APPENDIX B

DETAILED DESCRIPTIVE ANALYSES OF EXTERIOR DUST LEAD LOADINGS (INCLUDING BULK DEBRIS SAMPLES)

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B1. Normality Check for Exterior Lead Dust Loadings (including Bulk Debris Samples)

Distribution of Non-Detectable Exterior Lead Measurements

None of the exterior measurements fell below detection limits.

Normality of the Exterior Lead Measurement Distribution

Prior to any analysis of the lead dust Loadings, the underlying distribution of the response data was examined for normality. Note that a Wilkes-Shapiro p-value < 0.001 indicates a departure from normality. With larger sample sizes, normality tests can indicate statistically significant but unimportant departures from normality. For the data collected for this study, the log-transformation of the data was accepted even when the Wilkes-Shapiro statistics indicated non-normality. With additional time, potential outliers and other influential points could be explored to determine if other data adjustments would be beneficial to the analyses.

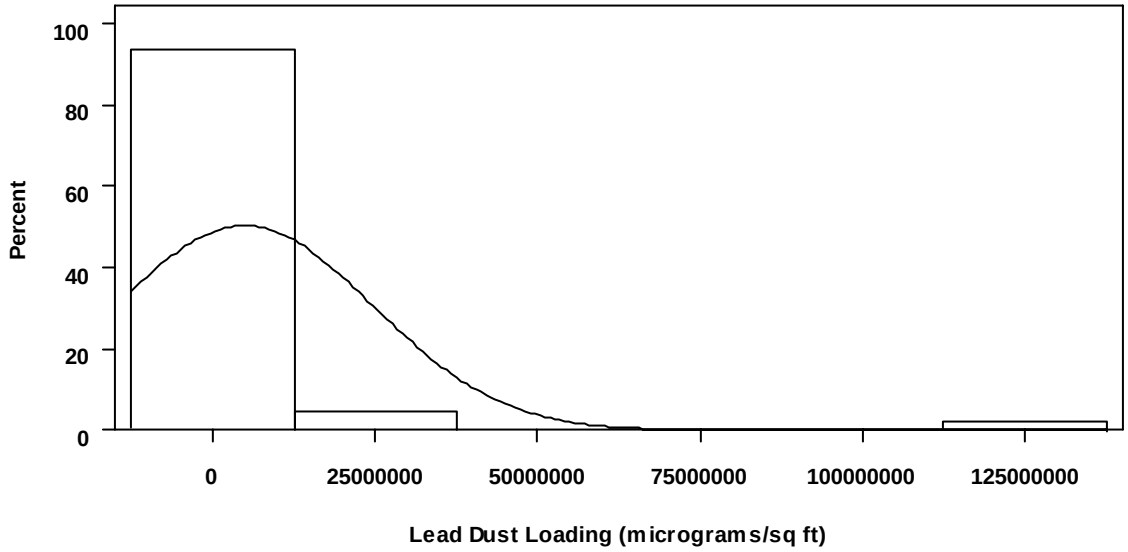

Figure B1.1a. Histogram of Dust Lead Measurements with Bulk (μg/ft^2) from Top of Rule Plastic (Wilkes-Shapiro p-value < 0.001)

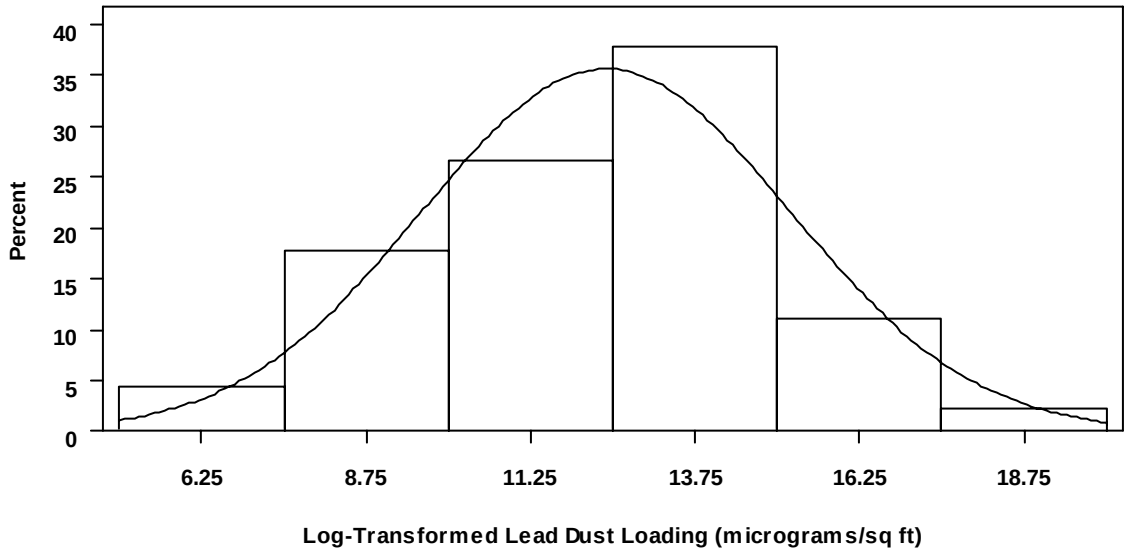

Figure B1.1b. Histogram of Log Transformed Dust Lead Measurements with Bulk (μg/ft^2) from Top of Rule Plastic (Wilkes-Shapiro p-value = 0.904)

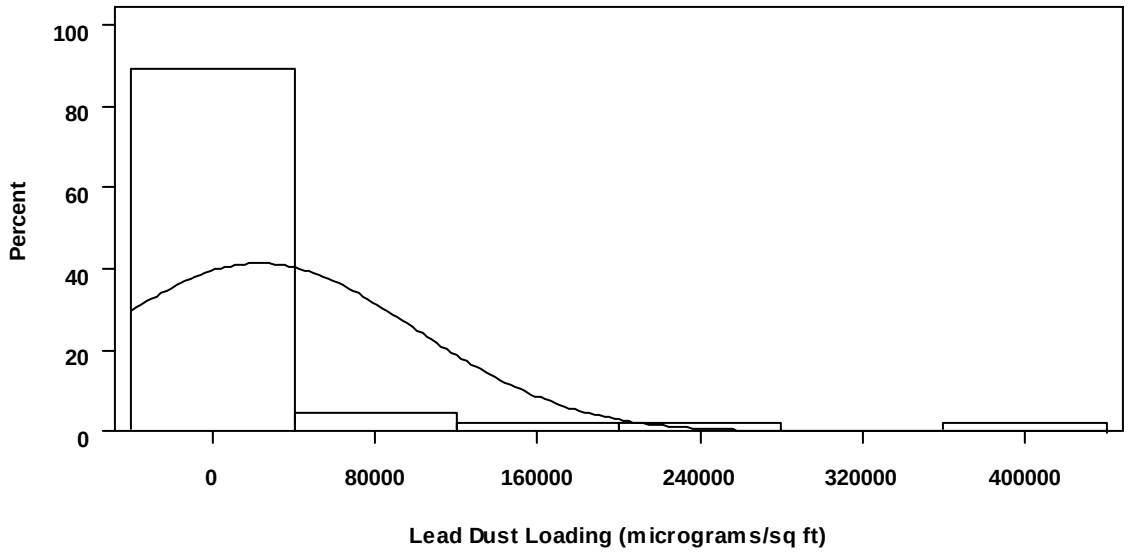

Figure B1.2a. Histogram of Dust Lead Measurements with Bulk ($\mu g/ft^2$) from Under Rule Plastic (Wilkes-Shapiro p-value < 0.001)

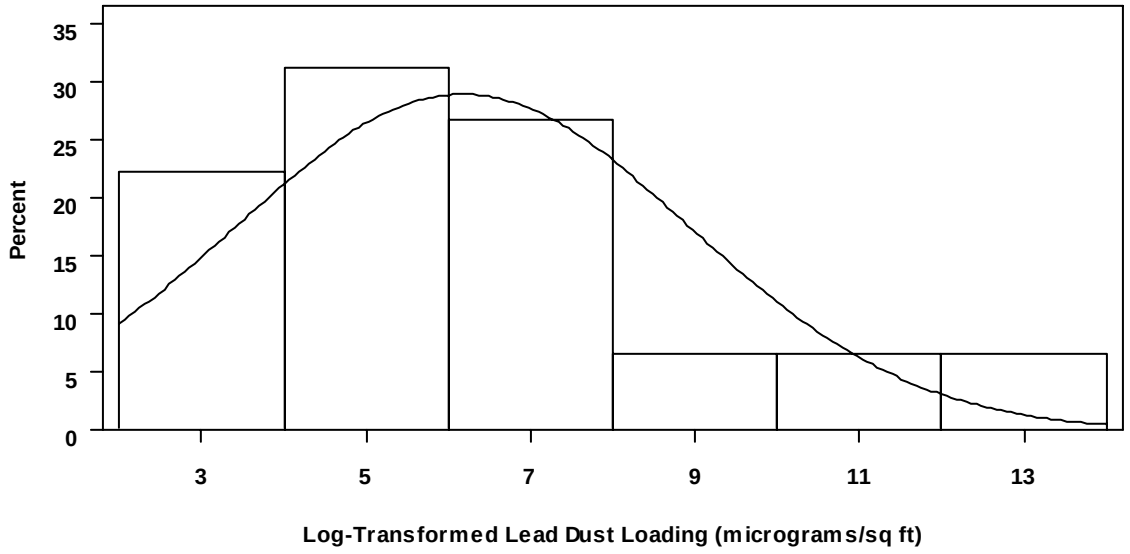

Figure B1.2b. Histogram of Log Transformed Dust Lead Measurements with Bulk ($\mu g/ft^2$) from Under Rule Plastic (Wilkes-Shapiro p-value = 0.003)

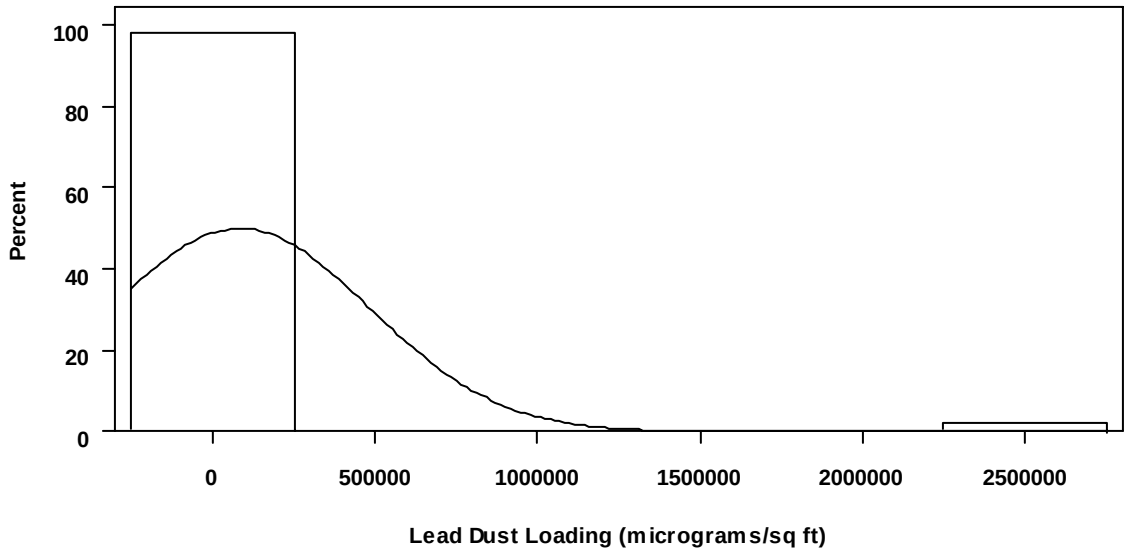

Figure B1.3a. Histogram of Dust Lead Measurements with Bulk ($\mu g/ft^2$) from Near Rule Plastic (Wilkes-Shapiro p-value < 0.001)

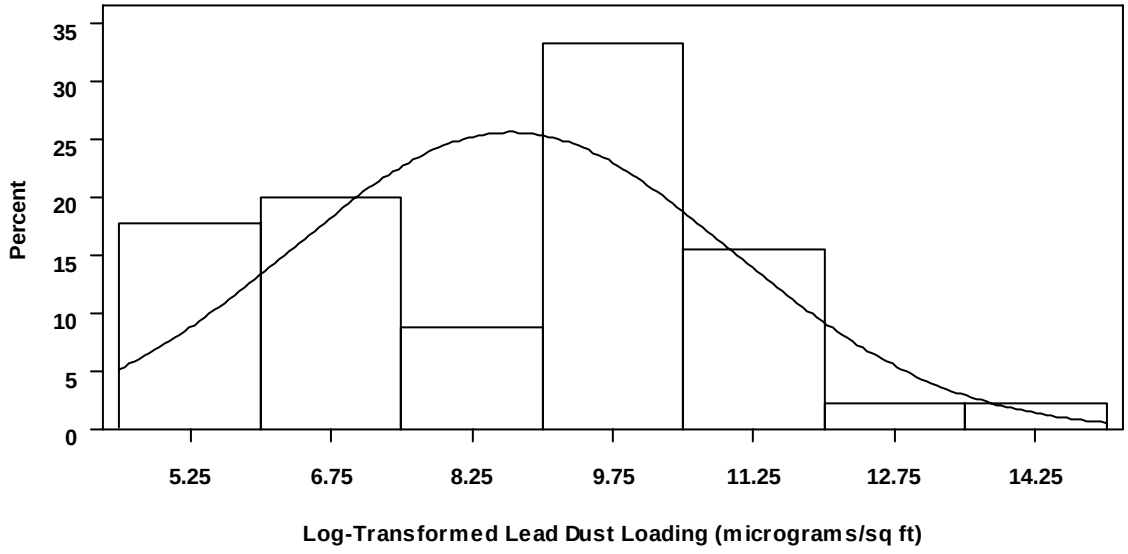

Figure B1.3b. Histogram of Log Transformed Dust Lead Measurements with Bulk ($\mu g/ft^2$) from Near Rule Plastic (Wilkes-Shapiro p-value = 0.055)

B2. Exploratory Summaries of Exterior Lead Dust Loadings (including Bulk Debris Samples) vs. Select Characteristics

Box plots of the dust lead Loadings recorded from top of, under and near rule plastic as well as descriptive statistical summary tables are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. Box plots are a technique for displaying one-dimensional data and their summary characteristics. A box plot displays the median (represented by the center horizontal line), the 25^{th} percentile (represented by the bottom of the box), and the 75^{th} percentile (represented by the top of the box). The vertical lines, or whiskers, are drawn from the box to the most extreme point within 1.5 * interquartile range. (An interquartile range is the distance between the 25^{th} and the 75^{th} percentiles.) Any value more extreme than this is identified individually with stars. The data are plotted using a log-base 10 scale. The summary statistics provided in the tables are sample size, geometric mean, geometric standard error, minimum, 10^{th} percentile, 25^{th} percentile, median, 75^{th} percentile, 90^{th} percentile, and maximum.

The selected characteristics are as follows:

1. Job intensity
2. City
3. Job type
4. Contractor
5. Housing unit

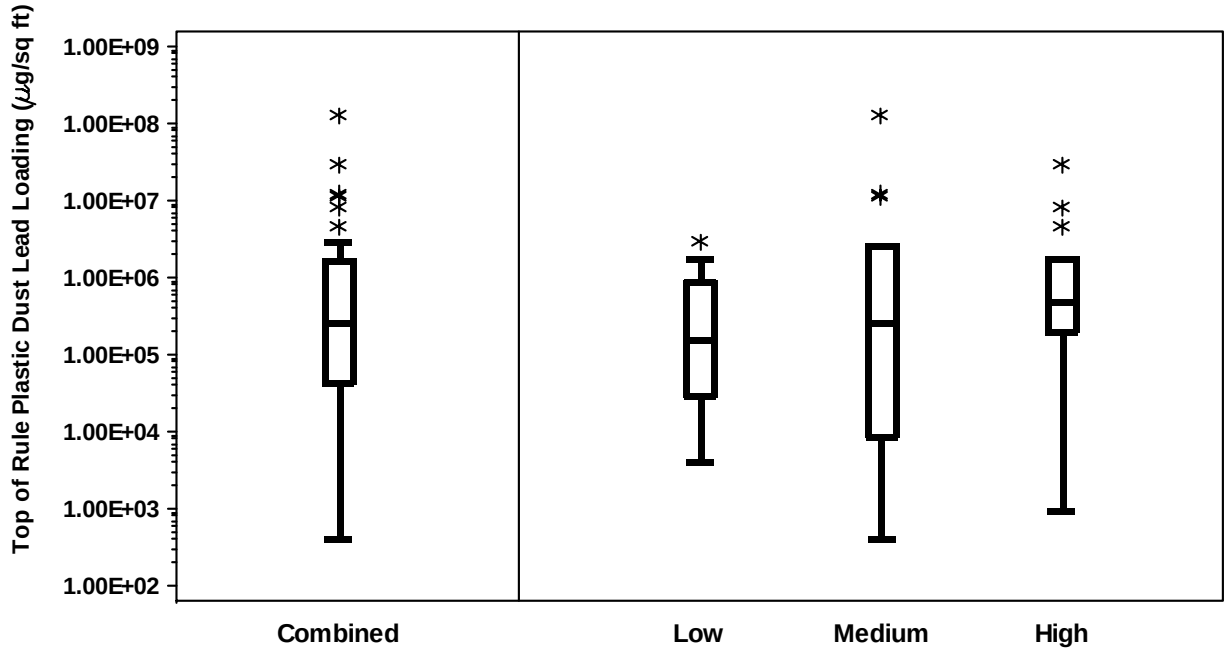

Figure B2.1a. Box Plots of Dust Lead Loading with Bulk Measured Top of Rule Plastic by Job Intensity Level

Table B2.1a. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Top of Rule Plastic by Job Intensity Level

Top of Rule Plastic - Intensity Level	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
1-High	15	3,303,873	544,525	956	196,760	494,822	1,819,556	29,401,680
2-Medium	15	10,808,565	180,013	417	8,556	268,359	2,538,052	130,670,000
3-Low	15	569,782	144,545	4,109	30,060	151,734	888,167	2,991,198
Combined	45	4,894,073	241,977	417	43,976	268,359	1,652,382	130,670,000

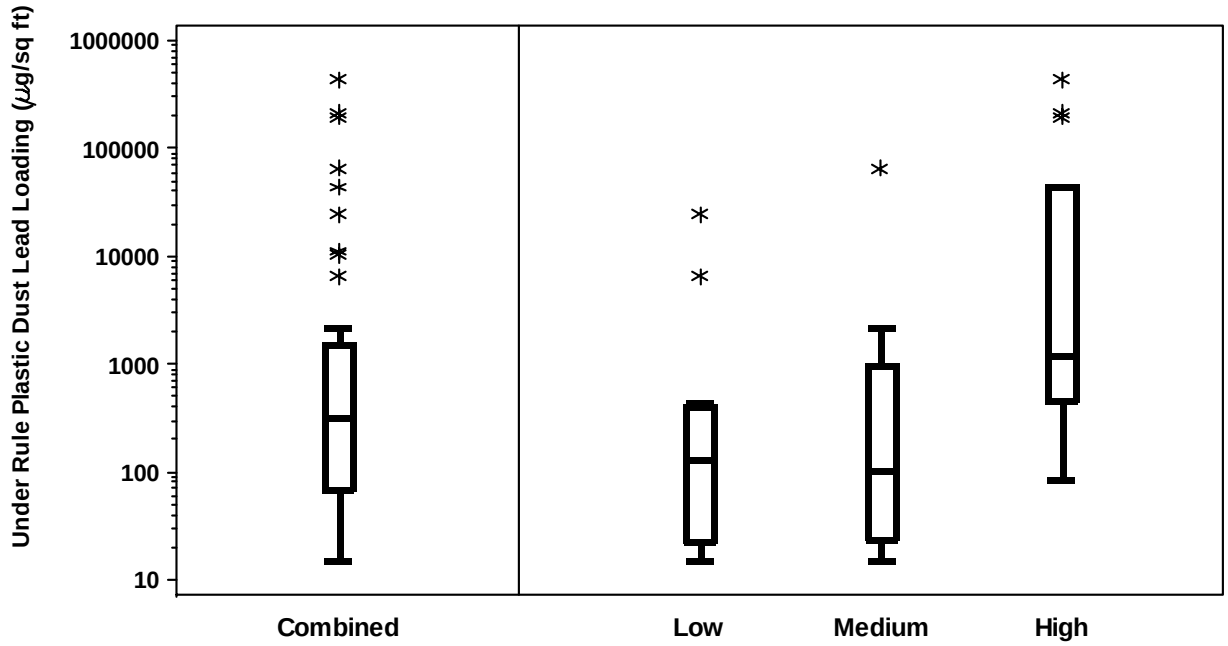

Figure B2.1b. Box Plots of Dust Lead Loading with Bulk Measured Under Rule Plastic by Job Intensity Level

Table B2.1b. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Under Rule Plastic by Job Intensity Level

Under Rule Plastic - Intensity Level	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
1-High	15	61,639	3,689	87	469	1,204	44,098	438,699
2-Medium	15	4,789	182	15	24	105	967	65,815
3-Low	15	2,230	164	15	23	129	411	24,744
Combined	45	22,886	479	15	68	322	1,523	438,699

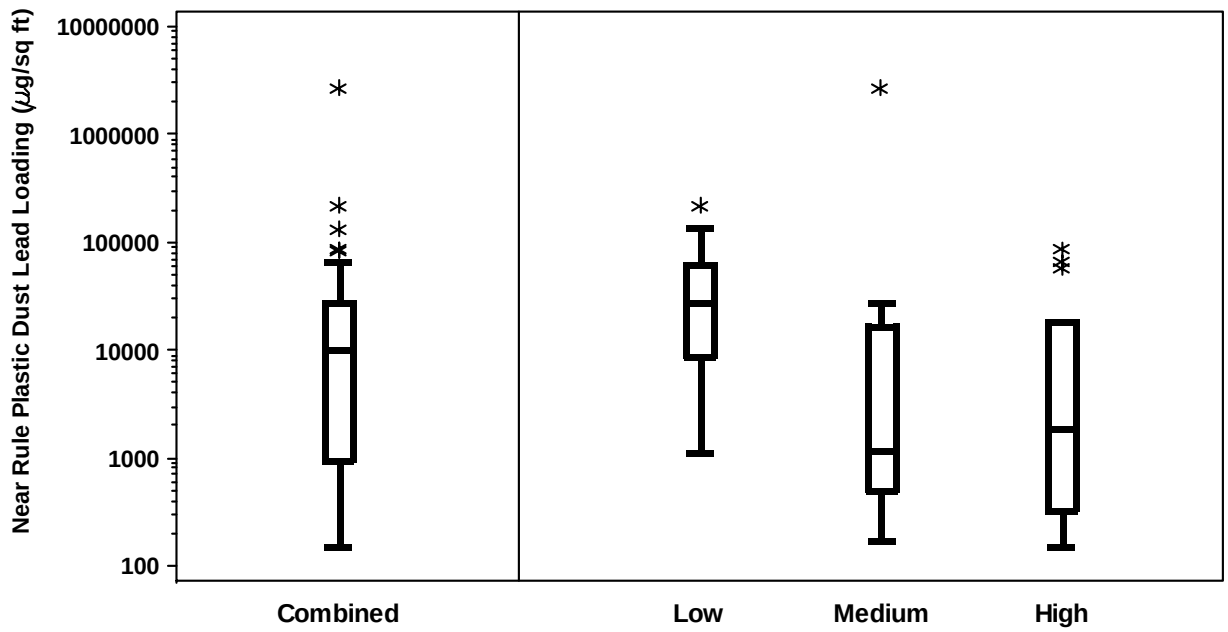

Figure B2.1c. Box Plots of Dust Lead Loading with Bulk Measured Near Rule Plastic by Job Intensity Level

Table B2.1c. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Near Rule Plastic by Job Intensity Level

Near Rule Plastic - Intensity Level	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
1-High	15	18,311	2,937	150	331	1,836	18,002	85,985
2-Medium	15	185,462	3,083	172	488	1,205	16,597	2,692,069
3-Low	15	47,629	21,232	1,129	8,768	27,082	61,388	217,900
Combined	45	83,800	5,771	150	929	9,865	27,650	2,692,069

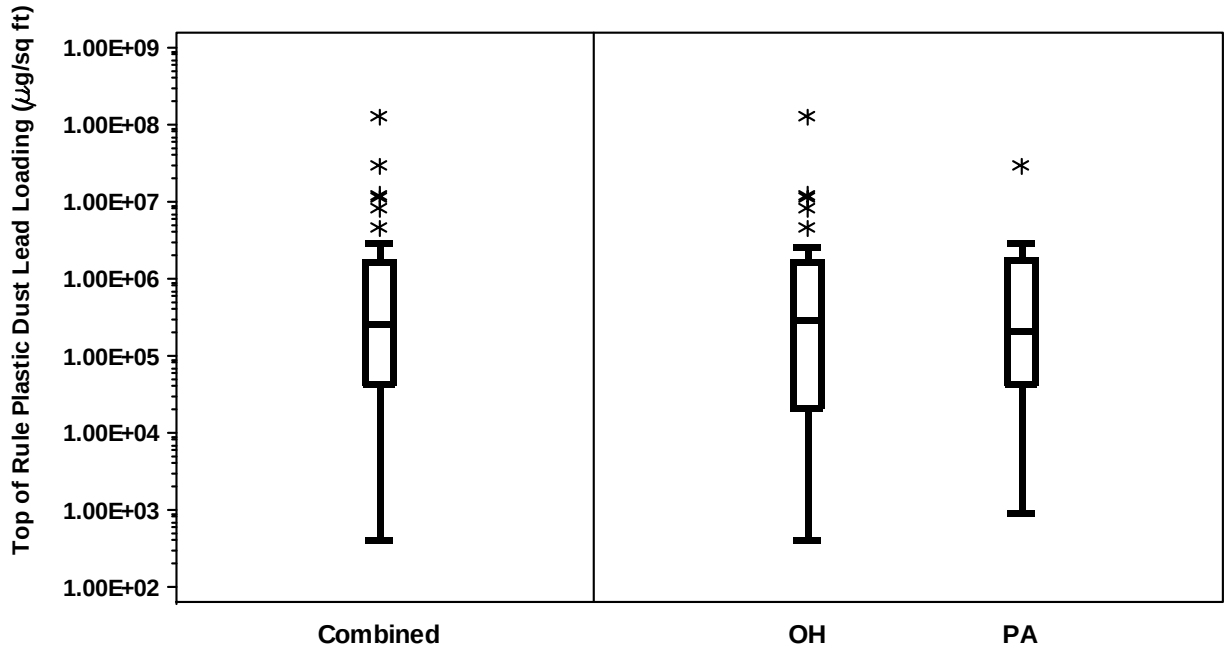

Figure B2.2a. Box Plots of Dust Lead Loading with Bulk Measured Top of Rule Plastic by City

Table B2.2a. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Top of Rule Plastic by City

Top of Rule Plastic - City	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Columbus, OH	30	6,016,101	235,057	417	22,004	304,926	1,652,382	130,670,000
Pittsburgh, PA	15	2,650,016	256,436	956	43,976	217,311	1,794,377	29,401,680
Combined	45	4,894,073	241,977	417	43,976	268,359	1,652,382	130,670,000

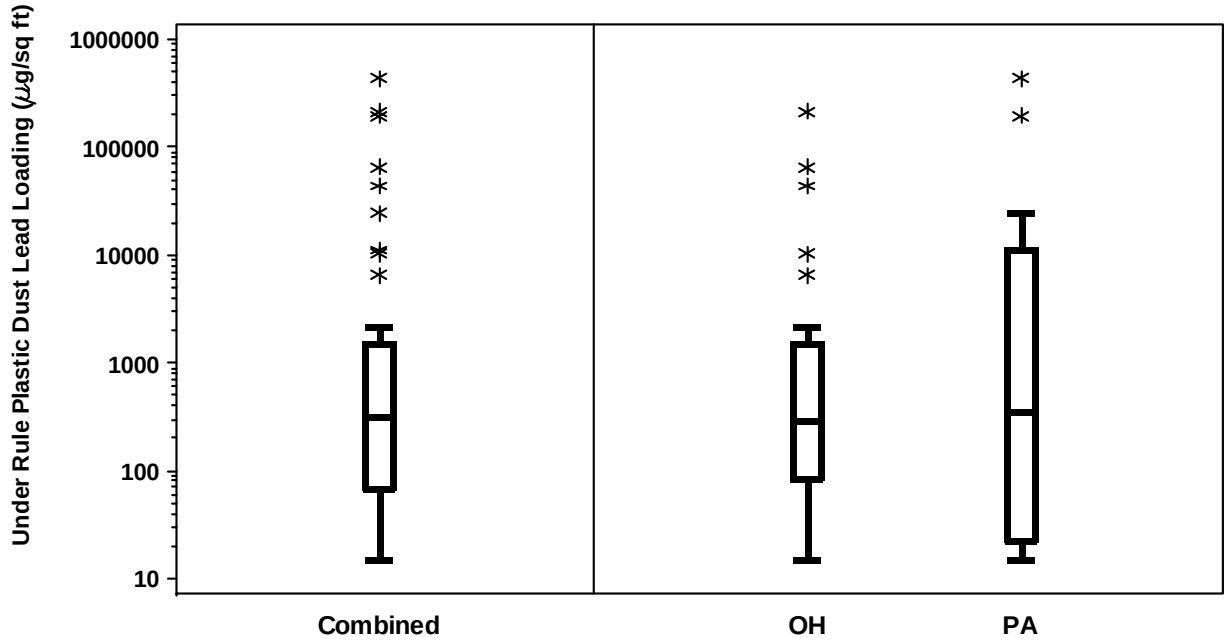

Figure B2.2b. Box Plots of Dust Lead Loading with Bulk Measured Under Rule Plastic by City

Table B2.2b. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Under Rule Plastic by City

Under Rule Plastic - City	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Columbus, OH	30	11,821	450	15	87	295	1,523	216,592
Pittsburgh, PA	15	45,017	544	15	23	360	11,220	438,699
Combined	45	22,886	479	15	68	322	1,523	438,699

