrated ore processed	180
91	3-03-005-05	Fire (Furnace) Refining	9.2	tons of concentrated ore processed	181
91	3-03-005-06	Ore Concentrate Dryer	4.8	tons of concentrated ore processed	182
91	3-03-005-07	Reverberatory Smelting Furnace with Ore Charge (w/o Roasting)	13.5	tons of concentrated ore processed	183
91	3-03-005-09	Fluidized Bed Roaster	29.2	tons of concentrated ore processed	184
91	3-03-005-10	Electric Smelting Furnace	58.0	tons of concentrated ore processed	185
91	3-03-005-12	Flash Smelting	83.0	tons of concentrated ore processed	186
91	3-03-005-13	Roasting: Fugitive Emissions	1.4	tons of concentrated ore processed	187
91	3-03-005-14	Reverberatory Furnace: Fugitive Emissions	0.17	tons of concentrated ore processed	188
91	3-03-005-15	Converter: Fugitive Emissions	2.6	tons of concentrated ore processed	189
91	3-03-005-16	Anode Refining Furnace: Fugitive Emissions	0.46	tons of concentrated ore processed	190

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
91	3-03-005-17	Slag Cleaning Furnace : Fugitive Emissions	7.7	tons of concentrated ore processed	191
92	3-03-005-22	Slag Cleaning Furnace	9.6	tons of concentrated ore processed	192
92	3-03-005-23	Reverberatory Furnace w/Converter	13.5	tons of concentrated ore processed	193
92	3-03-005-25	Fluid Bed Roaster w/Reverberatory Furnace and Converter	29.2	tons of concentrated ore processed	194
92	3-03-005-26	Concentrate Dryer w/Electric Furnace and Cleaning Furnace and Converter	4.8	tons of concentrated ore processed	195
92	3-03-005-27	Concentrate Dryer w/Flash Furnace and Converter	4.8	tons of concentrated ore processed	196
92	3-03-005-28	Notanda Reactor and Converter	---	tons of concentrated ore processed	197
92	3-03-005-29	Multiple Hearth Roaster w/Reverberatory Furnace and Converter	23.8	tons of concentrated ore processed	198
92	3-03-005-30	Fluid Bed Roaster w/Electric Furnace and Converter	29.2	tons of concentrated ore processed	199
92	3-03-005-31	Reverberatory Furnace after Multiple Hearth Roaster	13.5	tons of concentrated ore processed	200
93	3-03-005-32	Reverberatory Furnace after Fluid Bed Roaster	13.5	tons of concentrated ore processed	201
93	3-03-005-33	Electric Furnace after Concentrate Dryer	58.0	tons of concentrated ore processed	202

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
93	3-03-005-34	Flash Furnace after Concentrate Dryer	83.0	tons of concentrated ore processed	203
93	3-03-005-35	Electric Furnace after Fluid Bed Roaster	58.0	tons of concentrated ore processed	204
		<u>Ferroalloy (Open Furnace) - 3313</u>			
93	3-03-006-02	75% Ferrosilicon: Elec. Smelting Furnaces	199.0	tons produced	205
93	3-03-006-03	90% Ferrosilicon: Elec. Smelting Furnaces	355.0	tons produced	206
93	3-03-006-06	80% Ferromanganese	24.0	tons produced	207
93	3-03-006-07	80% Ferrochromium	143.0	tons produced	208
		<u>Ferroalloy (Semi-Covered Furnace) - 3313</u>			
	3-03-007-01	Ferromanganese: Electric Arc Furnace	10.8	tons produced	209
		<u>Iron Production - Blast Furnaces - 3312</u>			
94	3-03-008-01	Ore Charging	41.8	tons iron produced	210
94	3-03-008-02	Agglomerates Charging	15.2	tons iron produced	211
		<u>Iron Production - Blast Furnace Slag - 3312</u>			
	3-03-008-04	Loader: Hi-Silt	0.013	tons slag transferred	212
	3-03-008-05	Loader: Low-Silt	0.0044	tons slag transferred	213
		<u>Iron Production - Sintering - 3312</u>			
95	3-03-008-14	Discharge End	1.02	tons produced	214
95	3-03-008-17	Cooler	0.45	tons produced	215
95	3-03-008-19	Sinter Process (Combined Code Includes 15, 16, 17, 18)	0.12	tons produced	216
95	3-03-008-20	Sinter Conveyor: Transfer Station	0.013	tons sinter transferred	217

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
<u>Iron Production - Blast Furnaces - 3312</u>					
	3-03-008-21	Unload Ore, Pellets, Limestone, into Blast Furn.	0.0012	tons ore transferred	218
95	3-03-008-26	Blast Furnace Slips	33.0	number of slips	219
	3-03-008-27	Lump Ore Unloading	0.0002	tons ore transferred	220
<u>Steel Production - 3312</u>					
96	3-03-009-04	Electric Arc Furnace: Stack (Alloy Steel)	6.55	tons produced	221
96	3-03-009-08	Electric Arc Furnace: Stack (Carbon Steel)	29.0	tons produced	222
	3-03-009-11	Soaking Pits			223
		blast furnace gas	0.035	10 ⁶ Btu	
		coke oven gas	0.012	10 ⁶ Btu	
96	3-03-009-13	Basic Oxygen Furnace: Open Hood - Stack	13.1	tons produced	224
96	3-03-009-14	Basic Oxygen Furnace: Closed Hood - Stack	13.1	tons produced	225
96	3-03-009-15	Hot Metal (Iron) Transfer to Steelmaking Furnace	0.09	tons produced	226
97	3-03-009-20	Hot Metal Desulfurization	0.22	tons processed	227
97	3-03-009-21	Teeming (Unleaded Steel)	0.03	tons produced	228
	3-03-009-23	Steel furnace Slag Tapping and Dumping	0.39	tons steel	229
	3-03-009-24	Steel Furnace Slag Processing	0.0023	tons slag transferred	230
97	3-03-009-25	Teeming (Leaded Steel)	0.36	tons produced	231
97	3-03-009-32	Scarfig	0.1	tons produced	232
	3-03-009-33	Reheat Furnaces			233
		blast furnace gas	2.9	10 ⁶ ft ³ gas	
		coke oven gas	6.2	10 ⁶ ft ³ gas	

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
<u>Lead Production - 3339</u>					
97	3-03-010-05	Materials Handling (Includes 11, 12, 13, 04, 14)	4.25	tons of lead product	234
98	3-03-010-06	Sintering: Dual Stream Feed End	181.0	tons of concentrated ore processed	235
98	3-03-010-08	Slag Fume Furnace	1.29	tons of lead product	236
98	3-03-010-09	Lead Dressing	0.47	tons of lead product	237
98	3-03-010-10	Raw Material Crushing and Grinding	0.85	tons processed	238
98	3-03-010-11	Raw Material Unloading	0.34	tons of raw material	239
98	3-03-010-12	Raw Material Storage Piles	0.26	tons of raw material	240
98	3-03-010-13	Raw Material Transfer	0.43	tons of raw material	241
98	3-03-010-14	Sintering Charge Mixing	1.9	tons of raw material	242
98	3-03-010-15	Sinter Crushing/Screening	0.12	tons of sinter	243
98	3-03-010-16	Sinter Transfer	0.015	tons of sinter	244
98	3-03-010-17	Sinter Fines Return Handling	4.8	tons of sinter	245
98	3-03-010-19	Blast Furnace Tapping (Metal and Slag)	0.07	tons of lead product	246
98	3-03-010-20	Blast Furnace Lead Pouring	0.93	tons of lead product	247
98	3-03-010-21	Blast Furnace Slag Pouting	0.13	tons of lead product	248
98	3-03-010-22	Lead Refining/Silver Retort	1.76	tons of lead product	249

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
98	3-03-010-23	Lead Casting	0.85	tons of lead product	250
99	3-03-010-24	Reverberatory or Kettle Softening	2.94	tons of lead product	251
99	3-03-010-25	Sinter Machine Leakage	0.67	tons of sinter	252
99	3-03-010-26	Sinter Dump Area	0.0008	tons of sinter	253
	<u>Titanium Processing - 3339, 3369, 3356, 3364</u>				
99	3-03-012-02	Drying Titanium Sand Ore (Cyclone Exit)	0.43	tons of ore processed	254
	<u>Taconite Iron Ore Processing - 1011</u>				
99	3-03-023-03	Ore Screening	0.05	tons pellets produced	255
100	3-03-023-04	Ore Transfer	0.085	tons pellets produced	256
100	3-03-023-07	Bentonite Storage	0.03	tons pellets produced	257
100	3-03-023-12	Indurating Furnace: Gas Fired	24.8	tons pellets produced	258
100	3-03-023-13	Indurating Furnace: Oil Fired	24.8	tons pellets produced	259
100	3-03-023-14	Indurating Furnace: Coal Fired	24.8	tons pellets produced	260
	3-03-023-16	Pellet Transfer	1.5	tons pellet produced	261
100	3-03-023-21	Haul Road: Rock	6.2	vehicle-miles traveled	262
100	3-03-023-22	Haul Road: Taconite	5.2	vehicle-miles traveled	263
	<u>Metal Mining - General Processes - 1011, 1099</u>				
100	3-03-024-01	Primary Crushing (low moisture ore)	0.05	tons of ore processed	264

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
100	3-03-024-02	Secondary Crushing (low moisture ore)	0.1	tons of ore processed	265
100	3-03-024-03	Tertiary Crushing (low moisture ore)	0.16	tons of ore processed	266
100	3-03-024-04	Material Handling (low moisture ore)	0.06	tons of ore processed	267
100	3-03-024-05	Primary Crushing (high moisture ore)	0.009	tons of ore processed	268
100	3-03-024-06	Secondary Crushing (high moisture ore)	0.02	tons of ore processed	269
101	3-03-024-07	Tertiary Crushing (high moisture ore)	0.02	tons of ore processed	270
101	3-03-024-08	Material Handling (high moisture ore)	0.005	tons of ore processed	271
101	3-03-024-09	Dry Grinding w/air conveying	20.2	tons of ore processed	272
	3-03-024-10	Dry Grinding w/o air conveying, etc.	2.0	tons of ore processed	273
101	3-03-024-11	Ore Drying	12.0	tons of ore processed	274
	<u>Zinc Production - 3339</u>				
	3-03-030-02	Multiple Hearth Roaster	159	tons concentrated ore produced	275
	3-03-030-03	Sinter Strand	89	tons concentrated ore produced	276
	3-03-030-05	Vertical Retort/Electrothermal Furnace	93.0	tons concentrated ore produced	277
	3-03-030-06	Electrolytic Processor	3.0	tons concentrated ore produced	278
	3-03-030-07	Flash Roaster	1840	tons of concentrated ore processed	279

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
	3-03-030-08	Fluid Bed Roaster	1994	tons of concentrated ore processed	280
101	3-03-030-09	Raw Material Handling and Transfer	3.4	tons raw material processed	281
101	3-03-030-10	Sinter Breaking and Cooling	1.3	tons sinter processed	282
101	3-03-030-11	Zinc Casting	2.1	tons zinc produced	283
101	3-03-030-12	Raw Material Unloading	0.23	tons raw material processed	284
<u>SECONDARY METAL PRODUCTION - MAJOR GROUPS 33 AND 34</u>					
<u>Secondary Copper Production - 3341, 3364, 3366</u>					
104	3-04-002-07	Scrap Dryer (Rotary)	253.0	tons of charge	285
104	3-04-002-08	Wire Burning (Incinerator)	253.0	tons of charge	286
<u>Secondary Copper Production - Cupolas - 3341, 3364, 3369</u>					
104	3-04-002-10	Charge w/Scrap Copper	0.00027	tons of charge	287
104	3-04-002-11	Charge w/Insulated Copper Wire	211.6	tons of coke-free charge	288
104	3-04-002-12	Charge w/Scrap Copper and Brass	64.4	tons of charge	289
<u>Secondary Copper Production - Reverberatory Furnace - 3341, 3364, 3369</u>					
104	3-04-002-14	Charge w/Copper	5.1	tons of charge	290
104	3-04-002-15	Charge w/Brass and Bronze	21.2	tons of charge	291
<u>Secondary Copper Production - Rotary Furnace - 3341, 3364, 3369</u>					
104	3-04-002-17	Charge w/Brass and Bronze	177.0	tons of charge	292
<u>Secondary Copper Production - Crucible and Pot Furnaces - 3341, 3364, 3369</u>					
104	3-04-002-19	Charge w/Brass and Bronze	12.4	tons of charge	293
<u>Secondary Copper Production - Electric Arc Furnace - 3341, 3364, 3369</u>					
105	3-04-002-20	Charge w/Copper	5.0	tons of charge	294

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105	3-04-002-21	Charge w/Brass and Bronze	6.5	tons of charge	295
		<u>Secondary Copper Production - Electric Induction - 3341, 3364, 3369</u>			
105	3-04-002-23	Charge w/Copper	7.0	tons of charge	296
105	3-04-002-24	Charge w/Brass and Bronze	20.0	tons of charge	297
		<u>Secondary Copper Production - Fugitive Emissions - 3341, 3364, 3369</u>			
105	3-04-002-31	Scrap Dryer	8.25	tons of charge	298
105	3-04-002-32	Wire Incinerator	8.25	tons of charge	299
105	3-04-002-33	Sweating Furnace	0.45	tons of charge	300
105	3-04-002-34	Cupola Furnace	2.20	tons of charge	301
105	3-04-002-35	Reverberatory Furnace	3.16	tons of charge	302
105	3-04-002-36	Rotary Furnace	2.66	tons of charge	303
105	3-04-002-37	Crucible Furnace	0.29	tons of charge	304
105	3-04-002-38	Electric Induction Furnace	0.084	tons of charge	305
105	3-04-002-39	Casting Operations	0.015	tons of castings produced	306
		<u>Gray Iron Foundries - 3321</u>			
105	3-04-003-02	Reverberatory Furnace	1.7	tons of metal charged	307
105	3-04-003-03	Electric Induction Furnace	0.86	tons of metal charged	308
106	3-04-003-15	Charge Handling	0.36	tons of metal charged	309
106	3-04-003-20	Pouring /Casting	2.8	tons of metal charged	310
106	3-04-003-25	Castings Cooling	1.4	tons of metal charged	311
106	3-04-003-40	Grinding/Cleaning	1.7	tons of metal charged	312
106	3-04-003-50	Sand Grinding/Handling	0.54	tons sand handled	313

