

**Table A-1. Compilation of Ambient Air Monitoring Program Parameters at DOE Facilities:
Radioactive Particulate Matter**

	Particle sizes of interest	Filter media	Filter size	Airflow rate	Length of sampling period	Number of stations	Analyses of individual samples	Detection limits of individual samples in units given by facility	Detection limits for individual samples in pCi/m ³	Comments	Contact
Los Alamos National Laboratory	All (TSP)	Polypropylene	47 mm	4.0 cfm	2 weeks, continuous	52	Gross alpha, Gross beta, Gamma spec	Gross alpha: 0.5 pCi/sample Gross beta: 1.0 pCi/sample	Gross alpha: 2×10^{-4} pCi/m ³ * Gross beta: 4×10^{-4} pCi/m ³ *		Jean Dewart (505) 665-0239
Savannah River Site	All (TSP)	Glass fiber	47 mm	2.6 cfm	1 week, continuous	17	Gross alpha, Gross beta, Gamma spec	Gross alpha: 1×10^{-3} pCi/m ³ Gross beta: 1.5×10^{-2} pCi/m ³	Gross alpha: 1×10^{-3} pCi/m ³ Gross beta: 2×10^{-2} pCi/m ³		Pete Fledderman (803) 725-1736
Hanford Site-WMNW	All (TSP)	Glass fiber	47 mm	2.0 cfm	2 weeks, continuous	81	Gross alpha, Gross beta	Gross alpha: 2×10^{-15} μCi/mL Gross beta: 1.9×10^{-14} μCi/mL	Gross alpha: 2×10^{-3} pCi/m ³ * Gross beta: 2×10^{-2} pCi/m ³ *	WMNW – Waste Management Northwest. Near Facility Environmental Monitoring	Craig Perkins (509) 372-8042
Hanford Site-PNNL	All (TSP)	Glass fiber	47 mm	2.6 m ³ /hour (1.53cfm)*	2 weeks, continuous ¹²⁹ I monthly, continuous	44 (6 are gross beta only)	Gross alpha Gross beta	Gross alpha: 1×10^{-3} pCi/m ³ Gross beta: 3×10^{-3} pCi/m ³	Gross alpha: 1×10^{-3} pCi/m ³ Gross beta: 3×10^{-3} pCi/m ³	Pacific Northwest National Laboratory conducts far field monitoring for Hanford. ¹²⁹ I is on charcoal substrate at 4 locations only.	Barb Gillespie (509) 376-5802
Brookhaven	All (TSP)	Glass fiber, charcoal	5 cm	15–20 L/min (0.52cfm)*	1 week, continuous	5	Gross alpha, Gross beta	Gross alpha: $1-2 \times 10^{-3}$ pCi/m ³ Gross beta: 5×10^{-3} pCi/m ³	Gross alpha: $1-2 \times 10^{-3}$ pCi/m ³ Gross beta: 5×10^{-3} pCi/m ³		Gary Schroeder (516) 344-7045
INEEL – BBWI	PM-10 TSP	PM-10 and low-vol: acrylic copolymer	PM-10 4" Low-vol 2"	PM-10 40 cfm Low-vol 2 cfm	PM-10 2 weeks, continuous Low-vol 1 week, continuous	PM-10 27 Low-vol 18	Gross alpha Gross beta	Gross alpha: 7×10^{-10} pCi/cc Gross beta: 2×10^{-9} pCi/cc	Gross alpha: 7×10^{-4} pCi/m ³ Gross beta: 2×10^{-3} pCi/m ³	Bechtel, Babcock & Wilcox Idaho (BBWI) performs near field monitoring.	Maria Miles (208) 526-7924
INEEL – ESRF	All (TSP)	Acrylic copolymer	47 mm	2 cfm	1 week, continuous	17	Gross alpha Gross beta Gamma scan	Gross alpha: 1×10^{-15} μCi/ml Gross beta: 3×10^{-15} μCi/ml Gamma: (¹³⁷ Cs) 3×10^{-16} μCi/ml	Gross alpha: 1×10^{-3} pCi/m ³ Gross beta: 3×10^{-3} pCi/m ³ Gamma: (¹³⁷ Cs) 3×10^{-4} pCi/m ³	Environmental Science & Research Foundation (ESRF) conducts far field monitoring for INEEL.	Roy Evans (208) 525-7102
Nevada Test Site	All (TSP)	Glass fiber	9 cm 8" x 10"	3.0 cfm 40 cfm	1 week, continuous for both	27 6	Gross alpha Gross beta Gamma spec	Gross alpha: 1.8×10^{-15} μCi/mL Gross beta: 4.1×10^{-15} μCi/mL Gamma spec: 3×10^{-16} μCi/mL	Gross alpha: 2×10^{-3} pCi/m ³ * Gross beta: 4×10^{-3} pCi/m ³ *		Robert F. (Frank) Grossman (702) 295-5742