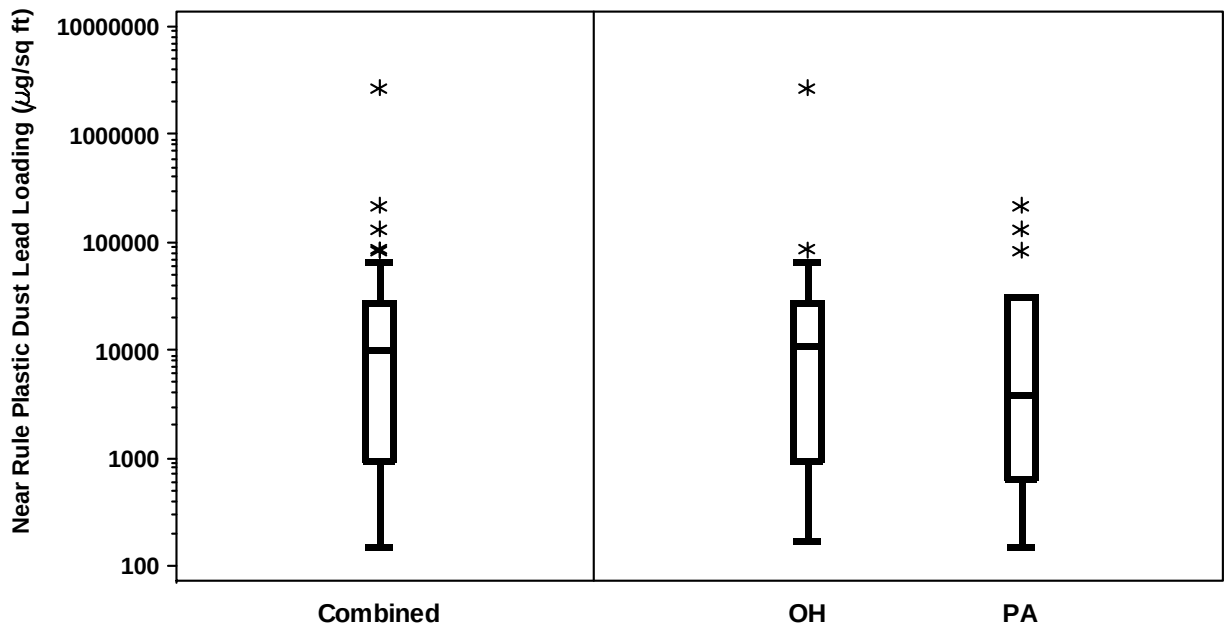

Figure B2.2c. Box Plots of Dust Lead Loading with Bulk Measured Near Rule Plastic by City

Table B2.2c. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Near Rule Plastic by City

Near Rule Plastic - City	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Columbus, OH	30	107,571	6,284	172	929	11,017	27,082	2,692,069
Pittsburgh, PA	15	36,259	4,867	150	658	3,793	31,708	217,900
Combined	45	83,800	5,771	150	929	9,865	27,650	2,692,069

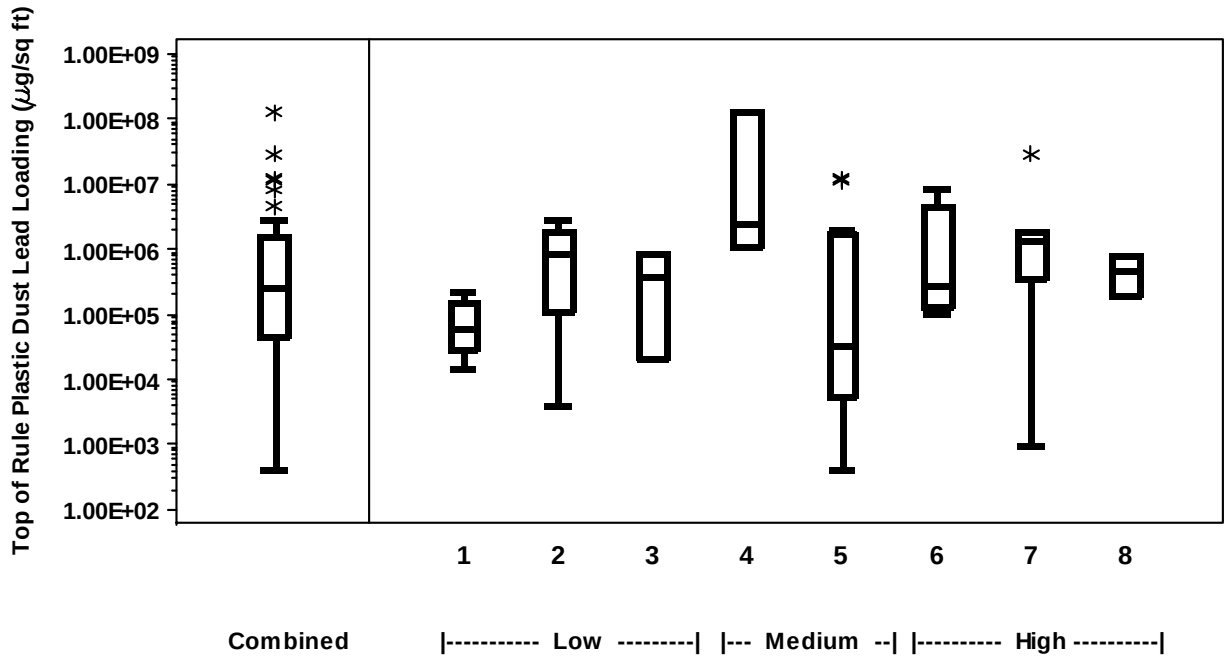

Figure B2.3a. Box Plots of Dust Lead Loading with Bulk Measured Top of Rule Plastic by Job Type

Table B2.3a. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Top of Rule Plastic by Job Type

Top of Rule Plastic - Job Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
E1-Door Replacement	6	89,447	60,662	14,441	30,060	61,570	151,734	217,311
E2-Trim Soffit Replacement	6	1,119,715	296,251	4,109	115,207	906,700	1,794,377	2,991,198
E3-Rotopene	3	430,586	195,372	22,004	22,004	381,586	888,167	888,167
E4-Heat gun under 1100 degrees	3	44,781,729	7,216,358	1,133,090	1,133,090	2,538,052	130,670,000	130,670,000
E5-Dry Scrape	12	2,315,273	71,540	417	5,457	32,584	1,712,876	12,516,130
E6-Power Sanding	6	2,294,746	591,491	106,383	129,738	288,185	4,666,776	8,289,211
E7-Torching	6	5,711,161	562,462	956	349,644	1,347,566	1,819,556	29,401,680
E8-Heat gun over 1100 degrees	3	507,548	432,520	196,760	196,760	494,822	831,062	831,062
Combined	45	4,894,073	241,977	417	43,976	268,359	1,652,382	130,670,000

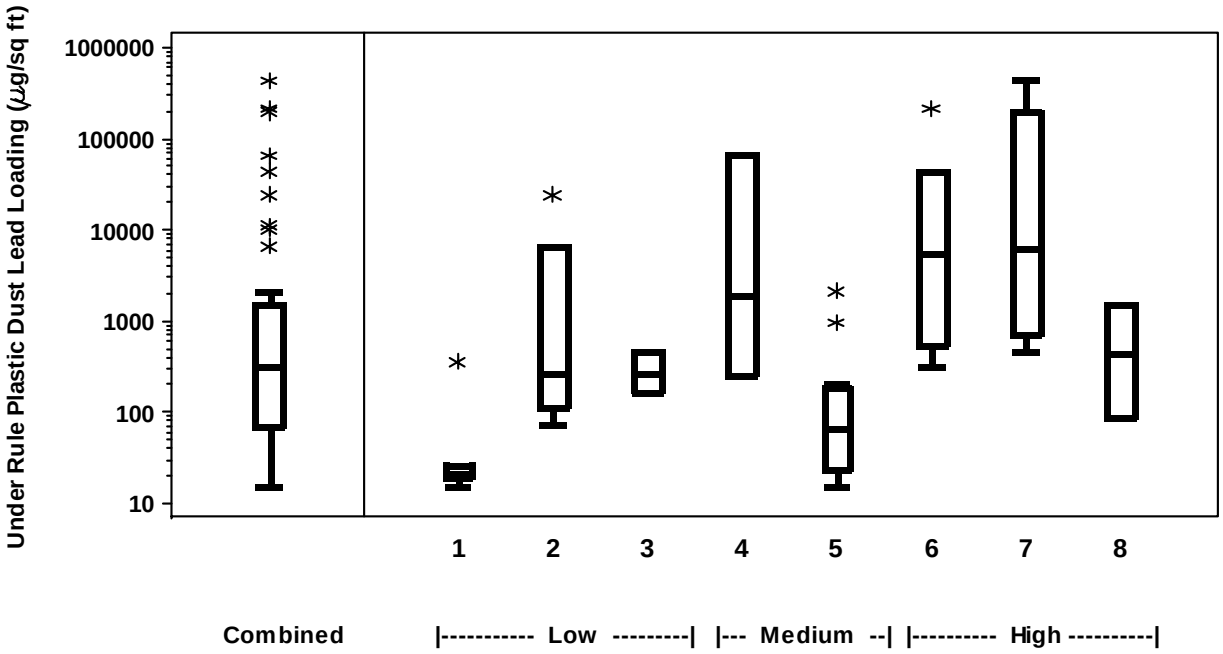

Figure B2.3b. Box Plots of Dust Lead Loading with Bulk Measured Under Rule Plastic by Job Type

Table B2.3b. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Under Rule Plastic by Job Type

Under Rule Plastic - Job Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
E1-Door Replacement	6	77	32	15	19	21	26	360
E2-Trim Soffit Replacement	6	5,351	648	74	115	270	6,635	24,744
E3-Rotopene	3	294	270	162	162	268	451	451
E4-Heat gun under 1100 degrees	3	22,659	3,149	248	248	1,914	65,815	65,815
E5-Dry Scrape	12	322	89	15	23	67	186	2,156
E6-Power Sanding	6	45,447	4,896	322	554	5,558	44,098	216,592
E7-Torching	6	108,308	8,565	469	719	6,212	197,538	438,699
E8-Heat gun over 1100 degrees	3	684	388	87	87	442	1,523	1,523
Combined	45	22,886	479	15	68	322	1,523	438,699

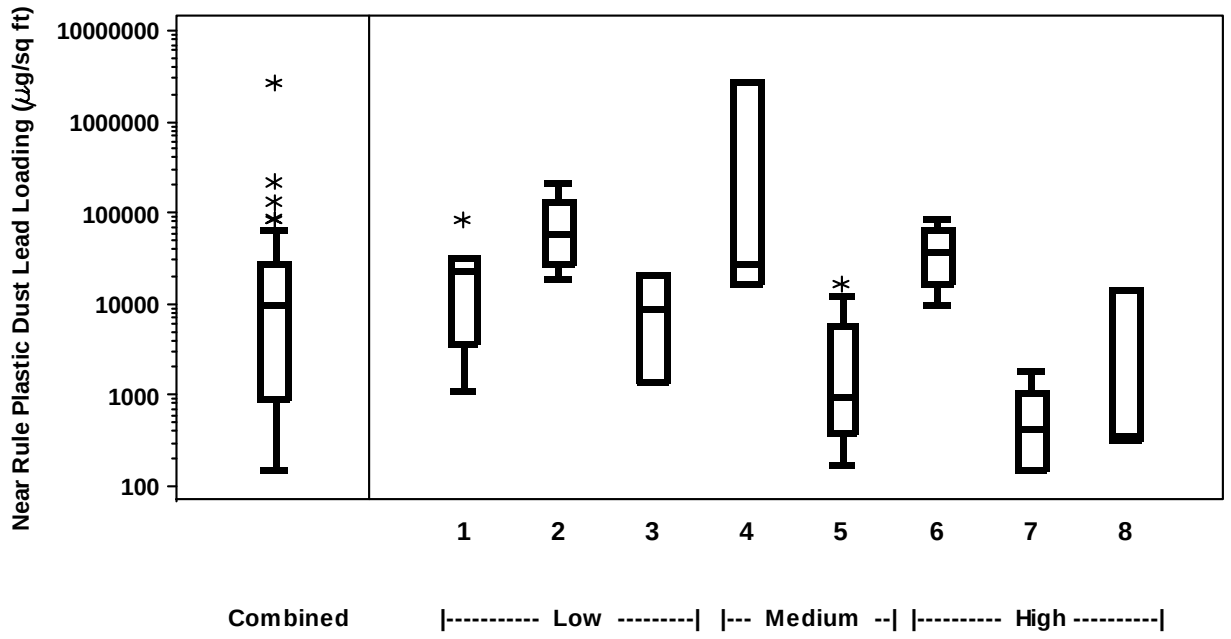

Figure B2.3c. Box Plots of Dust Lead Loading with Bulk Measured Near Rule Plastic by Job Type

Table B2.3c. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Near Rule Plastic by Job Type

Near Rule Plastic - Job Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
E1-Door Replacement	6	28,156	13,527	1,129	3,793	24,008	31,708	84,290
E2-Trim Soffit Replacement	6	85,698	60,939	19,278	27,082	58,120	133,690	217,900
E3-Rotopene	3	10,435	6,350	1,380	1,380	8,768	21,158	21,158
E4-Heat gun under 1100 degrees	3	912,201	107,916	16,884	16,884	27,650	2,692,069	2,692,069
E5-Dry Scrape	12	3,777	1,267	172	381	941	5,887	16,597
E6-Power Sanding	6	42,532	31,602	9,865	16,905	38,360	65,719	85,985
E7-Torching	6	681	425	150	151	428	1,093	1,836
E8-Heat gun over 1100 degrees	3	5,128	1,208	331	331	363	14,689	14,689
Combined	45	83,800	5,771	150	929	9,865	27,650	2,692,069

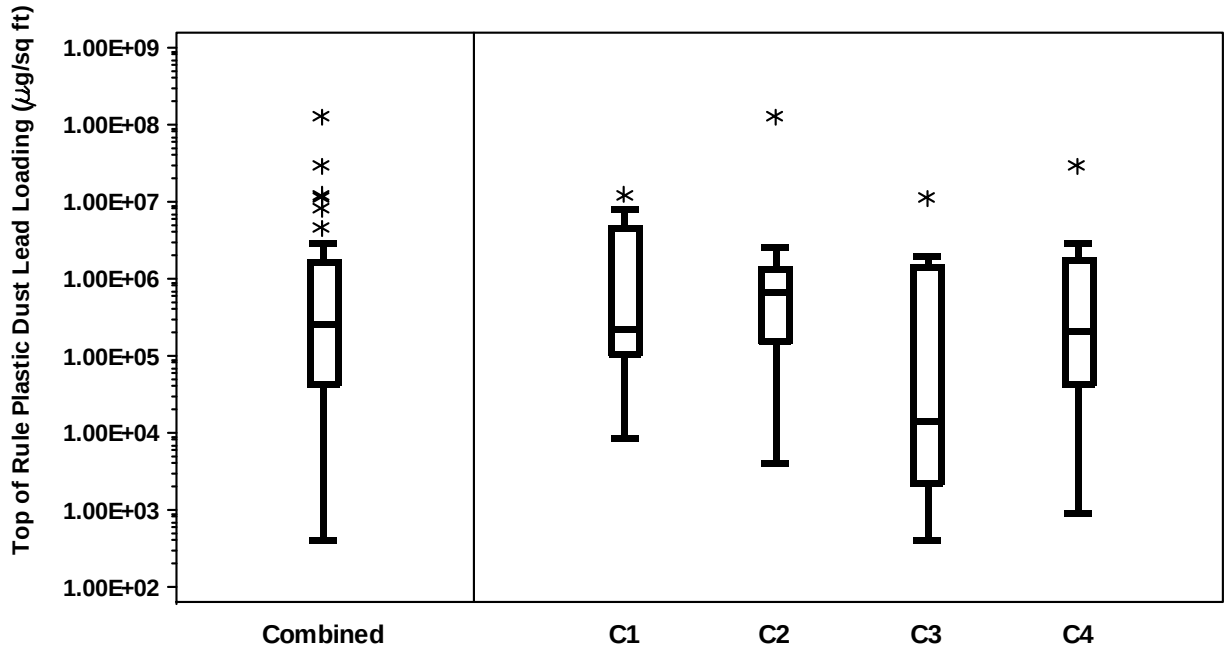

Figure B2.4a. Box Plots of Dust Lead Loading with Bulk Measured Top of Rule Plastic by Contractor

Table B2.4a. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Top of Rule Plastic by Contractor

Top of Rule Plastic - Contractor	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C1	9	2,927,109	394,806	8,556	106,383	234,877	4,666,776	12,516,130
C2	12	11,577,607	486,864	4,109	155,983	662,942	1,392,736	130,670,000
C3	9	1,689,753	53,005	417	2,357	14,348	1,463,974	11,480,352
C4	15	2,650,016	256,436	956	43,976	217,311	1,794,377	29,401,680
Combined	45	4,894,073	241,977	417	43,976	268,359	1,652,382	130,670,000

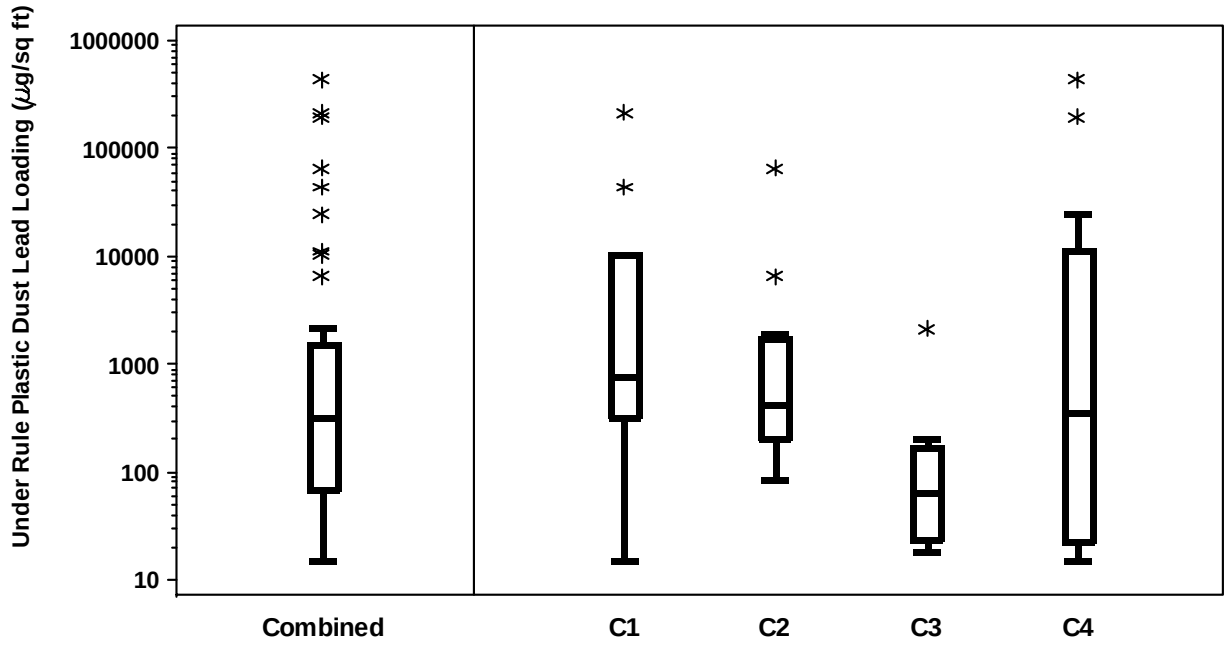

Figure B2.4b. Box Plots of Dust Lead Loading with Bulk Measured Under Rule Plastic by Contractor

Table B2.4b. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Under Rule Plastic by Contractor

Under Rule Plastic - Contractor	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C1	9	30,419	1,402	15	322	782	10,334	216,592
C2	12	6,506	688	87	205	427	1,719	65,815
C3	9	309	82	18	24	66	170	2,156
C4	15	45,017	544	15	23	360	11,220	438,699
Combined	45	22,886	479	15	68	322	1,523	438,699

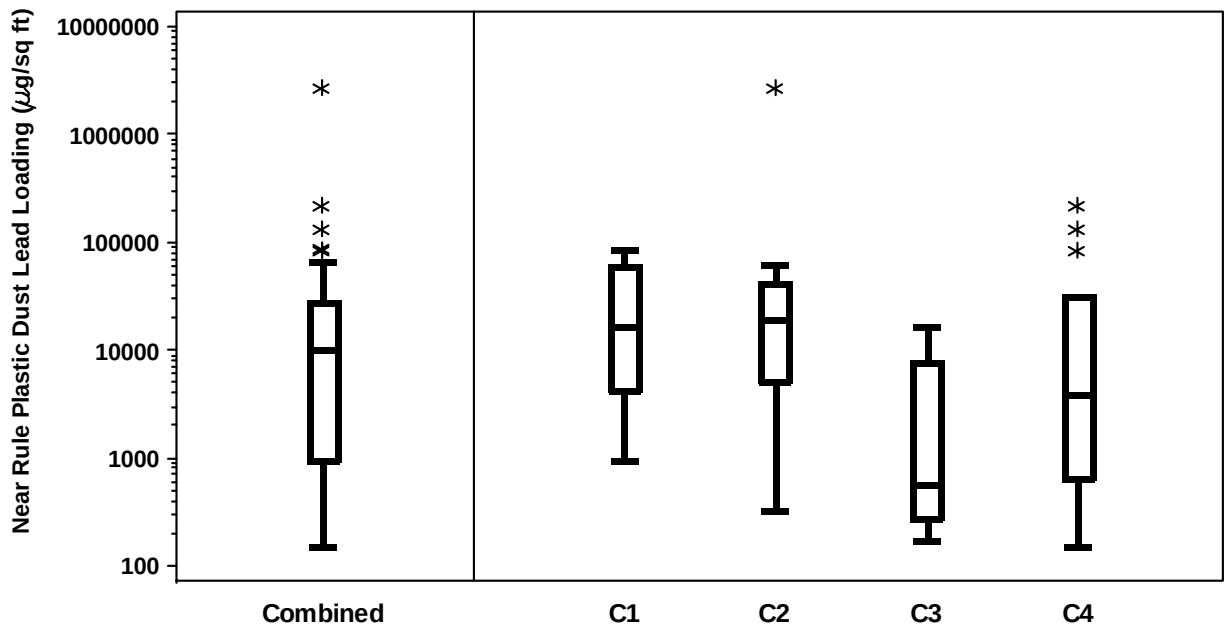

Figure B2.4c. Box Plots of Dust Lead Loading with Bulk Measured Near Rule Plastic by Contractor

Table B2.4c. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Near Rule Plastic by Contractor

Near Rule Plastic - Contractor	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C1	9	29,028	11,559	929	4,178	16,905	58,718	85,985
C2	12	243,884	13,895	331	5,074	19,021	41,251	2,692,069
C3	9	4,363	1,186	172	274	574	7,596	16,597
C4	15	36,259	4,867	150	658	3,793	31,708	217,900
Combined	45	83,800	5,771	150	929	9,865	27,650	2,692,069

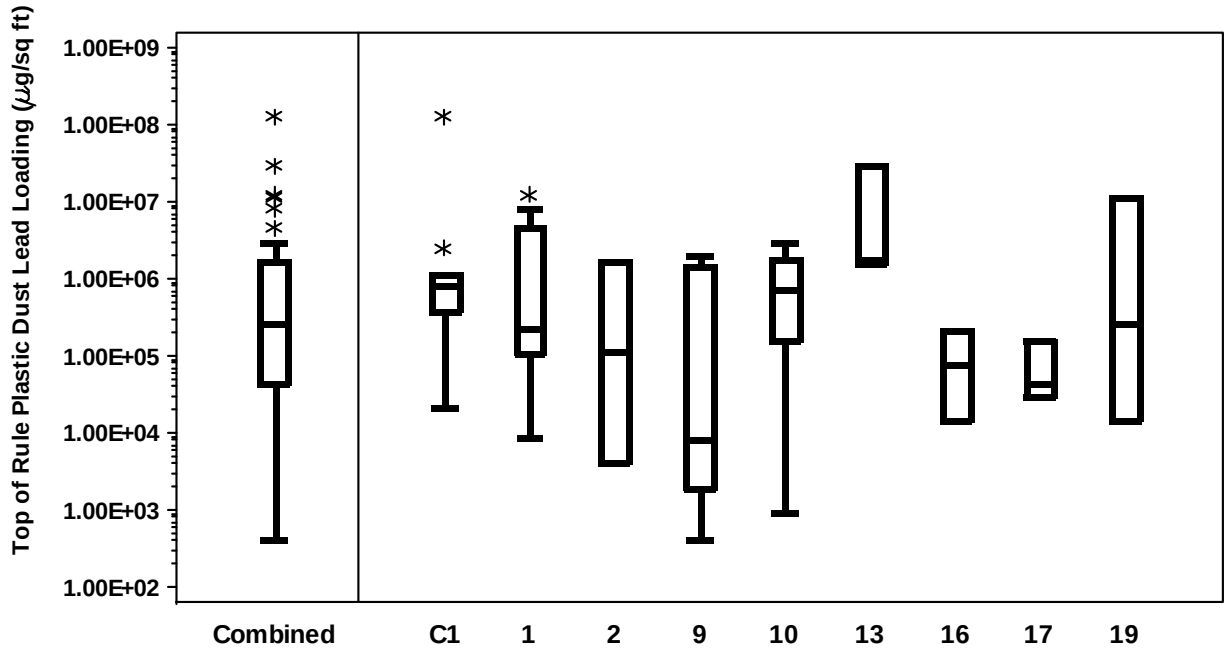

Figure B2.5a. Box Plots of Dust Lead Loading with Bulk Measured Top of Rule Plastic by Housing Unit

Table B2.5a. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Top of Rule Plastic by Housing Unit

Top of Rule Plastic - Housing Unit	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C01	9	15,239,954	848,000	22,004	381,586	831,062	1,133,090	130,670,000
H01	9	2,927,109	394,806	8,556	106,383	234,877	4,666,776	12,516,130
H02	3	590,566	92,139	4,109	4,109	115,207	1,652,382	1,652,382
H09	6	574,119	20,522	417	1,845	8,351	1,463,974	1,961,779
H10	6	1,072,004	262,588	956	161,018	742,236	1,794,377	2,991,198
H13	3	10,927,180	4,370,343	1,560,303	1,560,303	1,819,556	29,401,680	29,401,680
H16	3	103,638	62,864	14,441	14,441	79,163	217,311	217,311
H17	3	75,257	58,537	30,060	30,060	43,976	151,734	151,734
H19	3	3,921,020	353,580	14,348	14,348	268,359	11,480,352	11,480,352
Combined	45	4,894,073	241,977	417	43,976	268,359	1,652,382	130,670,000

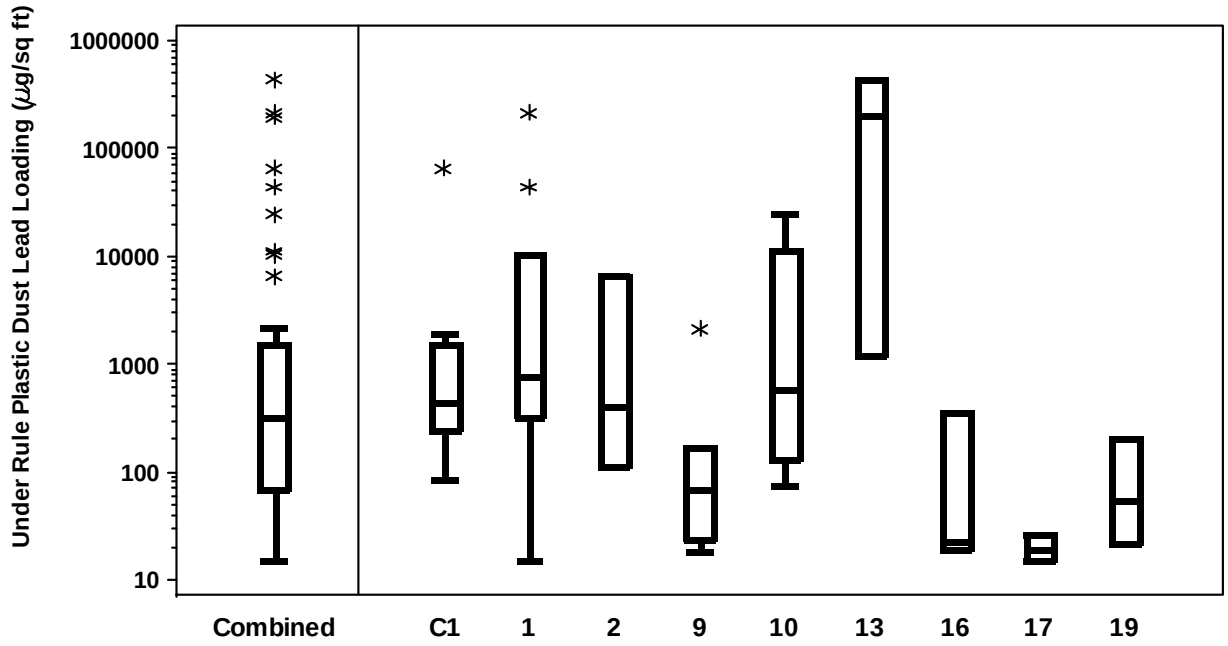

Figure B2.5b. Box Plots of Dust Lead Loading with Bulk Measured Under Rule Plastic by Housing Unit

Table B2.5b. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Under Rule Plastic by Housing Unit

Under Rule Plastic - Housing Unit	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C01	9	7,879	691	87	248	442	1,523	65,815
H01	9	30,419	1,402	15	322	782	10,334	216,592
H02	3	2,387	679	115	115	411	6,635	6,635
H09	6	417	94	18	24	67	170	2,156
H10	6	6,226	981	74	129	594	11,220	24,744
H13	3	212,480	47,078	1,204	1,204	197,538	438,699	438,699
H16	3	134	54	19	19	23	360	360
H17	3	20	19	15	15	19	26	26
H19	3	92	62	22	22	53	201	201
Combined	45	22,886	479	15	68	322	1,523	438,699

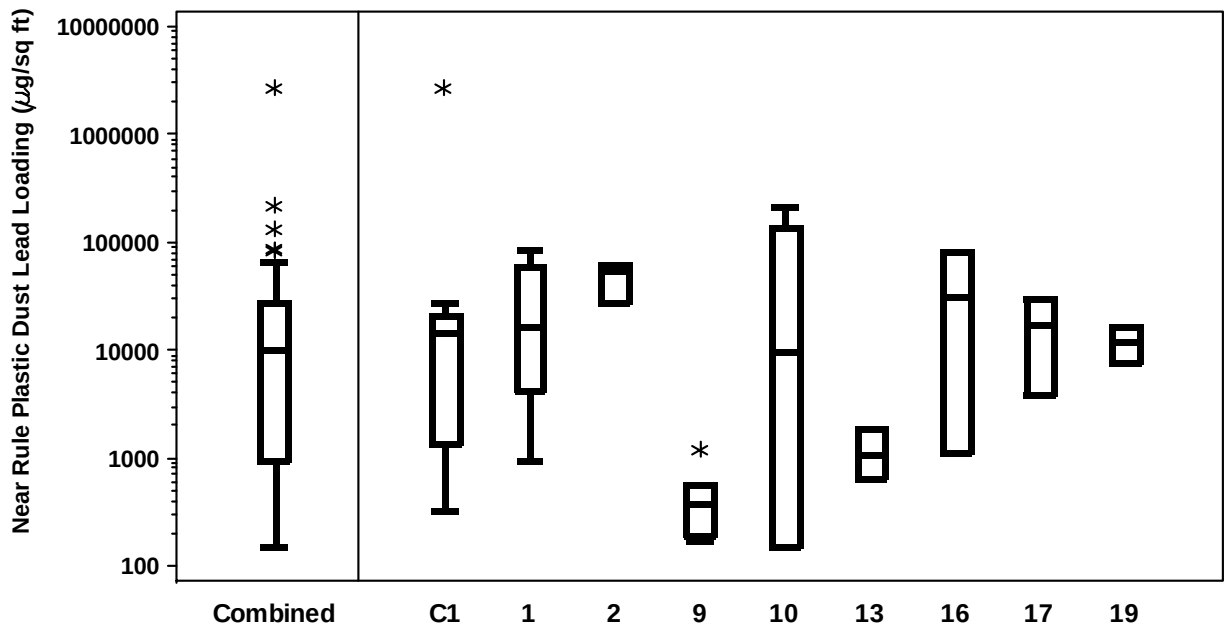

Figure B2.5c. Box Plots of Dust Lead Loading with Bulk Measured Near Rule Plastic by Housing Unit

Table B2.5c. Descriptive Summary of Dust Lead Loading with Bulk (µg/ft^2) Measured Near Rule Plastic by Housing Unit

Near Rule Plastic - Housing Unit	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C01	9	309,255	9,391	331	1,380	14,689	21,158	2,692,069
H01	9	29,028	11,559	929	4,178	16,905	58,718	85,985
H02	3	47,774	45,011	27,082	27,082	54,851	61,388	61,388
H09	6	484	380	172	190	381	574	1,205
H10	6	61,895	3,689	150	151	9,738	133,690	217,900
H13	3	1,196	1,097	658	658	1,093	1,836	1,836
H16	3	39,042	14,450	1,129	1,129	31,708	84,290	84,290
H17	3	17,270	12,662	3,793	3,793	17,590	30,426	30,426
H19	3	12,121	11,533	7,596	7,596	12,169	16,597	16,597
Combined	45	83,800	5,771	150	929	9,865	27,650	2,692,069

B3. Exploratory Summaries of Exterior Dust Lead Dust Loadings (including Bulk Debris Samples) vs. Select Continuous Characteristics

Scatter plots of the exterior dust lead loadings recorded are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. The exterior dust levels throughout this section include the bulk debris samples collected. The fitted linear regression line (using untransformed data) is displayed in each plot along with its associated r-square value.