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106	3-04-003-51	Core Oven	2.22	tons sand handled	314
106	3-04-003-52	Sand Grinding/Handling	6.0	tons of metal charged	315
106	3-04-003-53	Core Ovens	0.9	tons of metal charged	316
106	3-04-003-60	Castings Finishing	0.0045	tons of metal charged	317
<u>Secondary Lead Production - 3341, 3364</u>					
107	3-04-004-01	Pot Furnace	0.2	tons of metal charged	318
107	3-04-004-02	Reverberatory Furnace	194.0	tons of metal charged	319
107	3-04-004-03	Blast Furnace (Cupola)	129.0	tons of metal charged	320
107	3-04-004-04	Rotary Sweating Furnace	64.0	tons of metal charged	321
107	3-04-004-05	Reverberatory Sweating Furnace	31.0	tons of metal charged	322
107	3-04-004-08	Barton Process Reactor (Oxidation Kettle)	40.0	tons lead oxide produced	323
107	3-04-004-09	Casting	0.87	tons of lead cast	324
107	3-04-004-12	Sweating Furnace: Fugitive Emissions	2.35	tons of metal charged	325
107	3-04-004-13	Smelting Furnace: Fugitive Emissions	9.90	tons of metal charged	326
107	3-04-004-14	Kettle Refining: Fugitive Emissions	0.002	tons of metal charged	327
<u>Lead Battery Manufacture - 3691</u>					
107	3-04-005-05	Overall Process	125.0	thousand batteries produced	328
107	3-04-005-07	Paste Mixing	4.32	thousand batteries produced	329

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108	3-04-005-10	Lead Reclaiming Furnace	1.67	thousand batteries produced	330
108	3-04-005-11	Small Parts Casting	0.19	thousand batteries produced	331
108	3-04-005-12	Formation	32.4	thousand batteries produced	332
108	3-04-005-13	Barton Process: Oxidation Kettle	0.2	tons processed	333
108	3-04-005-29	Grid Cast/Paste Mix: Combined Operation	7.44	thousand batteries produced	334
108	3-04-005-30	Paste Mix/Lead Charge: Combined Operation	4.32	thousand batteries produced	335
		<u>Steel Foundries - 3324, 3325</u>			
109	3-04-007-03	Open Hearth Furnace with Oxygen Lance	8.5	tons metal processed	336
109	3-04-007-05	Electric Induction Furnace	0.09	tons metal processed	337
109	3-04-007-06	Sand Grinding/Handling	0.54	tons sand processed	338
109	3-04-007-07	Core Ovens	2.22	tons sand processed	339
	3-04-007-08	Pouring and Casting	2.8	tons metal processed	340
109	3-04-007-11	Cleaning	1.7	tons metal processed	341
109	3-04-007-12	Charge Handling	0.36	tons metal processed	342
	3-04-007-13	Castings Cooling	1.4	tons metal processed	343
109	3-04-007-15	Finishing	0.0045	tons metal processed	344
109	3-04-007-16	Sand Grinding and Handling	6.0	tons metal processed	345

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
109	3-04-007-17	Core Ovens	0.9	tons metal processed	346
		<u>Lead Cable Coating - 3357, 3315</u>			
113	3-04-040-01	General	0.36	tons processed	347
<u>MINERAL PRODUCTS - MAJOR GROUPS 11, 12, 14, 28, 29, 32, 44</u>					
		<u>Asphalt Roofing Manufacture - 2952</u>			
115	3-05-001-01	Asphalt Blowing: Saturant	6.8	tons asphalt processed	348
115	3-05-001-02	Asphalt Blowing: Coating	25.0	tons asphalt processed	349
115	3-05-001-03	Felt Saturation: Dipping Only	0.5	tons asphalt shingle	350
115	3-05-001-04	Felt Saturation: Dipping/Spraying	2.26	tons asphalt shingle	351
		<u>Asphaltic Concrete - 2951</u>			
116	3-05-002-02	Hot Elevators, Screens, Bins and Mixer	0.03	tons produced	352
116	3-05-002-03	Storage Piles	0.12	tons processed	353
116	3-05-002-04	Cold Aggregate Handling	0.04	tons processed	354
116	3-05-002-11	Rotary Dryer - Conventional Plant, w/Cyclone	0.36	tons produced	355
		<u>Brick Manufacture - 3251</u>			
116	3-05-003-01	Raw Material Drying	35.7	tons of raw material	356
116	3-05-003-03	Storage of Raw Materials	12.0	tons of raw material stored	357
117	3-05-003-08	Screening	1.4	tons of raw material	358
117	3-05-003-10	Curing and Firing: Saw-Dust Fired Tunnel Kilns	0.2	tons produced	359

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
117	3-05-003-11	Curing and Firing: Gas-Fired Tunnel Kilns	0.01	tons produced	360
117	3-05-003-12	Curing and Firing: Oil-Fired Tunnel Kilns	0.32	tons brick produced	361
117	3-05-003-14	Curing and Firing: Gas-Fired Periodic Kilns	0.034	tons produced	362
117	3-05-003-15	Curing and Firing: Oil-Fired Periodic Kilns	0.47	tons produced	363
117	3-05-003-16	Curing and Firing: Coal-Fired Periodic Kilns	10.0	tons produced	364
	3-05-003-21	Coal Handling	1.0	tons coal handled	365
		<u>Calcium Carbide - 2819</u>			
117	3-05-004-01	Electric Furnace (Hoods and Main Stack)	22.0	tons produced	366
117	3-05-004-02	Coke Dryer	1.0	tons produced	367
117	3-05-004-03	Furnace Room Vents	24.0	tons produced	368
		<u>Castable Refractory - 3255</u>			
118	3-05-005-05	Molding and Shakeout	20.0	tons feed material	369
		<u>Cement Manufacturing - Dry Process - 3241</u>			
118	3-05-006-07	Raw Material Unloading	0.1	tons of material unloaded	370
118	3-05-006-08	Raw Material Piles	1.4	tons in piles	371
118	3-05-006-09	Primary Crushing	0.26	tons processed	372
118	3-05-006-10	Secondary Crushing	1.13	tons processed	373
118	3-05-006-12	Raw Material Transfer	0.15	tons handled	374
118	3-05-006-19	Cement Load Out	0.20	tons cement produced	375
		<u>Cement Manufacturing - Wet Process - 3241</u>			
119	3-05-007-07	Raw Material Unloading	0.1	tons of material unloaded	376

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
119	3-05-007-08	Raw Material Piles	1.4	tons in piles	377
119	3-05-007-09	Primary Crushing	0.26	tons processed	378
119	3-05-007-10	Secondary Crushing	1.13	tons processed	379
119	3-05-007-12	Raw Material Transfer	0.15	tons handled	380
119	3-05-007-14	Clinker Cooler	0.8	tons cement produced	381
119	3-05-007-19	Cement Load Out	0.2	tons cement produced	382
<u>Clay and Fly Ash Sintering - 3295</u>					
	3-05-009-03	Natural Clay/Shale Sintering	6.36	tons finished product	383
119	3-05-009-04	Raw Clay/Shale Crushing/Screening	0.25	tons raw material	384
119	3-05-009-05	Raw Clay/Shale Transfer/Conveying	0.4	tons raw material	385
120	3-05-009-16	Dryer	62.6	tons clay dried	386
120	3-05-009-17	Clay Reciprocating Grate Clinker Cooler	0.18	tons clay processed	387
<u>Surface Mining Operations - 1111, 1221, 1222</u>					
	3-05-010-21	Overburden Removal	---	tons coal mined	388
	3-05-010-22	Drilling/Blasting	---	tons coal mined	389
121	3-05-010-23	Loading	0.05	tons coal mined	390
	3-05-010-24	Hauling	2.1	vehicle-miles traveled	391
	3-05-010-30	Topsoil Removal	---	tons of topsoil removed	392
	3-05-010-31	Scrapers: Travel Mode	---	vehicle-miles by scrapers	393
	3-05-010-32	Topsoil Unloading	---	tons of topsoil	394
121	3-05-010-33	Overburden: Drilling	0.16	holes drilled	395

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
121	3-05-010-34	- Coal Seam: Drilling	0.028	holes drilled	396
	3-05-010-35	- Blasting: Coal Overburden	---	blasts	397
	3-05-010-36	- Dragline: Overburden Removal	.009	cubic yards overburden removed	398
121	3-05-010-37	- Truck Loading: Overburden	0.015	tons overburden loaded	399
	3-05-010-38	- Truck Loading: Coal	.005	tons coal loaded	400
	3-05-010-39	- Hauling: Haul Trucks	2.1	vehicle-miles by haul trucks	401
	3-05-010-40	- Truck Unloading: End Dump-Coal	.001	tons coal	402
	3-05-010-41	- Truck Unloading: Bottom Dump-Coal	.01	tons coal	403
121	3-05-010-42	- Truck Unloading: Bottom Dump- Overburden	0.001	tons overburden	404
121	3-05-010-43	- Open Storage Pile: Coal	17060.0	acres of coal storage area	405
	3-05-010-44	- Train Loading: Coal	.0059	tons coal loaded	406
	3-05-010-45	- Bulldozing: Overburden	---	bulldozer-hours of operation	407
	3-05-010-46	- Bulldozing: Coal	---	bulldozer-hours of operation	408
	3-05-010-47	- Grading	3.33	vehicle-miles by graders	409
122	3-05-010-48	- Overburden Replacement	0.006	tons overburden	410
122	3-05-010-49	- Wind Erosion: Exposed Areas	380.0	acres of exposed area	411
	3-05-010-50	- Vehicle Traffic: Light/Medium Vehicles	1.56	vehicle-miles by light/medium vehicles	412

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
		<u>Concrete Batching - 3270, 1771, 3292</u>			
123	3-05-011-20	Asbestos/Cement Products	0.1	tons produced	413
		<u>Fiberglass Manufacture - Wool-Type Fiber - 3296</u>			
	3-05-012-01	Regenerative Furnace	20.9	tons material processed	414
	3-05-012-02	Recuperative Furnace	26.1	tons material processed	415
	3-05-012-03	Electric Furnace	0.48	tons material processed	416
	3-05-012-04	Forming (Rotary Spun)	54	tons material processed	417
123	3-05-012-05	Curing Oven (Rotary Spun)	9.0	tons material processed	418
123	3-05-012-06	Cooling	1.3	tons material processed	419
123	3-05-012-07	Unit Melter Furnace	8.6	tons material processed	420
	3-05-012-08	Forming (Flame Attenuation)	1.9	tons material processed	421
123	3-05-012-09	Curing (Flame Attenuation)	6.0	tons material processed	422
		<u>Fiberglass Manufacture - Textile-Type Fiber - 3229</u>			
123	3-05-012-11	Regenerative Furnace	15.0	tons material processed	423
123	3-05-012-12	Recuperative Furnace	1.9	tons material processed	424
123	3-05-012-13	Unit Melter Furnace	5.7	tons material processed	425
	3-05-012-14	Forming Process	0.5	tons material processed	426
124	3-05-012-15	Curing Oven	1.2	tons material processed	427

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
<u>Frit Manufacture - 2899</u>					
124	3-05-013-01	General	15.0	tons charged	428
<u>Glass Manufacture - 3211, 3221, 3229</u>					
124	3-05-014-03	Flat Glass: Melting Furnace	1.9	tons of glass produced	429
124	3-05-014-04	Pressed and Blown Glass: Melting Furnace	16.5	tons of glass produced	430
	3-05-014-16	Reflective Coating	0.5	tons of glass produced	431
<u>Gypsum Manufacture - 3275</u>					
125	3-05-015-04	Conveying	0.15	tons throughput	432
125	3-05-015-05	Primary Crushing: Gypsum Ore	0.26	tons crude gypsum processed	433
125	3-05-015-06	Secondary Crushing: Gypsum Ore	1.13	tons crude gypsum processed	434
126	3-05-015-21	End Sawing (8 ft)	6.8	thousand sq ft board sawed	435
126	3-05-015-22	End Sawing (12 ft)	4.25	thousand sq ft board sawed	436
<u>Lime Manufacture - 3274</u>					
126	3-05-016-01	Primary Crushing	0.26	tons limestone processed	437
126	3-05-016-02	Secondary Crushing/Screening	1.13	tons limestone processed	438
126	3-05-016-03	Calcining-Vertical Kiln	5.0	tons lime produced	439
126	3-05-016-05	Calcimatic Kiln	31.5	tons lime produced	440
126	3-05-016-07	Raw Material Transfer and Conveying	0.18	tons limestone processed	441
126	3-05-016-08	Raw Material Unloading	0.1	tons limestone processed	442

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Page Number*	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
126	3-05-016-09	- Hydrator (Atmospheric)	0.07	tons hydrated lime produced	443
	3-05-016-10	- Raw Material Storage Piles	1.4	tons limestone processed	444
126	3-05-016-11	- Product Cooler	25.2	tons lime produced	445
126	3-05-016-12	- Pressure Hydrator	0.07	tons hydrated lime produced	446
	<u>Perlite Mfg. - 3295</u>				
	3-05-018-01	- Vertical Furnace	19	tons charged	447
	<u>Phosphate Rock - 1475</u>				
127	3-05-019-04	- Open Storage	14.4	tons phosphate rock	448
	3-05-019-06	- Rotary Dryer	4.7	tons phosphate rock dried	449
127	3-05-019-07	- Ball Mill	0.45	tons phosphate rock milled	450
	<u>Stone Quarrying/Processing - 1411, 1422, 1423, 1429, 1499</u>				
128	3-05-020-07	- Open Storage	0.12	tons product stored	451
128	3-05-020-10	- Drilling	0.0001	tons raw material	452
	3-05-020-11	- Hauling	6.2	vehicle-miles	453
128	3-05-020-12	- Drying	5.0	tons stone dried	454
128	3-05-020-20	- Drilling	0.0001	feet drilled	455
	<u>Potash Production - 1474</u>				
	3-05-022-01	- Mine: Grinding/Drying	13.5	tons ore	456
	<u>Sand/Gravel - 1442, 1446</u>				
129	3-05-025-02	- Aggregate Storage	0.12	tons product	457
129	3-05-025-03	- Material Transfer and Conveying	0.0064	tons product	458
	3-05-025-04	- Hauling	6.2	vehicle-miles	459