**Table A-1. Compilation of Ambient Air Monitoring Program Parameters at DOE Facilities:
Radioactive Particulate Matter (Cont.)**

	Particle sizes of interest	Filter media	Filter size	Airflow rate	Length of sampling period	Number of stations	Analyses of individual samples	Detection limits of individual samples in units given by facility	Detection limits for individual samples in pCi/m ³	Comments	Contact
Oak Ridge National Laboratory	All (TSP)	Glass fiber, charcoal	9—8" x 10" 4—2.5"	9–35 cfm 4–2 cfm	9—1 week continuous 4—2 weeks continuous	8 Reservation, 1 Background; 4 Local	N/A	N/A	N/A	Other than I and Os (adsorbable gases collected on charcoal), analyses are done only on composites.	Laury Hamilton (423) 576-4526 Joan Hughes (423) 574-6649
E.O. Lawrence Berkeley National Lab	All (TSP)	Borosilicate glass microfiber	4"	2.1 cfm	1 Month, continuous	4	Gross alpha Gross beta	Gross alpha: 10 pCi/ sample Gross beta: 8 pCi/sample	Gross alpha: 4 x 10 ⁻³ pCi/m ³ * Gross beta: 3 x 10 ⁻³ pCi/m ³ *		Patrick Thorson (510)486-5852
Sandia National Laboratories	≤10μm	Glass fiber	8" x 10"	40 cfm	24 Hours every 6 th day	4	None	N/A	N/A	No analyses are performed on individual samples. Only composites are analyzed.	Gina Deola (505)845-7688
Argonne National Laboratory	≤10μm	Glass fiber	8" x 10"	60–70 m ³ /hr (35–41 cfm)*	1 week, continuous	18	Gross alpha Gross beta Gamma spec	Gross alpha: ~0.3 fCi/m ³ Gross beta and gamma: ~1fCi/m ³	Gross alpha: 3 x 10 ⁻⁴ pCi/m ³ * Gross beta: 1 x 10 ⁻³ pCi/m ³ *		Norbert Golchert (630) 252-3912
Pantex	All (TSP)	47 mm – Teflon or cellulose	47 mm	180 cm ³ /min or 1.5 cfm	4 weeks or 1 week	27	Gross alpha Gross beta (screening)	Gross alpha: ~0.01 dpm Gross beta: ~0.01 dpm	N/A	Two systems of collection are used. 47 mm filters are in line with the tritium collection and are collected at the same frequency as that system.	David W. Griffis (806) 477-4426
Lawrence Livermore	All (TSP)	Hi-vol Glass fiber Low-vol Millipore	Hi-vol 8" x 10" Low-vol 47 mm	Hi-vol 35 cfm Low-vol 30 L/min (1cfm)*	1 week, continuous for both	28 Hi-vol 3 LowVol	Gross alpha Gross beta	Gross alpha: 12 pCi/filter Gross beta: 20 pCi/filter	Gross alpha: 35 cfm 1 x 10 ⁻³ * 30 L/min 4 x 10 ⁻² * Gross beta: 35 cfm 2 x 10 ⁻³ * 30 L/min 7 x 10 ⁻² *	Monitoring performed by Terrestrial Atmospheric Monitoring and Modeling Group.	Paris Althouse (925) 422-3001
Waste Isolation Pilot Plant	All (TSP)	Glass fiber	47 mm	2.0 cfm	1 week, continuous	7	Gross alpha Gross beta	Gross alpha: 2 x 10 ⁻¹⁰ μCi/m ³ Gross beta: 1.9 x 10 ⁻¹⁰ μCi/m ³	Gross alpha: 2 x 10 ⁻⁴ * Gross beta: 2 x 10 ⁻⁴ *	Environmental Evaluation Group headed by Jim Kenney (505) 885-9675 evaluates in a similar manner except at 5 cfm and 102 mm filters	Stewart Jones (505) 234-8293 Benny Hooda (505) 234-8932
Rocky Flats-APCD	PM-10 and TSP	TSP–Glass fiber, PM10 – Quartz	8" x 10"	40 cfm	24 hours every 6 th day	6 PM-10 6 TSP	Mass Loading	N/A	N/A	APCD—Air Pollution Control Division	Richard Fox (303) 692-3251