The selected characteristics are as follows:

1. Paint Lead Concentration
2. Initial Average Soil Lead Concentration
3. Final Average Soil Lead Concentration
4. Disturbed Area

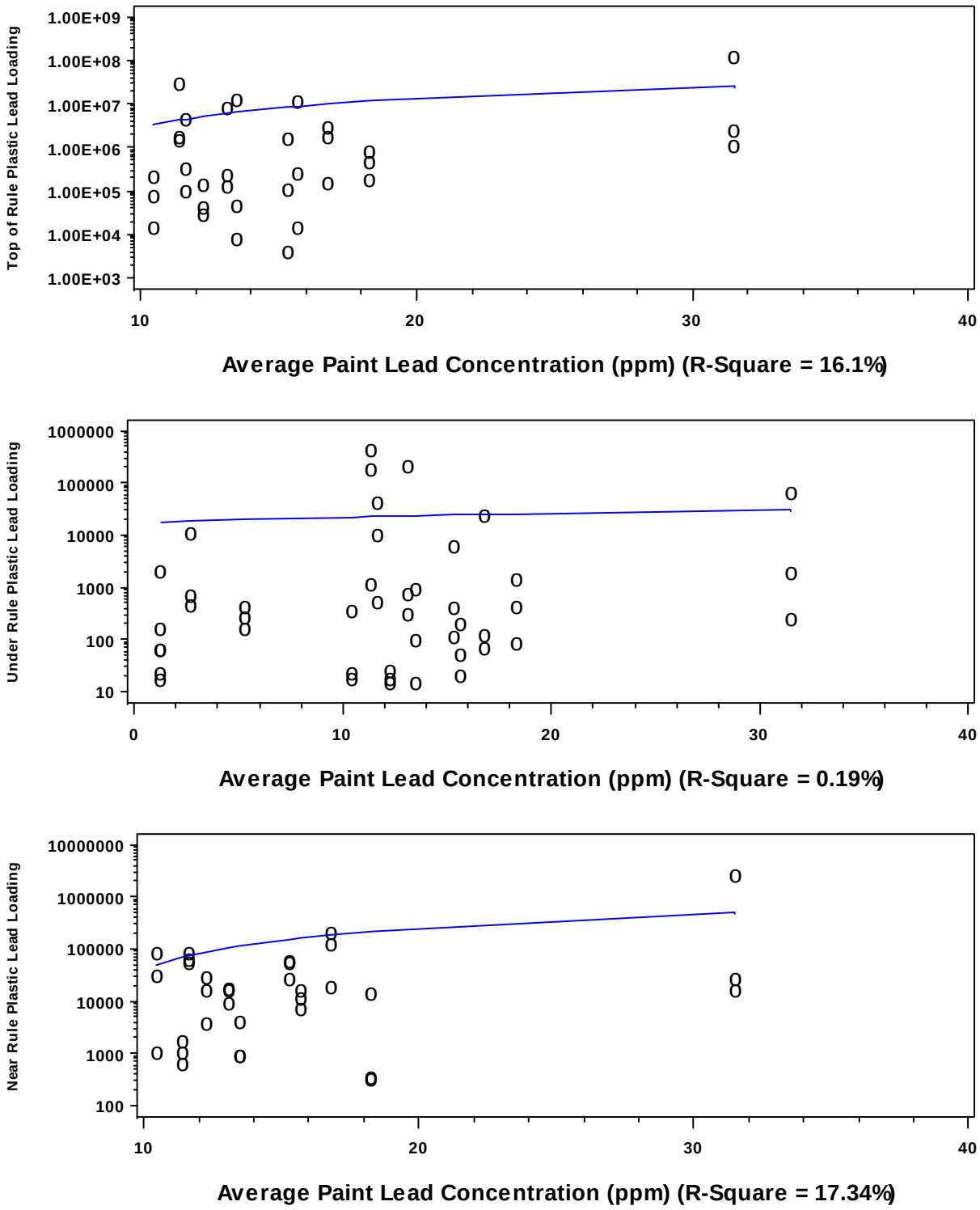

Figure B3.1. Scatter Plots of Average Paint Lead Concentration (ppm) by Top of, Under, and Near Rule Plastic

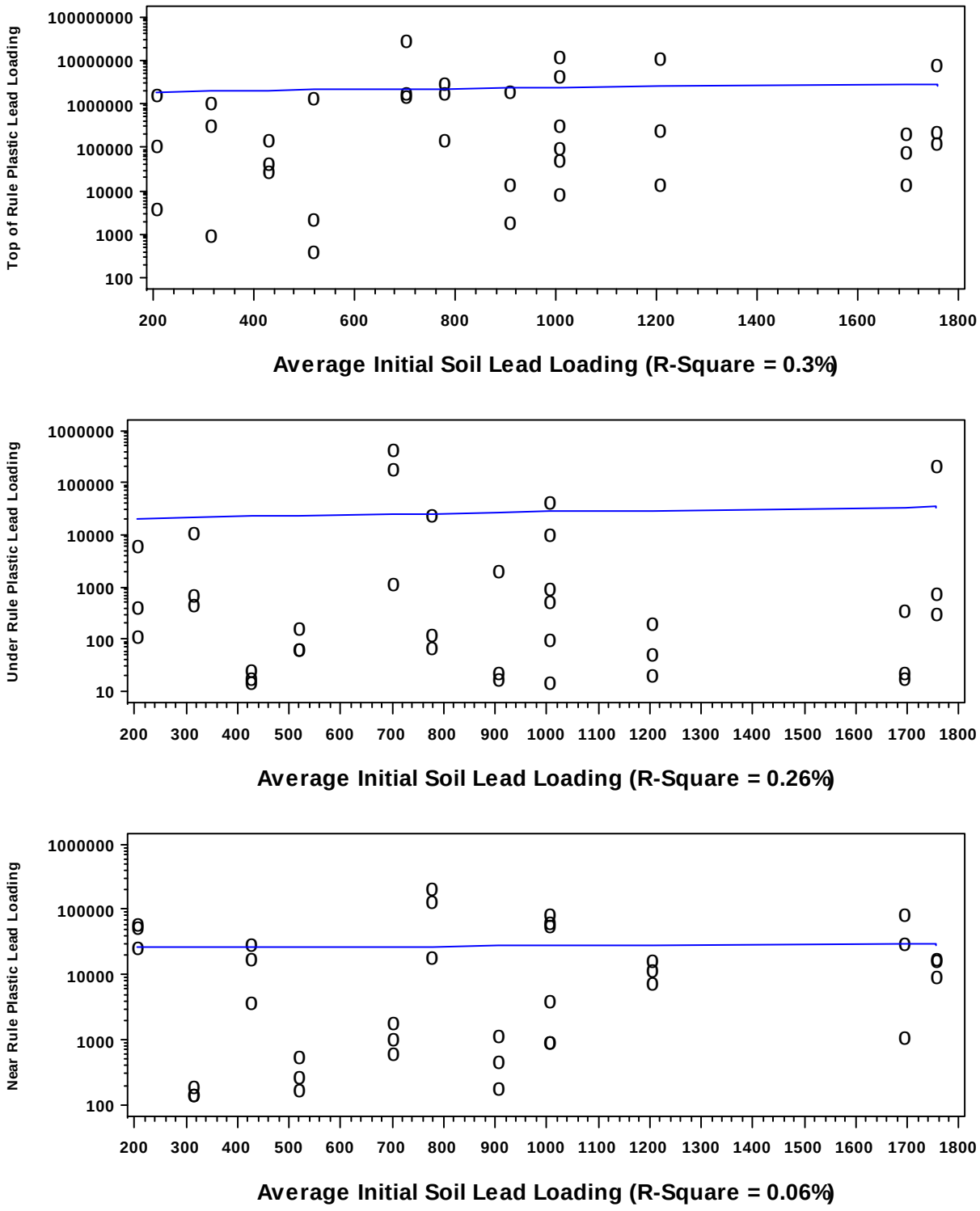

Figure B3.2. Scatter Plots of Initial Average Soil Lead Loading (ppm) by Top of, Under, and Near Rule Plastic

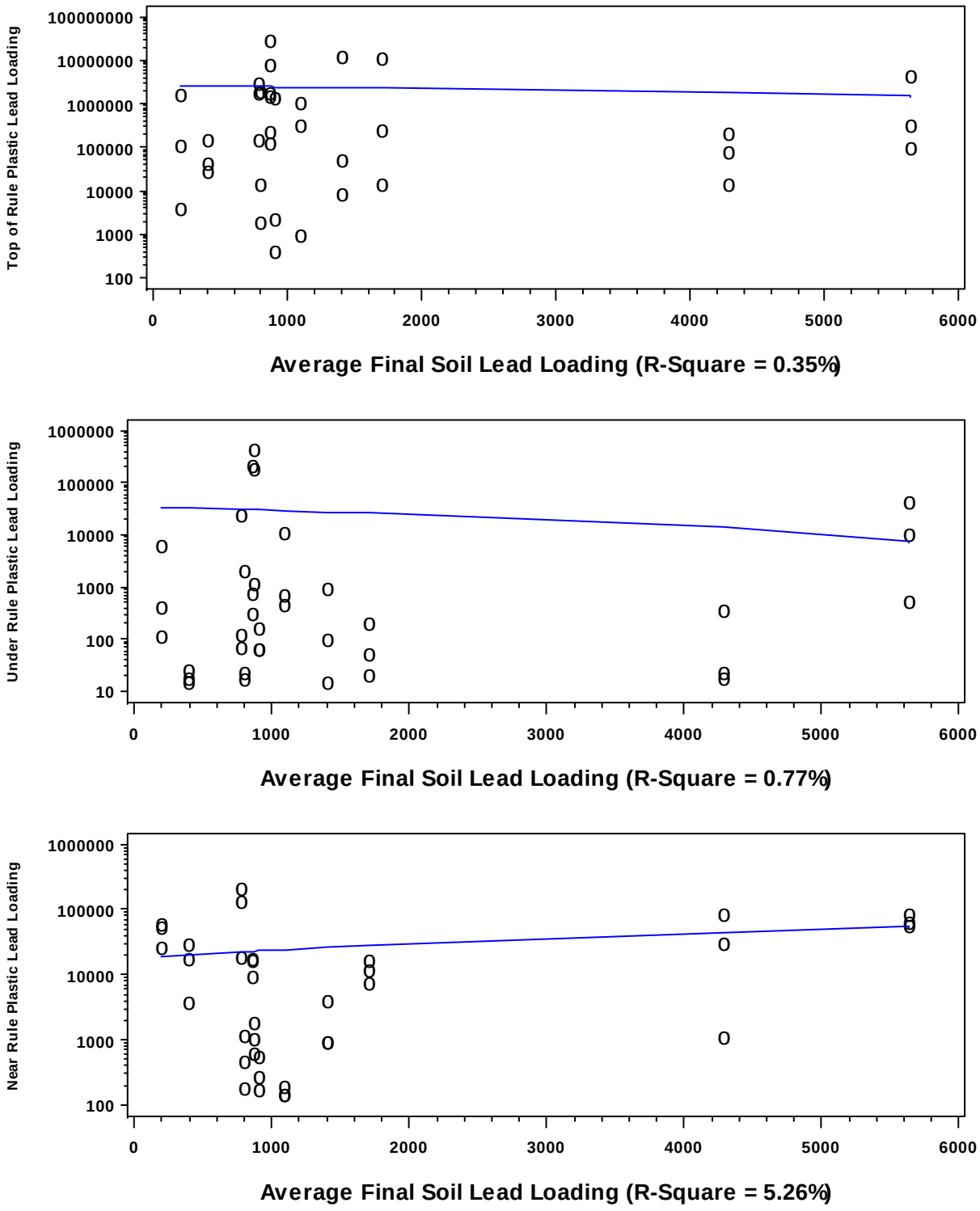

Figure B3.3. Scatter Plots of Final Average Soil Lead Loading (ppm) by Top of, Under, and Near Rule Plastic

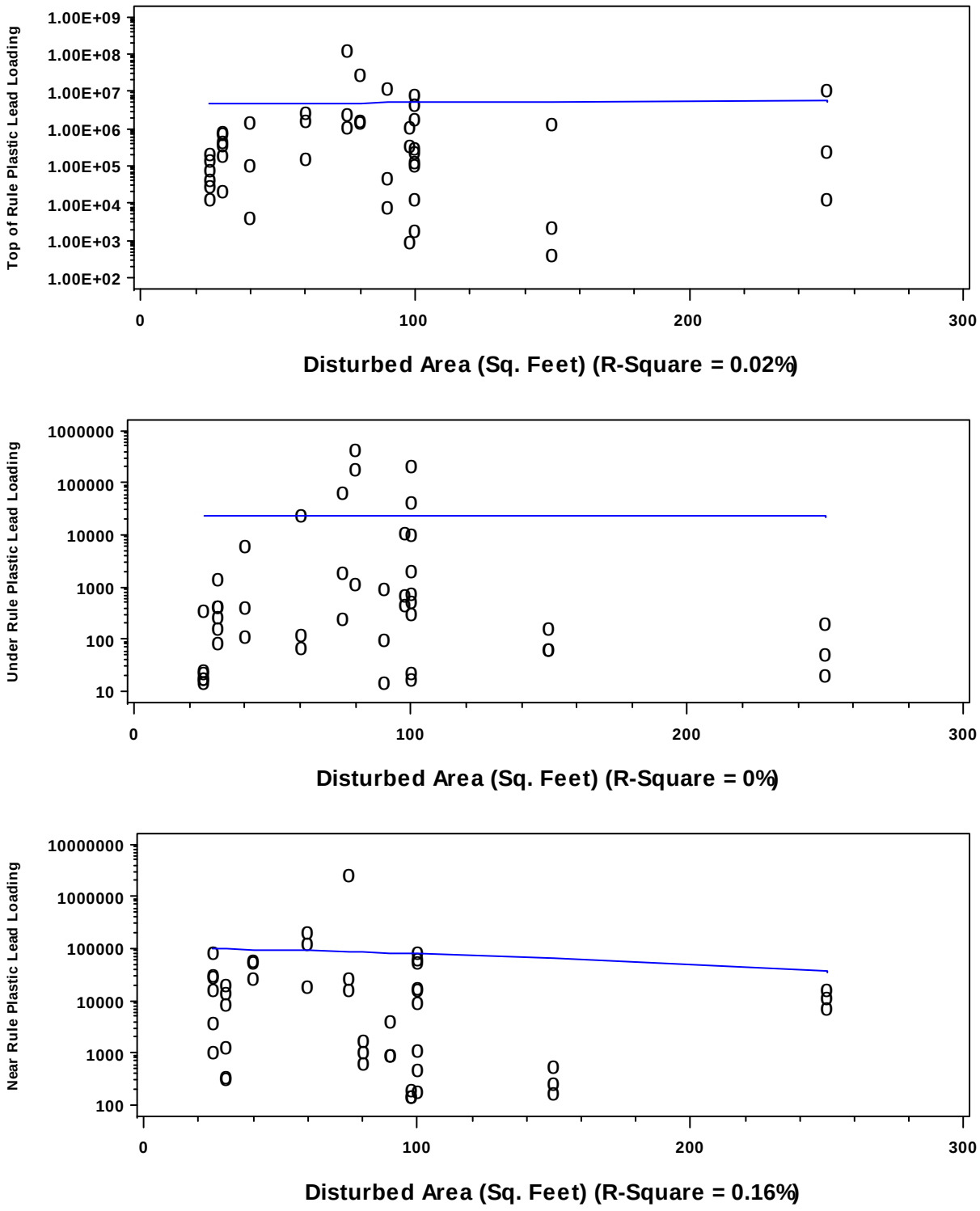

Figure B3.4. Scatter Plots of Disturbed Area by Top of, Under, and Near Rule Plastic

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APPENDIX C

DETAILED DESCRIPTIVE ANALYSES OF INTERIOR FLOOR DUST LEAD LOADINGS

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C1. Distribution Check for Floor Dust Lead Loadings

Distribution of Non-Detectable Floor Lead Measurements

Measurements recorded at or below the detection limit were set to half that limit for this analysis. Table C1.1 summarizes the frequency for these measurements. In the Work Room, it makes sense that higher percentages of samples were below the detection limit in each subsequent sampling stage, as clean-up activities occurred between each stage. Conversely, in the Tool and Observation Rooms where no cleaning activities occurred between stages, it makes sense that lower percentages of samples were obtained below the detection limit with each successive stage as dust accumulated on the floors in those rooms.

Table C1.1. Summary of Floor Dust Lead Loading Measurements below Detection Limit Measurements by Room and Stage

Stage	# (%) of Samples by Room Type		
	Work	Tool	Observation
Post-Work	3 (1.2%)	20 (15.2%)	42 (35.0%)
Post-Cleaning	41 (17.1%)	20 (15.2%)	37 (30.8%)
Post-Verification	72 (30.0%)	16 (12.1%)	36 (30.0%)

Normality of the Floor Lead Measurement Distribution

Prior to any analysis of the lead dust Loadings, the underlying distribution of the response data was examined for normality. Note that a Wilkes-Shapiro p-value < 0.001 indicates a significant departure from normality. With larger sample sizes, normality tests can indicate statistically significant but unimportant departures from normality. For the data collected for this study, the log-transformation of the data was accepted even when the Wilkes-Shapiro statistics indicated non-normality. With additional time, potential outliers and other influential points could be explored to determine if other data adjustments would be beneficial to the analyses.

Figures C1.1a and C1.1b summarize the distribution of the raw and natural log-transformed floor dust lead measurements from the work room. Note that 118 (16%) of these measurements fell below the measurement detection level.

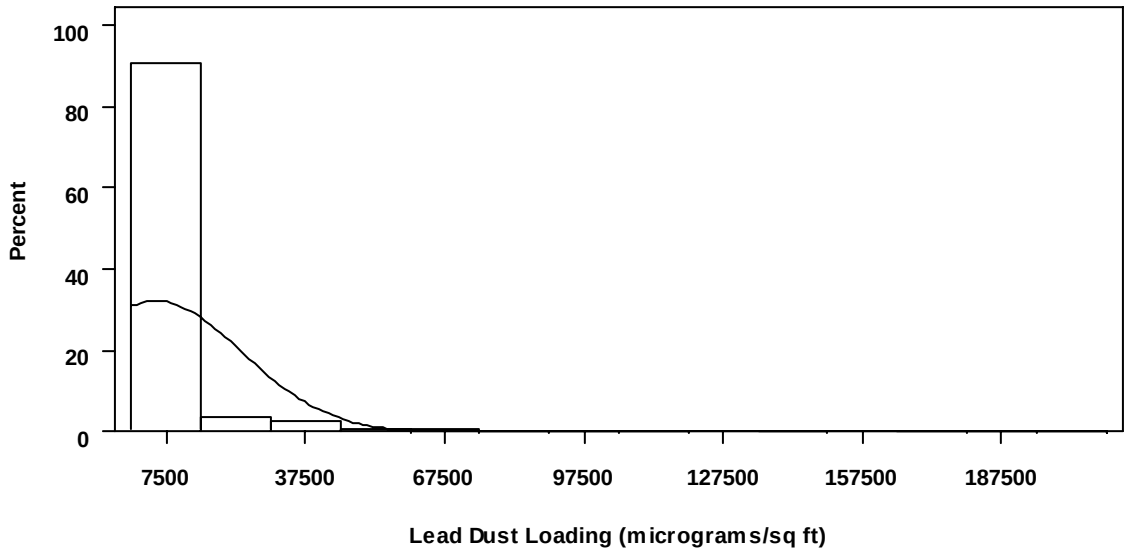


Figure C1.1a. Histogram of Floor Dust Lead Loading Measurements (μg/ft^2) in the Work Room across All Stages (Wilkes-Shapiro p-value < 0.001)

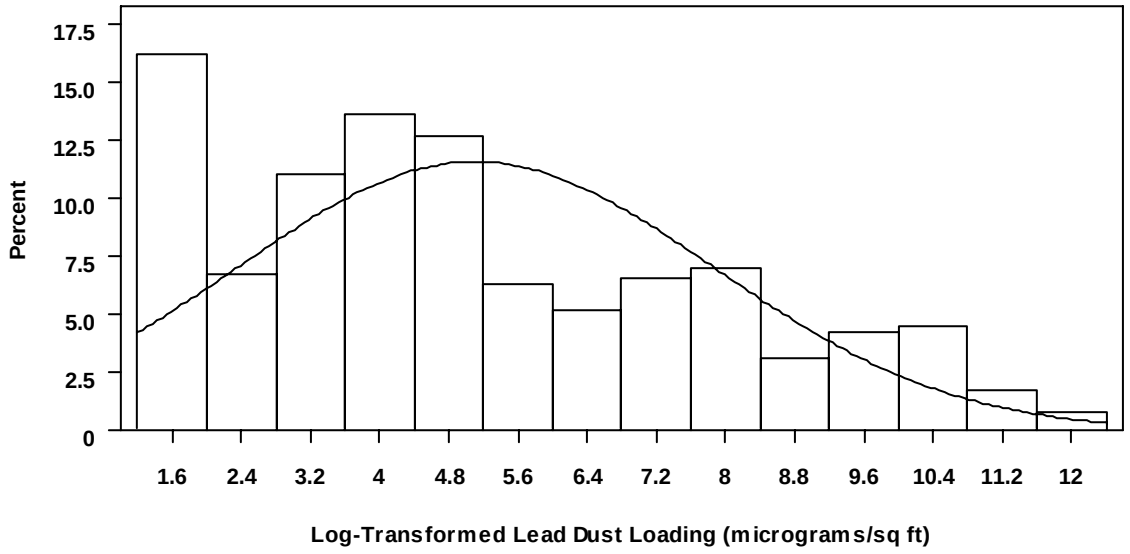


Figure C1.1b. Histogram of Log Transformed Floor Dust Lead Loading Measurements (μg/ft^2) in the Work Room across All Stages (Wilkes-Shapiro p-value = < 0.001)

Figures C1.2a and C1.2b summarize the distribution of the raw and natural log-transformed floor dust lead measurements from the tool room. Note that 56 (14%) of these measurements fell below the measurement detection level.

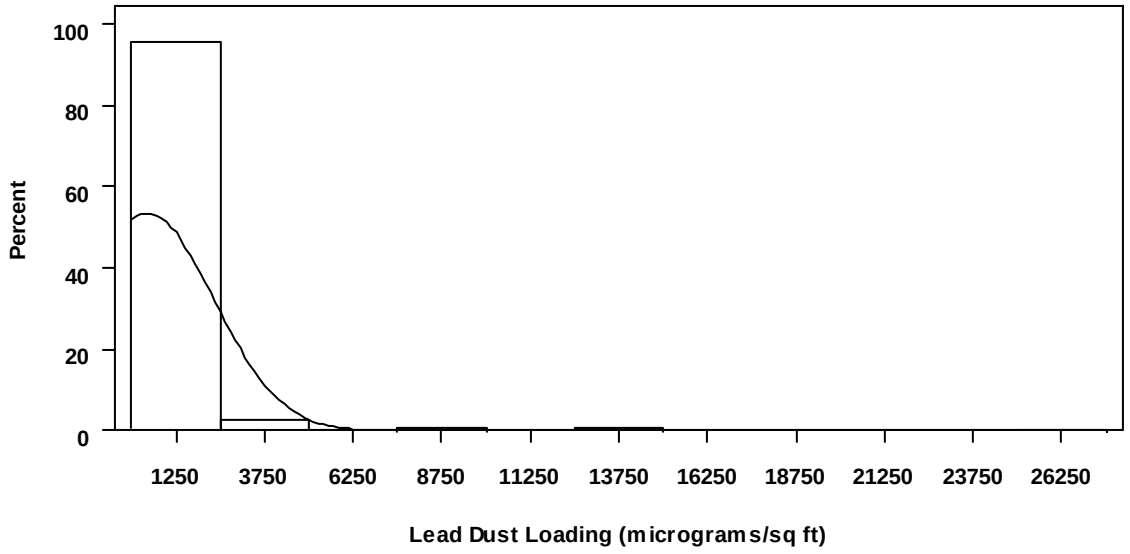


Figure C1.2a. Histogram of Floor Dust Lead Loading Measurements (μg/ft^2) in the Tool Room across All Stages (Wilkes-Shapiro p-value < 0.001)

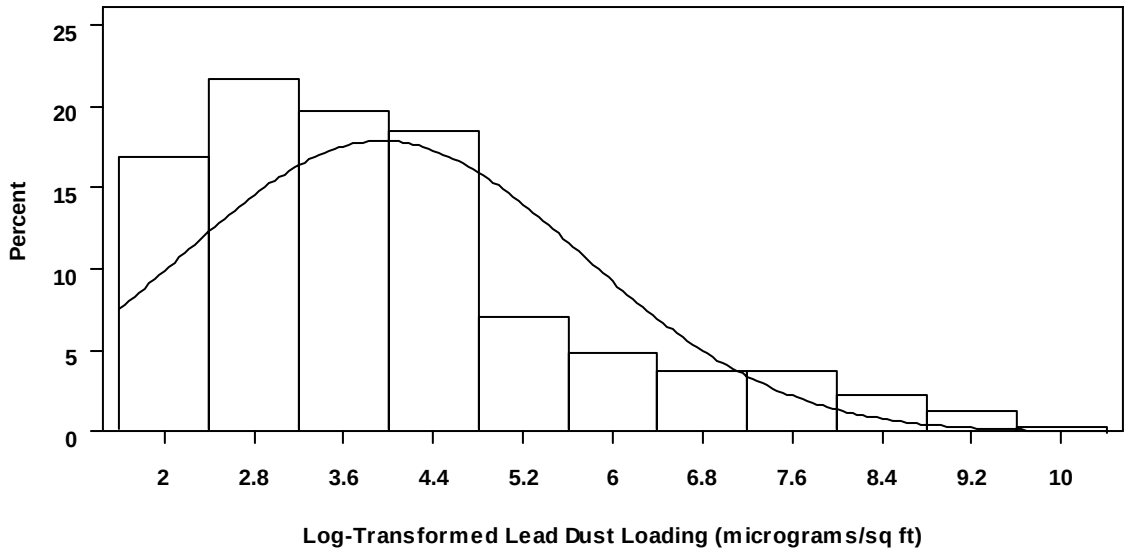


Figure C1.2b. Histogram of Log Transformed Floor Dust Lead Loading Measurements (μg/ft^2) in the Tool Room across All Stages (Wilkes-Shapiro p-value = < 0.001)

Figures C1.3a and C1.3b summarize the distribution of the raw and natural log-transformed floor dust lead measurements from the observation room. Note that 115 (32%) of these measurements fell below the measurement detection level.