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
	3-05-025-07	Storage Piles	1329.0	acres of storage area	460
129	3-05-025-11	Screening	0.12	tons product	461
		<u>Feldspar - 1459</u>			
130	3-05-034-01	Ball Mill	8.4	tons rock milled	462
<u>PETROLEUM INDUSTRY - MAJOR GROUP 29</u>					
		<u>Process Heaters 2911</u>			
136	3-06-001-03	Oil Fired	7.4S	thousand gals burned	463
136	3-06-001-04	Gas Fired	3.0	million cu ft burned	464
136	3-06-001-05	Natural Gas-Fired	3.0	million cu ft burned	465
136	3-06-001-06	Processed Gas-Fired	3.0	million cu ft burned	466
136	3-06-001-07	LPG Fired	0.27	thousand gals burned	467
		<u>Fluid Catalytic Cracking Units (FCC) - 2911</u>			
136	3-06-002-01	Fluid Catalytic Cracking Unit	169.4	thousand bbls fresh feed	468
136	3-06-003-01	Thermal Catalytic Cracking Unit	11.9	thousand bbls fresh feed	469
		<u>Fluid Coking Units - 2911</u>			
139	3-06-012-01	Fluid Coking Units: General	366.0	thousand bbls fresh feed	470
<u>PULP AND PAPER AND WOOD PRODUCTS - MAJOR GROUPS 24, 25, 26, AND 27</u>					
		<u>Sulfate (Kraft) Pulping - 2611, 2621, 2631 (For Bark Boilers, See Industrial Boilers)</u>			
140	3-07-001-08	Fluid Bed Calciner	50.4	air-dry tons unbleached pulp	471
140	3-07-001-10	Recovery Furnace/Indirect Contact Evaporator	230.0	air-dry tons unbleached pulp	472

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
<u>Neutral Sulfite Semichemical Pulping - 2611, 2621, 2631</u>					
	3-07-003-03	Fluid Bed Reactor: General	0		473
<u>Pulpboard Manufacture - 2611, 2621, 2631, 2493</u>					
142	3-07-004-02	Fiberboard: General	0.35	tons finished product	474
<u>Plywood/Particleboard Operations - 2435, 2436, 2493</u>					
142	3-07-007-01	General: Not Classified	2.47	ten thousand sq ft 3/8" plywood produced	475
142	3-07-007-03	Particleboard Drying	0.35	tons processed	476
142	3-07-007-04	Waferboard Dryer	498.0	ten thousand lbs wafers/chip dried	477
142	3-07-007-11	Fir-Sapwood-Steam	2.69	ten thousand sq ft 3/8" plywood produced	478
143	3-07-007-12	Fir-Sapwood-Gas-Fired Dryer	1.37	ten thousand sq ft 3/8" plywood produced	479
143	3-07-007-13	Fir-Heartwood Plywood Veneer Dryer	1.84	ten thousand sq ft 3/8" plywood produced	480
143	3-07-007-14	Larch Plywood Veneer Dryer	2.40	ten thousand sq ft 3/8" plywood produced	481
143	3-07-007-15	Southern Pine Plywood Veneer Dryer	2.15	ten thousand sq ft 3/8" plywood produced	482
<u>Sawmill Operations - 2421, 2426, 2429, 2411</u>					
143	3-07-008-01	Log Debarking: General	0.011	tons of logs processed	483
143	3-07-008-02	Log Sawing: General	0.2	tons of logs processed	484
143	3-07-008-03	Sawdust Pile Handling: General	0.36	tons of sawdust	485

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Page Number*	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
143	3-07-008-04	Sawing: Cyclone Exhaust	0.9	SCFM average airflow	486
143	3-07-008-05	Planing/Trimming: Cyclone Exhaust	0.9	SCFM average airflow	487
143	3-07-008-06	Sanding: Cyclone Exhaust	2.0	SCFM average airflow	488
144	3-07-008-07	Sanderdust: Cyclone Exhaust	2.5	hours of operation	489
144	3-07-008-08	Other Cyclones: Exhaust	0.8	hours of operation	490
<u>Miscellaneous Woodworking Operations - 2420, 2430</u>					
144	3-07-030-01	Wood Waste Storage Bin Vent	0.58	tons woodwaste	491
144	3-07-030-02	Wood Waste Stored Bin Loadout	1.2	tons woodwaste	492
<u>FABRICATED METAL PRODUCTS - MAJOR GROUPS 34 AND 50</u>					
<u>Drum Cleaning/Reclamation - 5085</u>					
150	3-09-025-01	Drum Burning Furnace	0.021	drums burned	493
151	3-09-040-30	Tinning: Batch Process	2.8	tons tin consumed	494
<u>OIL AND GAS PRODUCTION - FUEL FIRED EQUIPMENT - MAJOR GROUPS 13</u>					
<u>Process Heaters - 1300</u>					
153	3-10-004-01	Distillate Oil (No. 2)	1.0	thousand gals burned	495
153	3-10-004-02	Residual Oil	10.3S	thousand gals burned	496
153	3-10-004-03	Crude Oil	10.3S	thousand gals burned	497
153	3-10-004-04	Natural Gas	3.0	million cu ft burned	498
153	3-10-004-05	Process Gas	3.0	million cu ft burned	499
<u>Steam Generators - 1300</u>					
153	3-10-004-11	Distillate Oil (No. 2)	1.0	thousand gals burned	500

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
153	3-10-004-12	Residual Oil	10.3S	thousand gals burned	501
153	3-10-004-13	Crude Oil	10.3S	thousand gals burned	502
153	3-10-004-14	Natural Gas	3.0	million cu ft burned	503
153	3-10-004-15	Process Gas	3.0	million cu ft burned	504
<u>BUILDING CONSTRUCTION - MAJOR GROUP 15</u>					
<u>Construction: Demolition of Structures - 1521, 1522</u>					
154	3-11-002-01	Mechanical or Explosive Dismemberment	5.1 x 10 ⁻⁵	sq ft demolished floor area	505
154	3-11-002-02	Mechanical or Explosive Dismemberment	0.0011	tons of waste material	506
154	3-11-002-03	Debris Loading	9.3 x 10 ⁻⁵	sq ft demolished floor area	507
154	3-11-002-04	Debris Loading	0.058	tons of waste material	508
154	3-11-002-05	On-Site Truck Traffic	0.01	sq ft demolished floor area	509
155	3-11-002-06	On-Site Truck Traffic	4.5	vehicle-miles travelled	510
<u>PRINTING AND PUBLISHING - TYPESETTING - MAJOR GROUP 27</u>					
<u>Typesetting (Lead Remelting) - 2791</u>					
158	3-60-001-01	Remelting (Lead Emissions Only)	0.18	tons melted	511
<u>IN-PROCESS FUEL USE</u>					
<u>Anthracite Coal</u>					
	3-90-001-89	General	2.3A	tons burned	512
<u>Subbituminous Coal</u>					
	3-90-002-88	General	1.6A	tons burned	513

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Page Number*	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
		<u>Bituminous Coal</u>			
	3-90-002-89	- General	1.4A	tons burned	514
		<u>Lignite</u>			
	3-90-003-89	- General	1.3A	tons burned	515
		<u>Residual Oil</u>			
	3-90-004-89	- General	10.3S	thousand gal. burned	516
		<u>Distillate Oil</u>			
	3-90-005-89	- General	1	thousand gal. burned	517
		<u>Natural Gas</u>			
	3-90-006-89	- General	3.0	million cubic feet burned	518
		<u>Process Gas</u>			
	3-90-007-88	- General	3.0	million cubic feet burned	519
	3-90-007-89	- Coke Oven Gas	4.3	million cubic feet burned	520
		<u>Wood</u>			
	3-90-008-89	- General	6.3A	tons burned	521
		<u>LPG</u>			
	3-90-009-89	- General	7.2	tons burned	522
		<u>Liquified Petroleum Gas (LPG)</u>			
	3-90-010-89	- General	0.26	thousand gal. burned	523
		<u>Liquid Waste</u>			
	3-90-013-89	- General	16.3	thousand gal. burned	524

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Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
<u>SURFACE COATING OPERATIONS - MAJOR GROUPS 22-37</u>					
<u>Surface Coating of Automobiles and Light Trucks - 3711, 3713</u>					
173	4-02-016-01	Prime Application, Electodeposition/Dip/Spray	6.40	tons solvent in coating	525
<u>ORGANIC SOLVENT EVAPORATION - MISCELLANEOUS - MAJOR GROUPS 40, 47, & 76</u>					
<u>Waste Solvent Recovery Operations - 4000, 4700, 7600</u>					
	4-90-002-03	Incinerator Stack	0.89	tons reclaimed solvent	526
<u>SOLID WASTE DISPOSAL - GOVERNMENT - 4953</u>					
<u>Landfill Dump</u>					
225	5-01-004-01	Unpaved Road Traffic	1.0	cu. yd. waste x miles from gate to dump	527
<u>Other Incineration</u>					
225	5-01-005-05	Pathological	5.92	tons burned	528
225	5-01-005-07	Conical Design (Tee Pee) Municipal Refuse	11.0	tons burned	529
225	5-01-005-08	Conical Design (Tee Pee) Wood Refuse	3.85	tons burned	530
225	5-01-005-10	Trench Burner: Wood	4.94	tons burned	531
225	5-01-005-11	Trench Burner: Tires	52.4	tons burned	532
225	5-01-005-12	Trench Burner: Refuse	14.1	tons burned	533
225	5-01-005-15	Sludge: Multiple Hearth	8.2	tons dried sludge	534
225	5-01-005-16	Sludge: Fluidized Bed	0.44	tons dried sludge	535
<u>SOLID WASTE DISPOSAL - COMMERCIAL/INSTITUTIONAL - 4900</u>					
<u>Incineration - General</u>					
226	5-02-001-01	Multiple Chamber	4.7	tons burned	536
226	5-02-001-02	Single Chamber	5.7	tons burned	537
226	5-02-001-03	Controlled Air	1.04	tons burned	538

* In "Airs Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants" dated March 1990.

AIRS SOURCE CLASSIFICATION CODES AND PM₁₀ EMISSION FACTOR LISTING BY
TECHNOLOGY TRANSFER

Page Number	SCC	Process	PM ₁₀ Factor (lbs/unit)	Units	Ref #
226	5-02-001-04	Conical Design: (Tee Pee) Municipal Refuse	11.0	tons burned	539
227	5-02-001-05	Conical Design: (Tee Pee) Wood Refuse	3.85	tons burned	540
		<u>Apartment Incineration</u>			
227	5-02-003-01	Flue Fed	11.4	tons burned	541
227	5-02-003-02	Flue Fed (with Afterburner and Draft Controls)	4.02	tons burned	542
		<u>Incineration (Special Purpose)</u>			
227	5-02-005-05	Pathological Waste	5.92	tons burned	543
		<u>SOLID WASTE DISPOSAL - INDUSTRIAL - 4900</u>			
		<u>Incineration</u>			
228	5-03-001-01	Multiple Chamber	4.7	tons burned	544
228	5-03-001-02	Single Chamber	5.7	tons burned	545
228	5-03-001-03	Controlled Air	1.04	tons burned	546
228	5-03-001-04	Conical Design: (Tee Pee) Refuse	11.0	tons burned	547
228	5-03-001-05	Conical Design: (Tee Pee) Wood Refuse	3.9	tons burned	548
228	5-03-001-06	Trench Burner: Wood	4.9	tons burned	549
228	5-03-001-07	Trench Burner: Tires	52.4	tons burned	550
228	5-03-001-08	Auto Body Components	1.2	cars burned	551
228	5-03-001-09	Trench Burner: Refuse	14.1	tons burned	552
		<u>Open Burning</u>			
228	5-03-002-04	Coal Refuse Piles	0.9	cu yds of pile	553
		<u>Incineration</u>			
	5-03-005-01	Hazardous Waste	0.2	million Btu/year heat input	554

* In "Airs Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants" dated March 1990.