**Table A-1. Compilation of Ambient Air Monitoring Program Parameters at DOE Facilities:
Radioactive Particulate Matter (Cont.)**

	Particle sizes of interest	Filter media	Filter size	Airflow rate	Length of sampling period	Number of stations	Analyses of individual samples	Detection limits of individual samples in units given by facility	Detection limits for individual samples in pCi/m ³	Comments	Contact
Rocky Flats-LARS	PM-10 and TSP	TSP—Glass fiber, PM10 – Quartz	8" x 10"	40 cfm	1 week, continuous	3 PM-10, 12 TSP	Gross alpha Gross beta	Gross alpha: 2×10^{-3} pCi/m ³ Gross beta: 4×10^{-3} pCi/m ³	Gross alpha: 2×10^{-3} Gross beta: 4×10^{-3}	LARS—Laboratory and Radiation Services	Tony Harrison (303) 692-3046
Rocky Flats-RFETS	PM-10 and >10 μm	PM-10 – Glass fiber >10 μm – oiled paper	8" x 10" filter ~4" x 6" paper	40 cfm	1 Month, continuous	35	²³⁹ Pu, ²⁴¹ Am, ^{234,238} U	Pu & Am 2×10^{-4} pCi/m ³	Pu & Am 2×10^{-4} pCi/m ³	RFETS—Rocky Flats Environmental Technology Site 14 stations analyzed monthly, other selected stations analyzed weekly for α/β, monthly for isotopes	Bob Nininger (303) 966-4663
Mound Plant	All (TSP)	Quartz fiber	200 mm	45 cfm	1 week, continuous	20	²³⁸ Pu; ²²⁸ Th, ²³² Th at 1 Station	²³⁸ Pu, ²²⁸ Th, ²³² Th: 10^{-18} μCi/mL	²³⁸ Pu, ²²⁸ Th, ²³² Th: 10^{-6} pCi/m ³ *	10 stations are analyzed monthly by creating composites of weekly samples. Individual samples are halved for composites.	Steve Howard (937) 865-4188
Fernald Environmental Management Project	All (TSP)	Polyester	20 x 25 cm	45 cfm	2 weeks, continuous	20	Total U, Thorium, Particulate Weight	Th 0.4 pCi/ Filter Total U 3×10^{-5} pCi/m ³	Th 1.6×10^{-5} pCi/m ³ * Total U 3×10^{-5} pCi/m ³	Monitor for 40 CFR Part 61 (NESHAP) compliance	Kathy Nickel (513) 648-3166
Knolls Atomic Power Laboratory	All (TSP)	Glass fiber	2"	1 cfm	2 weeks, continuous	2	Gross alpha Gross beta	Gross alpha: 1×10^{-15} μCi/mL Gross beta: 5×10^{-15} μCi/mL	Gross alpha: 1×10^{-3} pCi/m ³ * Gross beta: 5×10^{-3} pCi/m ³ *	NOT used for compliance	Doug Marx (518) 395-6169
Bettis Atomic Power Laboratory	All (TSP)	Mixed cellulose esters	47 mm	20 L/min (0.7 cfm)*	1 week, continuous	2	Gross alpha Gross beta	Gross alpha: 2×10^{-16} μCi/mL Gross beta: 4×10^{-16} μCi/mL	Gross alpha: 2×10^{-4} pCi/m ³ * Gross beta: 4×10^{-4} pCi/m ³ *	NOT used for compliance	Connie Carpenter (412) 476-7388

*Denotes a calculation and is not the value and/or units given by the facility.