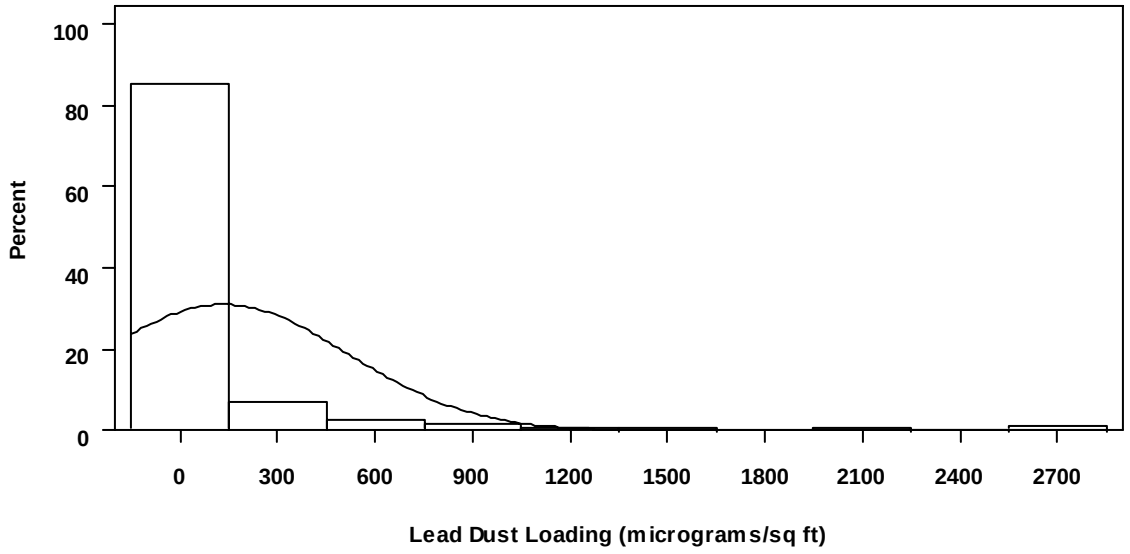


Figure C1.3a. Histogram of Floor Dust Lead Loading Measurements (μg/ft^2) in the Observation Room across All Stages (Wilkes-Shapiro p-value < 0.001)

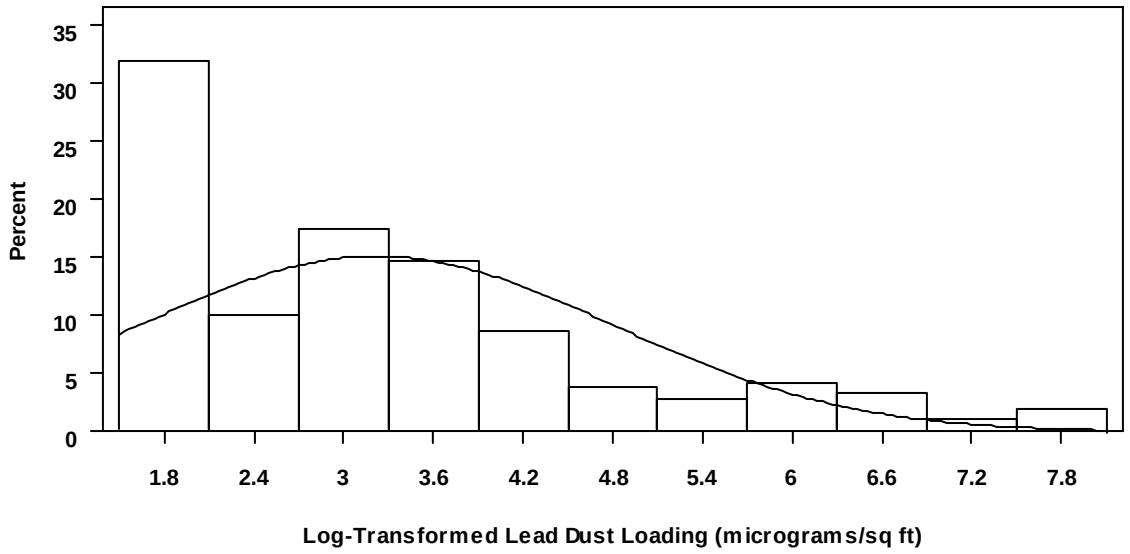


Figure C1.3b. Histogram of Log Transformed Floor Dust Lead Loading Measurements (μg/ft^2) in the Observation Room across All Stages (Wilkes-Shapiro p-value = < 0.001)

C2. Exploratory Summaries of Floor Dust Lead Dust Loadings vs. Select Categorical Characteristics

Box plots of the dust lead Loadings recorded from floors as well as descriptive statistical summary tables are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. Box plots are a technique for displaying one-dimensional data and their summary characteristics. A box plot displays the median (represented by the center horizontal line), the 25^{th} percentile (represented by the bottom of the box), and the 75^{th} percentile (represented by the top of the box). The vertical lines, or whiskers, are drawn from the box to the most extreme point within 1.5 * interquartile range. (An interquartile range is the distance between the 25^{th} and the 75^{th} percentiles.) Any value more extreme than this is identified individually with stars. The data are plotted using a log-base 10 scale. The summary statistics provided in the tables are sample size, arithmetic average, geometric average, minimum, 25^{th} percentile, median, 75^{th} percentile, maximum, and the percentage of measurements exceeding the federal standards for floor lead of 40 $\mu g/ft^2$.

The selected characteristics are as follows:

1. Job intensity
2. City
3. Job type
4. Contractor
5. Housing unit
6. Rule Plastic Use
7. Cleaning Type
8. Phase
9. Restricted vs. non-restricted jobs
10. Work room floor type
11. Work room floor condition

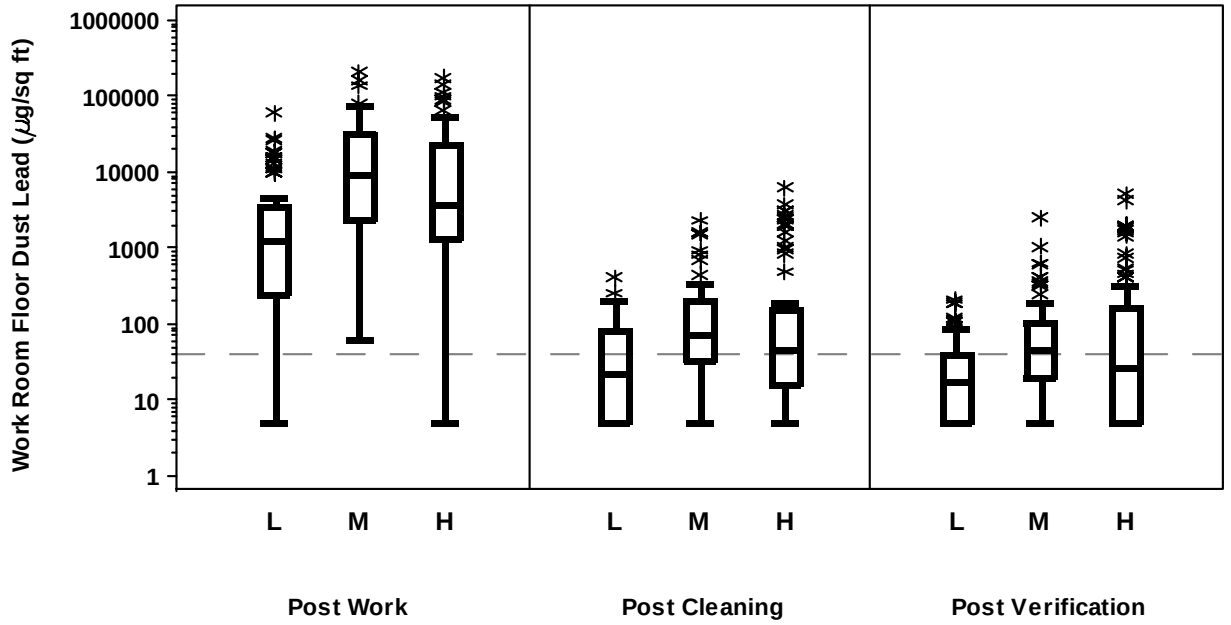


Figure C2.1a. Box Plots of Floor Dust Lead Loading Measured in the Work Room by Stage and Job Intensity Level

Table C2.1a. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) Measured in the Work Room by Stage and Job Intensity Level

Stage	Work Room - Floor Dust (Intensity)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-High	81	18287	3304	5	1351	3802	23124	180281	95%
	2-Medium	80	23458	6931	65	2314	9552	32507	209798	100%
	3-Low	80	4674	1037	5	243	1262	3626	61134	96%
Post-Clean	1-High	80	498	64	5	16	47	154	6420	55%
	2-Medium	80	215	81	5	33	74	202	2347	70%
	3-Low	80	55	25	5	5	22	84	412	38%
Post-Verification	1-High	80	344	40	5	5	27	168	5206	45%
	2-Medium	80	134	48	5	20	45	107	2583	55%
	3-Low	80	33	16	5	5	17	40	212	25%

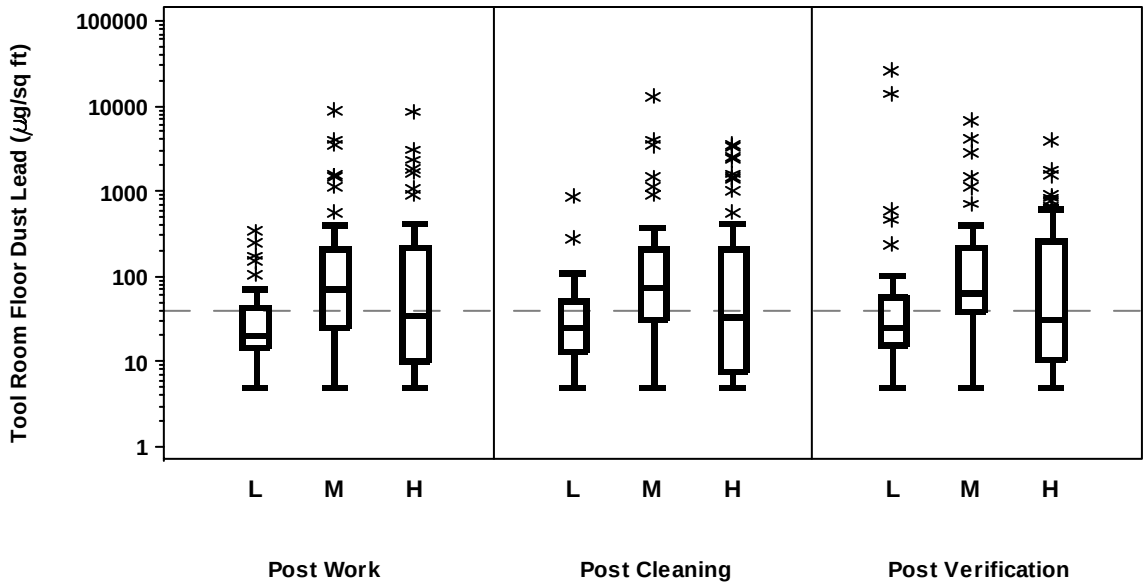


Figure C2.1b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and Job Intensity Level

Table C2.1b. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Job Intensity Level

Stage	Tool Room - Floor Dust (Intensity)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-High	44	505	53	5	10	36	224	8667	48%
	2-Medium	44	560	89	5	26	69	216	9031	61%
	3-Low	44	45	25	5	15	20	45	345	32%
Post-Clean	1-High	44	455	54	5	8	34	210	3553	48%
	2-Medium	44	632	94	5	31	76	213	13167	68%
	3-Low	44	58	27	5	14	25	52	869	34%
Post-Verification	1-High	44	311	50	5	11	31	261	3963	45%
	2-Medium	44	471	92	5	40	65	225	6902	75%
	3-Low	44	971	37	5	16	25	59	26266	30%

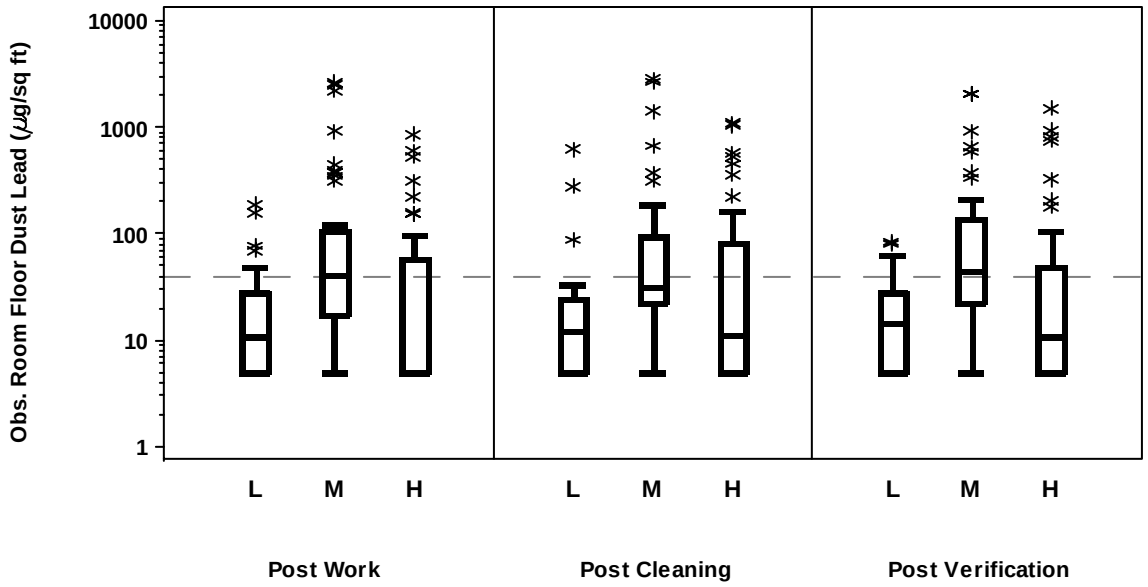


Figure C2.1c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and Job Intensity Level

Table C2.1c. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Job Intensity Level

Stage	Obs. Room - Floor Dust (Intensity)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-High	40	86	18	5	5	5	58	863	30%
	2-Medium	40	286	58	5	17	41	105	2674	53%
	3-Low	40	25	12	5	5	11	28	189	13%
Post-Clean	1-High	40	129	23	5	5	11	81	1101	30%
	2-Medium	40	247	56	5	22	32	94	2841	43%
	3-Low	40	37	13	5	5	12	25	632	8%
Post-Verification	1-High	40	134	21	5	5	11	48	1510	30%
	2-Medium	40	220	62	5	23	45	140	2087	55%
	3-Low	40	21	13	5	5	15	28	85	13%

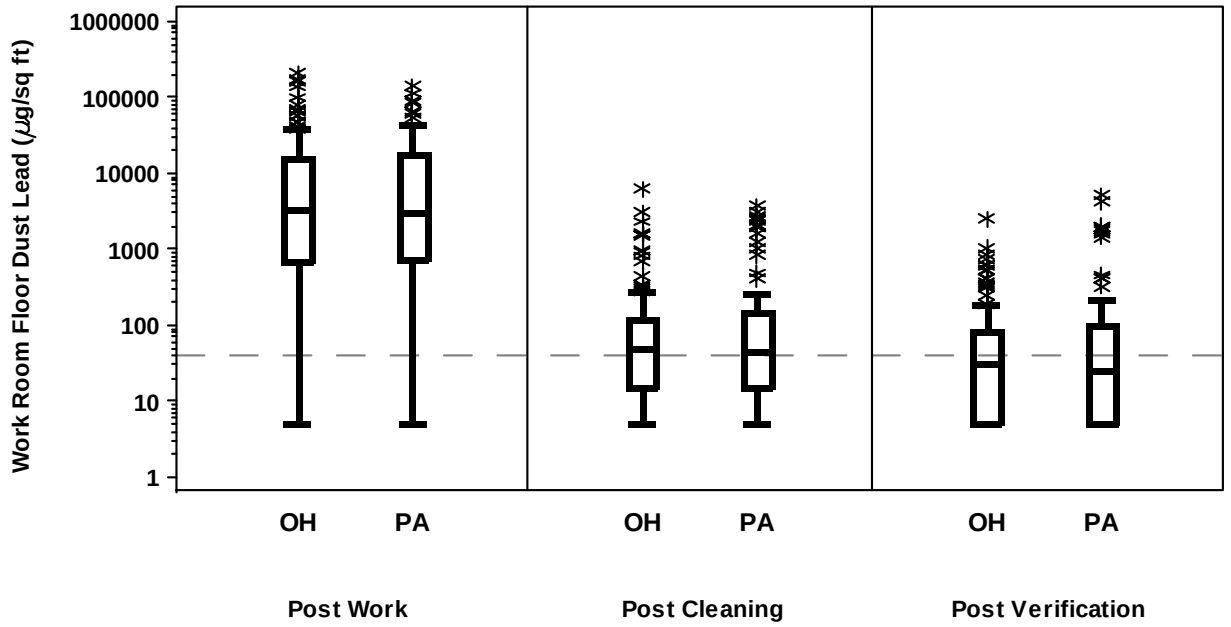


Figure C2.2a. Box Plots of Floor Dust Lead Loading in the Work Room by Stage and City

Table C2.2a. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Work Room by Stage and City

Stage	Work Room - Floor Dust (City)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Columbus, OH	153	15805	2881	5	712	3265	16046	209798	97%
	Pittsburgh, PA	88	14927	2866	5	729	3136	18399	144393	97%
Post-Clean	Columbus, OH	152	202	48	5	16	48	124	6420	56%
	Pittsburgh, PA	88	349	55	5	15	46	149	3769	51%
Post-Verification	Columbus, OH	152	106	30	5	5	30	80	2583	43%
	Pittsburgh, PA	88	282	34	5	5	25	102	5206	40%

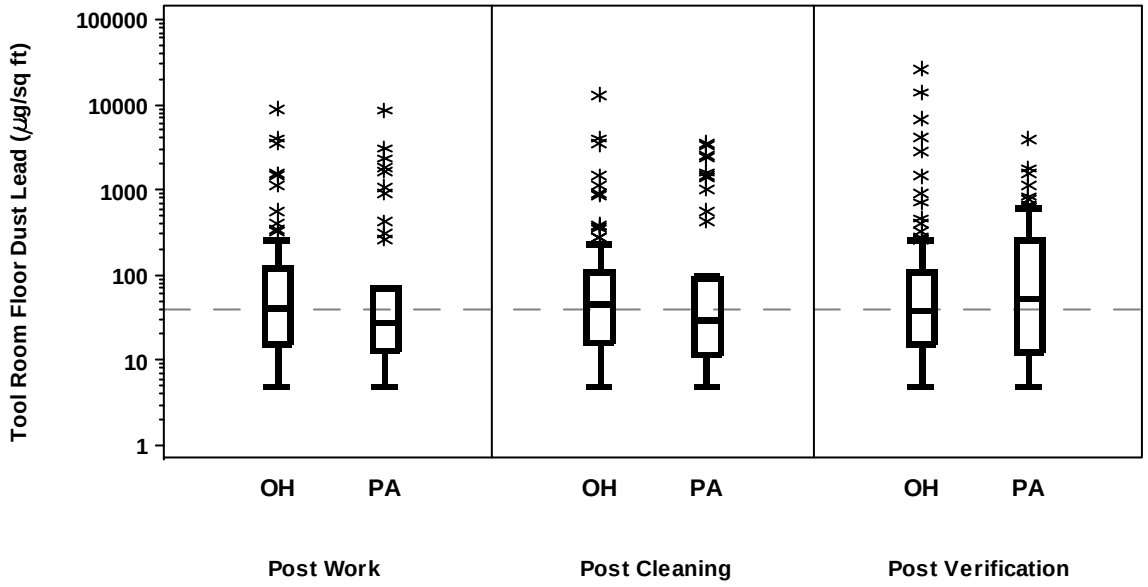


Figure C2.2b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and City

Table C2.2b. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and City

Stage	Tool Room - Floor Dust (City)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Columbus, OH	88	310	50	5	16	43	124	9031	52%
	Pittsburgh, PA	44	490	47	5	14	29	70	8667	36%
Post-Clean	Columbus, OH	88	351	52	5	17	47	109	13167	55%
	Pittsburgh, PA	44	442	51	5	12	30	92	3553	41%
Post-Verification	Columbus, OH	88	716	54	5	16	39	112	26266	49%
	Pittsburgh, PA	44	322	57	5	13	54	255	3963	52%

Figure C2.2c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and City

Table C2.2c. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and City

Stage	Obs. Room - Floor Dust (City)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Columbus, OH	76	164	29	5	5	28	55	2674	37%
	Pittsburgh, PA	44	77	17	5	5	11	25	863	23%
Post-Clean	Columbus, OH	76	148	26	5	5	24	55	2841	29%
	Pittsburgh, PA	44	121	25	5	5	17	37	1101	23%
Post-Verification	Columbus, OH	76	125	29	5	11	26	55	2087	37%
	Pittsburgh, PA	44	126	21	5	5	13	45	1510	25%

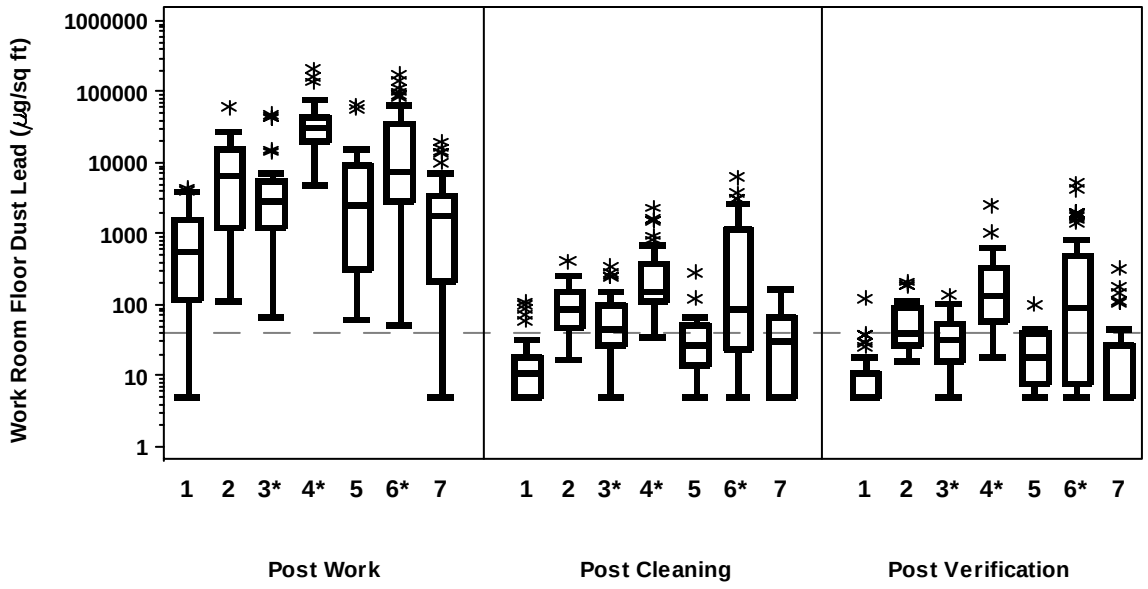


Figure C2.3a. Box Plots of Floor Dust Lead Loading in the Work Room by Stage and Job Type

Table C2.3a. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Job Type

Stage	Work Room - Floor Dust (Job Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I1-Cut Outs	48	1096	422	5	117	575	1649	4524	94%
	I2-Replace Windows	32	10041	3993	113	1262	6770	15424	61134	100%
	I3-Scrape Surface *	32	7489	2686	69	1289	2977	5534	48440	100%
	I4-Scrape Door *	32	45578	32644	4999	19877	31649	45441	209798	100%
	I5-Heat gun < 1100°	16	11157	2080	65	310	2567	9620	65994	100%
	I6-Heat gun > 1100° *	48	28261	7737	51	2812	7791	35626	180281	100%
	I7-Kitchen	33	3778	958	5	222	1896	3513	20074	88%
Post-Clean	I1-Cut Outs	48	19	11	5	5	11	18	112	10%
	I2-Replace Windows	32	109	81	18	48	90	158	412	78%
	I3-Scrape Surface *	32	81	49	5	28	47	99	347	59%
	I4-Scrape Door *	32	432	225	35	114	157	389	2347	97%
	I5-Heat gun < 1100°	16	50	28	5	14	28	52	289	38%
	I6-Heat gun > 1100° *	48	800	120	5	23	87	1150	6420	65%
	I7-Kitchen	32	45	25	5	5	31	69	162	41%
Post-Verification	I1-Cut Outs	48	12	8	5	5	5	11	124	2%
	I2-Replace Windows	32	65	49	16	27	41	91	212	59%
	I3-Scrape Surface *	32	39	28	5	17	33	55	137	44%
	I4-Scrape Door *	32	284	136	18	58	140	343	2583	81%
	I5-Heat gun < 1100°	16	26	18	5	8	18	40	102	25%
	I6-Heat gun > 1100° *	48	549	85	5	8	94	496	5206	63%
	I7-Kitchen	32	37	13	5	5	5	27	326	19%

* Indicates job is restricted

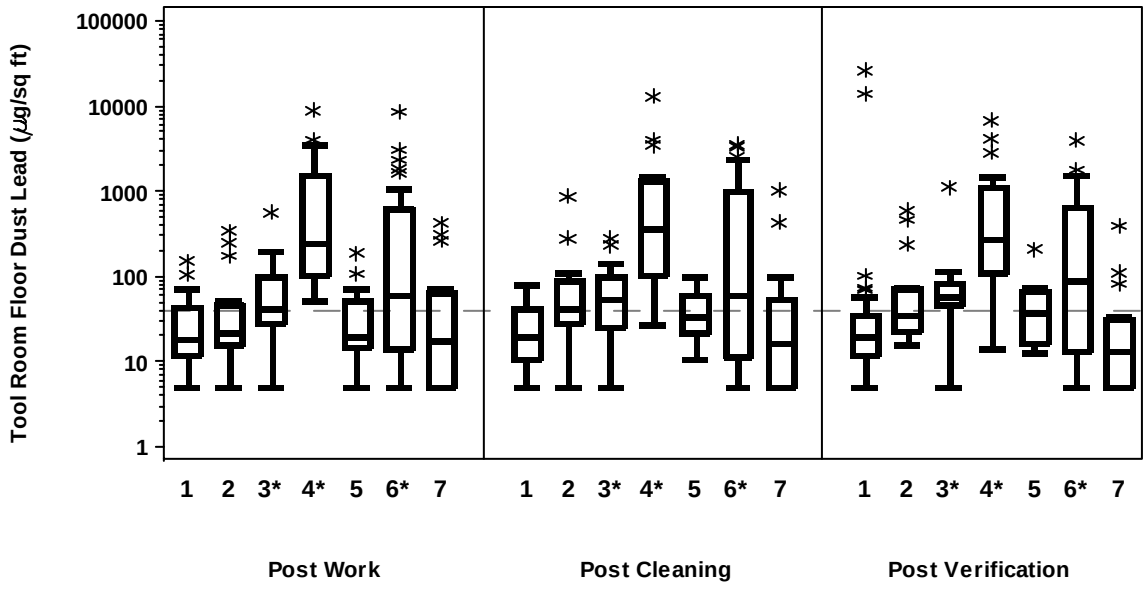


Figure C2.3b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and Job Type

Table C2.3b. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Job Type

Stage	Tool Room - Floor Dust (Job Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I1-Cut Outs	28	33	21	5	12	19	45	152	36%
	I2-Replace Windows	16	67	32	5	15	22	45	345	25%
	I3-Scrape Surface *	16	94	49	5	28	42	98	567	50%
	I4-Scrape Door *	16	1415	425	51	102	250	1537	9031	100%
	I5-Heat gun < 1100°	12	44	24	5	15	19	51	190	25%
	I6-Heat gun > 1100° *	28	748	84	5	14	59	624	8667	57%
	I7-Kitchen	16	79	23	5	5	18	63	429	31%
Post-Clean	I1-Cut Outs	28	27	18	5	11	20	41	81	25%
	I2-Replace Windows	16	112	51	5	29	41	91	869	50%
	I3-Scrape Surface *	16	80	48	5	25	54	98	283	69%
	I4-Scrape Door *	16	1627	395	28	103	365	1311	13167	94%
	I5-Heat gun < 1100°	12	41	33	11	22	33	61	98	33%
	I6-Heat gun > 1100° *	28	651	89	5	11	60	984	3553	61%
	I7-Kitchen	16	113	23	5	5	16	55	1033	25%
Post-Verification	I1-Cut Outs	28	1462	30	5	12	19	35	26266	21%
	I2-Replace Windows	16	112	53	16	23	35	70	599	44%
	I3-Scrape Surface *	16	125	55	5	46	58	82	1122	81%
	I4-Scrape Door *	16	1132	313	14	109	272	1097	6902	94%
	I5-Heat gun < 1100°	12	51	35	13	17	38	67	211	42%
	I6-Heat gun > 1100° *	28	461	94	5	14	90	663	3963	61%
	I7-Kitchen	16	48	17	5	5	13	32	398	19%

* Indicates job is restricted

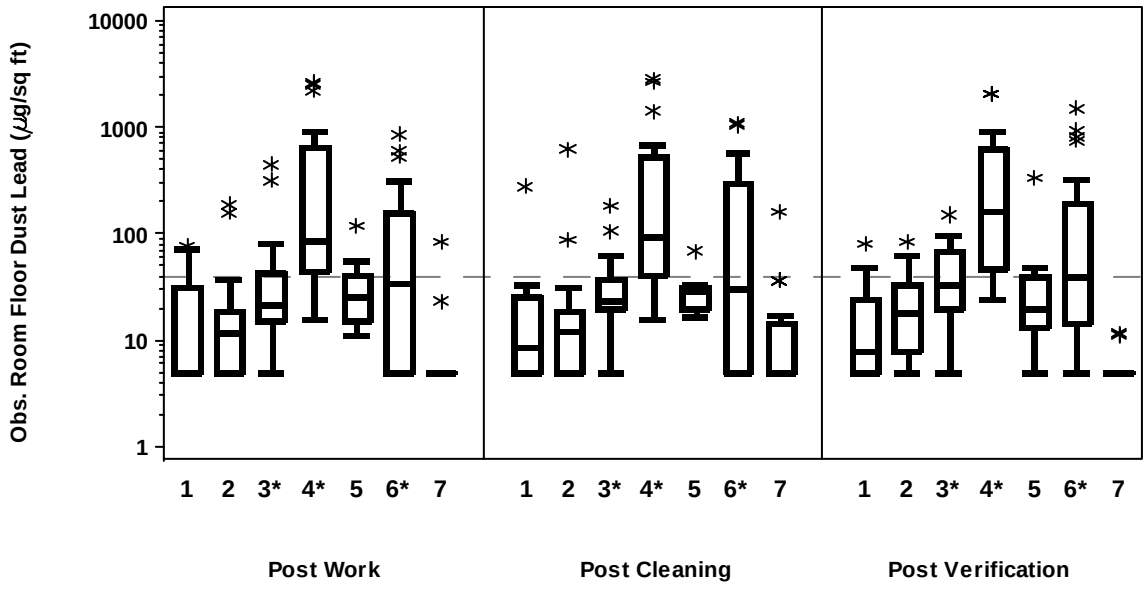


Figure C2.3c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and Job Type

Table C2.3c. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Job Type

Stage	Obs. Room - Floor Dust (Job Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I1-Cut Outs	24	19	12	5	5	5	31	78	13%
	I2-Replace Windows	16	32	14	5	5	12	19	189	13%
	I3-Scrape Surface *	16	71	28	5	15	21	43	452	38%
	I4-Scrape Door *	16	625	173	16	44	86	661	2674	81%
	I5-Heat gun < 1100°	8	37	27	11	15	26	42	119	25%
	I6-Heat gun > 1100° *	24	136	35	5	5	34	156	863	46%
	I7-Kitchen	16	11	7	5	5	5	5	85	6%
Post-Clean	I1-Cut Outs	24	25	12	5	5	9	25	280	4%
	I2-Replace Windows	16	55	15	5	5	12	19	632	13%
	I3-Scrape Surface *	16	41	28	5	20	24	37	185	25%
	I4-Scrape Door *	16	561	156	16	41	95	524	2841	75%
	I5-Heat gun < 1100°	8	31	28	17	20	29	32	69	13%
	I6-Heat gun > 1100° *	24	201	41	5	5	31	295	1101	46%
	I7-Kitchen	16	21	10	5	5	5	14	162	6%
Post-Verification	I1-Cut Outs	24	18	11	5	5	8	24	81	8%
	I2-Replace Windows	16	25	17	5	8	18	34	85	19%
	I3-Scrape Surface *	16	47	34	5	20	33	70	152	44%
	I4-Scrape Door *	16	474	175	24	47	162	622	2087	81%
	I5-Heat gun < 1100°	8	61	25	5	13	20	39	338	25%
	I6-Heat gun > 1100° *	24	219	51	5	14	39	194	1510	50%
	I7-Kitchen	16	6	6	5	5	5	5	12	0%