APPENDIX

PM₁₀ EMISSION FACTOR DOCUMENTATION

Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
1	1-01-002-17	38.0	Errata for EPA-450/4-90-003
2	1-01-007-01	3.0	As stated in AP-42, Section 1.4, all PM from natural gas (NG) combustion is < 1 micron; assume 100% PM ≤ 10 microns
3	1-01-007-02	3.0	As stated in AP-42, Section 1.4, all PM from natural gas (NG) combustion is < 1 micron; assume 100% PM ≤ 10 microns
4	1-01-008-01	10.0A	Use AP-42, Appendix C.2, Category 2, which shows, on average, 79% of PM is ≤ 10 microns.
5	1-01-010-01	0.28	As stated in AP-42, Section 1.4, all PM from natural gas (NG) combustion is < 1 micron; assume same for LPG: 100% PM ≤ 10 microns.
6	1-01-010-02	0.26	As stated in AP-42, Section 1.4, all PM from natural gas (NG) combustion is < 1 micron; assume same for LPG: 100% PM ≤ 10 microns.
7	1-01-011-01	16.0	Assume bagasse combustion is similar to wood bark, for which AP-42, Table 1.6-2 reports 35% of PM ≤ 10 microns.
8	1-01-012-02	80	Use AP-42, Table 2.1-2, refuse-derived fuel. Interpolate graphically for ≤ 6 microns.
9	1-01-013-02	61.0A	Use AP-42, Table 1.11. Assume psd for utility boilers in same as industrial/commercial boiler, for which an emission factor of 61A is given. Calculate psd by proportioning PM ₁₀ emission factors as a % of total PM emission factor. This updates data from EPA-450/4-89-022, which refers to an earlier PM emission factor for waste oil combustion of 19 lbs PM/1000 gals oil burned. In addition, psd is updated to include the 1988 revisions to AP-42, Table 1.11-1.
10	1-02-001-07	10.0	Per Section 1.2, AP-42, use data for traveling grate stoker; Table 1.2-4 states 52% PM ≤ 10 microns.
11	1-02-002-13	0	Assume no PM emissions from wet slurry.
12	1-02-002-17	38.0	Errata for EPA-450/4-90-003
13	1-02-007-01	3.0	As stated in AP-42, Section 1.4, all PM from natural gas (NG) combustion is < 1 micron; assume same for LPG: 100% PM ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
14	1-02-008-02	7.0A	Use AP-42, Appendix C.2, Category 2, which shows, on average, 79% of PM is ≤ 10 microns.
15	1-02-008-04	7.0A	Use AP-42, Appendix C.2, Category 2, which shows, on average, 79% of PM is ≤ 10 microns.
16	1-02-009-03	8.8	Use 90% ≤ 10 microns, per footnote C, Table 1.6-3, AP-42.
17	1-02-009-06	8.8	Use 90% ≤ 10 microns, per footnote C, Table 1.6-3, AP-42.
18	1-02-010-01	0.28	Assume particle size distribution (psd) is same as NG: 100% ≤ 10 microns.
19	1-02-010-02	0.26	Assume particle size distribution (psd) is same as NG: 100% ≤ 10 microns.
20	1-02-011-01	16.0	Assume bagasse combustion is similar to wood bark, for which AP-42, Table 1.6-2 reports 35% of PM ≤ 10 microns.
21	1-02-012-02	80	Use AP-42, Table 2.1-2, refuse-derived fuel. Interpolate graphically for ≤ 6 microns.
22	1-02-014-01	3.0	As stated in AP-42, Section 1.4, all PM from NG combustion is 1 micron; assume 100% PM ≤ 10 microns
23	1-02-014-02	3.0	As stated in AP-42, Section 1.4, all PM from NG combustion is < 1 micron; assume 100% PM ≤ 10 microns
24	1-03-001-03	10.0	Per Section 1.2, AP-42, use data for traveling grate stokers; Table 1.2-4 which states 52% PM ≤ 10 microns.
25	1-03-002-14	15.0	Assume bituminous coal similar to anthracite; psd same as SCC 1-02-001-07, per section 1.2 AP-42, use data for traveling grate stoker, Table 1.2-4 which states 52% ≤ 10 microns.
26	1-03-002-17	38.0	Errata for EPA-450/4-90-003
27	1-03-009-03	8.8	Use 90% ≤ 10 microns, per footnote C, Table 1.6-3, AP-42.
28	1-03-010-01	0.28	Assume particle size distribution (psd) is same as NG: 100% ≤ 10 microns.
29	1-03-010-02	0.26	Assume particle size distribution (psd) is same as NG: 100% ≤ 10 microns.
30	1-03-012-02	80	Use AP-42, Table 2.1-2, refuse-derived fuel. Interpolate graphically for ≤ 6 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
31	1-05-001-05	2.5	Assume psd is same as for industrial boilers, data in AP-42 PMS, 10/62 <u>Atmospheric Emissions from Fuel Oil Combustion</u> , Table 11, page 35 psd interpolated 98.5% ≤ 10 microns.
32	1-05-001-06	3.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
33	1-05-001-10	1.85	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
34	1-05-001-14	2.4A	Assume psd from burning waste oil in a vaporizing burner is same as air atomizing burner. Use AP-42, Table 1.11-1. Calculate percentages from PM ₁₀ , 6, 2.5 factors provided.
35	1-05-002-05	2.5	Assume psd is same as for industrial boilers, data in AP-42 PMS, 10/62 <u>Atmospheric Emissions from Fuel Oil Combustion</u> , Table 11, page 35 psd interpolated 98.5% ≤ 10 microns.
36	1-05-002-06	3.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
37	1-05-002-09	25.0	AP-42, Section 1.10 notes that 95% of wood smoke particles are < 0.4 microns. Assume 100% ≤ 10 microns.
38	1-05-002-10	1.85	As stated in AP-42, Section 1.4, all PM from NG combustion is < 1 micron; assume 100% PM ≤ 10 microns, assume same for LPG.
39	1-05-002-14	2.4A	Assume psd from burning waste oil in a vaporizing burner is same as air atomizing burner. Use AP-42, Table 1.11-1. Calculate percentages from PM ₁₀ , 6, 2.5 factors provided.
40	2-01-001-01	5.0	From AP-42, Appendix C.2, Table C.2.-2, use 96% ≤ 10 microns.
41	2-01-001-02	33.5	From AP-42, Appendix C.2, Table C.2.-2, use 96% ≤ 10 microns.
42	2-01-002-01	14.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
43	2-01-002-02	10.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
44	2-01-009-01	5.0	From AP-42, Appendix C.2, Category 1, 96% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
45	2-01-009-02	33.5	From AP-42, Appendix C.2, Category 1, use 96% ≤ 10 microns
46	2-02-001-01	5.0	From AP-42, Appendix C.2, Table C.2-2, use 96% ≤ 10 microns.
47	2-02-001-02	33.5	From AP-42, Appendix C.2, Table C.2-2, use 96% ≤ 10 microns.
48	2-02-001-03	5.0	From AP-42, Appendix C.2, Table C.2-2, use 96% ≤ 10 microns.
49	2-02-001-04	33.5	From AP-42, Appendix C.2, Table C.2-2, use 96% ≤ 10 microns.
50	2-02-002-01	14.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
51	2-02-002-02	10.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
52	2-02-002-03	14.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
53	2-02-002-04	10.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
54	2-02-003-01	6.47	From AP-42, Table C.2-2, Category 1, assume 96% ≤ 10 microns.
55	2-02-004-01	50.0	Assume 92% ≤ 10 microns, per Table C.2-2, since large bore may tend toward less efficient combustion, producing more large particles.
56	2-02-004-02	2.2	Assume 92% ≤ 10 microns, per Table C.2-2, since large bore may tend toward less efficient combustion, producing more large particles.
57	2-02-004-03	0.035	Assume 92% ≤ 10 microns, per Table C.2-2, since large bore may tend toward less efficient combustion, producing more large particles.
58	2-02-005-01	33.5	Assume 92% ≤ 10 microns, per Table C.2-2, since large bore may tend toward less efficient combustion, producing more large particles.
59	2-02-009-01	5.0	Assume 92% ≤ 10 microns, per Table C.2-2, since large bore may tend toward less efficient combustion, producing more large particles.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
60	2-02-009-02	33.5	From AP-42, Table C.2-2, Category 1, assume 96% ≤ 10 microns.
61	2-02-010-01	5.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
62	2-02-010-02	5.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
63	2-03-001-01	33.5	Same as SCC 2-01-001-02, from AP-42, Appendix C.2, Table C.2-2, use 96% ≤ 10 microns.
64	2-03-001-02	5.0	Same as SCC 2-01-001-01, from AP-42, Appendix C.2, Table C.2-2, use 96% ≤ 10 microns.
65	2-03-002-01	10.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
66	2-03-002-02	14.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
67	2-03-003-01	6.47	From AP-42, C.2-2, Category 1, assume psd equal 96% ≤ 10 microns.
68	2-03-010-01	5.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
69	2-03-010-02	5.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
70	2-04-001-01	11.8	Assume jet engine testing (firing jet fuel) same as SCC 2-01-009-01, Turbine (96% ≤ 10 microns); from AP-42, Appendix C.2, Category 1.
71	2-04-001-02	11.8	From AP-42, Appendix C.2, Category 1, 96% ≤ 10 microns.
72	2-04-003-01	14.0	As stated in AP-42, Section 1.4, all PM from NG combustion is < 1 micron; assume 100% PM ≤ 10 microns
73	2-04-003-02	5.0	From AP-42, Appendix C.2-2, Category 1, 96% ≤ 10 microns.
74	2-04-004-01	6.47	From AP-42, Table C.2-2, Category 1, assume 96% ≤ 10 microns.
75	2-04-004-02	33.5	From AP-42, Appendix C.2-2, Category 1, 96% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
76	3-01-001-01	0.9	Assume psd is similar to that of potassium chloride drying, without controls, as given in AP-42, Appendix C.1-28; 4.07% ≤ 10 microns.
77	3-01-001-05	0.1	Assume psd is similar to that of potassium chloride drying, without controls, as given in AP-42, Appendix C.1-28; 4.07% ≤ 10 microns.
78	3-01-001-06	0.8	Assume psd is similar to that of potassium chloride drying, without controls, as given in AP-42, Appendix C.1-28; 4.07% ≤ 10 microns.
79	3-01-003-06	0.144	Assume PM emissions are from NG combustion. AP-42, Section 1.4 notes that all PM from NG combustion is < 1 micron.
80	3-01-003-07	0.9	Assume PM emissions are from oil firing From AP-42, Table C.2-2, Category 1, assume 96% ≤ 10 microns.
81	3-01-005-01	2300.0	No plants.
82	3-01-005-03	3.2	Assume 100% of PM ≤ 10 microns; AP-42, Section 5.3 states that all PM is between 10-500 nm.
83	3-01-005-04	6.53	Assume 100% of PM ≤ 10 microns; AP-42, Section 5.3 states that all PM is between 10-500 nm.
84	3-01-005-06	0.58	Assume 100% of PM ≤ 10 microns; AP-42, Section 5.3 states that all PM is between 10-500 nm.
85	3-01-005-07	0.45	Assume 100% of PM ≤ 10 microns; AP-42, Section 5.3 states that all PM is between 10-500 nm.
86	3-01-005-08	0.06	Assume 100% of PM ≤ 10 microns; AP-42, Section 5.3 states that all PM is between 10-500 nm.
87	3-01-005-09	0.2	Assume 100% of PM ≤ 10 microns; AP-42, Section 5.3 states that all PM is between 10-500 nm.
88	3-01-006-03	266.0	Assume psd similar to coke mfg.: from AP-42, Table 7.2-2; for combustion stack, uncontrolled, 96% ≤ 10 microns.
89	3-01-006-04	266.0	Assume psd similar to coke mfg.: from AP-42, Table 7.2-2; for combustion stack, uncontrolled, 96% ≤ 10 microns.
90	3-01-006-05	56.0	Assume psd similar to coke pushing, AP-42, Table 7.2-2; 43% ≤ 10 microns.
91	3-01-010-15	25.0	Assume same as recovery boiler in pulp mill; 94% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
92	3-01-010-23	0.25	Assume same as recovery boiler in pulp mill; 94% ≤ 10 microns.
93	3-01-010-30	180.0	No basis for technology transfer. As default value use AP-42, Appendix C.2, Category 2.
94	3-01-017-03	2.14	AP-42, Section 5.11, Table 2.2 notes that acid mist particle size is 0.4-2.6 microns. Assume all large particles are absorbed, and 100% of particles uncontrolled are ≤ 10 microns.
95	3-01-017-04	2.53	AP-42, Section 5.11, Table 2.2 notes that acid mist particle size is 0.4-2.6 microns. Assume all large particles are absorbed, and 100% of particles uncontrolled are ≤ 10 microns.
96	3-01-017-05	0.69	AP-42, Section 5.11, Table 2.2 notes that acid mist particle size is 0.4-2.6 microns. Assume all large particles are absorbed, and 100% of particles uncontrolled are ≤ 10 microns.
97	3-01-017-06	5.46	AP-42, Section 5.11, Table 2.2 notes that acid mist particle size is 0.4-2.6 microns. Assume all large particles are absorbed, and 100% of particles uncontrolled are ≤ 10 microns.
98	3-01-017-07	0.11	AP-42, Section 5.11, Table 2.2 notes that acid mist particle size is 0.4-2.6 microns. Assume all large particles are absorbed, and 100% of particles uncontrolled are ≤ 10 microns.
99	3-01-017-08	1.66	AP-42, Section 5.11, Table 2.2 notes that acid mist particle size is 0.4-2.6 microns. Assume all large particles are absorbed, and 100% of particles uncontrolled are ≤ 10 microns.
100	3-01-018-01	35.0	PM emissions from plastics mfg. generally occur during drying and post processing. Assume similar to detergent spray drying AP-42, Table 5.15-2: 66.1% ≤ 10 microns.
101	3-01-018-02	3.0	PM emissions from plastics mfg. generally occur during drying and post processing. Assume similar to detergent spray drying AP-42, Table 5.15-2: 66.1% ≤ 10 microns.
102	3-01-018-07	3.0	Polyethylene production is similar to polypropylene. Use EF for SCC 3-01-018-02. 66.1% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
103	3-01-018-12	3.0	Polyethylene production is similar to polypropylene. Use EF for SCC 3-01-018-02. 66.1% ≤ 10 microns.
104	3-01-019-02	13.0	From AP-42, Appendix C-2 Category 9; 94% ≤ 10 microns.
105	3-01-019-06	5.0	From AP-42, Appendix C-2, Category 9, 94% ≤ 10 microns.
106	3-01-020-05	2.0	Use AP-42, Appendix C.2, Category 3.