TSP = Total Suspended Particulate

**Table A-2. Compilation of Ambient Air Monitoring Program Parameters at DOE Facilities:
Composites**

	Airflow rate	Length of sampling period	Composite	Composite nuclides	Detection limits for composites in units given by facility	Comments	Contact
Los Alamos National Laboratory	4.0 cfm	2 weeks, continuous	Quarterly	²³⁸ Pu, ²³⁹⁺²⁴⁰ Pu, ²³⁴ U, ²³⁵ U, ²³⁸ U, ²⁴¹ Am, Gamma scan	0.04 pCi/sample		Jean Dewart (505) 665-0239
Savannah River Site	2.6 cfm	1 week, continuous	No	N/A	N/A	A one-week sample is characterized annually for Sr, Pu, U, Am and Cm	Pete Fledderman (803) 725-1736
Hanford Site-WMNW	2.0 cfm	2 weeks, continuous	Every 6 months	²³⁸ Pu, ²³⁹⁺²⁴⁰ Pu, ²³⁴ U, ²³⁵ U, ²³⁸ U, ²⁴¹ Am, ⁹⁰ Sr, Gamma scan	Units in $\mu\text{Ci/mL}$: ⁹⁰ Sr: 1.9×10^{-14} Iso Pu: 2.0×10^{-15} ²⁴¹ Am: 1.9×10^{-15} Iso U: 7.1×10^{-15}	WMNW – Waste Management Northwest. Near Facility Environmental Monitoring	Craig Perkins (509) 372-8042
Hanford Site-PNNL	2.6 m ³ /hour (1.53cfm)*	2 weeks, continuous ¹²⁹ I monthly, continuous	Quarterly (filters and ¹²⁹ I)	²³⁸ Pu, ²³⁹⁺²⁴⁰ Pu, ²³⁴ U, ²³⁵ U, ²³⁸ U, ¹³⁴ Cs, ⁹⁰ Sr, ¹³⁷ Cs, ⁷ Be, ⁴⁰ K, ⁶⁰ Co, ¹⁰⁶ Rn, ¹²⁵ Sb, ¹⁵⁴ Eu, ¹⁵⁵ Eu	In pCi/m³: ²³⁸ Pu 5×10^{-6} ²³⁹⁺²⁴⁰ Pu 5×10^{-6} ⁹⁰ Sr 1×10^{-4} ²³⁴ U 5×10^{-5} ²³⁵ U 5×10^{-5} ²³⁸ U 5×10^{-5} ¹³⁷ Cs .01	29 composites are made up of the 44 stations for _ and _ . ¹²⁹ I is on charcoal substrate at 4 locations only. PNNL – Pacific Northwest National Laboratory conducts far field monitoring for Hanford.	Barb Gillespie (509) 376-5802
Brookhaven	15–20 L/min (0.52 cfm)*	1 week, continuous	Monthly	Gamma scan. No specific nuclides.	N/A		Gary Schroeder (516) 344-7045
INEEL – BBWI	PM-10 40 cfm Low-vol 2.0 cfm	PM-10 2 weeks, continuous Low-vol 1 week, continuous	Quarterly for both, PM10—Monthly γ composite	²³⁸ Pu, ²³⁹⁺²⁴⁰ Pu, ²³⁴ U, ²³⁵ U, ²³⁸ U, ²⁴¹ Am, ⁹⁰ Sr, ¹³⁷ Cs Gamma spec on both Low-vol and PM-10	In $\mu\text{Ci/cc}$: ²³⁸ Pu 8×10^{-18} ²³⁹⁺²⁴⁰ Pu 8×10^{-18} ²⁴¹ Am 8×10^{-18} ⁹⁰ Sr 1×10^{-16} ²³⁴ U 6×10^{-18} ²³⁵ U 4×10^{-18} ²³⁸ U 4×10^{-18}	Bechtel, Babcock & Wilcox Idaho (BBWI) performs near field monitoring.	Maria Miles (208) 526-7924
INEEL – ESRF	2.0 cfm	1 week, continuous	Quarterly	⁹⁰ Sr ²⁴¹ Am ²³⁸ Pu ^{239/240} Pu Specific Gamma (¹³⁷ Cs)	In $\mu\text{Ci/ml}$: ⁹⁰ Sr 3×10^{-17} ²⁴¹ Am 2×10^{-18} ²³⁸ Pu 2×10^{-18} ^{239/240} Pu 3×10^{-18} ¹³⁷ Cs 3×10^{-16}	Environmental Science and Research Foundation (ESRF) conducts far field monitoring for INEEL.	Roy Evans (208) 525-7102