* Indicates job is restricted

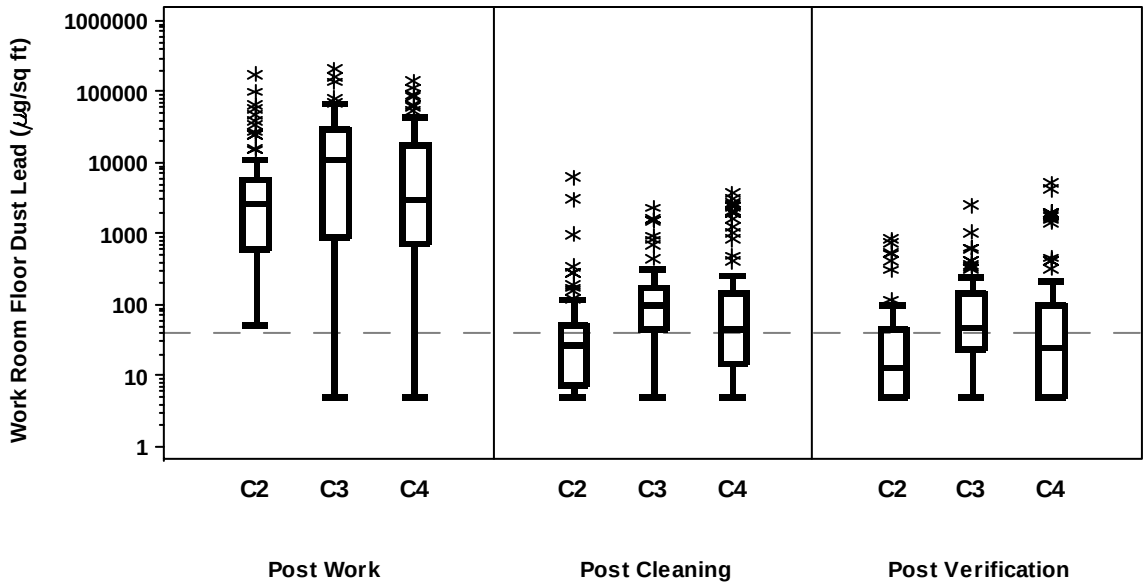


Figure C2.4a. Box Plots of Floor Dust Lead Loading in the Work Room by Stage and Contractor

Table C2.4a. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Contractor

Stage	Work Room - Floor Dust (Contractor)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C2	80	10284	2150	51	595	2685	5927	180281	100%
	C3	73	21856	3971	5	909	11211	29248	209798	95%
	C4	88	14927	2866	5	729	3136	18399	144393	97%
Post-Clean	C2	80	175	27	5	8	27	52	6420	38%
	C3	72	232	90	5	45	97	176	2347	76%
	C4	88	349	55	5	15	46	149	3769	51%
Post-Verification	C2	80	66	18	5	5	14	46	858	34%
	C3	72	151	53	5	24	49	147	2583	53%
	C4	88	282	34	5	5	25	102	5206	40%

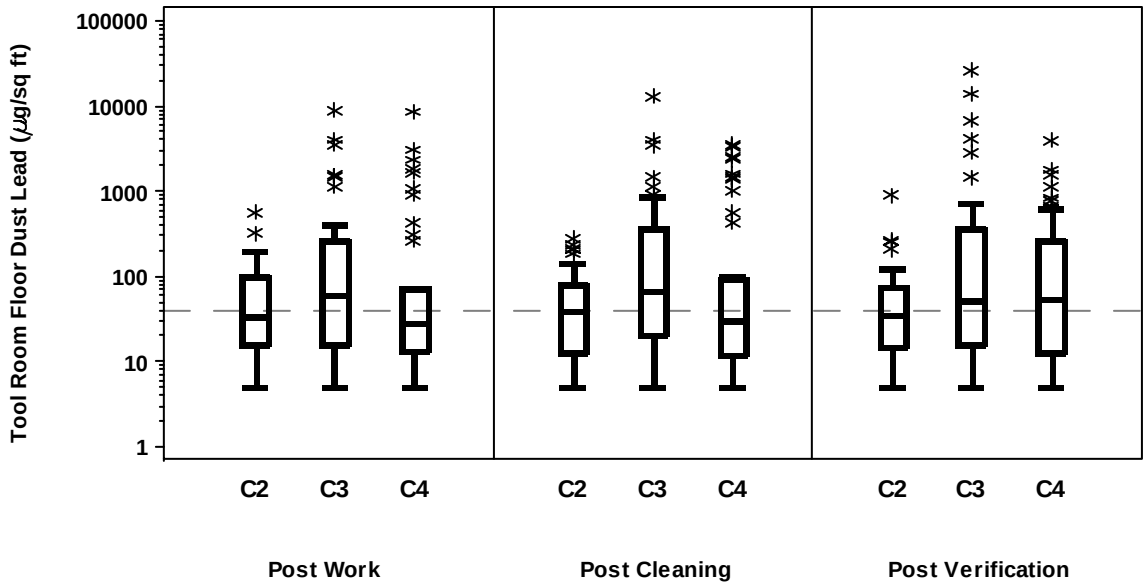


Figure C2.4b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and Contractor

Table C2.4b. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Contractor

Stage	Tool Room - Floor Dust (Contractor)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C2	52	69	35	5	15	33	98	567	46%
	C3	36	659	81	5	16	59	256	9031	61%
	C4	44	490	47	5	14	29	70	8667	36%
Post-Clean	C2	52	61	35	5	13	40	79	283	50%
	C3	36	771	91	5	20	68	365	13167	61%
	C4	44	442	51	5	12	30	92	3553	41%
Post-Verification	C2	52	69	35	5	15	35	75	910	44%
	C3	36	1650	100	5	16	52	367	26266	56%
	C4	44	322	57	5	13	54	255	3963	52%

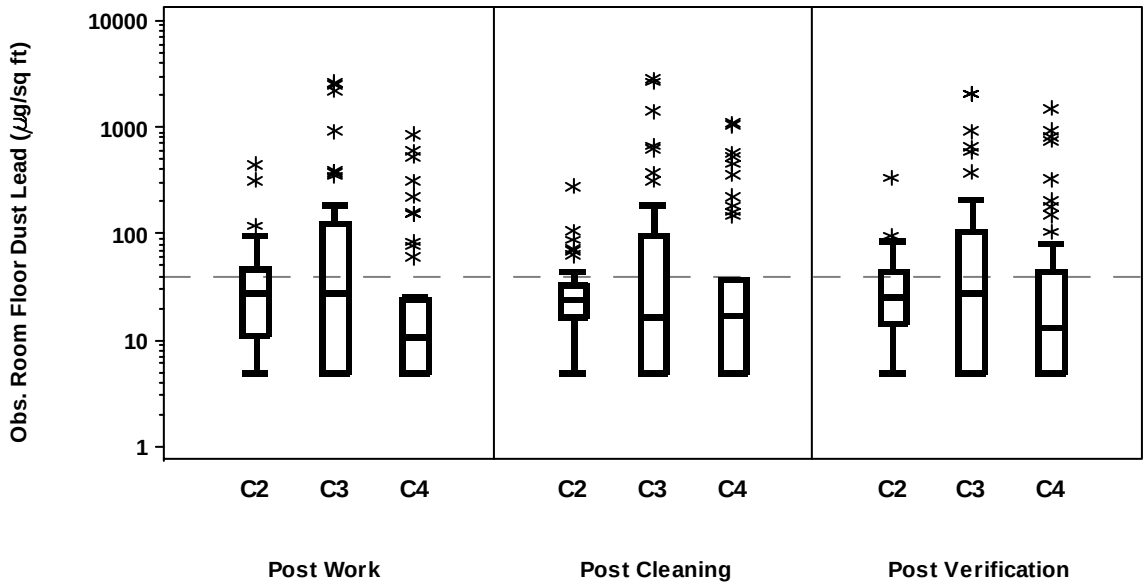


Figure C2.4c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and Contractor

Table C2.4c. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Contractor

Stage	Obs. Room - Floor Dust (Contractor)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C2	40	49	25	5	11	28	46	452	33%
	C3	36	292	34	5	5	28	125	2674	42%
	C4	44	77	17	5	5	11	25	863	23%
Post-Clean	C2	40	35	22	5	16	25	33	280	20%
	C3	36	273	32	5	5	17	98	2841	39%
	C4	44	121	25	5	5	17	37	1101	23%
Post-Verification	C2	40	39	25	5	15	25	45	338	33%
	C3	36	220	34	5	5	28	107	2087	42%
	C4	44	126	21	5	5	13	45	1510	25%

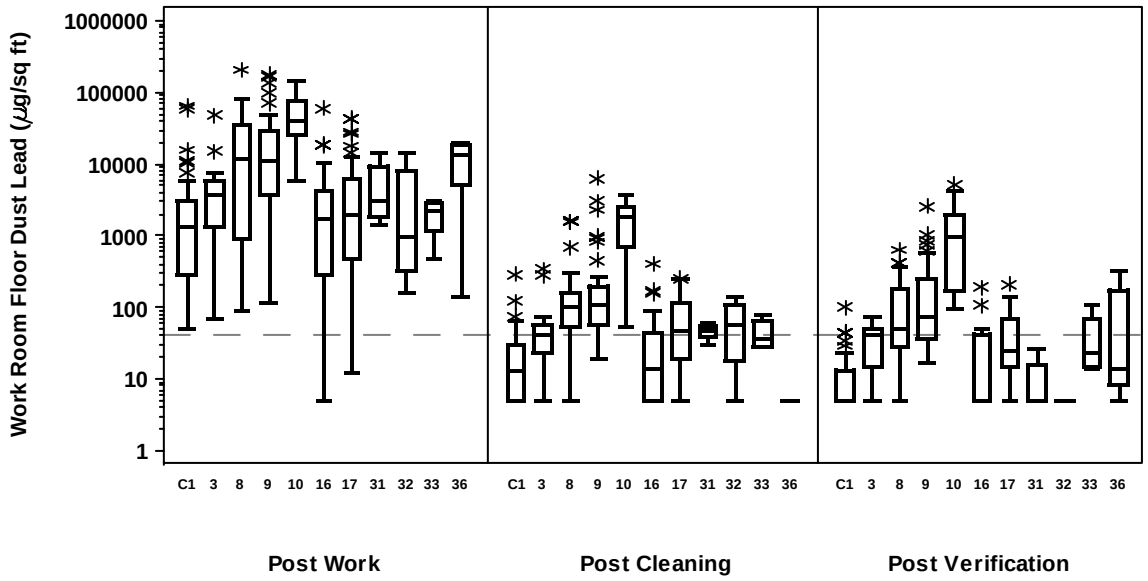


Figure C2.5a. Box Plots of Floor Dust Lead Loading in the Work Room by Stage and Housing Unit

Table C2.5a. Descriptive Summary of Floor Dust Lead Loading (μg/ft^2) in the Work Room by Stage and Housing Unit

Stage	Work Room - Floor Dust (Housing Unit)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C01	48	4808	1103	51	283	1326	3009	65994	100%
	H03	16	6900	2847	69	1289	3652	5829	48440	100%
	H08	28	26964	6123	90	910	11612	36280	209798	100%
	H09	40	28160	9180	113	3793	11422	29641	180281	100%
	H10	16	52416	39983	5774	25294	39067	77373	144393	100%
	H16	24	6232	1169	5	283	1747	4349	61134	92%
	H17	32	7245	1651	12	465	1910	6027	44197	97%
	H31	4	5491	3700	1433	1862	3151	9120	14229	100%
	H32	4	4154	1125	162	321	948	7987	14560	100%
	H33	4	2035	1655	481	1188	2260	2881	3139	100%
	H35	21	9315	1051	5	55	2940	17936	33363	81%
	H36	4	11698	4628	137	5154	13290	18241	20074	100%
Post-Clean	C01	48	27	14	5	5	13	30	289	17%
	H03	16	70	37	5	23	41	55	347	56%
	H08	28	282	108	5	54	101	163	1615	82%
	H09	40	462	138	19	57	106	195	6420	88%
	H10	16	1653	1003	52	676	1796	2564	3769	100%
	H16	24	49	17	5	5	14	45	412	25%
	H17	32	77	47	5	19	48	114	260	50%
	H31	4	46	45	31	39	47	53	59	75%
	H32	4	65	37	5	18	57	111	140	50%
	H33	4	45	41	28	28	37	63	80	50%
	H35	20	98	42	5	11	64	135	320	50%
	H36	4	5	5	5	5	5	5	5	0%
Post-Verification	C01	48	13	8	5	5	5	13	102	8%
	H03	16	35	25	5	14	41	50	74	56%
	H08	28	132	63	5	29	50	181	644	54%
	H09	40	248	97	16	37	75	251	2583	73%
	H10	16	1384	684	97	175	957	1933	5206	100%
	H16	24	27	12	5	5	5	40	194	29%
	H17	32	45	27	5	14	25	68	212	31%
	H31	4	11	8	5	5	5	16	27	0%
	H32	4	5	5	5	5	5	5	5	0%
	H33	4	42	29	14	15	23	70	110	25%
	H35	20	67	26	5	5	28	124	253	40%
	H36	4	90	23	5	8	14	171	326	25%

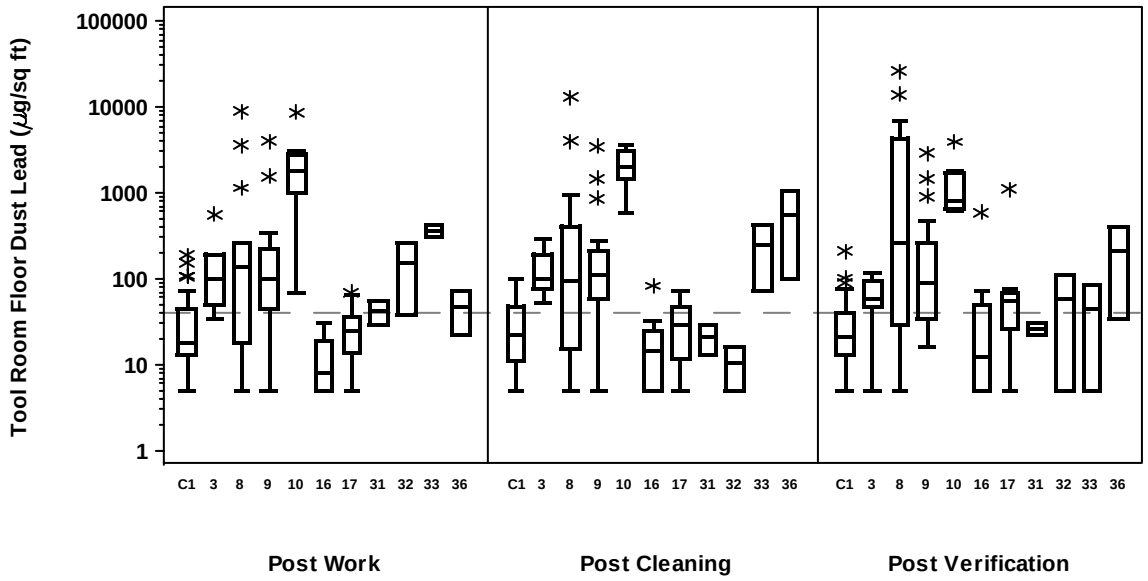


Figure C2.5b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and Housing Unit

Table C2.5b. Descriptive Summary of Floor Dust Lead Loading (μg/ft^2) in the Tool Room by Stage and Housing Unit

Stage	Tool Room - Floor Dust (Housing Unit)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C01	36	36	22	5	13	18	45	190	28%
	H03	8	160	107	34	50	98	192	567	88%
	H08	14	1063	113	5	18	135	257	9031	71%
	H09	20	384	100	5	45	97	219	4054	75%
	H10	8	2468	1382	67	1003	1767	2737	8667	100%
	H16	12	12	10	5	5	8	19	31	0%
	H17	16	27	20	5	14	25	35	70	19%
	H31	2	42	40	29	29	42	56	56	50%
	H32	2	152	101	38	38	152	265	265	50%
	H33	2	368	363	307	307	368	429	429	100%
	H35	10	216	39	5	13	21	116	1508	40%
	H36	2	47	40	23	23	47	71	71	50%
Post-Clean	C01	36	31	22	5	11	23	47	98	31%
	H03	8	132	112	51	75	98	189	283	100%
	H08	14	1381	109	5	15	92	390	13167	57%
	H09	20	385	116	5	58	112	210	3509	90%
	H10	8	2127	1860	569	1435	2020	2992	3553	100%
	H16	12	20	13	5	5	15	25	83	8%
	H17	16	31	22	5	12	30	46	74	31%
	H31	2	21	19	13	13	21	29	29	0%
	H32	2	10	9	5	5	10	16	16	0%
	H33	2	251	175	71	71	251	431	431	100%
	H35	10	171	40	5	18	26	48	1146	30%
	H36	2	567	323	101	101	567	1033	1033	100%
Post-Verification	C01	36	35	24	5	13	21	39	211	22%
	H03	8	66	50	5	47	59	97	117	88%
	H08	14	3796	291	5	29	258	4151	26266	71%
	H09	20	364	115	16	35	90	261	2892	75%
	H10	8	1357	1084	608	663	805	1672	3963	100%
	H16	12	70	18	5	5	12	50	599	25%
	H17	16	111	41	5	26	54	70	1122	56%
	H31	2	26	26	22	22	26	31	31	0%
	H32	2	59	24	5	5	59	112	112	50%
	H33	2	44	20	5	5	44	83	83	50%
	H35	10	79	22	5	5	14	45	400	30%
	H36	2	216	115	33	33	216	398	398	50%

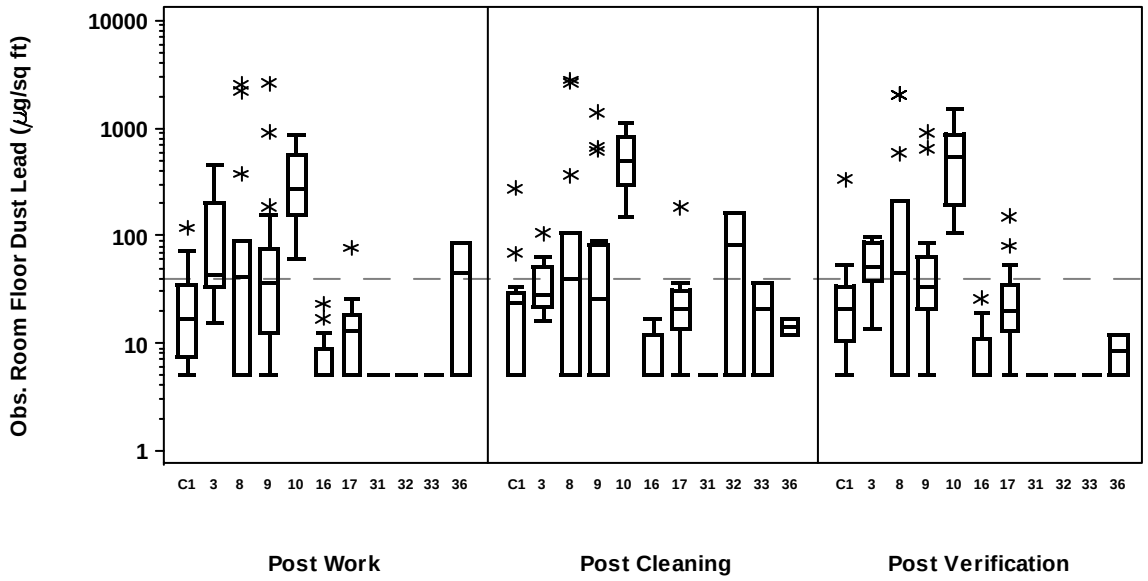


Figure C2.5c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and Housing Unit

Table C2.5c. Descriptive Summary of Floor Dust Lead Loading ($\mu g/ft^2$) in the Observation Room by Stage and Housing Unit

Stage	Obs. Room - Floor Dust (Housing Unit)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C01	24	26	17	5	8	17	34	119	17%
	H03	8	128	66	16	34	43	202	452	75%
	H08	14	396	42	5	5	41	90	2564	50%
	H09	20	221	38	5	12	37	75	2674	40%
	H10	8	364	271	61	156	270	569	863	100%
	H16	12	8	7	5	5	5	9	24	0%
	H17	16	17	12	5	5	13	18	78	6%
	H31	2	5	5	5	5	5	5	5	0%
	H32	2	5	5	5	5	5	5	5	0%
	H33	2	5	5	5	5	5	5	5	0%
	H35	10	83	16	5	5	5	41	391	30%
	H36	2	45	21	5	5	45	85	85	50%
Post-Clean	C01	24	32	18	5	5	24	29	280	8%
	H03	8	41	34	16	22	28	52	107	38%
	H08	14	448	46	5	5	39	108	2841	50%
	H09	20	163	31	5	5	25	84	1421	40%
	H10	8	558	460	149	295	495	819	1101	100%
	H16	12	8	7	5	5	5	12	17	0%
	H17	16	31	21	5	13	20	31	185	6%
	H31	2	5	5	5	5	5	5	5	0%
	H32	2	84	28	5	5	84	162	162	50%
	H33	2	21	14	5	5	21	37	37	0%
	H35	10	60	17	5	5	8	31	322	20%
	H36	2	14	14	12	12	14	17	17	0%
Post-Verification	C01	24	35	19	5	11	21	33	338	21%
	H03	8	57	49	14	38	51	85	96	75%
	H08	14	379	48	5	5	44	211	2087	50%
	H09	20	110	36	5	20	33	64	927	40%
	H10	8	607	429	105	194	542	883	1510	100%
	H16	12	9	7	5	5	5	11	26	0%
	H17	16	32	21	5	13	20	35	152	19%
	H31	2	5	5	5	5	5	5	5	0%
	H32	2	5	5	5	5	5	5	5	0%
	H33	2	5	5	5	5	5	5	5	0%
	H35	10	67	17	5	5	10	26	381	20%
	H36	2	8	8	5	5	8	12	12	0%

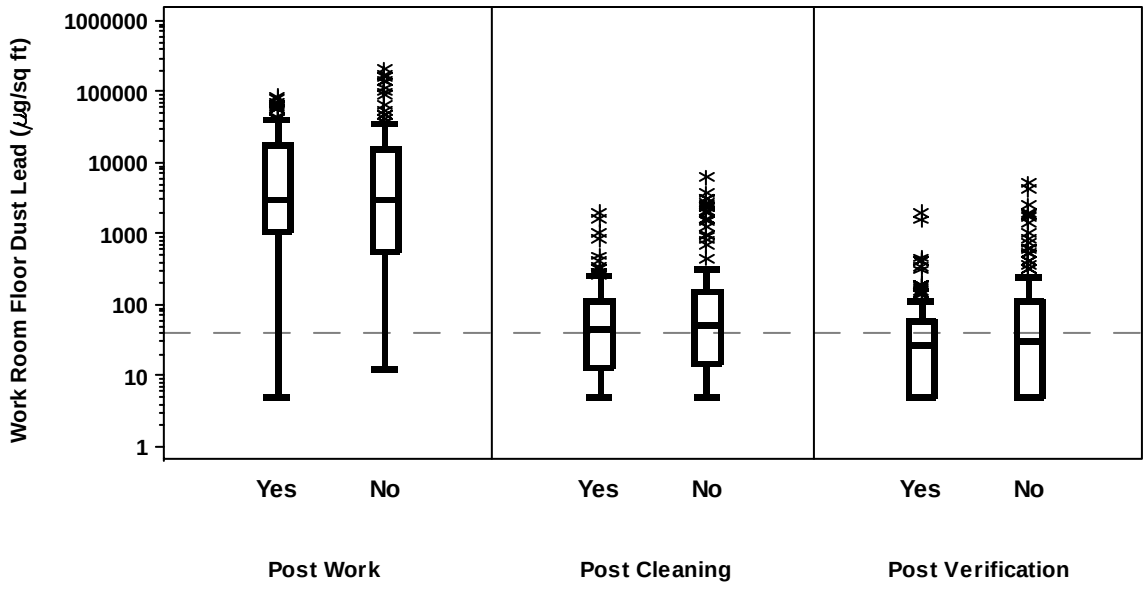


Figure C2.6a. Box Plots of Floor Dust Lead Loading in the Work Room by Stage and Rule Plastic Use

Table C2.6a. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Rule Plastic Use

Stage	Work Room - Floor Dust (Plastic)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	121	12946	2854	5	1122	3146	17936	87849	95%
	2-no	120	18045	2897	12	566	3139	15622	209798	99%
Post-Clean	1-yes	120	121	41	5	13	46	116	2020	56%
	2-no	120	391	62	5	16	54	158	6420	53%
Post-Verification	1-yes	120	88	26	5	5	27	59	2002	40%
	2-no	120	253	38	5	5	31	111	5206	43%

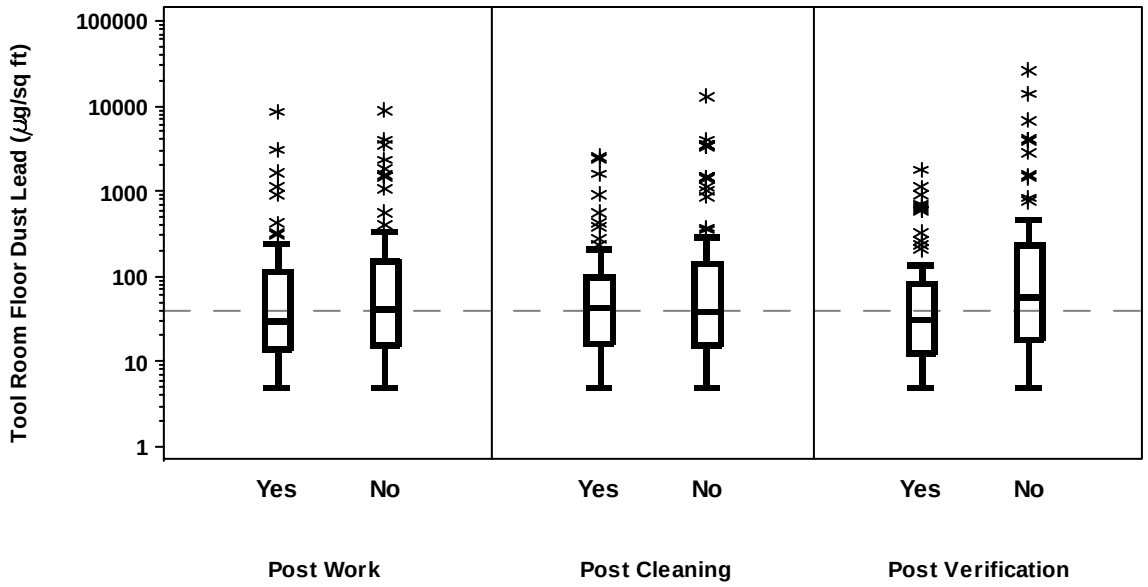


Figure C2.6b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and Rule Plastic Use

Table C2.6b. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Rule Plastic Use

Stage	Tool Room - Floor Dust (Plastic)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	66	296	41	5	14	30	116	8667	42%
	2-no	66	445	57	5	16	41	152	9031	52%
Post-Clean	1-yes	66	183	43	5	16	43	98	2568	52%
	2-no	66	580	61	5	16	40	145	13167	48%
Post-Verification	1-yes	66	151	39	5	13	31	84	1802	45%
	2-no	66	1018	79	5	18	57	238	26266	55%

Figure C2.6c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and Rule Plastic Use

Table C2.6c. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Rule Plastic Use

Stage	Obs. Room - Floor Dust (Plastic)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	60	50	18	5	5	14	41	452	27%
	2-no	60	214	30	5	5	17	79	2674	37%
Post-Clean	1-yes	60	49	17	5	5	16	33	457	22%
	2-no	60	226	38	5	12	26	89	2841	32%
Post-Verification	1-yes	60	55	22	5	5	24	47	593	30%
	2-no	60	195	31	5	5	20	76	2087	35%

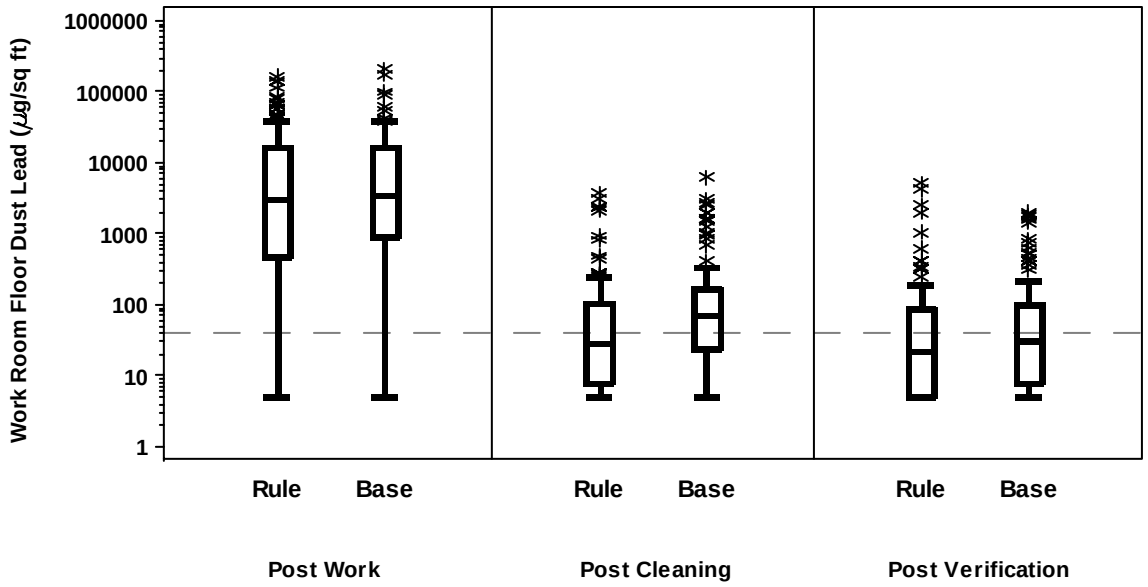


Figure C2.7a. Box Plots of Floor Dust Lead Loading in the Work Room by Stage and Cleaning Type

Table C2.7a. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Cleaning Type

Stage	Work Room - Floor Dust (Cleaning)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-rule	120	16439	2575	5	472	3100	16431	166383	98%
	2-base	121	14538	3209	5	911	3513	16511	209798	97%
Post-Clean	1-rule	120	187	34	5	8	30	104	3769	41%
	2-base	120	325	75	5	24	72	169	6420	68%
Post-Verification	1-rule	120	184	27	5	5	22	90	5206	40%
	2-base	120	157	36	5	8	31	100	2002	43%