107	3-01-021-02	50.0	Assume psd similar to rotary drying of sodium carbonate, AP-42, Table 5.16-3; 21% ≤ 10 microns.
108	3-01-021-06	84.0	From AP-42, Section 5.16, Table 5.16-3; 21% ≤ 10 microns.
109	3-01-021-14	67.0	From AP-42, Section 5.16, Table 5.16-3; 21% ≤ 10 microns.
110	3-01-024-01	0.02	SCC 3-01-018-02; 66.1% ≤ 10 microns.
111	3-01-024-02	50.4	Assume psd for polyester staple is same as nylon staple, SCC 3-01-018-02; 66.1% ≤ 10 microns.
112	3-01-024-03	0.06	Assume psd for polyester yam same as polyester staple, SCC 3-01-018-02; 66.1% ≤ 10 microns.
113	3-01-024-06	0.2	This is controlled source.
114	3-01-024-07	1.0	Assume psd for uncontrolled nylon 66 is same as nylon 6, SCC 3-01-018-02; 66.1% ≤ 10 microns.
115	3-01-024-14	0.02	SCC 3-01-018-02; 66.1% ≤ 10 microns.
116	3-01-027-04	4.35	Mostly fume; assume 100% ≤ 10 microns, by engineering judgement.
117	3-01-027-08	2.68	Assume pan granulator is similar to rotary-drum granulator; AP-42, Table 6.8-2; 2% ≤ 10 microns.
118	3-01-027-09	0.02	No basis for technology transfer. Use AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
119	3-01-027-10	0.19	No basis for technology transfer. Assume psd from bagging is same as bulk loading, SCC 3-01-027-09; 85% ≤ 10 microns.
120	3-01-027-11	4.35	Mostly fume; assume 100% ≤ 10 microns, by engineering judgement.
121	3-01-027-12	3.18	Use prilling from AP-42, Appendix C.2-2, Category 9; 94% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
122	3-01-027-14	1.6	From AP-42, Table 6.8-2, assume low density prilling cooler is same as high density: 0.4% ≤ 10 microns.
123	3-01-027-17	0.52	Use prilling from AP-42, Appendix C.2-2, Category 9; 94% ≤ 10 microns.
124	3-01-027-18	4.0	From AP-42, Appendix C.2-2, Category 4, 85% ≤ 10 microns.
125	3-01-027-21	4.35	Mostly fume; assume 100% ≤ 10 microns, by engineering judgement.
126	3-01-027-27	0.52	Use prilling from AP-42, Appendix C.2-2, Category 9; 94% ≤ 10 microns.
127	3-01-027-28	4.0	From AP-42, Appendix C.2-2, Category 4, 85% ≤ 10 microns.
128	3-01-035-01	230.0	Assume psd similar to lime calcination; AP-42, Table 8.15-2, where 12% ≤ 10 microns.
129	3-01-035-06	0.64	100% of lead oxide emissions are generally ≤ 10 microns, as presented in AP-42, Appendix C.1, Section 7.15.
130	3-01-035-07	15.0	100% of lead oxide emissions are generally ≤ 10 microns, as presented in AP-42, Appendix C.1, Section 7.15.
131	3-01-035-10	1.0	100% of lead oxide emissions are generally ≤ 10 microns, as presented in AP-42, Appendix C.1, Section 7.15.
132	3-01-035-15	0.69	100% of lead oxide emissions are generally ≤ 10 microns, as presented in AP-42, Appendix C.1, Section 7.15.
133	3-01-035-20	0.2	Assume psd for lead chromate is same as lead oxide; 100% ≤ 10 microns.
134	3-01-035-51	8.0	Assume principal pigment ore dried is lead, and psd is same as for storage, AP-42, Section 7.6, Table 7.6-3; 86% ≤ 10 microns.
135	3-01-040-02	0.0214	Assume similar to sodium carbonate pre-dryer with controls, AP-42, Table 5.16-3; 52.5% ≤ 10 microns.
136	3-01-040-03	3.8	Assume psd is as given in AP-42, Appendix C.2, Category 9; 94% ≤ 10 microns.
137	3-01-040-04	241.0	Assume pan granulator is similar to rotary-drum granulator; AP-42, Table 6.8-2; 2% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
138	3-01-040-05	4.0	From AP-42, Appendix C.2-2, Category 4, 85% ≤ 10 microns.
139	3-01-040-06	0.19	From AP-42, Appendix C.2-2, Category 4, 85% ≤ 10 microns.
140	3-01-040-07	0.02	Assume bulk loading is same as bagging, 3-01-040-06. Use AP-42, Appendix C.2, Category 4, 85% ≤ 10 microns.
141	3-01-042-01	59.3	Lead Oxide (PbO) fume, assumed to be 100% PM ₁₀ , by engineering judgement.
142	3-01-042-04	1.9	No basis for estimate. As default value, assume psd of sludge pit fugitives are same as Recovery furnace.
143	3-01-113-01	8.4	Use AP-42, Appendix C.1, C.1-26, Boric Acid Dryer.
144	3-01-114-01	65.4	Use AP-42, Appendix C.1, C.1-28, Potash Dryer.
145	3-01-130-05	218.0	Assume psd is same as sodium carbonate fluidized bed dryer, AP-42, Table 5.16-3; 10% ≤ 10 microns.
146	3-02-003-01	1.4	PM emissions from plastics mfg. generally occur during and post processing. Assume similar to detergent spray drying AP-42, Table 5.15-2: 66.1% ≤ 10 microns.
147	3-02-004-01	5.0	From AP-42, Appendix C.2, Category 6, 15% ≤ 10 microns.
148	3-02-004-02	0.3	From AP-42, Appendix C.2, Category 6, 15% ≤ 10 microns.
149	3-02-004-03	0.2	From AP-42, Appendix C.2, Category 6, 15% ≤ 10 microns.
150	3-02-004-04	1.5	From AP-42, Appendix C.2, Category 6, 15% ≤ 10 microns.
151	3-02-004-10	7.0	Assume same psd for general sources. AP-42, Appendix C.2, Category 6; 15% ≤ 10 microns.
152	3-02-005-12	11.0	Use AP-42, Appendix C.2, Category 6.
153	3-02-006-08	1.5	Psd for grain handling in AP-42, Appendix C.2, Category 6 is used: 15% ≤ 10 microns.
154	3-02-006-10	4.65	Psd for grain handling in AP-42, Appendix C.2, Category 6 is used: 15% ≤ 10 microns.
155	3-02-007-24	70.0	From AP-42, Appendix C.2, Category 7, 61% ≤ 10 microns.
156	3-02-007-33	3.0	Engineering judgement per AAM, 70% ≤ 10 microns.
157	3-02-007-34	70.0	From AP-42, Appendix C.2, Category 7, 61% ≤ 10 microns.
158	3-02-007-54	0.48	Use AP-42, Appendix C.2, Category 7, 61% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
159	3-02-007-60	2.5	Use AP-42, Appendix C.2, Category 7, 61% ≤ 10 microns.
160	3-02-007-83	3.0	Engineering judgement per AAM 61% ≤ 10 microns.
161	3-02-008-05	0.42	Engineering judgement using AP-42, Table 6.4-6 (with cyclone) 30% ≤ 10 microns.
162	3-02-008-06	0.4	Engineering judgement using AP-42, Table 6.4-6 (with cyclone) 30% ≤ 10 microns.
163	3-02-008-15	0.21	Engineering judgement, 30% ≤ 10 microns.
164	3-02-008-16	0.2	Engineering judgement, 30% ≤ 10 microns.
165	3-02-009-05	0.045	Assume malt drying is same as grain drying; use AP-42, Appendix C.2, Category 7. 61% ≤ 10 microns.
166	3-02-012-05	5.0	Assume psd for steam tube dryers is same as for rotary steam tube dryer for sodium carbonate, AP-42, Table 5.16-3; 21% ≤ 10 microns.
167	3-02-012-06	8.0	Assume psd for steam tube dryers is same as for rotary steam tube dryer for sodium carbonate, AP-42, Table 5.16-3; 21% ≤ 10 microns.
168	3-02-040-01	1.5	Use AP-42, Appendix C.1, Section 6.4, Cereal Dryer. 44% ≤ 10 microns.
169	3-03-000-02	1.2	AP-42, Section 7.1 suggests that psd for miscellaneous fugitive operations is similar to that presented in Table 7.1-3, which shows 58% ≤ 10 microns.
170	3-03-001-01	94.0	Assume psd for prebake cell is same as for fugitives. AP-42, Section 7.1 suggests that psd for miscellaneous fugitive operations is similar to that presented in Table 7.1-3, which shows 58% ≤ 10 microns.
171	3-03-001-04	10.0	AP-42, Section 7.1 suggests that psd for miscellaneous fugitive operations is similar to that presented in Table 7.1-3, which shows 58% ≤ 10 microns.
172	3-03-001-10	12.0	Assume psd from VSS fugitives is same as for HSS, AP-42, Table 7.1-4; 31% ≤ 10 microns.
173	3-03-002-01	200.0	Assume psd similar to lime calcination; AP-42, Table 8.15-2, where 12% ≤ 10 microns.
174	3-03-003-05	0.00011	Assume psd for coal unloading is same as for coal charging. Use AP-42, Section 7.2, Table 7.2-2. 48.9% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
175	3-03-003-08	0.51	From AP-42, Appendix C.2, Category 9, 94% ≤ 10 microns.
176	3-03-003-10	0.11	Assume psd for coal crushing is same as for coal charging, AP-42, Table 7.2-2; 48.9% ≤ 10 microns.
177	3-03-003-12	0.09	No basis for technology transfer. As default value, assume same as coal crushing; 48.9% ≤ 10 microns.
178	3-03-003-14	0.09	From AP-42, Appendix C.2, Category 9, 94% ≤ 10 microns.
179	3-03-004-01	200.0	No basis for technology transfer. As default value, assume same as coal charging, AP-42, Table 7.2-2 48.9% ≤ 10 microns.
180	3-03-005-02	45.0	Use AP-42, Appendix C.2, Category 5; 53% ≤ 10 microns.
181	3-03-005-05	10.0	Use AP-42, Appendix C.2-2, Category 8; 92% ≤ 10 microns.
182	3-03-005-06	10.0	As default value, assume psd similar to Fluorspar drum dryer, AP-42, Appendix C.1, 48% ≤ 10 microns.
183	3-03-005-07	50.0	From AP-42, Table 7.3-4, 27% ≤ 10 microns.
184	3-03-005-09	55.0	Use AP-42, Appendix C.2, Category 5; 53% ≤ 10 microns.
185	3-03-005-10	100.0	Assume similar to EAF in steel refining, AP-42, Table 7.5-2; 58% ≤ 10 microns.
186	3-03-005-12	140.0	Flash furnace combines roasting and smelting. Use AP-42, converter, Table 7.3-5; 59% ≤ 10 microns.
187	3-03-005-13	2.6	Assume psd of fugitives from roasting are similar to roasting. Use AP-42, Appendix C.2, Category 5; 53% ≤ 10 microns.
188	3-03-005-14	0.4	Assume psd of fugitives from reverberatory furnace are average from matte tapping (Table 7.3-7), slag tapping (Table 7.3-8), and smelter (Table 7.3-4); $(74+28+27)/3 = 43\% \leq 10$ microns.
189	3-03-005-15	4.4	Flash furnace combines roasting and smelting. Use AP-42, converter, Table 7.3-5; 59% ≤ 10 microns.
190	3-03-005-16	0.5	Use AP-42, Appendix C.2-2, Category 8; 92% ≤ 10 microns.
191	3-03-005-17	8.0	No basis for technology transfer. As default value, use psd from fugitive emissions from converter slag and copper blow, AP-42, Table 7.3-9; 96% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
192	3-03-005-22	10.0	No basis for technology transfer. As default value, use psd from fugitive emissions from converter slag and copper blow, AP-42, Table 7.3-9; 96% ≤ 10 microns.
193	3-03-005-23	50.0	From AP-42, Table 7.3-4, 27% ≤ 10 microns.
194	3-03-005-25	55.0	Use AP-42, Appendix C.2, Category 5; 53% ≤ 10 microns.
195	3-03-005-26	10.0	As default value, assume psd similar to Fluorspar drum dryer, AP-42, Appendix C.1, 48% ≤ 10 microns.
196	3-03-005-27	10.0	As default value, assume psd similar to Fluorspar drum dryer, AP-42, Appendix C.1, 48% ≤ 10 microns.
197	3-03-005-28	---	No basis for technology transfer.
198	3-03-005-29	45.0	Use AP-42, Appendix C.2, Category 5; 53% ≤ 10 microns.
199	3-03-005-30	55.0	Use AP-42, Appendix C.2, Category 5; 53% ≤ 10 microns.
200	3-03-005-31	50.0	From AP-42, Table 7.3-4, 27% ≤ 10 microns.
201	3-03-005-32	50.0	From AP-42, Table 7.3-4, 27% ≤ 10 microns.
202	3-03-005-33	100.0	Assume similar to EAF in steel refining, AP-42, Table 7.5-2; 58% ≤ 10 microns.
203	3-03-005-34	140.0	Flash furnace combines roasting and smelting. Use AP-42, converter, Table 7.3-5; 59% ≤ 10 microns.
204	3-03-005-35	100.0	Assume similar to EAF in steel refining, AP-42, Table 7.5-2; 58% ≤ 10 microns.
205	3-03-006-02	316.0	No basis for technology transfer. As default value assume psd is same as for 50% SiFe, AP-42, Table 7.4-4; 63% ≤ 10 microns.
206	3-03-006-03	564.0	No basis for technology transfer. As default value assume psd is same as for 50% SiFe, AP-42, Table 7.4-4; 63% ≤ 10 microns.
207	3-03-006-06	28.0	Use AP-42, Table 7.4-4, 80% FeMn, 83% ≤ 10 microns.
208	3-03-006-07	157.0	Use AP-42, Table 7.4-4, FeCr, 91% ≤ 10 microns.
209	3-03-007-01	12.0	No basis for technology transfer. As default value assume average from 80% FeMn, open EAF (86%) and background ferroalloy EAF from AP-42, Appendix C.2-2, Category 8 (94%) [(86%+94%)/2] = 90% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
210	3-03-008-01	110.0	No basis for technology transfer. Assume source of PM is coke, with psd of 44% ≤ 10 microns; sinter with psd of 32% ≤ 10 microns. Average default value of (44+32)/2 = 38% ≤ 10 microns.
211	3-03-008-02	40.0	No basis for technology transfer. Assume source of PM is coke, with psd of 44% ≤ 10 microns; sinter with psd of 32% ≤ 10 microns. Average default value of (44+32)/2 = 38% ≤ 10 microns.
212	3-03-008-04	0.026	Use AP-42, Section 7.5, Table 7.5-4. Calculate psd from PM ₁₀ , PM ₆ , and PM _{2.5} emission factors, 50% ≤ 10 microns.
213	3-03-008-05	0.0088	Use AP-42, Section 7.5, Table 7.5-4. Calculate psd from PM ₁₀ , PM ₆ , and PM _{2.5} emission factors, 50% ≤ 10 microns.
214	3-03-008-14	6.8	Assume same psd as windbox; AP-42, Table 7.5-2; 15% ≤ 10 microns.
215	3-03-008-17	3.0	Assume same psd as windbox; AP-42, Table 7.5-2; 15% ≤ 10 microns.
216	3-03-008-19	0.8	Assume same psd as windbox; AP-42, Table 7.5-2; 15% ≤ 10 microns.
217	3-03-008-20	0.17	Psd based on AP-42, Table 7.5-4, and data in Reference 4 of 7.5; 7.74% ≤ 10 microns.
218	3-03-008-21	0.0024	Use AP-42, Appendix C.2, Category 3, 51% ≤ 10 microns.
219	3-03-008-26	87.0	Assume composition of collapsed charge is same as ore charge. No basis for technology transfer. Assume source of PM is coke, with psd of 44% ≤ 10 microns; sinter with psd of 32% < 10 microns. Average default value of (44+32)/2 = 38% ≤ 10 microns.
220	3-03-008-27	0.0003	Use AP-42, Appendix C.2, Category 3; 51% ≤ 10 microns.
221	3-03-009-04	11.3	Assume similar to carbon steel, AP-42, Table 7.5-2; 58% ≤ 10 microns.