**Table A-2. Compilation of Ambient Air Monitoring Program Parameters at DOE Facilities:
Composites (Cont.)**

	Airflow rate	Length of sampling period	Composite	Composite nuclides	Detection limits for composites in units given by facility	Comments	Contact
Nevada Test Site	3.0 cfm 40 cfm	1 week, continuous for both	Monthly	²³⁸ Pu, ²³⁹⁺²⁴⁰ Pu, ⁷ Be, Gamma scan ²³⁸ Pu, ²³⁵⁺²⁴⁰ Pu	In $\mu\text{Ci}/\text{mL}$: ²³⁸ Pu 9.8×10^{-18} ²³⁹⁺²⁴⁰ Pu 10.6×10^{-18} ⁷ Be 2.1×10^{-14} ²³⁸ Pu 6×10^{-18} ²³⁵⁺²⁴⁰ Pu 6×10^{-18}		Robert F. (Frank) Grossman (702) 295-5742
Oak Ridge National Laboratory	9–35 cfm 4–2 cfm	9–1 week continuous 4–2 weeks continuous	9 Quarterly, 4 Annually	Gross alpha, Gross beta, Gamma scan, ²³⁴ U, ²³⁵ U, ²³⁸ U	In $\mu\text{Ci}/\text{year}$: ²³⁴ U 3.53×10^{-4} ²³⁵ U 3.76×10^{-4} ²³⁸ U 3.92×10^{-4} Gross α 2.25×10^{-5} Gross β 6.54×10^{-4}	Other than I and Os, analyses are done only on composites.	Laury Hamilton (423) 576-4526 Joan Hughes (423) 574-6649
E.O. Lawrence Berkeley National Lab	2.1 cfm	1 Month, continuous	None	None	N/A		Patrick Thorson (510)486-5852
Sandia National Laboratories	40 cfm	24 Hours every sixth day	Monthly	Gross alpha Gross beta Gamma spec	Gross alpha: 5.4×10^{-4} pCi/m ³ Gross beta: 1.5×10^{-3} pCi/m ³	Gamma spec – Peaks are counted	Gina Deola (505)845-7688
Argonne National Laboratory	60–70 m ³ /hr (35–41 cfm)*	10 days, continuous	Monthly	²³⁸ Pu, ²³⁹ Pu, ²³⁴ U, ²³⁸ U, ⁹⁰ Sr, ²³² Th, ²³⁰ Th, ²²⁸ Th	²³⁸ Pu 1 aCi/m ³ ²³⁹ Pu 1 aCi/m ³ ²³⁴ U 1 aCi/m ³ ²³⁸ U 1 aCi/m ³ ²³² Th 1 aCi/m ³ ²³⁰ Th 1 aCi/m ³ ²²⁸ Th 1 aCi/m ³ ⁹⁰ Sr: 10 aCi/m ³	Three separate stations are used for compositing. They run for 10 days and are composited monthly. Polystyrene filters are used for these composites	Norbert Golchert (630)252-3912
Pantex	8" x 10" 40 cfm	1 week, continuous	Monthly	²³⁴ U, ²³⁸ U, ²³⁹ Pu – all filters ²³⁸ Pu, ²³² Th – some filters	.05 pCi/composite	The 8" x 10" cellulose filters are collected weekly from a total of 27 monitoring locations.	David W. Griffis (806) 477-4426