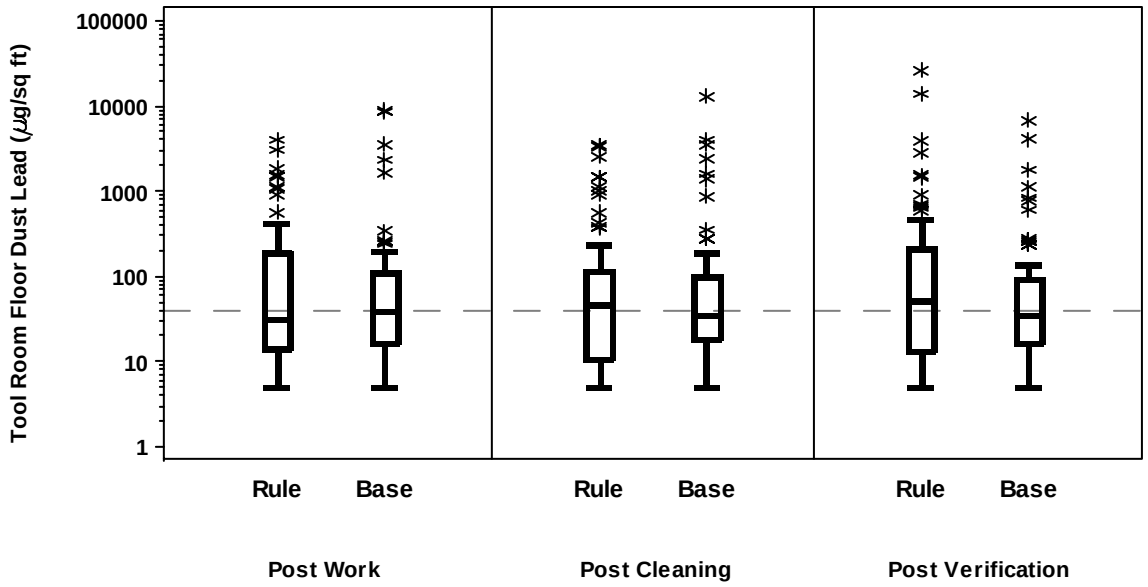


Figure C2.7b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and Cleaning Type

Table C2.7b. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Cleaning Type

Stage	Tool Room - Floor Dust (Cleaning)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-rule	66	298	48	5	14	31	190	4054	45%
	2-base	66	442	49	5	16	39	107	9031	48%
Post-Clean	1-rule	66	301	49	5	11	46	115	3509	53%
	2-base	66	462	53	5	18	36	98	13167	47%
Post-Verification	1-rule	66	873	62	5	13	52	211	26266	55%
	2-base	66	296	49	5	16	35	92	6902	45%

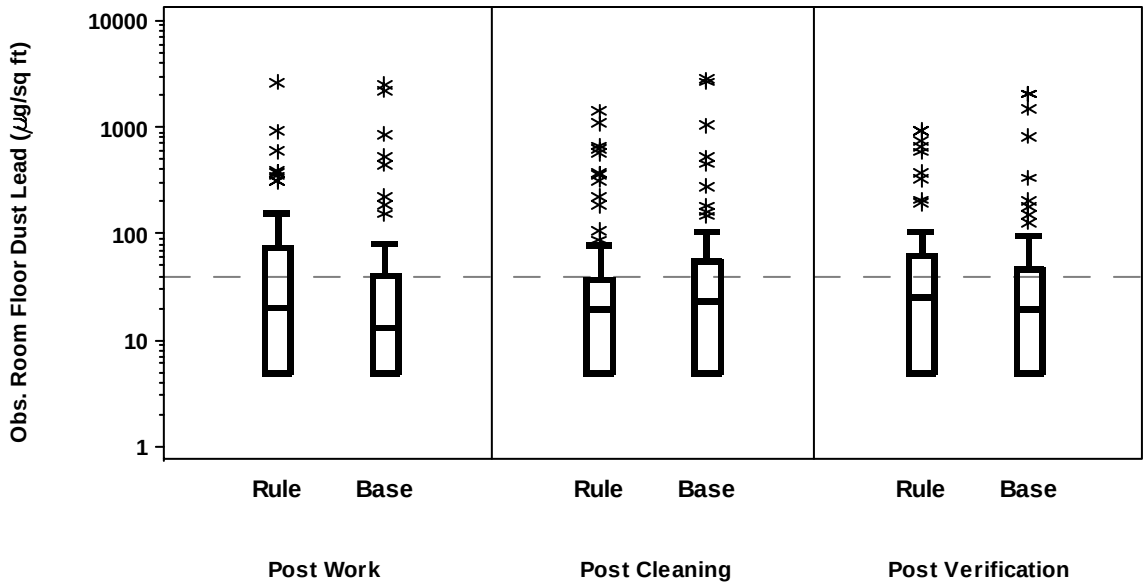


Figure C2.7c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and Cleaning Type

Table C2.7c. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Cleaning Type

Stage	Obs. Room - Floor Dust (Cleaning)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-rule	60	127	27	5	5	20	74	2674	37%
	2-base	60	137	20	5	5	13	41	2564	27%
Post-Clean	1-rule	60	116	26	5	5	20	37	1421	23%
	2-base	60	159	25	5	5	23	55	2841	30%
Post-Verification	1-rule	60	106	28	5	5	25	64	938	35%
	2-base	60	144	24	5	5	20	47	2087	30%

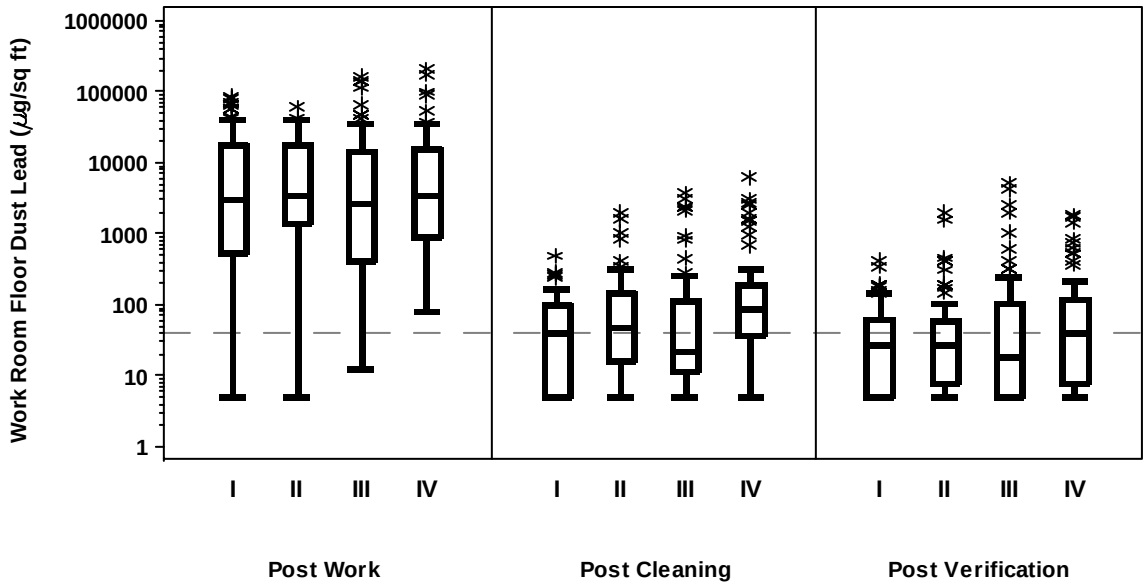


Figure C2.8a. Box Plots of Floor Dust Lead Loading in the Work Room by Stage and Phase

Table C2.8a. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Phase

Stage	Work Room - Floor Dust (Phase)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I-Rule w/ Plastic	60	14934	2797	5	533	3142	17514	87849	97%
	II-Base w/ Plastic	61	10990	2912	5	1433	3513	17936	61134	93%
	III-Rule w/o Plastic	60	17945	2370	12	415	2691	14893	166383	98%
	IV-Base w/o Plastic	60	18145	3542	84	875	3470	15622	209798	100%
Post-Clean	I-Rule w/ Plastic	60	69	32	5	5	40	98	493	50%
	II-Base w/ Plastic	60	173	54	5	16	50	144	2020	62%
	III-Rule w/o Plastic	60	306	37	5	12	22	115	3769	32%
	IV-Base w/o Plastic	60	477	105	5	39	87	191	6420	73%
Post-Verification	I-Rule w/ Plastic	60	55	24	5	5	27	62	428	43%
	II-Base w/ Plastic	60	121	29	5	8	27	59	2002	37%
	III-Rule w/o Plastic	60	314	32	5	5	18	108	5206	37%
	IV-Base w/o Plastic	60	193	45	5	8	40	119	1864	50%

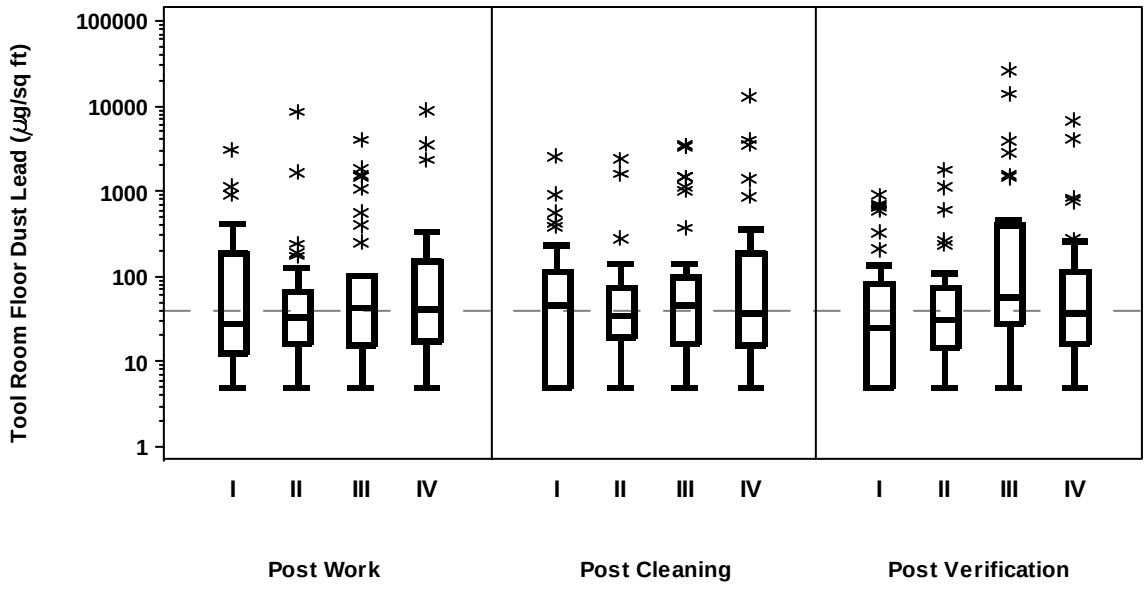


Figure C2.8b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and Phase

Table C2.8b. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Phase

Stage	Tool Room - Floor Dust (Phase)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I-Rule w/ Plastic	33	229	41	5	12	29	190	3101	39%
	II-Base w/ Plastic	33	363	41	5	16	33	67	8667	45%
	III-Rule w/o Plastic	33	367	57	5	16	44	107	4054	52%
	IV-Base w/o Plastic	33	522	58	5	18	41	152	9031	52%
Post-Clean	I-Rule w/ Plastic	33	196	43	5	5	46	115	2568	55%
	II-Base w/ Plastic	33	170	43	5	20	35	76	2421	48%
	III-Rule w/o Plastic	33	406	56	5	17	47	101	3509	52%
	IV-Base w/o Plastic	33	754	66	5	16	37	186	13167	45%
Post-Verification	I-Rule w/ Plastic	33	150	36	5	5	26	84	910	45%
	II-Base w/ Plastic	33	152	41	5	15	32	74	1802	45%
	III-Rule w/o Plastic	33	1596	107	5	29	59	398	26266	64%
	IV-Base w/o Plastic	33	440	58	5	17	37	117	6902	45%

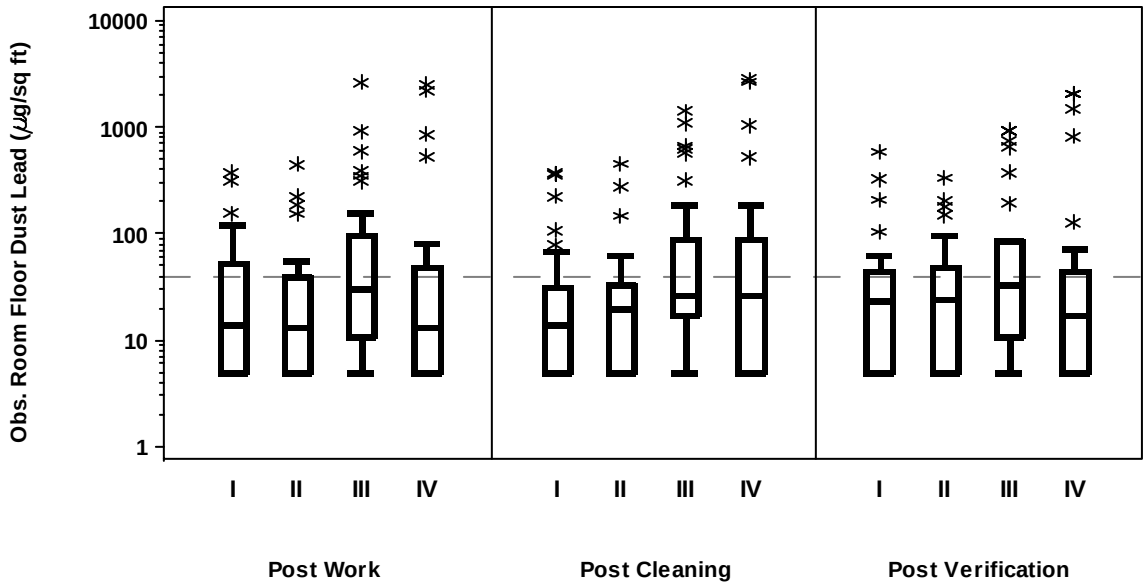


Figure C2.8c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and Phase

Table C2.8c. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Phase

Stage	Obs. Room - Floor Dust (Phase)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I-Rule w/ Plastic	30	51	19	5	5	14	54	379	30%
	II-Base w/ Plastic	30	49	17	5	5	13	39	452	23%
	III-Rule w/o Plastic	30	202	39	5	11	31	96	2674	43%
	IV-Base w/o Plastic	30	226	24	5	5	13	49	2564	30%
Post-Clean	I-Rule w/ Plastic	30	50	16	5	5	14	31	372	20%
	II-Base w/ Plastic	30	48	18	5	5	20	33	457	23%
	III-Rule w/o Plastic	30	182	42	5	17	26	89	1421	27%
	IV-Base w/o Plastic	30	271	34	5	5	26	89	2841	37%
Post-Verification	I-Rule w/ Plastic	30	60	20	5	5	24	45	593	30%
	II-Base w/ Plastic	30	51	23	5	5	24	48	338	30%
	III-Rule w/o Plastic	30	153	37	5	11	33	85	938	40%
	IV-Base w/o Plastic	30	237	26	5	5	17	45	2087	30%

Figure C2.9a. Box Plots of Floor Dust Lead Loading in the Work Room by Stage and Restricted Job

Table C2. 9a. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Restricted Job

Stage	Work Room - Floor Dust (Restricted Job)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	112	27274	8629	51	2950	12668	35557	209798	100%
	2-no	129	5249	1108	5	252	1433	4010	65994	95%
Post-Clean	1-yes	112	489	111	5	36	104	281	6420	72%
	2-no	128	52	26	5	8	26	74	412	38%
Post-Verification	1-yes	112	328	70	5	20	59	194	5206	63%
	2-no	128	33	16	5	5	14	38	326	23%

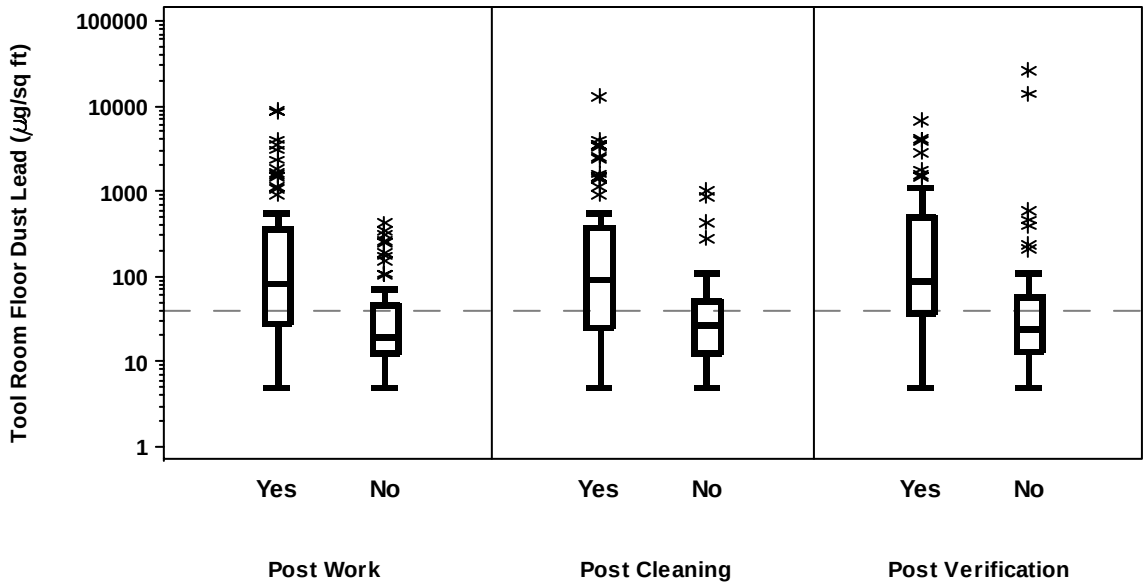


Figure C2.9b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and Restricted Job

Table C2. 9b. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Restricted Job

Stage	Tool Room - Floor Dust (Restricted Job)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	60	751	112	5	28	83	365	9031	67%
	2-no	72	53	24	5	13	20	45	429	31%
Post-Clean	1-yes	60	759	113	5	26	94	382	13167	72%
	2-no	72	67	27	5	13	28	52	1033	32%
Post-Verification	1-yes	60	550	112	5	36	87	504	6902	75%
	2-no	72	613	31	5	13	24	59	26266	29%

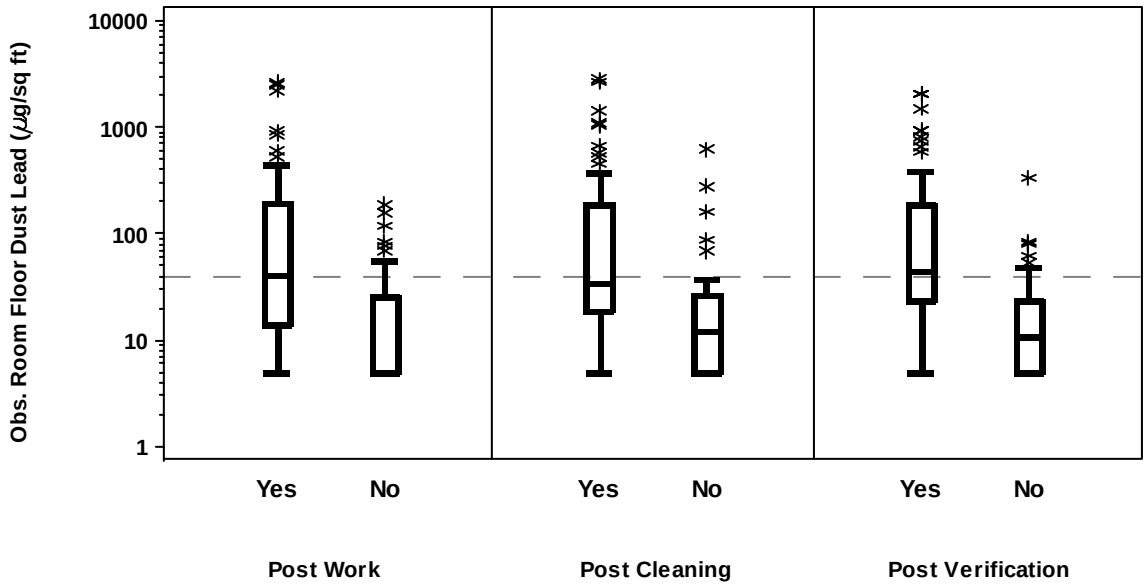


Figure C2.9c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and Restricted Job

Table C2. 9c. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Restricted Job

Stage	Obs. Room - Floor Dust (Restricted Job)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	56	257	52	5	14	41	191	2674	54%
	2-no	64	23	12	5	5	5	26	189	13%
Post-Clean	1-yes	56	258	54	5	19	34	186	2841	48%
	2-no	64	32	13	5	5	12	26	632	8%
Post-Verification	1-yes	56	243	65	5	23	45	189	2087	57%
	2-no	64	22	12	5	5	11	24	338	11%

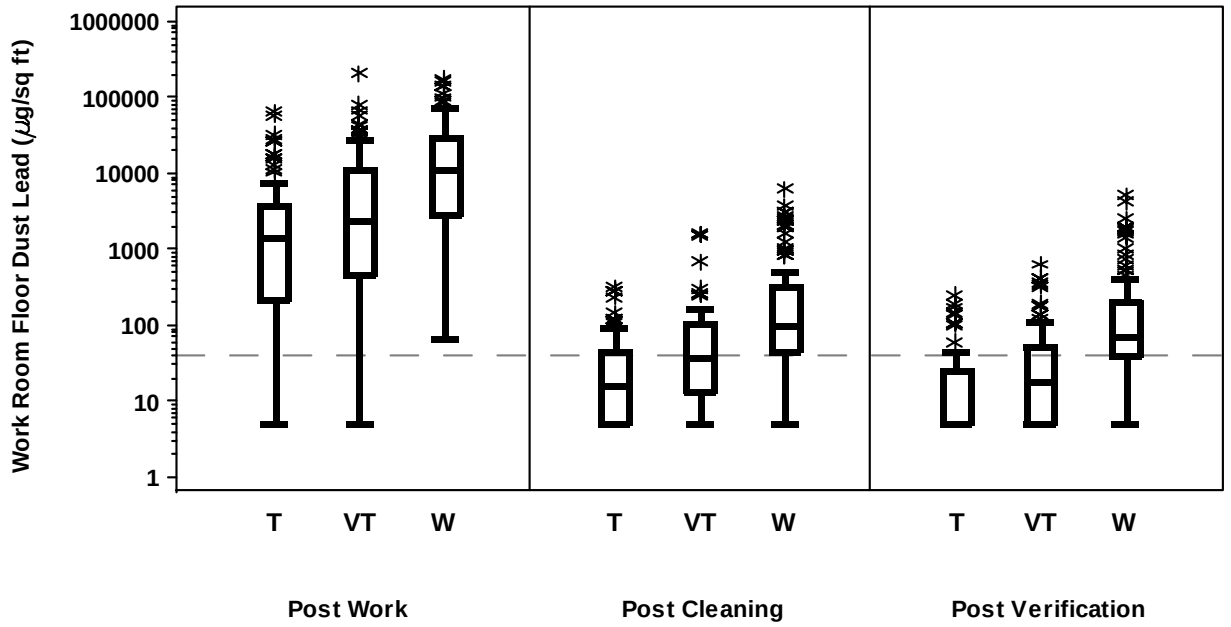


Figure C2.10a. Box Plots of Floor Dust Lead Loading in the Work Room by Stage and Work Room Floor Type

Table C2. 10a. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Work Room Floor Type

Stage	Work Room - Floor Dust (Floor Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Tile	69	6180	1087	5	220	1443	3676	65994	94%
	Vinyl Tile	84	12099	1991	5	474	2351	11612	209798	96%
	Wood	88	26012	8760	69	2977	11422	30876	180281	100%
Post-Clean	Tile	68	48	20	5	5	16	45	320	26%
	Vinyl Tile	84	124	38	5	13	38	104	1615	49%
	Wood	88	543	140	5	45	98	314	6420	81%
Post-Verification	Tile	68	29	12	5	5	5	25	253	18%
	Vinyl Tile	84	61	21	5	5	18	50	644	26%
	Wood	88	385	99	5	39	72	203	5206	75%

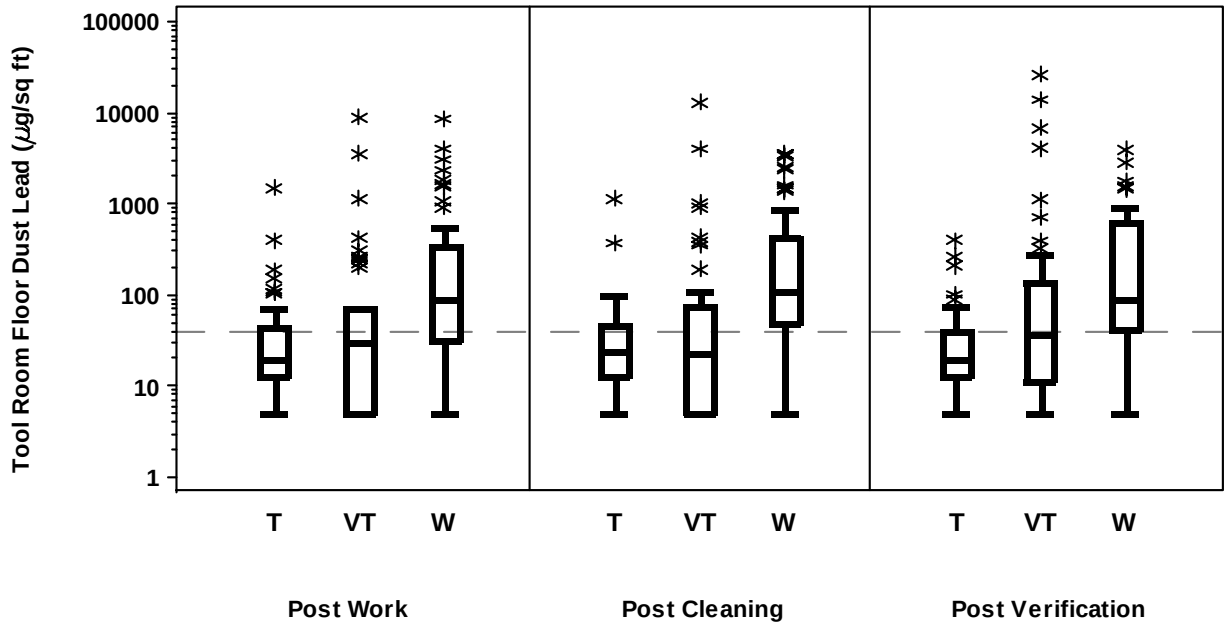


Figure C2.10b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and Work Room Floor Type

Table C2. 10b. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Work Room Floor Type

Stage	Tool Room - Floor Dust (Floor Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Tile	46	75	25	5	13	19	45	1508	30%
	Vinyl Tile	42	393	38	5	5	29	71	9031	43%
	Wood	44	657	123	5	31	90	335	8667	68%
Post-Clean	Tile	46	62	25	5	12	24	47	1146	30%
	Vinyl Tile	42	512	36	5	5	23	76	13167	40%
	Wood	44	592	152	5	49	108	426	3553	80%
Post-Verification	Tile	46	44	24	5	13	20	40	400	24%
	Vinyl Tile	42	1322	56	5	11	37	138	26266	50%
	Wood	44	445	131	5	41	87	604	3963	77%

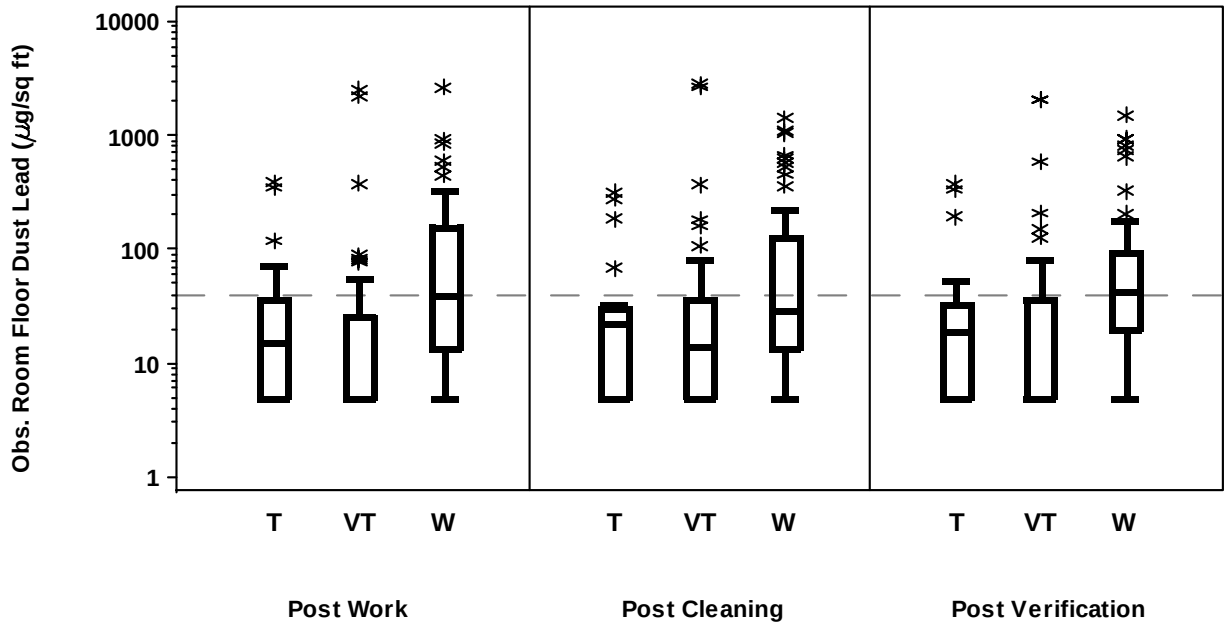


Figure C2.10c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and Work Room Floor Type

Table C2. 10c. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Work Room Floor Type

Stage	Obs. Room - Floor Dust (Floor Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Tile	34	43	17	5	5	15	36	391	21%
	Vinyl Tile	42	142	15	5	5	5	26	2564	21%
	Wood	44	192	47	5	13	40	158	2674	50%
Post-Clean	Tile	34	40	18	5	5	22	30	322	12%
	Vinyl Tile	42	166	19	5	5	14	37	2841	21%
	Wood	44	186	44	5	13	30	128	1421	43%
Post-Verification	Tile	34	44	19	5	5	19	32	381	21%
	Vinyl Tile	42	138	17	5	5	5	36	2087	21%
	Wood	44	174	52	5	19	43	92	1510	52%