222	3-03-009-08	50.0	From AP-42, Table 7.5-2, for electric arc furnace; 58% ≤ 10 microns
223	3-03-009-11		
	blast furnace	0.035	Assumed from gas combustion, 100% ≤ 2.5 microns.
	coke oven	0.012	Assumed from gas combustion, 100% ≤ 2.5 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
224	3-03-009-13	28.5	Assume similar to psd of BOF charge, AP-42, Table 7.5-2; 46% ≤ 10 microns.
225	3-03-009-14	28.5	Assume similar to psd of BOF charge, AP-42, Table 7.5-2; 46% ≤ 10 microns.
226	3-03-009-15	0.19	Assume similar to psd of BOF tapping, AP-42, Table 7.5-2; 45% ≤ 10 microns.
227	3-03-009-20	1.11	Use AP-42, Table 7.5-2, Hot Metal Desulfurization, typographical error in AP-42, 19% ≤ 10 microns.
228	3-03-009-21	0.07	Assume similar to psd of BOF tapping, AP-42, Table 7.5-2; 45% ≤ 10 microns.
229	3-03-009-23	1.4	From AP-42, Table 7.3-8 28% ≤ 10 microns.
230	3-03-009-24	0.026	Engineering judgement 9% ≤ 10 microns.
231	3-03-009-25	0.81	Assume similar to psd of BOF tapping, AP-42, Table 7.5-2; 45% ≤ 10 microns.
232	3-03-009-32	0.1	No basis for technology transfer. Assume all fume, 100% ≤ 10 microns, by engineering judgement.
233	3-03-009-33 blast furnace coke oven	2.9	Assume from gas combustion, 100% ≤ 10 microns.
		6.2	Assume from gas combustion, 100% ≤ 10 microns.
234	3-03-010-05	5.0	From AP-42, Appendix C.2, Category 4, 85% ≤ 10 microns.
235	3-03-010-06	213.0	Assume same psd as material handling. From AP-42, Appendix C.2, Category 4, 85% ≤ 10 microns.
236	3-03-010-08	4.6	No basis for technology transfer. Assume similar to psd for copper reverberatory furnace slag tapping; AP-42, Table 7.3-8; 28% ≤ 10 microns.
237	3-03-010-09	0.48	Assume psd for process similar to psd for fugitives from dross kettle, AP-42, Table 7.6-6; 98% ≤ 10 microns.
238	3-03-010-10	1.0	From AP-42, Appendix C.2, Category 4, 85% ≤ 10 microns.
239	3-03-010-11	0.4	From AP-42, Appendix C.2, Category 4, 85% ≤ 10 microns.
240	3-03-010-12	0.3	From AP-42, Appendix C.2, Category 4, 85% ≤ 10 microns.
241	3-03-010-13	0.5	From AP-42, Appendix C.2, Category 4, 85% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
242	3-03-010-14	2.26	Assume same psd as fugitive emissions from lead ore storage; AP-42, Table 7.6-3; 86% ≤ 10 microns.
243	3-03-010-15	1.5	Psd based on AP-42, Table 7.5-4, and data in Reference 4 of 7.5; 7.74% ≤ 10 microns.
244	3-03-010-16	0.2	Psd based on AP-42, Table 7.5-4, and data in Reference 4 of 7.5; 7.74% ≤ 10 microns.
245	3-03-010-17	9.0	Use AP-42, Appendix C.2-2, Category 5; 53% ≤ 10 microns.
246	3-03-010-19	0.16	Assume similar to BOF tapping, AP-42, Table 7.5-2; 45% ≤ 10 microns.
247	3-03-010-20	0.93	No basis for technology transfer. Assume all fume, 100% ≤ 10 microns based on engineering judgement.
248	3-03-010-21	0.47	No basis for technology transfer. Assume similar to psd for copper reverberatory furnace slag tapping; AP-42, Table 7.3-8; 28% ≤ 10 microns.
249	3-03-010-22	1.8	No basis for technology transfer. Assume psd for process similar to psd for fugitives from dross kettle, AP-42, Table 7.6-6; 98% ≤ 10 microns.
250	3-03-010-23	0.87	No basis for technology transfer. Assume psd for process similar to psd for fugitives from dross kettle, AP-42, Table 7.6-6; 98% ≤ 10 microns.
251	3-03-010-24	3.0	No basis for technology transfer. Assume psd for process similar to psd for fugitives from dross kettle, AP-42, Table 7.6-6; 98% ≤ 10 microns.
252	3-03-010-25	0.68	Use fugitive psd for sinter machine, AP-42, Table 7.6-4; 98% ≤ 10 microns.
253	3-03-010-26	0.01	Psd based on AP-42, Table 7.5-4, and data in Reference 4 of 7.5; 7.74% ≤ 10 microns.
254	3-03-012-02	0.5	From AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
255	3-03-023-03	0.06	Use AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
256	3-03-023-04	0.1	Assume same psd as fine crushing; AP-42, Appendix C.2-2, Category 4; 85% ≤ 10 microns.
257	3-03-023-07	0.04	From AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
258	3-03-023-12	29.2	From AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
259	3-03-023-13	29.2	From AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
260	3-03-023-14	29.2	From AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
261	3-03-023-16	3.4	From AP-42, Appendix C.2, Category 5; 45% ≤ 10 microns.
262	3-03-023-21	11.0	From AP-42, Table 8.22-4; Factor: 6.2 lb/VMT ≤ 10 microns.
263	3-03-023-22	9.3	From AP-42, Table 8.22-4; Factor: 5.2 lb/VMT ≤ 10 microns.
264	3-03-024-01	0.5	From AP-42, Table 8.23-1; PM ₁₀ given as 0.05 lb/ton.
265	3-03-024-02	1.2	From AP-42, Table 8.23-1 PM ₁₀ fraction for primary crushing of low moisture ore is 10%, and for tertiary, 6%. Assume 8% for secondary crushing.
266	3-03-024-03	2.7	Use AP-42, Table 8.23-1, 6% ≤ 10 microns.
267	3-03-024-04	0.12	From AP-42, Appendix C.2-2, Category 3, 51% ≤ 10 microns.
268	3-03-024-05	0.02	From AP-42, Table 8.23-1, for high moisture ore, PM ₁₀ emission factor is given as 0.009 lb/ton for primary grinding.
269	3-03-024-06	0.05	From AP-42, Table 8.23-1, for high moisture ore, PM ₁₀ emission factor is given as 0.02 lb/ton for secondary grinding.
270	3-03-024-07	0.06	From AP-42, Table 8.23-1, for high moisture ore, PM ₁₀ emission factor is given as 0.02 lb/ton for tertiary grinding.
271	3-03-024-08	0.01	From AP-42, Appendix C.2-2, Category 3, 51% ≤ 10 microns.
272	3-03-024-09	28.8	From AP-42, Appendix C-2, Category 4, low end of range, 70% ≤ 10 microns, assuming air conveying will increase proportion of coarse particles in stream.
273	3-03-024-10	2.4	W/o air conveying; from AP-42, Appendix C.2-2 Category 4; 85% ≤ 10 microns.
274	3-03-024-11	19.7	From AP-42, Table 8.23-1, in which drying is given as 12/19.7 or 61% ≤ 10 microns.
275	3-03-030-02	227.0	Engineering judgement 70% ≤ 10 microns.
276	3-03-030-03	90.0	Engineering judgement 99% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
277	3-03-030-05	100.0	Engineering judgement 93% ≤ 10 microns.
278	3-03-030-06	3.0	Engineering judgement 100% ≤ 10 microns.
279	3-03-030-07	2000.0	Use AP-42, Appendix C.2, Category 8; 92% ≤ microns.
280	3-03-030-08	2167.0	Use AP-42, Appendix C.2, Category 8; 92% ≤ microns.
281	3-03-030-09	4.0	From AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
282	3-03-030-10	1.5	From AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
283	3-03-030-11	2.5	From AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
284	3-03-030-12	0.4	AP-42, Section 7.1 suggests that psd for miscellaneous fugitive operations is similar to that presented in Table 7.1-3, which shows 58% ≤ 10 microns.
285	3-04-002-07	275.0	From AP-42, Appendix C.2-2, Category 9, 92% ≤ 10 microns.
286	3-04-002-08	275.0	From AP-42, Appendix C.2-2, Category 9, 92% ≤ 10 microns.
287	3-04-002-10	0.0003	From AP-42, Appendix C.2-2, Category 9, 92% ≤ 10 microns.
288	3-04-002-11	230.0	From AP-42, Appendix C.2-2, Category 9, 92% ≤ 10 microns.
289	3-04-002-12	70.0	From AP-42, Appendix C.2-2, Category 9, 92% ≤ 10 microns.
290	3-04-002-14	5.1	Assume similar to SCC 3-04-008-18. Reverberatory furnace firing general metallic scrap; 100% ≤ 10 microns.
291	3-04-002-15	36.0	Assume similar to secondary Zn reverberatory furnace charging residual metallic scrap, SCC 3-04-008-38; 59% ≤ 10 microns.
292	3-04-002-17	300.0	Assume same psd as reverberatory furnace charged with residual metallic scrap, SCC 3-04-008-38, 59% ≤ 10 microns.
293	3-04-002-19	21.0	Assume same psd as reverberatory furnace charged with residual metallic scrap, SCC 3-04-008-38, 59% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
294	3-04-002-20	5.0	Assume similar to SCC 3-04-008-28 Reverberatory furnace charged with general residual metallic scrap, 100% ≤ 10 microns.
295	3-04-002-21	11.0	Assume same psd as reverberatory furnace charged with general residual metallic scrap, SCC 3-04-008-38, 59% ≤ 10 microns.
296	3-04-002-23	7.0	Assume similar to SCC 3-04-008-18 Reverberatory furnace charge w/scrap; 100% ≤ 10 microns.
297	3-04-002-24	20.0	Assume similar to SCC 3-04-008-18 Reverberatory furnace charge w/scrap; 100% ≤ 10 microns.
298	3-04-002-31	13.75	Assume psd of all fugitives similar to SCC 3-04-008-61 through 65; 60 % ≤ 10 microns.
299	3-04-002-32	13.75	Assume psd of all fugitives similar to SCC 3-04-008-61 through 65; 60 % ≤ 10 microns.
300	3-04-002-33	0.75	Assume psd of all fugitives similar to SCC 3-04-008-61 through 65; 60 % ≤ 10 microns.
301	3-04-002-34	3.66	Assume psd of all fugitives similar to SCC 3-04-008-61 through 65; 60 % ≤ 10 microns.
302	3-04-002-35	5.27	Assume psd of all fugitives similar to SCC 3-04-008-61 through 65; 60 % ≤ 10 microns.
303	3-04-002-36	4.43	Assume psd of all fugitives similar to SCC 3-04-008-61 through 65; 60 % ≤ 10 microns.
304	3-04-002-37	0.49	Assume psd of all fugitives similar to SCC 3-04-008-61 through 65; 60 % ≤ 10 microns.
305	3-04-002-38	0.14	Assume psd of all fugitives similar to SCC 3-04-008-61 through 65; 60 % ≤ 10 microns.
306	3-04-002-39	0.015	Assume fugitives from casting to be 100% ≤ 10 microns., by engineering judgement.
307	3-04-003-02	2.1	Assume the low range of AP-42, Appendix C.2-2 Category 8: 80% ≤ 10 microns.
308	3-04-003-03	0.9	Assume psd to be halfway between midrange and the high side of the range of AP-42, Appendix C.2-2 Category 8: 95.5% ≤ 10 microns.
309	3-04-003-15	0.6	No basis for technology transfer. Assume psd same as fugitives in secondary copper smelting; 60% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
310	3-04-003-20	2.8	Assume psd same as fugitives from secondary Zn processing; 100% ≤ 10 microns.
311	3-04-003-25	1.4	Assume psd same as fugitives from secondary Zn processing; 100% ≤ 10 microns.
312	3-04-003-40	17.0	Assume grinding and cleaning of castings not to produce more than 10% ≤ 10 microns.
313	3-04-003-50	3.6	Assume not more than 15% ≤ 10 microns. PM factor from AP-42, Supplement A, 10/86, Table 7.10-4.
314	3-04-003-51	2.71	Use AP-42, Appendix C.1, 7.13, Castings Shakeout; 82% ≤ 10 microns.
315	3-04-003-52	40.0	Assume not more than 15% ≤ 10 microns.
316	3-04-003-53	1.1	Use AP-42, Appendix C.1, 7.13, Castings Shakeout; 82% ≤ 10 microns.
317	3-04-003-60	0.01	Assume psd similar to machine scarfing in steel production: 45% ≤ 10 microns.
318	3-04-004-01	0.8	Assume pot furnace similar to kettle. Psd data in AP-42, Section 7.11 states median particle diameter is 18.9 microns. Assume 25% ≤ 10 microns.
319	3-04-004-02	323.0	In AP-42 Section 7.11, reverberatory furnaces are reported as emitting small particles. Reverberatory furnace in AP-42, Section 7.8 produces 60% ≤ 10 microns. Assume same for lead.
320	3-04-004-03	307.0	Assume psd relationship for baghouse - controlled or uncontrolled - is same as for blast furnace flue gas to ventilation; 42% ≤ 10 microns.
321	3-04-004-04	70.0	Assume rotary sweat furnace psd same as rotary sweat furnace in secondary Zn (3-04-008-09); 92% ≤ 10 microns.
322	3-04-004-05	51.0	Assume 60% ≤ 10 microns, as in SCC 3-04-004-02. In AP-42 Section 7.11, reverberatory furnaces are reported as emitting small particles. Reverberatory furnace in AP-42, Section 7.8 produces 60% ≤ 10 microns. Assume same for lead.
323	3-04-004-08	40.0	From AP-42, Section 7.11, pg. 9, text states 100% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
324	3-04-004-09	0.87	Assume psd same as grid casting in lead battery mfg.; 100% ≤ 10 microns. From AP-42, Appendix C.1-65
325	3-04-004-12	2.55	Assume psd of fugitives same as psd of stack emissions (SCC 3-04-008-09); 92% ≤ 10 microns.
326	3-04-004-13	16.5	Assume fugitives from smelting have same psd as Reverberatory furnace, In AP-42 Section 7.11, reverberatory furnaces are reported as emitting small particles. Reverberatory furnace in AP-42, Section 7.8 produces 60% ≤ 10 microns. Assume same for lead.
327	3-04-004-14	0.002	Assume psd of fugitives from kettle refining to be 100% ≤ 10 microns. by engineering judgement.
328	3-04-005-05	139.0	Assume psd for overall process is 90% ≤ 10 microns, since many of the operations are 100% ≤ 10 microns.
329	3-04-005-07	4.32	Psd for paste mixing is 100% ≤ 10 microns, per AP-42, Appendix C.1-7.15. PM emission factor from AP-42, Table 7.15-1 (8/82).
330	3-04-005-10	6.68	Assume similar to pot furnace in secondary lead processing; 25% ≤ 10 microns.
331	3-04-005-11	0.19	Assume psd for small parts casting is same as grid casting, from AP-42, Appendix C.1 - 7.15; 100% ≤ 10 microns.
332	3-04-005-12	32.4	Assume 100% of PM is sulfuric acid mist, which AP-42, Appendix C.1-5.17 reports as 100 % ≤ 10 microns.
333	3-04-005-13	0.2	AP-42, Section 7.11 page 7.11-9.
334	3-04-005-29	7.44	Assume psd same as combined grid casting and paste mixing. Use AP-42, Appendix C.1-67 (Sect. 7.15, Grid Casting and Paste Mix); 100% ≤ 10 microns.