**Table A-2. Compilation of Ambient Air Monitoring Program Parameters at DOE Facilities:
Composites (Cont.)**

	Airflow rate	Length of sampling period	Composite	Composite nuclides	Detection limits for composites in units given by facility	Comments	Contact
Lawrence Livermore	Hi-vol 35 cfm Low-vol 30 L/min (1cfm)*	1 week, continuous for both	Monthly	²³⁸ Pu, ²³⁹⁺²⁴⁰ Pu, ²³⁵ U, ²³⁸ U, Gamma	In pCi/filter: ²³⁸ Pu 1.7 x 10 ⁻² ²³⁹⁺²⁴⁰ Pu 3.06 x 10 ⁻³ In µg /filter: ²³⁵ U 1.43 x 10 ⁻² ²³⁸ U 2.00	Calculations at a flow rate of 1 cfm: ²³⁸ Pu 7 x 10 ⁻⁶ * ²³⁹⁺²⁴⁰ Pu 1 x 10 ⁻⁵ * ²³⁵ U 1 x 10 ⁻⁴ * ²³⁸ U 2 x 10 ⁻³ *	Paris Althouse (925) 422-3001
Waste Isolation Pilot Plant	2.0 cfm	1 week, continuous	Quarterly	²³⁸ Pu, ²³⁹ Pu, ²³⁴ U, ²³⁵ U, ²³⁸ U, ⁹⁰ Sr, ²⁴¹ Am	In pCi/m³: ²³⁸ Pu 6 x 10 ⁻⁵ ²³⁹ Pu 6 x 10 ⁻⁵ ²³⁴ U 3 x 10 ⁻⁵ ²³⁵ U 3 x 10 ⁻⁵ ²³⁸ U 3 x 10 ⁻⁵ ²⁴¹ Am See Comments ⁹⁰ Sr 8 x 10 ⁻⁴ ⁴⁰ K 1 x 10 ⁻² ¹³⁷ Cs 1 x 10 ⁻³ ⁶⁰ Co 1 x 10 ⁻³	Environmental Evaluation Group headed by Jim Kenney (505) 885-9675 evaluates in a similar manner except at 5 cfm and 102 mm filters. ²⁴¹ Am 1 x 10 ⁻⁶ Bq/m ³	Stewart Jones (505) 234-8293 Benny Hooda (505) 234-8932
Rocky Flats-APCD	40 cfm	24 hours every 6 th day	Quarterly TSP and PM10	²³⁹ Pu, ²⁴⁰ Pu, U, ²⁴¹ Am	U 1 x 10 ⁻⁴ pCi/m ³ ²⁴¹ Am 5 x 10 ⁻⁶ pCi/m ³ Iso Pu 5 x 10 ⁻⁶ pCi/m ³	APCD – Air Pollution Control Division	Richard Fox (303) 692-3251
Rocky Flats-LARS	40 cfm	1 week, continuous	Quarterly TSP and PM10	²³⁹ Pu, ²⁴⁰ Pu, ²⁴¹ Am	²⁴¹ Am 3 x 10 ⁻⁶ pCi/m ³ Iso Pu 3 x 10 ⁻⁶ pCi/m ³	LARS-Laboratory and Radiation Services	Tony Harrison (303) 692-3046
Mound Plant	45 cfm	1 week, continuous	Quarterly (remaining 12 stations)	²³⁸ Pu; ²²⁸ Th, ²³² Th	³⁸ Pu; ²²⁸ Th, ²³² Th: 10 ⁻¹⁸ µCi/mL	Individual samples are halved for composites	Steve Howard (937) 865-4188
Fernald Environmental Management Project	45 cfm	2 weeks, continuous	Quarterly	²³⁴ U, ²³⁵ U, ²³⁶ U, ²³⁸ U; ²²⁸ Th, ²³⁰ Th, ²³² Th; ²²⁶ Ra	In pCi/m³: Iso U 9 x 10 ⁻⁵ Iso Th 7 x 10 ⁻⁶ ²²⁶ Ra 2 x 10 ⁻⁴	Monitor for 40 CFR Part 61 (NESHAP) compliance	Kathy Nickel (513) 648-3166
Knolls Atomic Power Laboratory	1 cfm	2 weeks, continuous	No	N/A	N/A	NOT used for compliance	Doug Marx (518) 395-6169
Bettis Atomic Power Laboratory	20 L/min (0.7 cfm)*	1 week, continuous	No	N/A	N/A	NOT used for compliance	Connie Carpenter (412) 476-7388

**Table A-3. Compilation of Ambient Air Monitoring Program Parameters at DOE Facilities:
Detection Limits for Composites**