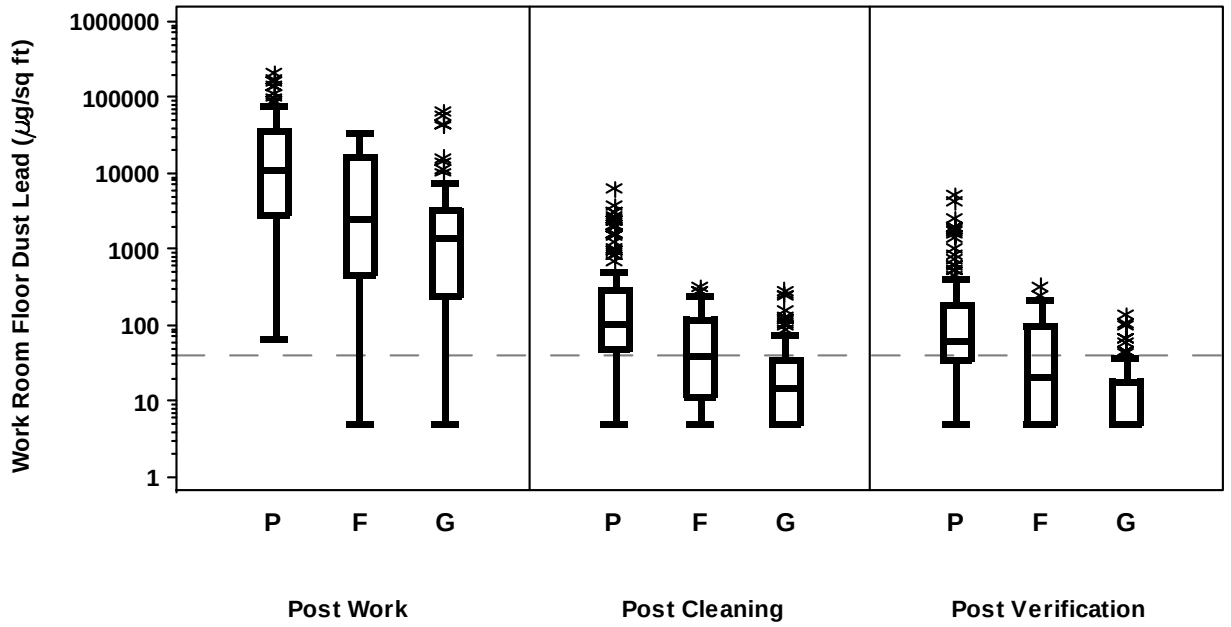


Figure C2.11a. Box Plots of Floor Dust Lead Loading in the Work Room by Stage and Work Room Floor Condition

Table C2. 11a. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Work Room Floor Condition

Stage	Work Room - Floor Dust (Floor Condition)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Poor	108	27342	8361	69	2817	11450	35557	209798	100%
	Fair	45	8450	1833	5	481	2624	16409	33363	91%
	Good	88	4529	977	5	252	1385	3308	65994	97%
Post-Clean	Poor	108	509	138	5	50	104	296	6420	82%
	Fair	44	77	37	5	12	39	118	320	50%
	Good	88	36	17	5	5	15	35	289	22%
Post-Verification	Poor	108	342	91	5	35	63	195	5206	70%
	Fair	44	59	24	5	5	21	101	326	34%
	Good	88	17	10	5	5	5	19	137	10%

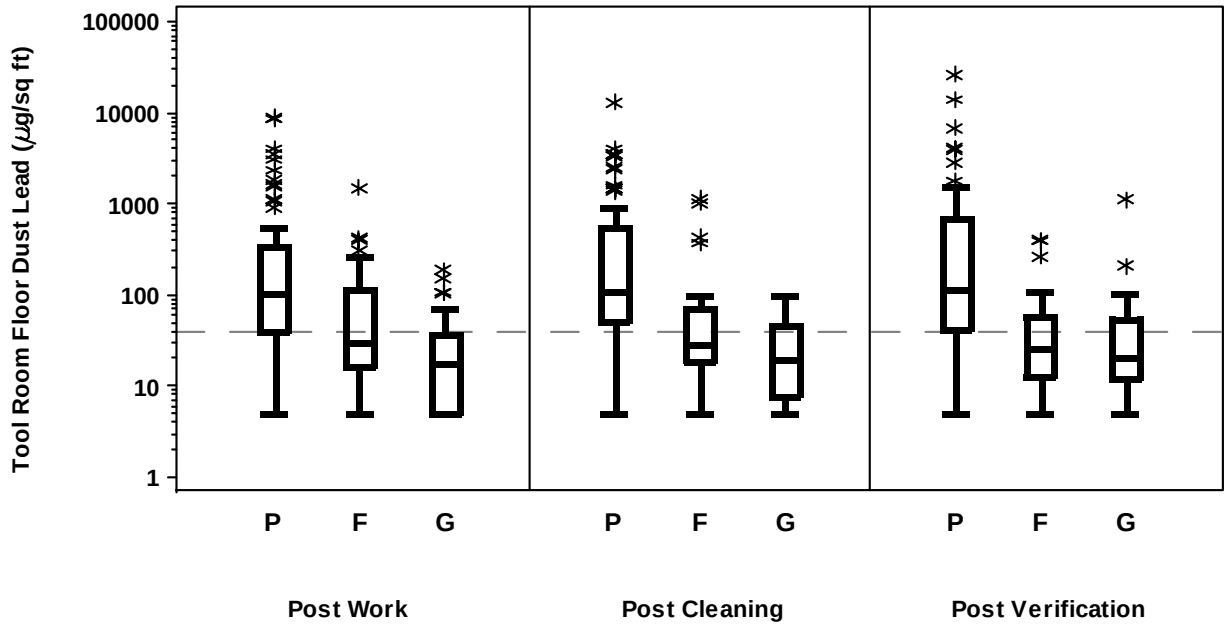


Figure C2.11b. Box Plots of Floor Dust Lead Loading in the Tool Room by Stage and Work Room Floor Condition

Table C2. 11b. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Work Room Floor Condition

Stage	Tool Room - Floor Dust (Floor Condition)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Poor	54	809	138	5	39	105	345	9031	74%
	Fair	22	157	46	5	16	30	116	1508	41%
	Good	56	30	18	5	5	18	37	190	23%
Post-Clean	Poor	54	838	156	5	51	112	569	13167	80%
	Fair	22	161	43	5	18	29	71	1146	32%
	Good	56	28	19	5	8	20	45	98	29%
Post-Verification	Poor	54	1344	178	5	42	118	682	26266	80%
	Fair	22	74	28	5	13	26	59	400	32%
	Good	56	53	23	5	12	20	54	1122	29%

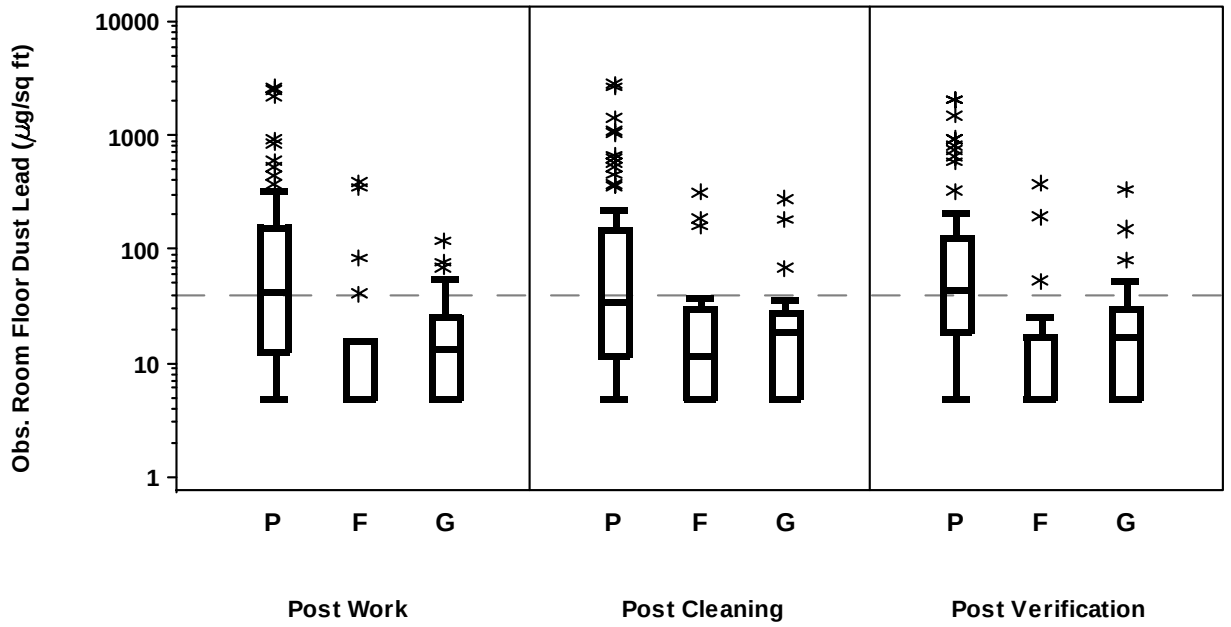


Figure C2.11c. Box Plots of Floor Dust Lead Loading in the Observation Room by Stage and Work Room Floor Condition

Table C2. 11c. Descriptive Summary of Floor Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Work Room Floor Condition

Stage	Obs. Room - Floor Dust (Floor Condition)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Poor	54	258	51	5	13	43	159	2674	54%
	Fair	22	45	11	5	5	5	16	391	18%
	Good	44	21	13	5	5	13	26	119	11%
Post-Clean	Poor	54	266	48	5	12	34	149	2841	48%
	Fair	22	42	15	5	5	12	31	322	14%
	Good	44	28	15	5	5	19	28	280	7%
Post-Verification	Poor	54	238	54	5	19	45	128	2087	54%
	Fair	22	37	12	5	5	5	18	381	14%
	Good	44	30	16	5	5	17	31	338	16%

C3. Exploratory Summaries of Floor Dust Lead Dust Loadings vs. Select Continuous Characteristics

Scatter plots of the dust lead Loadings recorded from floors are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. The fitted linear regression line (using untransformed data) is displayed in each plot along with its associated r-square value.

The selected characteristics are as follows:

1. Paint Lead Concentration
2. Floor Dust Lead Loading at Clearance
3. Initial Average Soil Lead Concentration
4. Final Average Soil Lead Concentration
5. Disturbed Area
6. Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room

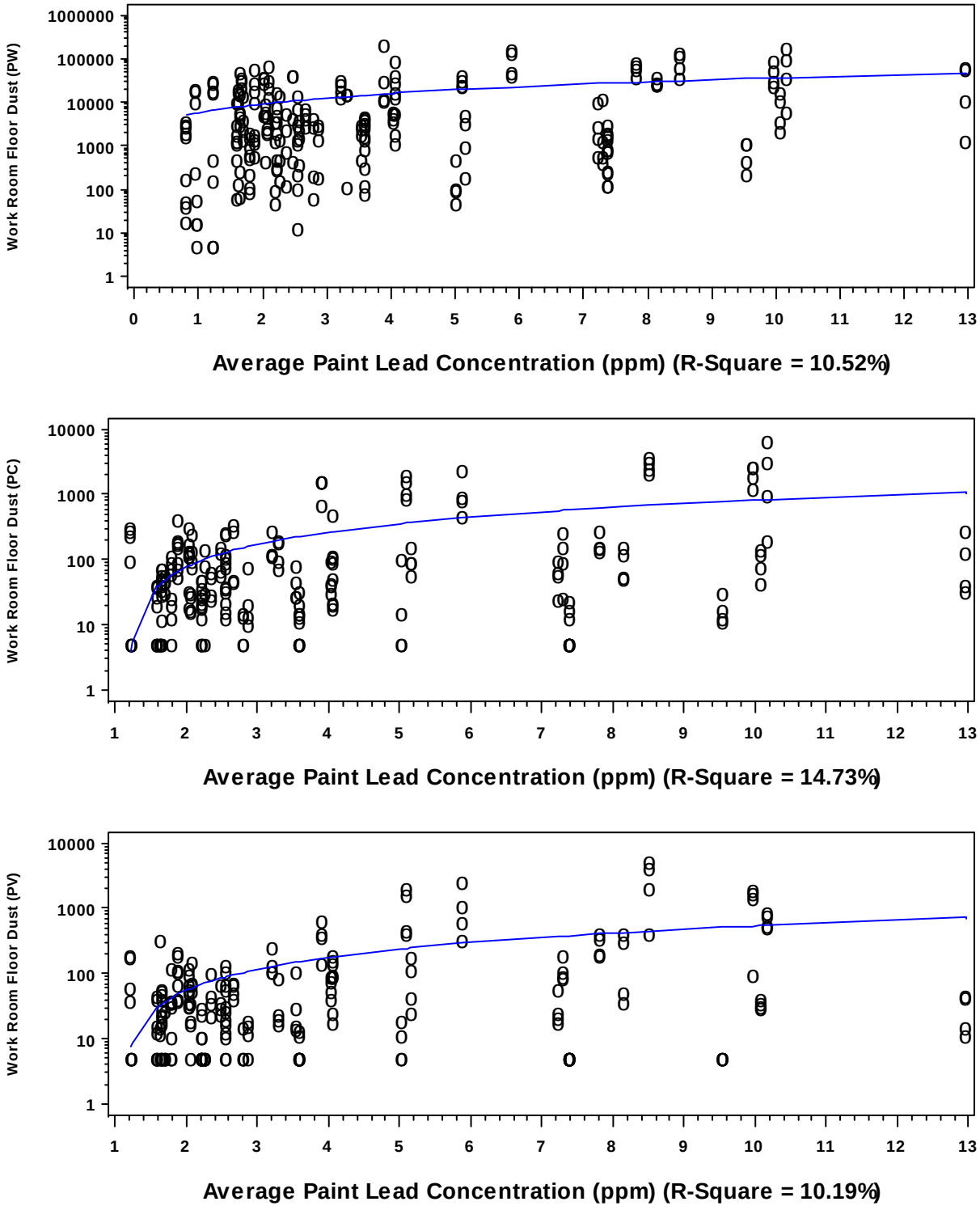


Figure C3.1a. Scatter Plots of Work Room Floor Dust Lead Loading (µg/ft^2) by Stage and Average Paint Lead Concentration (ppm)

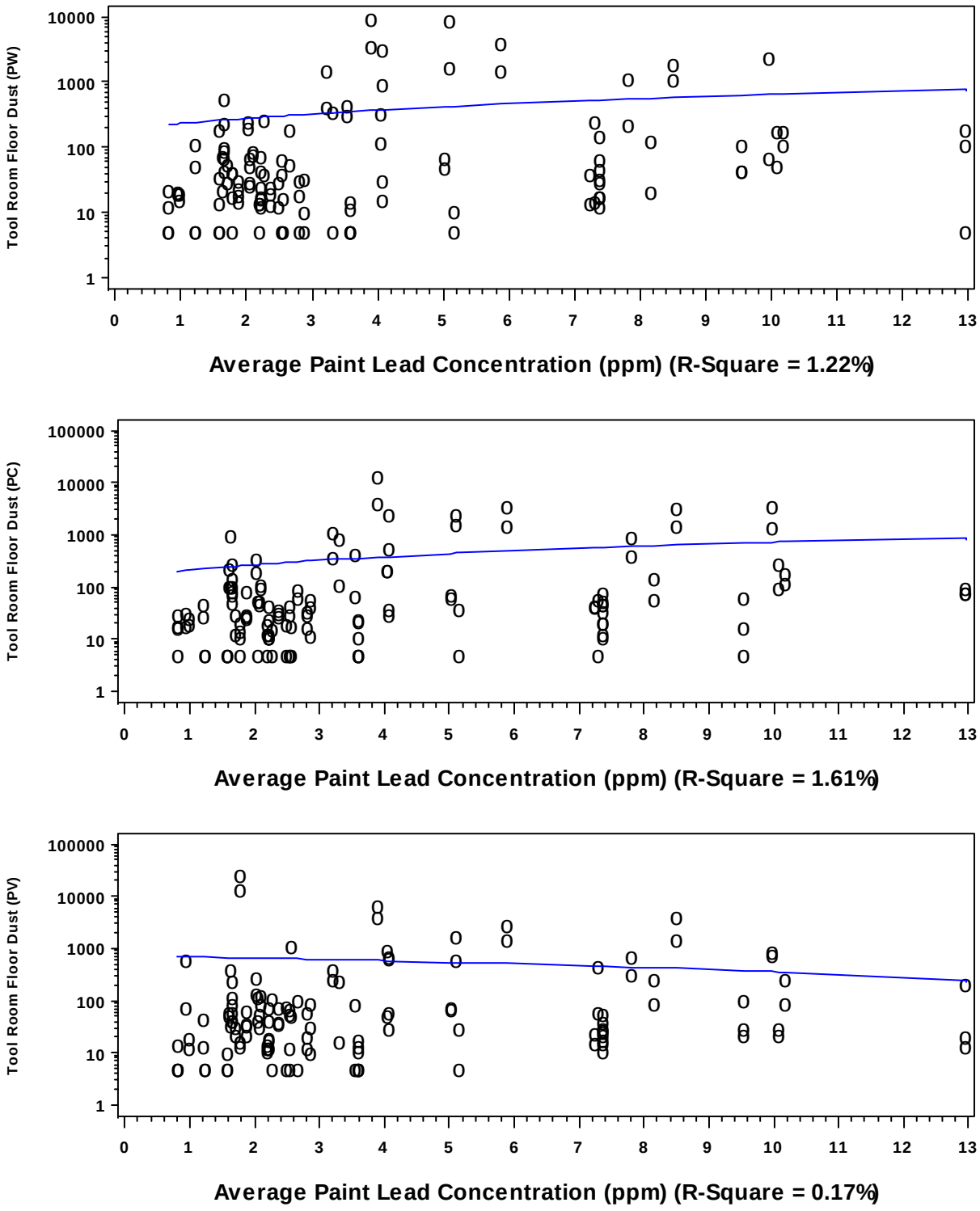


Figure C3.1b. Scatter Plots of Tool Room Floor Dust Lead Loading (µg/ft^2) by Stage and Average Paint Lead Concentration (ppm)

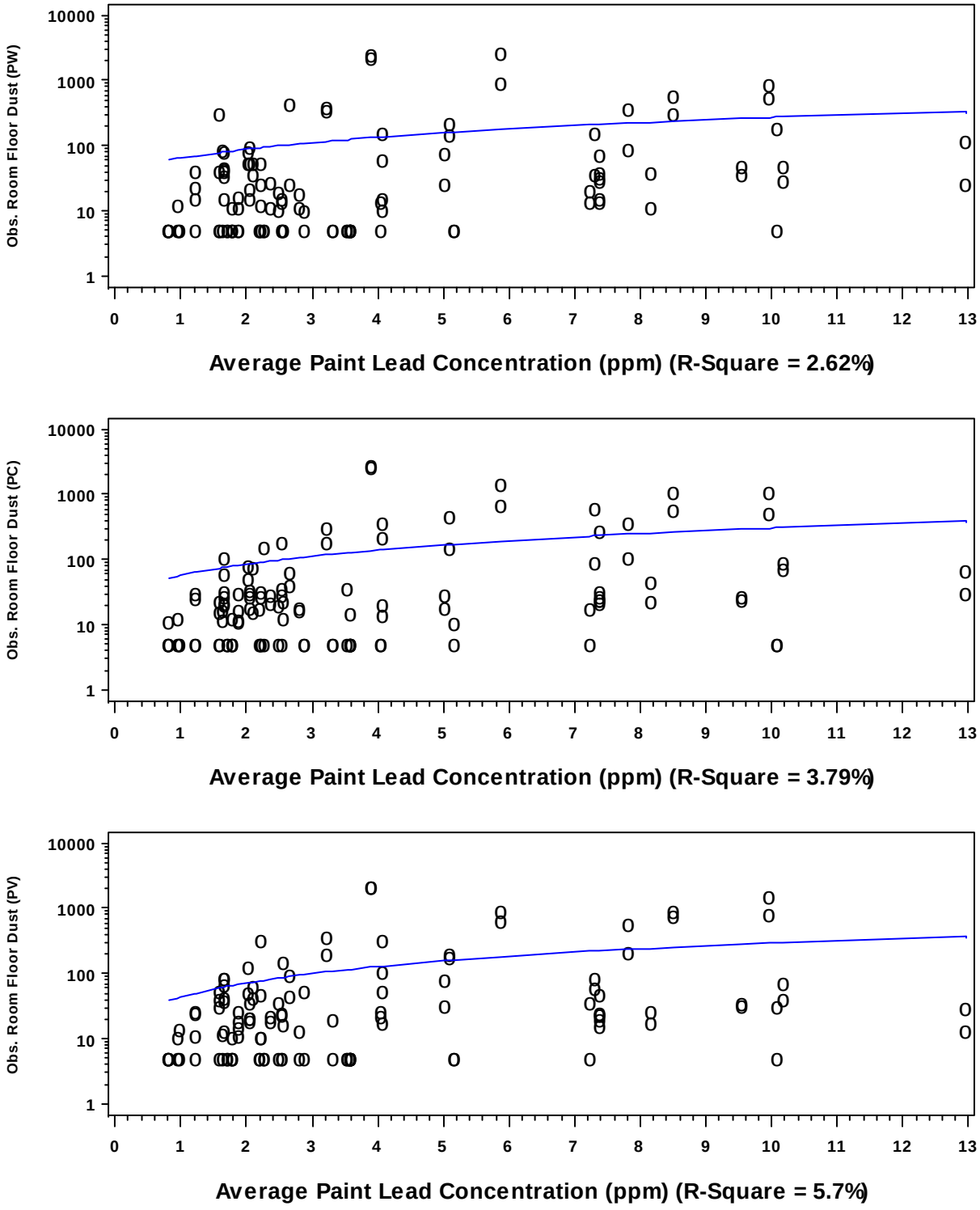


Figure C3.1c. Scatter Plots of Observation Room Floor Dust Lead Loading (µg/ft^2) by Stage and Average Paint Lead Concentration (ppm)

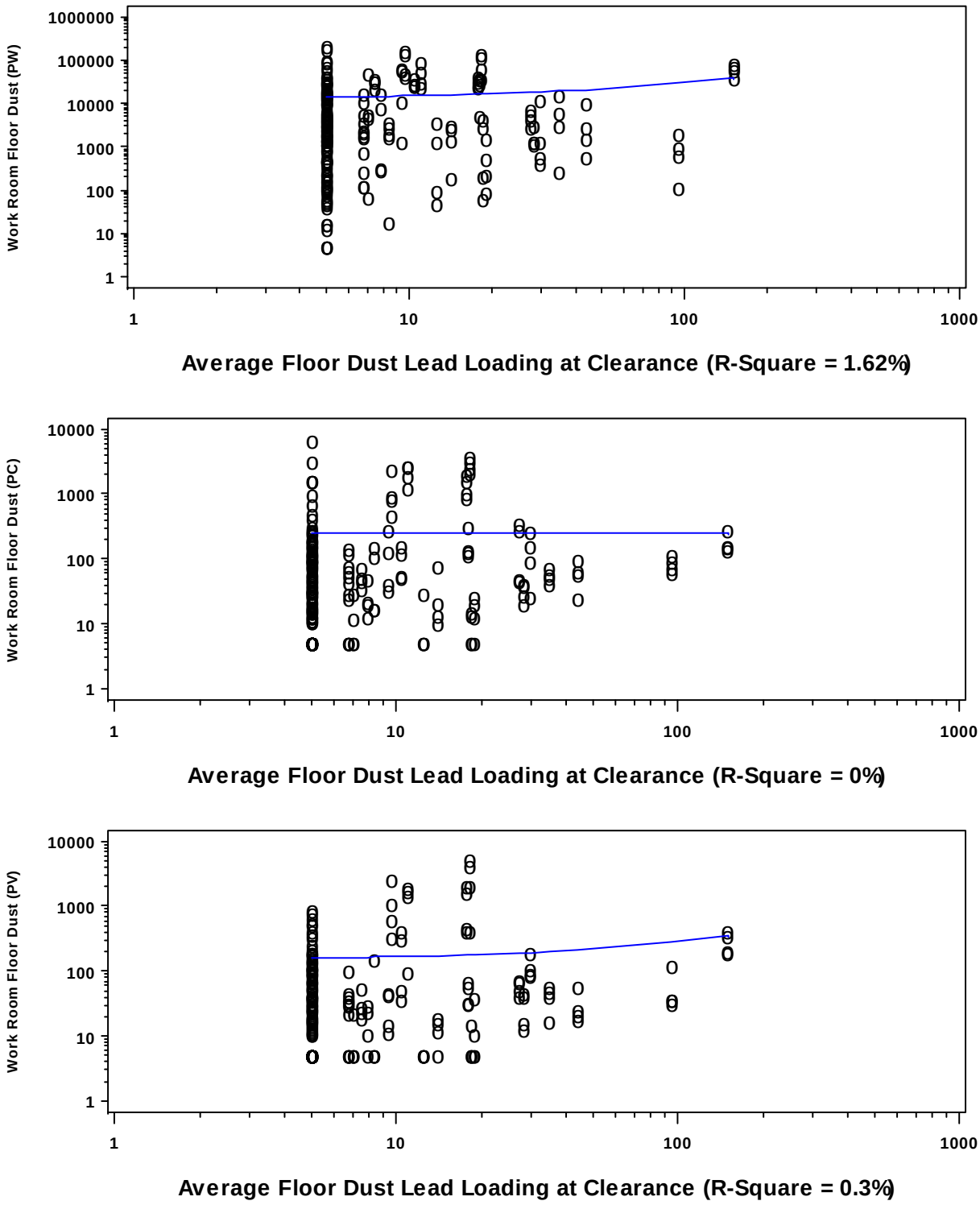
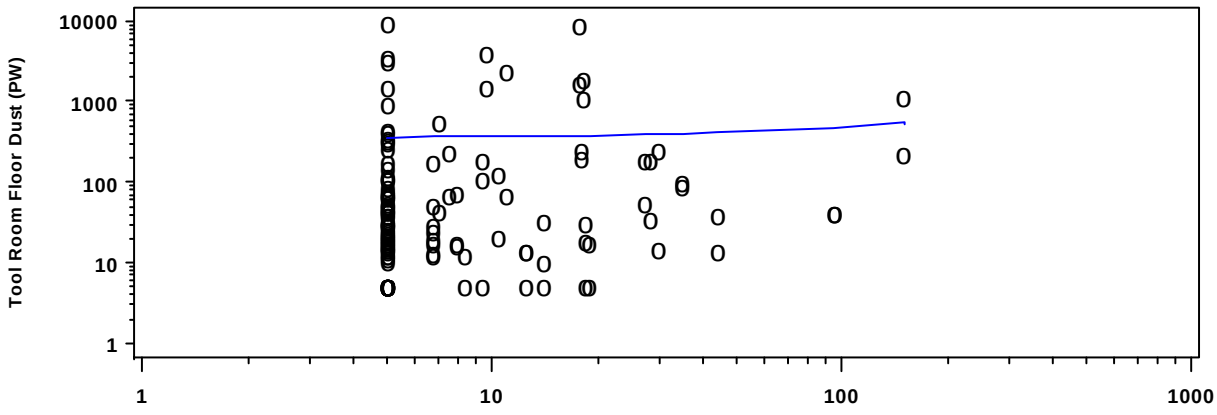
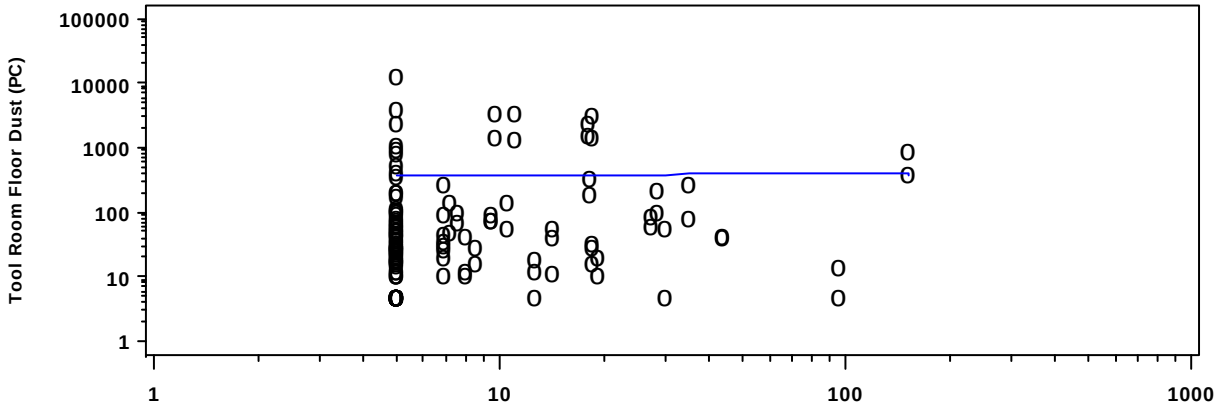


Figure C3.2a. Scatter Plots of Work Room Floor Dust Lead Loading (µg/ft^2) by Stage and Floor Dust Lead Loading at Clearance (ppm)





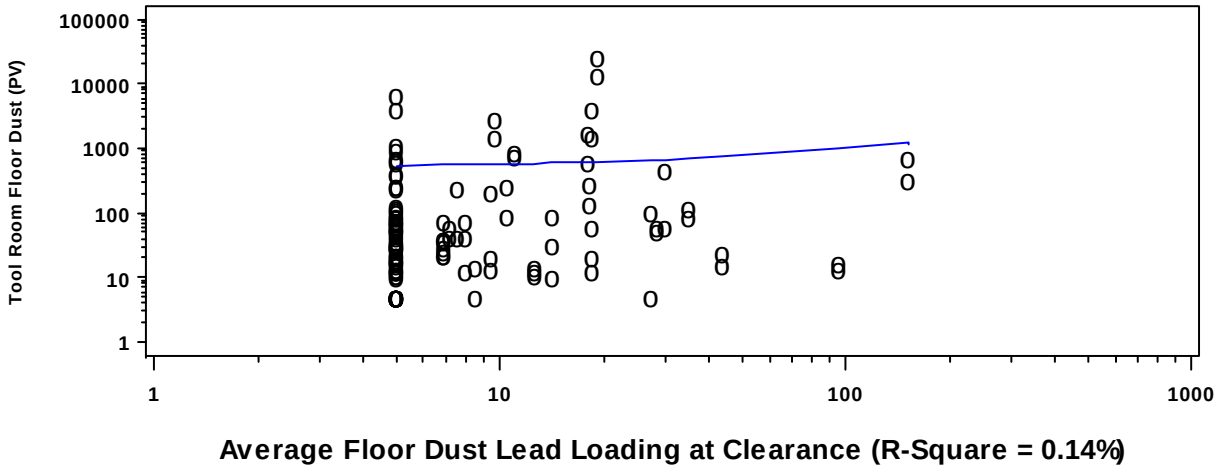


Figure C3.2b. Scatter Plots of Tool Room Floor Dust Lead Loading (µg/ft^2) by Stage and Floor Dust Lead Loading at Clearance (ppm)