335	3-04-005-30	4.32	Use AP-42, Appendix C.1 - 70, Section 7.15, paste mixing and lead oxide charging; 100% ≤ 10 microns.
336	3-04-007-03	10.0	From AP-42, Table 7.13-1, assume psd is similar to psd of open hearth exhaust; 85.4% ≤ 10 microns.
337	3-04-007-05	0.1	From AP-42, Appendix C.2, Category 8, 92% ≤ 10 microns.
338	3-04-007-06	3.6	Assume not more than 15% ≤ 10 microns.
339	3-04-007-07	2.71	Assume psd similar to core oven in gray iron foundry; 82% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
340	3-04-007-08	2.8	Assume psd similar to gray iron foundry SCC 3-04-003-20 Assume psd same as fugitives from secondary Zn processing; 100% ≤ 10 microns. AAM PM EF
341	3-04-007-11	17.0	Assume similar to SCC 3-04-003-40, gray iron foundry; Assume grinding and cleaning of castings not to produce more than 10% ≤ 10 microns.
342	3-04-007-12	0.6	Assume psd same as Gray Iron Foundry SCC 3-04-003-15; No basis for technology transfer. Assume psd same as fugitives in secondary copper smelting; 60% ≤ 10 microns.
343	3-04-007-13	1.4	Assume psd same as fugitives from secondary Zn processing; 100% ≤ 10 microns. AAM PM EF
344	3-04-007-15	0.01	Assume psd similar to machine scarfing in steel production: 45% ≤ 10 microns.
345	3-04-007-16	40.0	Assume not more than 15% ≤ 10 microns.
346	3-04-007-17	1.1	Use AP-42, Appendix C.1, 7.13, Castings Shakeout; 82% ≤ 10 microns.
347	3-04-040-01	0.6	Assume same psd as sweating furnace in secondary lead smelting SCC 3-04-004-05: In AP-42 Section 7.11, reverberatory furnaces are reported as emitting small particles. Reverberatory furnace in AP-42, Section 7.8 produces 60% ≤ 10 microns.
348	3-05-001-01	7.2	Assume psd similar to distillation, AP-42, Appendix C.2, Category 9, 94% ≤ 10 microns.
349	3-05-001-02	26.7	Assume psd similar to distillation, AP-42, Appendix C.2, Category 9, 94% ≤ 10 microns.
350	3-05-001-03	0.5	Assume PM is 100% PM ₁₀ by engineering judgement.
351	3-05-001-04	3.14	[(3.14-0.50)*66% + (0.5 * 100%)] = 72% ≤ 10 microns. Assume 66 % from detergent spray dryer and 100% from SCC 3-05001-03 (assume PM is 100% PM ₁₀ by engineering judgement).
352	3-05-002-02	0.2	From AP-42, Table 8.1-2, assume psd is same as uncontrolled plant: 14% ≤ 10 microns.
353	3-05-002-03	0.33	Use Table 11.2.3-2 in AP-42; 36% ≤ 10 microns.
354	3-05-002-04	0.1	Use Table 11.2.3-2 in AP-42; 36% ≤ 10 microns.
355	3-05-002-11	1.7	From AP-42 (10/86), Table 8.1-2; 21% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
356	3-05-003-01	70.0	From AP-42, Appendix C.2, Category 3, 51% ≤ 10 microns.
357	3-05-003-03	34.0	Assume psd similar to storage piles SCC 3-05-002-03; Use Table 11.2.3-2 in AP-42; 36% ≤ 10 microns
358	3-05-003-08	20.0	Assume psd for screening is similar to Brick Raw Material screening/grinding; AP-42, Table 8.3-4; 7% ≤ 10 microns.
359	3-05-003-10	0.24	Use AP-42, Table 8.3-2; 82.5% ≤ 10 microns.
360	3-05-003-11	0.02	Use AP-42, Appendix C,2, Category 5; 53% ≤ 10 microns.
361	3-05-003-12	0.6	Use AP-42, Appendix C,2, Category 5; 53% ≤ 10 microns.
362	3-05-003-14	0.065	Use AP-42, Appendix C,2, Category 5; 53% ≤ 10 microns.
363	3-05-003-15	0.88	Use AP-42, Appendix C,2, Category 5; 53% ≤ 10 microns.
364	3-05-003-16	18.84	Use AP-42, Appendix C,2, Category 5; 53% ≤ 10 microns.
365	3-05-003-21	2.0	Use AP-42, Appendix C.2, Category 3; 51% ≤ 10 microns.
366	3-05-004-01	24.0	Assume psd is similar to electric arc melting in castable refractories (SCC 3-05-005-03), where 92% ≤ 10 microns.
367	3-05-004-02	2.0	Assume psd is similar to raw material dryer in castable refractories (SCC 3-05-005-01), where 51% ≤ 10 microns.
368	3-05-004-03	26.0	Assume psd is similar to electric arc melting in castable refractories (SCC 3-05-005-03), where 92% ≤ 10 microns.
369	3-05-005-05	25.0	Assume molding similar to materials handling, AP-42, Appendix C.2, Category 8, 92% PM ₁₀ ; assume shakeouts similar to shakeout in gray iron foundries, Table 7.10-5, 70% PM ₁₀ . Average PM ₁₀ = (92+70)/2 = 81% ≤ 10 microns.
370	3-05-006-07	0.2	Assume psd similar to concrete batching, cement unloading (SCC 3-05-011-07); 50% ≤ 10 microns.
371	3-05-006-08	4.0	Assume psd similar to storage piles, SCC 3-05-002-03; use Table 11.2.3-2 in AP-42; 36% ≤ 10 microns.
372	3-05-006-09	0.5	Assume psd is similar to raw material dryer in castable refractories (SCC 3-05-005-01), where 51% ≤ 10 microns.
373	3-05-006-10	1.5	Assume psd for secondary crushing produces a higher % of fines than primary crushing, assume 75% ≤ 10 microns.
374	3-05-006-12	0.3	From AP-42, Appendix C.2, Category 3; 51% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
375	3-05-006-19	0.24	From AP-42, Appendix C.2, Category 4, 85% ≤ 10 microns.
376	3-05-007-07	0.2	Assume psd similar to concrete batching, cement unloading (SCC 3-05-011-07); 50% ≤ 10 microns.
377	3-05-007-08	4.0	Assume psd similar to storage piles, SCC 3-05-002-03; use Table 11.2.3-2 in AP-42; 36% ≤ 10 microns.
378	3-05-007-09	0.5	Assume psd is similar to raw material dryer in castable refractories (SCC 3-05-005-01), where 51% ≤ 10 microns.
379	3-05-007-10	1.5	Assume psd for secondary crushing produces a higher % of fines than primary crushing, assume 75% ≤ 10 microns.
380	3-05-007-12	0.3	From AP-42, Appendix C.2, Category 3; 51% ≤ 10 microns.
381	3-05-007-14	9.2	Use AP-42, Table 8.6-4, 8.6% ≤ 10 microns.
382	3-05-007-19	0.24	From AP-42, Appendix C.2, Category 4, 85% ≤ 10 microns.
383	3-05-009-03	12.0	Use AP-42, Appendix C.2, Category 5; 53% ≤ 10 microns.
384	3-05-009-04	0.5	Assume psd similar to SCC 3-05-005-02; Use AP-42 Appendix C.2, Category 3: 51% ≤ 10 microns.
385	3-05-009-05	0.8	Assume psd similar to SCC 3-05-005-02; Use AP-42 Appendix C.2, Category 3: 51% ≤ 10 microns.
386	3-05-009-16	123	Use AP-42, Appendix C.2, Category 3, 51% ≤ 10 microns.
387	3-05-009-17	2.1	Use AP-42, Table 8.6-4, 8.6% ≤ 10 microns.
388	3-05-010-21	0.45	No basis for technology transfer. See AP-42, Section 8.24, Table 8.24-2.
389	3-05-010-22	0.0001	See AP-42, Section 8.24 Table 8.24-2, the equation.
390	3-05-010-23	0.1	Assume psd same as SCC 3-05-006-07, assume psd similar to concrete batching, cement unloading (SCC 3-05-011-07); 50% ≤ 10 microns.
391	3-05-010-24	17.2	Use EPA-450/4-82-016, Appendix K: Unpaved Roads - Coal Mining Fugitive dust source, 12% ≤ 10 microns.
392	3-05-010-30	0.05	No basis for technology transfer. See AP-42, Section 8.24, Table 8.24-2.
393	3-05-010-31	14.6	No basis for technology transfer.
394	3-05-010-32	0.04	No basis for technology transfer.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
395	3-05-010-33	1.3	Assume wet drilling similar to stone drilling. From AP-42, Table 8.19.2-2, 12.5% ≤ 10 microns.
396	3-05-010-34	0.22	Assume wet drilling similar to stone drilling. From AP-42, Table 8.19.2-2, 12.5% ≤ 10 microns.
397	3-05-010-35	32.7	No basis for technology transfer.
398	3-05-010-36	0.05	Use EPA-450/4-82-016, Appendix K, page K-14; 17% ≤ 10 microns.
399	3-05-010-37	0.03	Assume psd similar to concrete batching, cement unloading (SCC 3-05-011-07); 50% ≤ 10 microns.
400	3-05-010-38	0.03	Assume psd from truck loading is same as truck dumping. Use EPA-450/4-82-016, Appendix K-13; 15% ≤ 10 microns.
401	3-05-010-39	17.2	Use EPA-450/4-82-016, Appendix K: Unpaved Roads - Coal Mining Fugitive dust source, 12% ≤ 10 microns.
402	3-05-010-40	0.007	Assume psd from truck loading is same as truck dumping. Use EPA-450/4-82-016, Appendix K-13; 15% ≤ 10 microns.
403	3-05-010-41	0.066	Assume psd from truck loading is same as truck dumping. Use EPA-450/4-82-016, Appendix K-13; 15% ≤ 10 microns.
404	3-05-010-42	0.002	Assume psd similar to concrete batching, cement unloading (SCC 3-05-011-07); 50% ≤ 10 microns.
405	3-05-010-43	47,400.0	Use Table 11.2.3-2 in AP-42; 36% ≤ 10 microns.
406	3-05-010-44	0.028	Assume psd from train loading of coal is same as shovel/truck loading. Use EPA-450/4-82-016, Appendix K-12; 21% ≤ 10 microns.
407	3-05-010-45	3.94	No basis for technology transfer.
408	3-05-010-46	49.4	No basis for technology transfer.
409	3-05-010-47	5.37	Assume psd for grading is same as agricultural tilling. Use EPA-450/4-82-016, Appendix K-15; 62% ≤ 10 microns.
410	3-05-010-48	0.012	Assume psd similar to concrete batching, cement unloading (SCC 3-05-011-07); 50% ≤ 10 microns.
411	3-05-010-49	760.0	Assume psd similar to concrete batching, cement unloading (SCC 3-05-011-07); 50% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
412	3-05-010-50	2.79	Assume psd from vehicle traffic at coal mines same as vehicle traffic in iron production. Use AP-42, Table 7.5-4. (Calculate distributions from emission factors; e.g., PM ≤ 10 microns = 1.0/1.8 = 56%.)
413	3-05-011-20	0.2	Assume psd similar to cement unloading to storage bins (3-05-011-07), bucket elevator, 50% ≤ 10 microns.
414	3-05-012-01	22.0	Assume psd for furnaces similar to melting furnace in glass mfg. AP-42 Table 8.13-2; 95% ≤ 10 microns.
415	3-05-012-02	27.5	Assume psd for furnaces similar to melting furnace in glass mfg. AP-42 Table 8.13-2; 95% ≤ 10 microns.
416	3-05-012-03	0.5	Assume psd for furnaces similar to melting furnace in glass mfg. AP-42 Table 8.13-2; 95% ≤ 10 microns.
417	3-05-012-04	58.0	No basis for technology transfer. Assume 93% ≤ 10 microns.
418	3-05-012-05	9.0	Assume PM is 100% ≤ 10 microns; engineering judgement.
419	3-05-012-06	1.3	Assume PM is 100% ≤ 10 microns; engineering judgement.
420	3-05-012-07	9.0	Assume psd for furnaces similar to melting furnace in glass mfg. AP-42 Table 8.13-2; 95% ≤ 10 microns.
421	3-05-012-08	2.0	No basis for technology transfer. Assume 93% ≤ 10 microns.
422	3-05-012-09	6.0	Assume PM is 100% ≤ 10 microns; engineering judgement.
423	3-05-012-11	16.0	Assume psd for furnaces similar to melting furnace in glass mfg. AP-42 Table 8.13-2; 95% ≤ 10 microns.
424	3-05-012-12	2.0	Assume psd for furnaces similar to melting furnace in glass mfg. AP-42 Table 8.13-2; 95% ≤ 10 microns.
425	3-05-012-13	6.0	Assume psd for furnaces similar to melting furnace in glass mfg. AP-42 Table 8.13-2; 95% ≤ 10 microns.
426	3-05-012-14	1.0	No basis for technology transfer.
427	3-05-012-15	1.2	Assume PM is 100% ≤ 10 microns; engineering judgement.
428	3-05-013-01	16.0	Assume psd for furnaces similar to melting furnace in glass mfg. AP-42 Table 8.13-2; 95% ≤ 10 microns.
429	3-05-014-03	2.0	Assume psd for furnaces similar to melting furnace in glass mfg. AP-42 Table 8.13-2; 95% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
430	3-05-014-04	17.4	Assume psd for furnaces similar to melting furnace in glass mfg. AP-42 Table 8.13-2; 95% ≤ 10 microns.
431	3-05-014-16	0.5	No process description available.
432	3-05-015-04	0.7	Assume psd same as conveying, AP-42 (9/88), Table 8.19.2-2, 22% ≤ 10 microns.
433	3-05-015-05	0.5	From AP-42, Appendix C.2, Category 3, 51% ≤ 10 microns.
434	3-05-015-06	1.5	Assume psd similar to secondary crushing of cement raw materials (SCC 3-05-006-10) assume psd for secondary crushing produces a higher % of fines than primary crushing, assume 75% ≤ 10 microns.
435	3-05-015-21	8.0	From AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
436	3-05-015-22	5.0	From AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
437	3-05-016-01	0.5	From AP-42, Appendix C.2, Category 3, 51% ≤ 10 microns.
438	3-05-016-02	1.5	Assume psd similar to secondary crushing of gypsum ore (SCC 3-05-015-06) assume psd for secondary crushing produces a higher % of fines than primary crushing, assume 75% ≤ 10 microns.
439	3-05-016-03	8.0	Assume psd similar to continuous kettle calciner (SCC 3-05-015-11); 63% ≤ 10 microns.
440	3-05-016-05	50.0	Assume psd similar to continuous kettle calciner (SCC 3-05-015-11); 63% ≤ 10 microns.
441	3-05-016-07	0.8	Assume psd similar to conveying (SCC 3-05-015-04); AP-42 (9/88), Table 8.19.2-2, 22% ≤ 10 microns.
442	3-05-016-08	0.2	Assume psd similar to Raw Material unloading, (SCC 3-05-012-21); 50% ≤ 10 microns.
443	3-05-016-09	0.1	Assume psd similar to spray drying of detergents (SCC 3-01-009-01); 67% ≤ 10 microns.
444	3-05-016-10	4.0	Assume similar to aggregate piles in asphaltic concrete, which uses Table 11.2.3-2 in AP-42; 35% ≤ 10 microns.
445	3-05-016-11	40.0	Assume psd similar to continuous kettle calciner (SCC 3-05-015-11); 63% ≤ 10 microns.
446	3-05-016-12	0.1	Assume psd similar to spray drying of detergents (SCC 3-01-009-01); 67% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
447	3-05-018-01	21.0	Use AP-42, Appendix C.2, Category 9. Text in AP-42, Section 8.17 states that product from Perlite furnaces is collected in cyclones, which would minimize number of large particles in PM discharged; 94% ≤ 10 microns.
448	3-05-019-04	40.0	Assume psd same as Raw Material Storage Piles; 36% ≤ 10 microns.
449	3-05-019-06	5.7	Use AP-42, Table 8.18-2; 82% ≤ 10 microns.