	Detection limits for composites in pCi/m ³														
	²³⁸ Pu	²³⁹⁺²⁴⁰ Pu	²³⁴ U	²³⁵ U	²³⁸ U	²⁴¹ Am	⁹⁰ Sr	⁷ Be	¹³⁷ Cs	²²⁸ Th	²³⁰ Th	²³² Th	Gross alpha:	Gross beta:	Other
Los Alamos National Laboratory	5 x 10 ⁻⁶ *	5 x 10 ⁻⁶ *	5 x 10 ⁻⁶ *	5 x 10 ⁻⁶ *	5 x 10 ⁻⁶ *	5 x 10 ⁻⁶ *									
Hanford Site-WMNW	2 x 10 ⁻³ *	2 x 10 ⁻³ *	7 x 10 ⁻³ *	7 x 10 ⁻³ *	7 x 10 ⁻³ *	2 x 10 ⁻³ *	2 x 10 ⁻² *								
Hanford Site-PNNL	5 x 10 ⁻⁶	5 x 10 ⁻⁶	5 x 10 ⁻⁵	5 x 10 ⁻⁵	5 x 10 ⁻⁵		1 x 10 ⁻⁴		1 x 10 ⁻²						
INEEL – BBWI	8 x 10 ⁻⁶ *	8 x 10 ⁻⁶ *	6 x 10 ⁻⁶ *	4 x 10 ⁻⁶ *	4 x 10 ⁻⁶ *	8 x 10 ⁻⁶	1 x 10 ⁻⁴ *								
INEEL – ESRF	2 x 10 ⁻⁶	3 x 10 ⁻⁶				2 x 10 ⁻⁶	3 x 10 ⁻⁵		3 x 10 ⁻⁴						
Nevada Test Site	At 3 cfm: 1 x 10 ⁻⁵ * At 40 cfm: 6 x 10 ⁻⁶ *	At 3 cfm: 1 x 10 ⁻⁵ * At 40 cfm: 6 x 10 ⁻⁶ *						2 x 10 ⁻² *							
Oak Ridge National Laboratory			At 2cfm: 1 x 10 ⁻² * At 35cfm: 7 x 10 ⁻⁴ *	At 2cfm: 1 x 10 ⁻² * At 35cfm: 7 x 10 ⁻⁴ *	At 2cfm: 1 x 10 ⁻² * At 35cfm: 8 x 10 ⁻⁴ *										
Sandia National Laboratories													5 x 10 ⁻⁴ pCi/m ³	2 x 10 ⁻³ pCi/m ³	
Argonne National Laboratory	1 x 10 ⁻⁶ *	1 x 10 ⁻⁶ *	1 x 10 ⁻⁶ *	1 x 10 ⁻⁶ *	1 x 10 ⁻⁶ *		1 x 10 ⁻⁵ *			1 x 10 ⁻⁶ *	1 x 10 ⁻⁶ *	1 x 10 ⁻⁶ *			
Pantex	1 x 10 ⁻⁵ *	1 x 10 ⁻⁵ *	1 x 10 ⁻⁵ *		1 x 10 ⁻⁵ *							1 x 10 ⁻⁵ *			
Lawrence Livermore	At 35 cfm: 2 x 10 ⁻⁷ *	At 35 cfm: 3 x 10 ⁻⁷ *		At 35cfm: 3 x 10 ⁻⁷ *	At 35cfm: 7 x 10 ⁻⁵ *										
Waste Isolation Pilot Plant	6 x 10 ⁻⁵	6 x 10 ⁻⁵	3 x 10 ⁻⁵	3 x 10 ⁻⁵	3 x 10 ⁻⁵	3 x 10 ⁻⁵	8 x 10 ⁻⁴		1 x 10 ⁻³						⁴⁰ K 1 x 10 ⁻² ⁶⁰ Co 1 x 10 ⁻³

**Table A-3. Compilation of Ambient Air Monitoring Program Parameters at DOE Facilities
Detection Limits for Composites (Cont.)**

	Detection limits for composites in pCi/m ³														
	²³⁸ Pu	²³⁹⁺²⁴⁰ Pu	²³⁴ U	²³⁵ U	²³⁸ U	²⁴¹ Am	⁹⁰ Sr	⁷ Be	¹³⁷ Cs	²²⁸ Th	²³⁰ Th	²³² Th	Gross alpha:	Gross beta:	Other
Rocky Flats-APCD		3*	6 x 10 ⁻¹ *	2 x 10 ⁻⁴ *	3 x 10 ⁻⁵ *	2*									
Rocky Flats-LARS		2 *	6 x 10 ⁻¹ *		3 x 10 ⁻⁵ *	10*									
Mound Plant	1 x 10 ⁻⁶ *									1 x 10 ⁻⁶ *		1 x 10 ⁻⁶ *			
Fernald Environmental Management Project			9 x 10 ⁻⁵	9 x 10 ⁻⁵	9 x 10 ⁻⁵					7 x 10 ⁻⁶	7 x 10 ⁻⁶	7 x 10 ⁻⁶			²²⁶ Ra 2 x 10 ⁻⁴

* Denotes a calculation and is not the value and/or units given by the facility.

SRS, Brookhaven, Berkeley, Rocky Flats-RFETS, Knolls and Bettis do not analyze composites.