450	3-05-019-07	0.53	Use AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
451	3-05-020-07	0.33	Assume psd similar to storage piles, SCC 3-05-016-10; Assume similar to aggregate piles in asphaltic concrete, which uses Table 11.2.3-2 in AP-42; 35% ≤ 10 microns.
452	3-05-020-10	0.0002	Assume psd from drilling of stone is similar to grinding of aggregate or unprocessed ore. Use AP-42, Appendix C.2, Category 3; 51% ≤ 10 microns.
453	3-05-020-11	52.0	Assume psd for hauling at stone quarries is same as at coal mines. Use EPA-450/4-82-016, Appendix K, Unpaved Roads - Coal Mining Fugitive Dust Sources; 12% ≤ 10 microns.
454	3-05-020-12	35.0	Assume psd is similar to SCC 3-05-002-01; 14% ≤ 10 microns.
455	3-05-020-20	0.0002	Assume psd from drilling of stone is similar to grinding of aggregate or unprocessed ore. Use AP-42, Appendix C.2, Category 3; 51% ≤ 10 microns.
456	3-05-022-01	15.9	Use AP-42, Appendix C.2, Category 4; 85% ≤ 10 microns.
457	3-05-025-02	0.33	Assume similar to aggregate piles in asphaltic concrete, which uses Table 11.2.3-2 in AP-42; 35% ≤ 10 microns.
458	3-05-025-03	0.029	Assume psd similar to conveying (SCC 3-05-015-04); AP-42 (9/88), Table 8.19.2-2, 22% ≤ 10 microns.
459	3-05-025-04	52.0	Assume psd for sand/gravel hauling is same as coal mines. Use EPA-450/4-82-016, Appendix K, Unpaved Roads - Coal Mining Fugitive Dust Sources; 12% ≤ 10 microns.
460	3-05-025-07	3,796.0	Assume similar to aggregate piles in asphaltic concrete, which uses Table 11.2.3-2 in AP-42; 35% ≤ 10 microns.
461	3-05-025-11	0.24	Assume sand and gravel screening is same as aggregate. Use AP-42, Appendix C.2, Category 3; 51% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
462	3-05-034-01	16.5	Assume sand and gravel screening is same as aggregate. Use AP-42, Appendix C.2, Category 3; 51% ≤ 10 microns.
463	3-06-001-03	12.0S	Assume psd is similar to residual oil fired in commercial boilers; AP-42, Table 1.3-5; 62% ≤ 10 microns.
464	3-06-001-04	3.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
465	3-06-001-05	3.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
466	3-06-001-06	3.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
467	3-06-001-07	0.27	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.
468	3-06-002-01	242.0	From API publication 4363, FCCU with internal cyclones emit PM with 70% ≤ 10 microns.
469	3-06-003-01	17.0	From API publication 4363, FCCU with internal cyclones emit PM with 70% ≤ 10 microns.
470	3-06-012-01	523.0	From API publication 4363, FCCU with internal cyclones emit PM with 70% ≤ 10 microns.
471	3-07-001-08	72.0	All fluid bed calciners are well controlled for product collection. PM is likely to be fine; assume psd similar to fluid coking (SCC 3-06-012-01); 70% ≤ 10 microns.
472	3-07-001-10	230.0	Assume psd similar to recovery boiler w/o direct contact evaporator, Table 10.1-3, AP-42; 100%, ≤ 10 microns.
473	3-07-003-03	0	No data, and no basis for technology transfer. Assume pm emissions from the fluid bed reactor are negligible. AP-42 notes that recovery boiler is only important source of particulate emissions.
474	3-07-004-02	0.6	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
475	3-07-007-01	4.25	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
476	3-07-007-03	0.6	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
477	3-07-007-04	859.0	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
478	3-07-007-11	4.64	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
479	3-07-007-12	2.37	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
480	3-07-007-13	3.18	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
481	3-07-007-14	4.14	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
482	3-07-007-15	3.7	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
483	3-07-008-01	0.02	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
484	3-07-008-02	0.35	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
485	3-07-008-03	1.0	Assume psd is similar to storage piles, SCC 3-05-002-03; Use Table 11.2.3-2 in AP-42; 35% ≤ 10 microns.
486	3-07-008-04	2.25	Psd from test data reported by CA Air Resources Board; 40% ≤ 10 microns.
487	3-07-008-05	2.25	Psd from test data reported by CA Air Resources Board; 40% ≤ 10 microns.
488	3-07-008-06	4.0	Assume psd from sanding to consist of higher % of fines than from sawing. Assume 50% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
489	3-07-008-07	5.0	Assume psd from sanding to consist of higher % of fines than from sawing. Assume 50% ≤ 10 microns.
490	3-07-008-08	2.0	PsD from test data reported by CA Air Resources Board; 40% ≤ 10 microns.
491	3-07-030-01	1.0	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
492	3-07-030-02	2.0	No basis for technology transfer. As default value, assume psd is similar to cotton ginning; average psd; 58% ≤ 10 microns.
493	3-09-025-01	0.035	Assume psd is similar to SCC 3-04-002-32, wire incinerator fugitive emissions; 60% ≤ 10 microns.
494	3-09-040-30	5.0	Use AP-42, Appendix C.1 - 74, Batch Tinner; 55.9% ≤ 10 microns.
495	3-10-004-01	2.0	Assume psd is similar to external combustion boiler firing distillate oil; AP-42, Table 1.3-4; 50% ≤ 10 microns.
496	3-10-004-02	12.0S	Assume psd is similar to external combustion boiler firing residual oil; AP-42, Table 1.3-3; 86% ≤ 10 microns.
497	3-10-004-03	12.0S	Assume psd from crude oil is similar to residual oil which is assumed to have a psd similar to external combustion boiler firing residual oil; AP-42, Table 1.3-3; 86% ≤ 10 microns.
498	3-10-004-04	3.0	Assume psd is similar to SCC 1-02-006-01; 100% ≤ 10 microns.
499	3-10-004-05	3.0	Assume psd is similar to SCC 1-02-006-01; 100% ≤ 10 microns.
500	3-10-004-11	2.0	Assume psd is similar to oil fired industrial external combustion boiler (SCC 1-02-005-01); 50% ≤ 10 microns.
501	3-10-004-12	12.0S	Assume psd is similar to residual oil fired external combustion boilers (1-02-004-01); 86% ≤ 10 microns.
502	3-10-004-13	12.0S	Assume psd is similar to residual oil fired external combustion boilers (1-02-004-01); 86% ≤ 10 microns.
503	3-10-004-14	3.0	As stated in Section 1.4, AP-42, all PM from NG combustion is < 1 micron: assume same for LPG.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
504	3-10-004-15	3.0	Assume psd is similar to process gas fired boiler (SCC 1-02-007-01); 100% ≤ 10 microns.
505	3-11-002-01	1.5 x 10 ⁻⁴	EPA-450/4-88-003, 35% ≤ 10 microns.
506	3-11-002-02	.0031	EPA-450/4-88-003, 35% ≤ 10 microns.
507	3-11-002-03	.00027	EPA-450/4-88-003, 35% ≤ 10 microns.
508	3-11-002-04	.17	EPA-450/4-88-003, 35% ≤ 10 microns.
509	3-11-002-05	.03	EPA-450/4-88-003, 36% ≤ 10 microns.
510	3-11-002-06	12.5	EPA-450/4-88-003, 36% ≤ 10 microns.
511	3-60-001-01	0.7	Assume psd similar to secondary lead smelting in pot furnace (SCC 3-04-004-01); 25% ≤ 10 microns.
512	3-90-001-89	10.0A	Assume psd from in-process firing same as external combustion. Use AP-42, Table 1.2-3; 23% ≤ 10 microns.
513	3-90-002-88	7.0A	Assume psd from in-process firing of sub-bituminous coal same as bituminous coal in external combustion industrial boilers-dry bottom. Use AP-42, Table 1.1-3; 23% ≤ 10 microns.
514	3-90-002-89	7.0A	Assume psd for in-process firing of bituminous coal same as spreader stocker. Use AP-42, Table 1.1-6; 20% ≤ 10 microns.
515	3-90-003-89	6.3A	Use AP-42, Table 1.7-4; 20% ≤ 10 microns.
516	3-90-004-89	12.0S	Assume psd from in-process residual oil fuel use same as industrial boilers firing residual oil. Use AP-42, Table 1.3-3; 86% ≤ 10 microns.
517	3-90-005-89	2.0	Assume psd from in-process distillate oil fuel use same as industrial boiler firing distillate oil. Use AP-42, Table 1.3-4; 50% ≤ 10 microns.
518	3-90-006-89	3.0	AP-42, Section 1.4 states that all PM from NG combustion is < 1 micron. 100% ≤ 10 microns.
519	3-90-007-88	3.0	Assume refinery process gas is same as NG. AP-42, Section 1.4 notes that all PM from combustion is < 1 micron.
520	3-90-007-89	6.2	Assume similar to residual oil, AP-42, Table 1.3-2; 70% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
521	3-90-008-89	7.0A	Assume psd from in-process wood fuel use is same as wood bark-fired boilers. Use AP-42, Table 1.6-3; 90% ≤ 10 microns.
522	3-90-009-89	7.2	Assume psd from combustion of LPG is same as NG. AP-42, Section 1.4 notes that all PM from combustion is < 1 micron.
523	3-90-010-89	0.26	Assume psd from combustion of LPG is same as NG. AP-42, Section 1.4 notes that all PM from combustion is < 1 micron.
524	3-90-013-89	19.0	Assume psd from in-process liquid waste combustion is same as industrial boilers firing residual oil. Use AP-42, Table 1.3-3; 86% ≤ 10 microns.
525	4-02-016-01	9.68	Assume psd similar to detergent spray drying (SCC 3-01-009-01); 66.1 % ≤ 10 microns.
526	4-90-002-03	1.44	Assume psd for solvent bottoms is same as firing residual oil in industrial boilers. Use AP-42, Table 1.3-5; 62% ≤ 10 microns.
527	5-01-004-01	2.8	Use AP-42, Section 11.2.1, multiplier table, and assume psd is approximately equal to multiplier; 36% ≤ 10 microns.
528	5-01-005-05	8.0	Assume psd similar to municipal waste "starved air" incinerator: AP-42, (9/88), Table 2.1-2; 74% ≤ 10 microns.
529	5-01-005-07	20.0	Assume psd similar to refuse derived fuel in municipal waste combustion: AP-42, Table 2.1-2; 55% ≤ 10 microns.
530	5-01-005-08	7.0	Assume psd similar to refuse derived fuel in municipal waste combustion: AP-42, Table 2.1-2; 55% ≤ 10 microns.
531	5-01-005-10	13.0	Assume psd similar to municipal waste mass burn incinerator; AP-42, Appendix C.1, Table 2.1; 38% ≤ 10 microns.
532	5-01-005-11	138.0	Assume psd similar to municipal waste mass burn incinerator; AP-42, Appendix C.1, Table 2.1; 38% ≤ 10 microns.
533	5-01-005-12	37.0	Assume psd similar to municipal waste mass burn incinerator; AP-42, Appendix C.1, Table 2.1; 38% ≤ 10 microns.
534	5-01-005-15	84	Use AP-42, Table 2.5-2, multiple hearth; 10% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
535	5-01-005-16	1.5	Assume psd from fluidized bed incineration of sewage sludge similar to combustion of coal in fluidized bed external combustion boiler. SCC 1-01-002-17. Errata for EPA-450/4-90-003. 29% ≤ 10 microns.
536	5-02-001-01	7.0	Assume psd is similar to municipal waste modular incinerator; AP-42, Appendix C.1, Table 2.1; 67% ≤ 10 microns.
537	5-02-001-02	15.0	Assume psd similar to municipal waste mass burn incinerator; AP-42, Appendix C.1, Table 2.1; 38% ≤ 10 microns.
538	5-02-001-03	1.4	Assume psd is similar to AP-42, Table 2.1-2; 74% ≤ 10 microns.
539	5-02-001-04	20.0	Assume psd similar to refuse derived fuel in municipal waste combustion: AP-42, Table 2.1-2; 55% ≤ 10 microns.
540	5-02-001-05	7.0	Assume psd similar to refuse derived fuel in municipal waste combustion: AP-42, Table 2.1-2; 55% ≤ 10 microns.
541	5-02-003-01	30.0	Assume psd similar to municipal waste mass burn incinerator; AP-42, Appendix C.1, Table 2.1; 38% ≤ 10 microns.
542	5-02-003-02	6.0	Assume psd is similar to municipal waste modular incinerator; AP-42, Appendix C.1, Table 2.1; 67% ≤ 10 microns.
543	5-02-005-05	8.0	Assume psd similar to municipal waste "starved air" incinerator: AP-42, (9/88), Table 2.1-2; 74% ≤ 10 microns.
544	5-03-001-01	7.0	Assume psd is similar to municipal waste modular incinerator; AP-42, Appendix C.1, Table 2.1; 67% ≤ 10 microns.
545	5-03-001-02	15.0	Assume psd similar to municipal waste mass burn incinerator; AP-42, Appendix C.1, Table 2.1; 38% ≤ 10 microns.
546	5-03-001-03	1.4	Assume psd is similar to AP-42, Table 2.1-2; 74% ≤ 10 microns.
547	5-03-001-04	20.0	Assume psd similar to refuse derived fuel in municipal waste combustion: AP-42, Table 2.1-2; 55% ≤ 10 microns.
548	5-03-001-05	7.0	Assume psd similar to refuse derived fuel in municipal waste combustion: AP-42, Table 2.1-2; 55% ≤ 10 microns.

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Reference Number	SCC	PM Factor	Documentation
			Basis for PM ₁₀ Derivative
549	5-03-001-06	13.0	Assume psd similar to municipal waste mass burn incinerator; AP-42, Appendix C.1, Table 2.1; 38% ≤ 10 microns.
550	5-03-001-07	138.0	Assume psd similar to municipal waste mass burn incinerator; AP-42, Appendix C.1, Table 2.1; 38% ≤ 10 microns.
551	5-03-001-08	2.0	Assume psd is similar to SCC 3-04-002-32, wire incinerator fugitive emissions; 60% ≤ 10 microns.
552	5-03-001-09	37.0	Assume psd similar to municipal waste mass burn incinerator; AP-42, Appendix C.1, Table 2.1; 38% ≤ 10 microns.
553	5-03-002-04	0.9	No basis for technology transfer. As default value, assume 100% PM ₁₀ based on observed burning and plume.
554	5-03-005-01	0.3	Use AP-42, Appendix C.2, Category 2; 79% ≤ 10 microns.

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