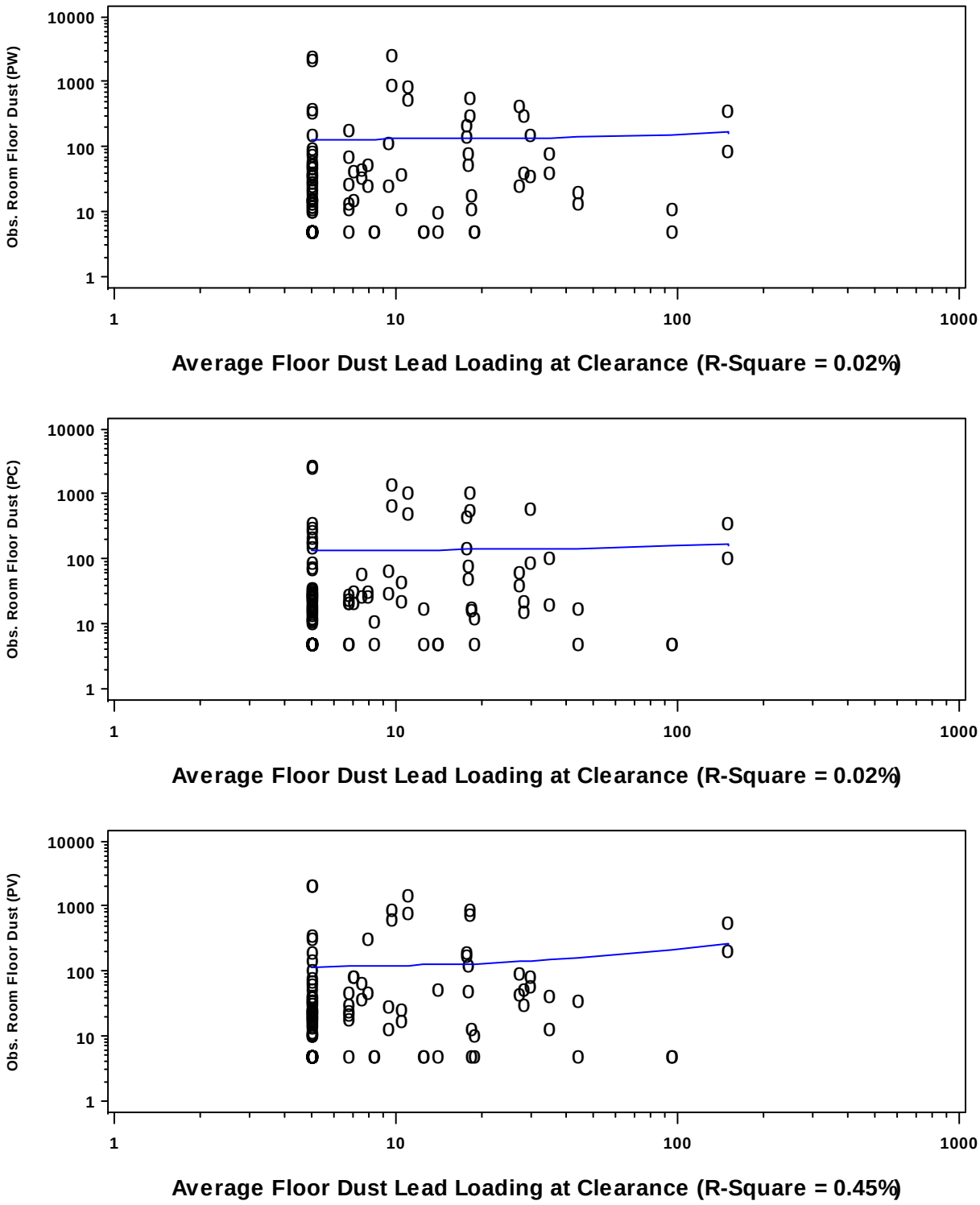


Figure C3.2c. Scatter Plots of Observation Room Floor Dust Lead Loading (µg/ft^2) by Stage and Floor Dust Lead Loading at Clearance (ppm)

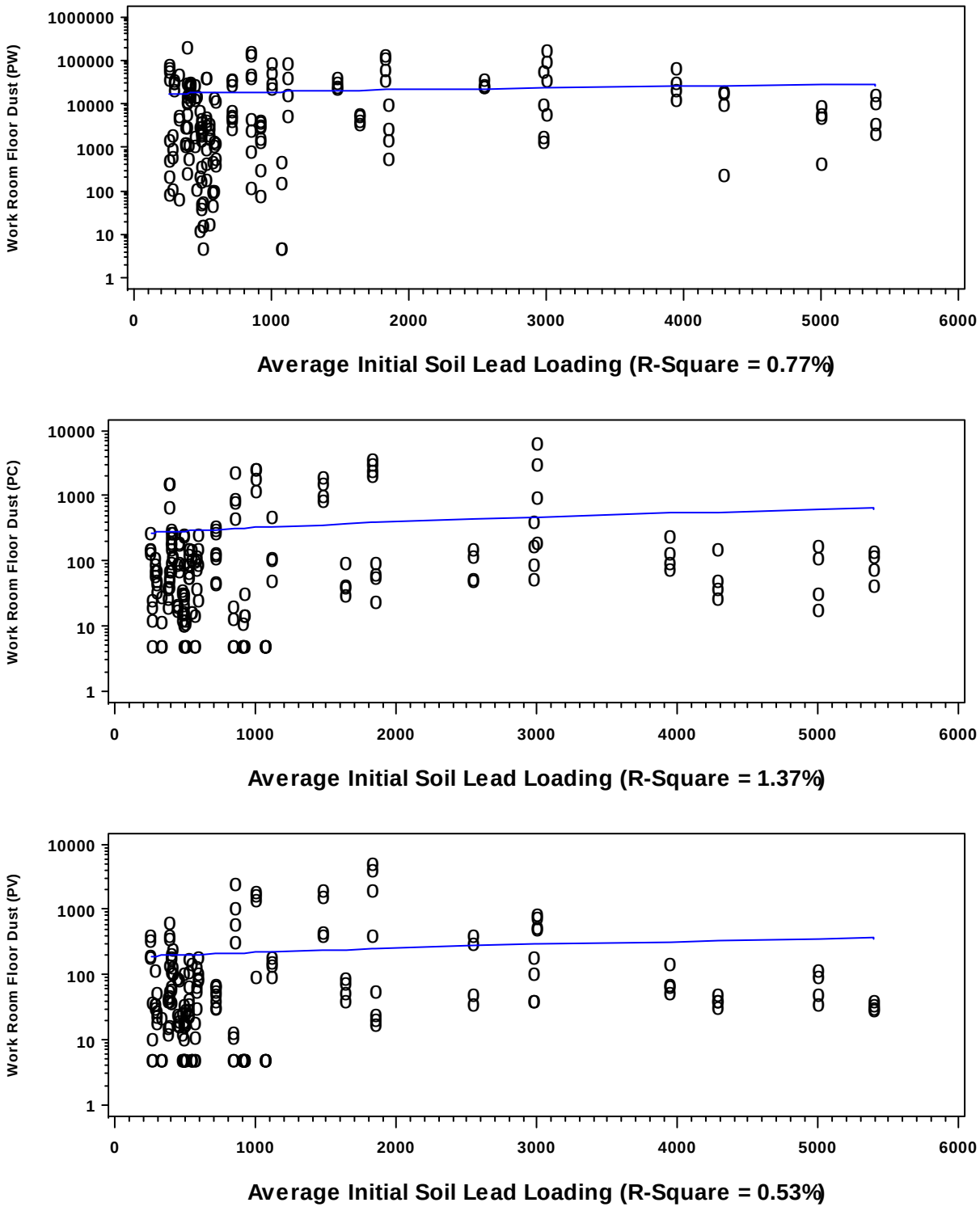


Figure C3.3a. Scatter Plots of Work Room Floor Dust Lead Loading (µg/ft^2) by Stage and Initial Average Soil Lead Concentration (ppm)

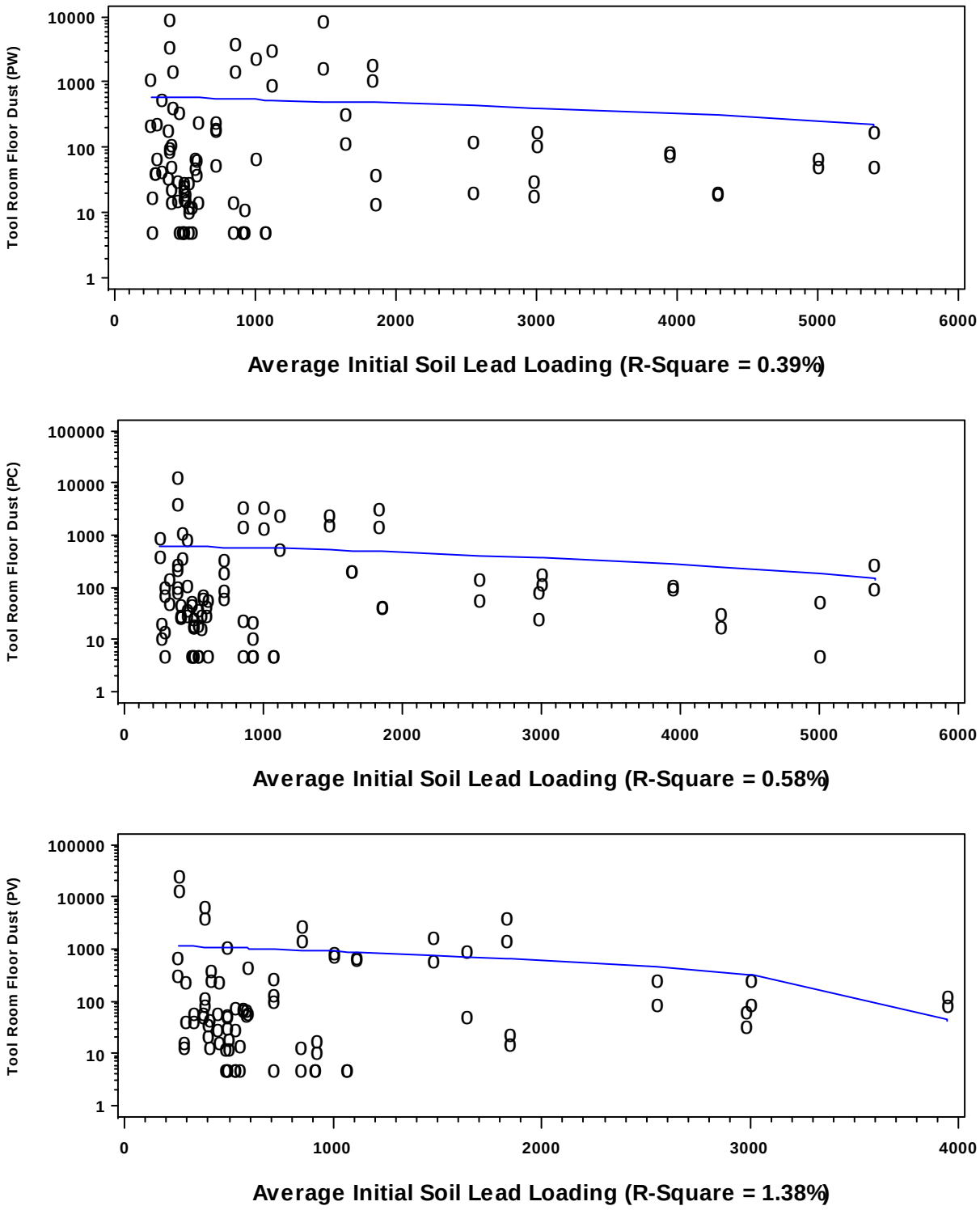


Figure C3.3b. Scatter Plots of Tool Room Floor Dust Lead Loading (µg/ft^2) by Stage and Initial Average Soil Lead Concentration (ppm)

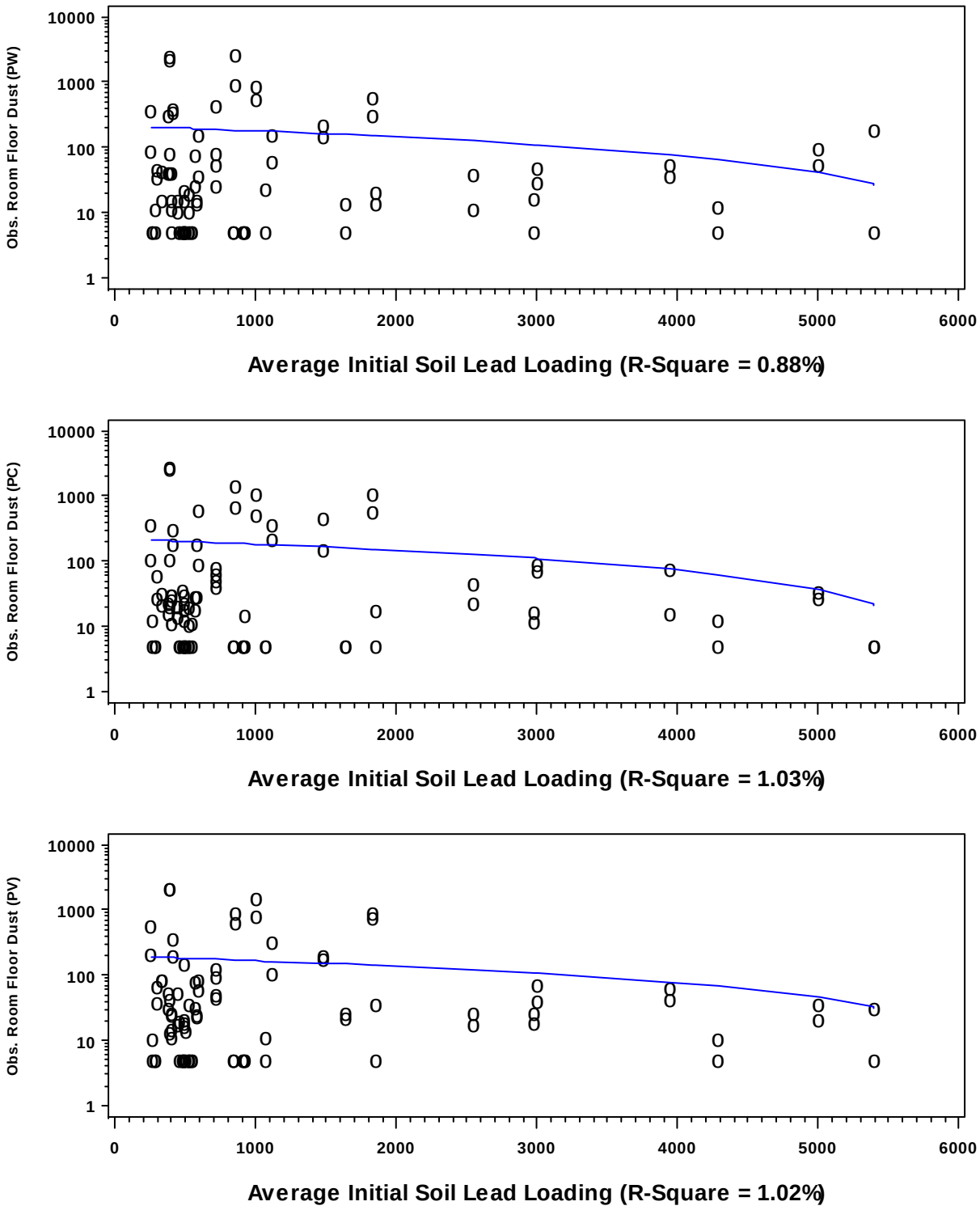


Figure C3.3c. Scatter Plots of Observation Room Floor Dust Lead Loading (μg/ft^2) by Stage and Initial Average Soil Lead Concentration (ppm)

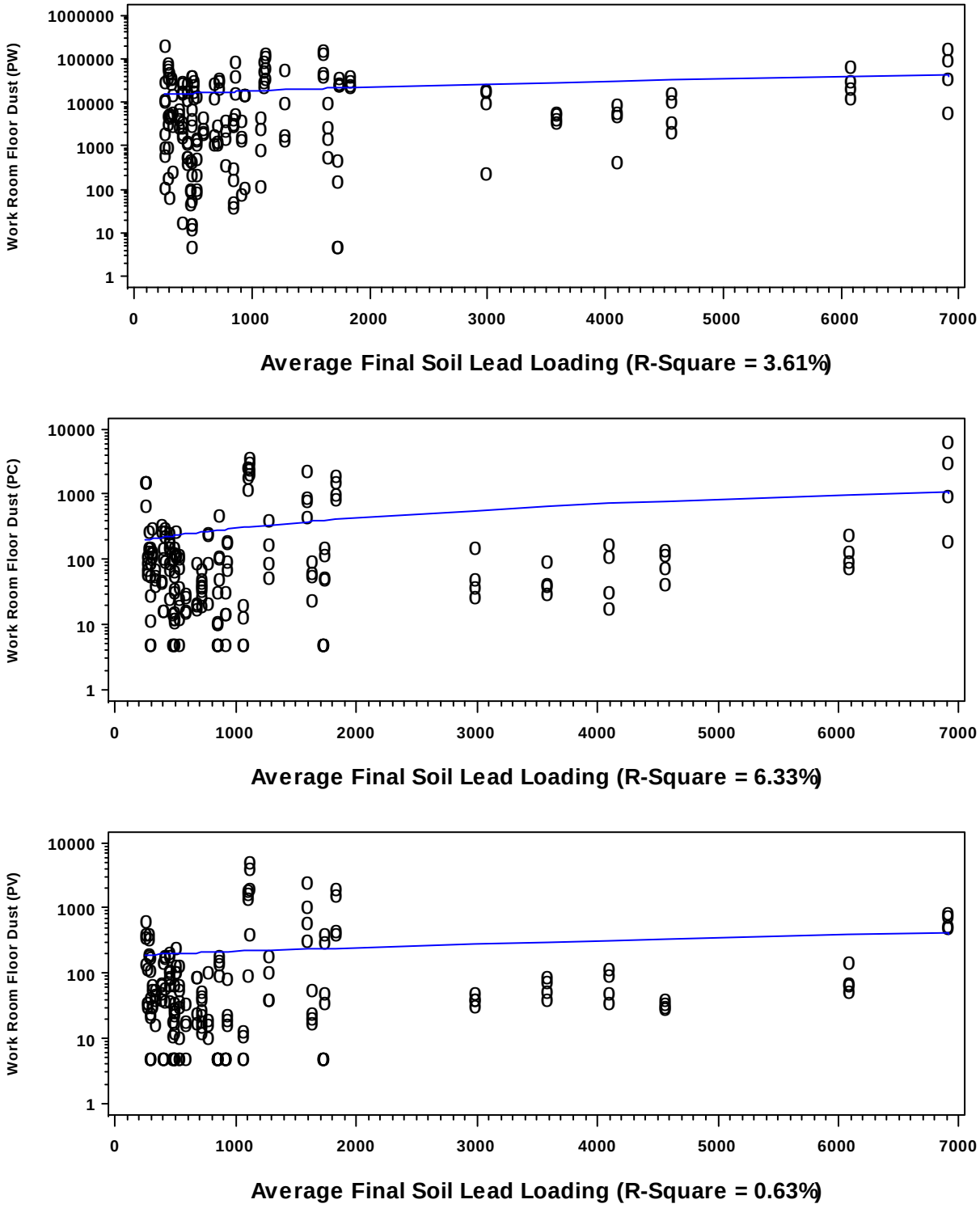


Figure C3.4a. Scatter Plots of Work Room Floor Dust Lead Loading (µg/ft^2) by Stage and Final Average Soil Lead Concentration (ppm)

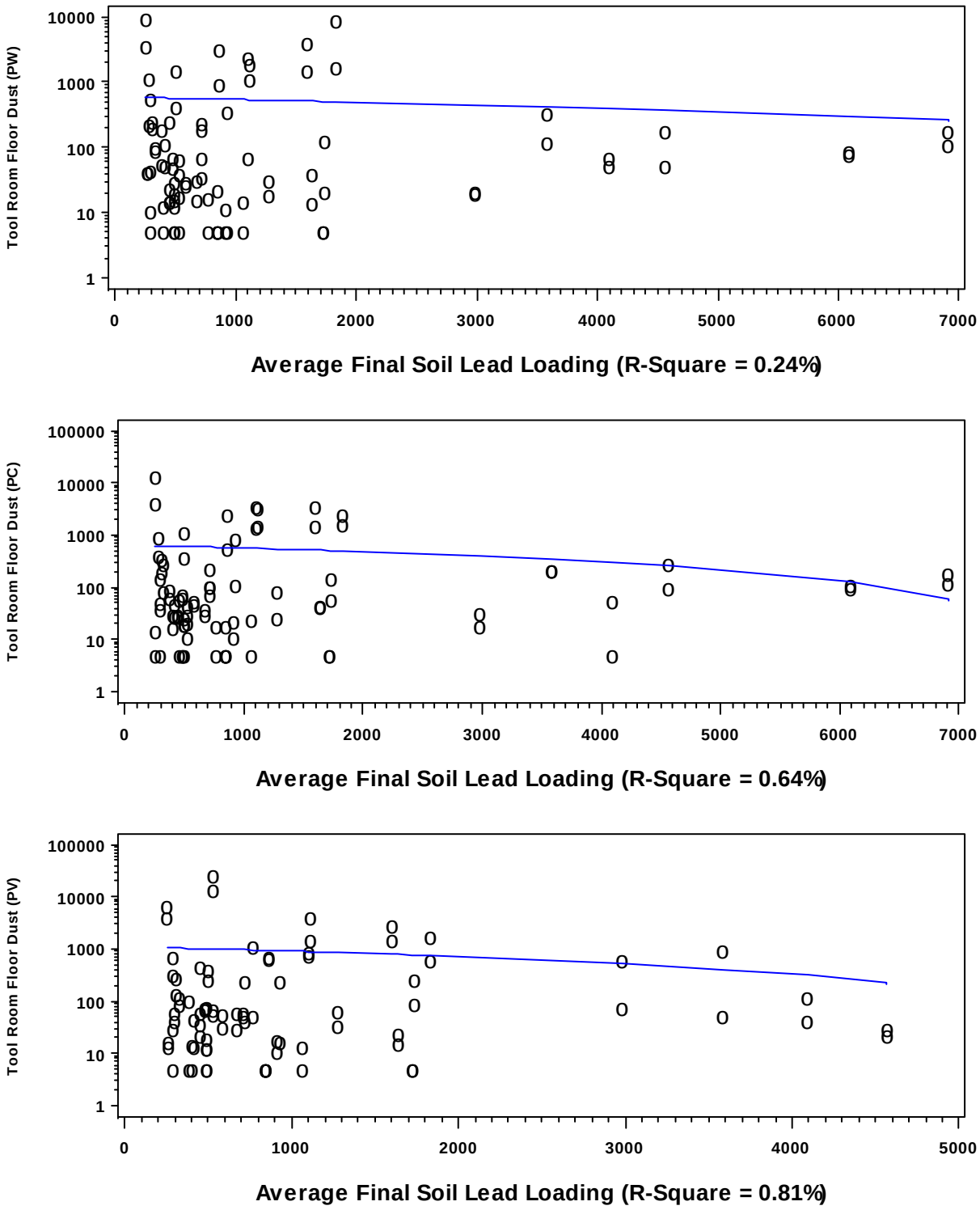


Figure C3.4b. Scatter Plots of Tool Room Floor Dust Lead Loading (µg/ft^2) by Stage and Final Average Soil Lead Concentration (ppm)

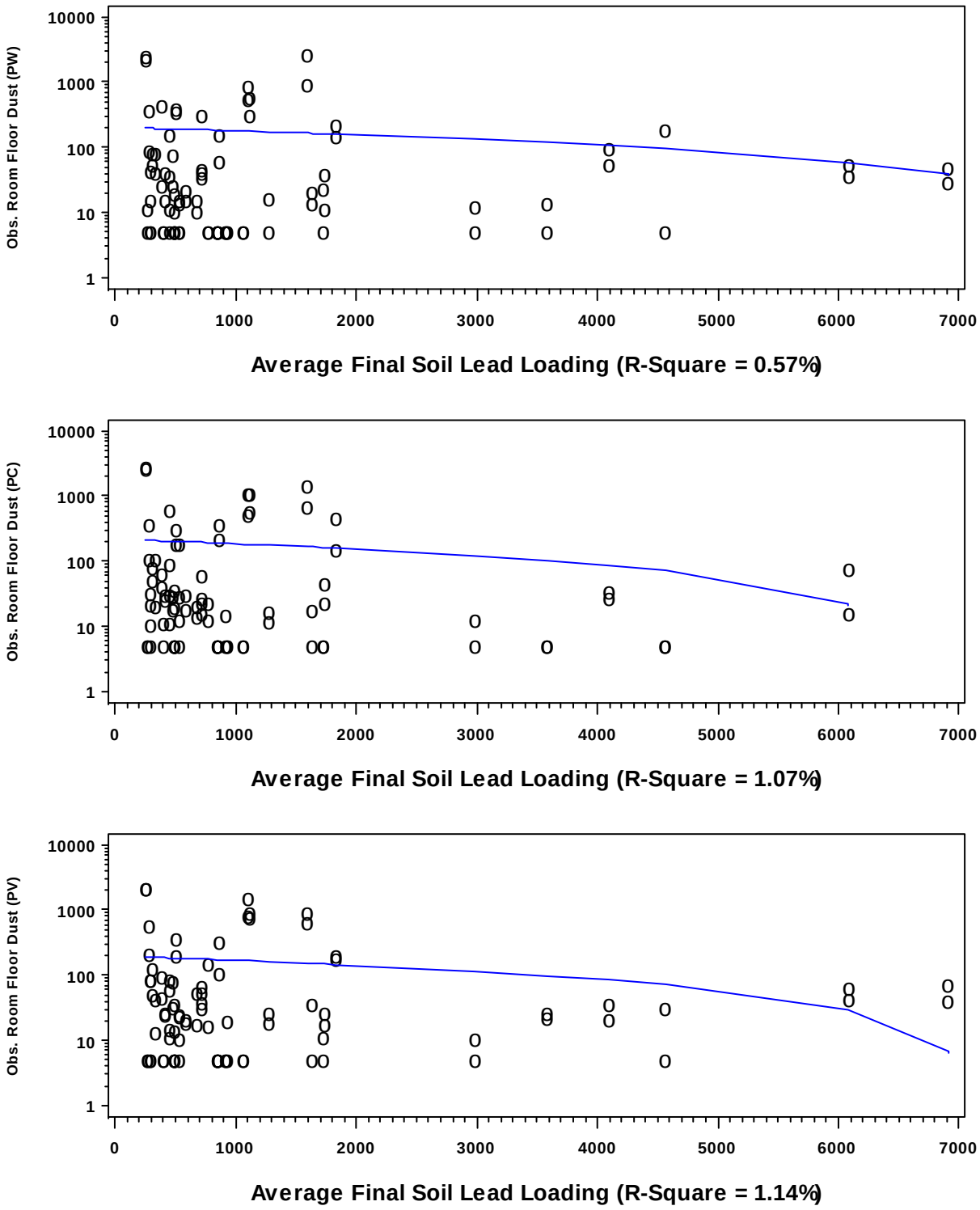


Figure C3.4c. Scatter Plots of Observation Room Floor Dust Lead Loading (μg/ft^2) by Stage and Final Average Soil Lead Concentration (ppm)

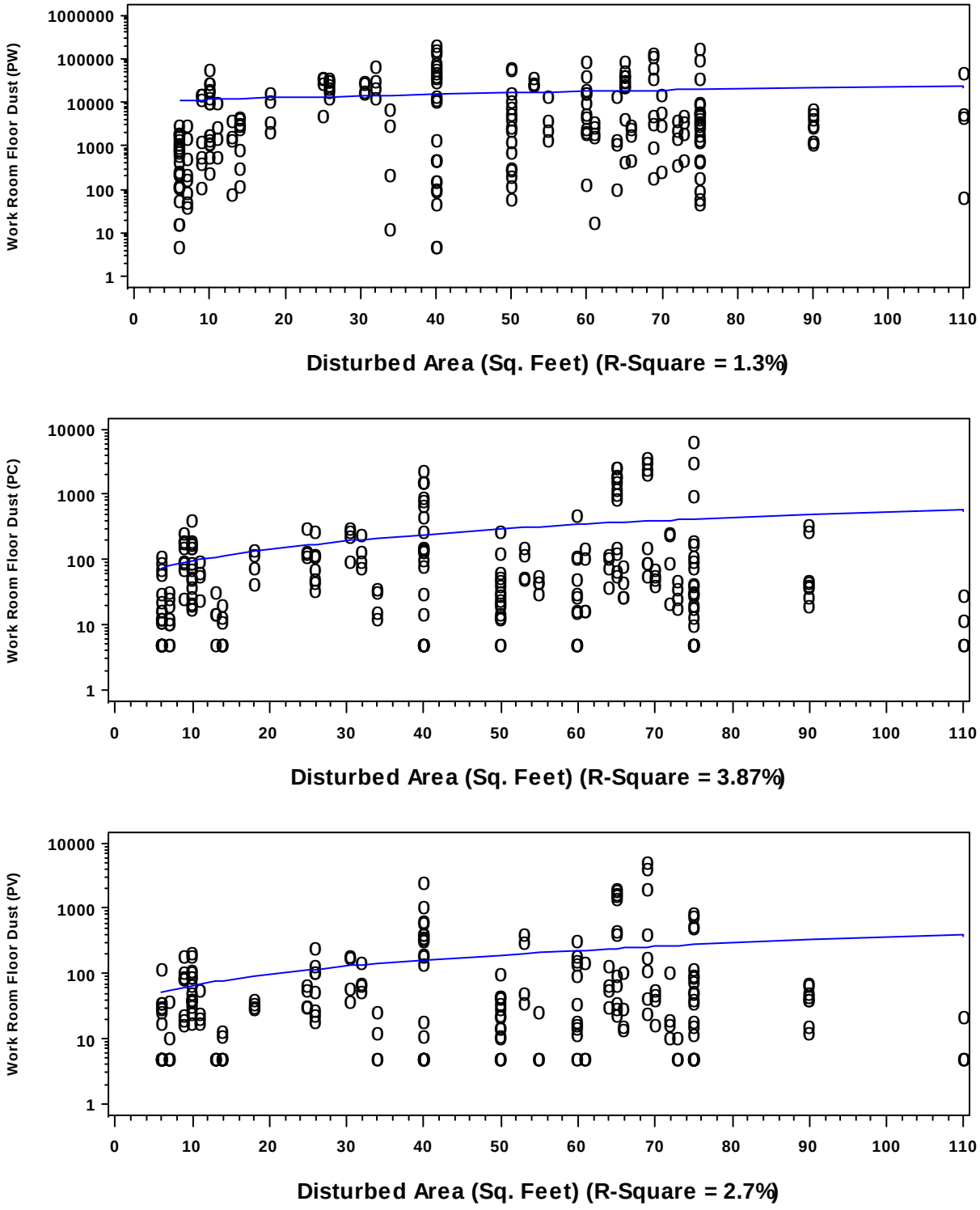


Figure C3.5a. Scatter Plots of Work Room Floor Dust Lead Loading (µg/ft^2) by Stage and Disturbed Area (ft^2)

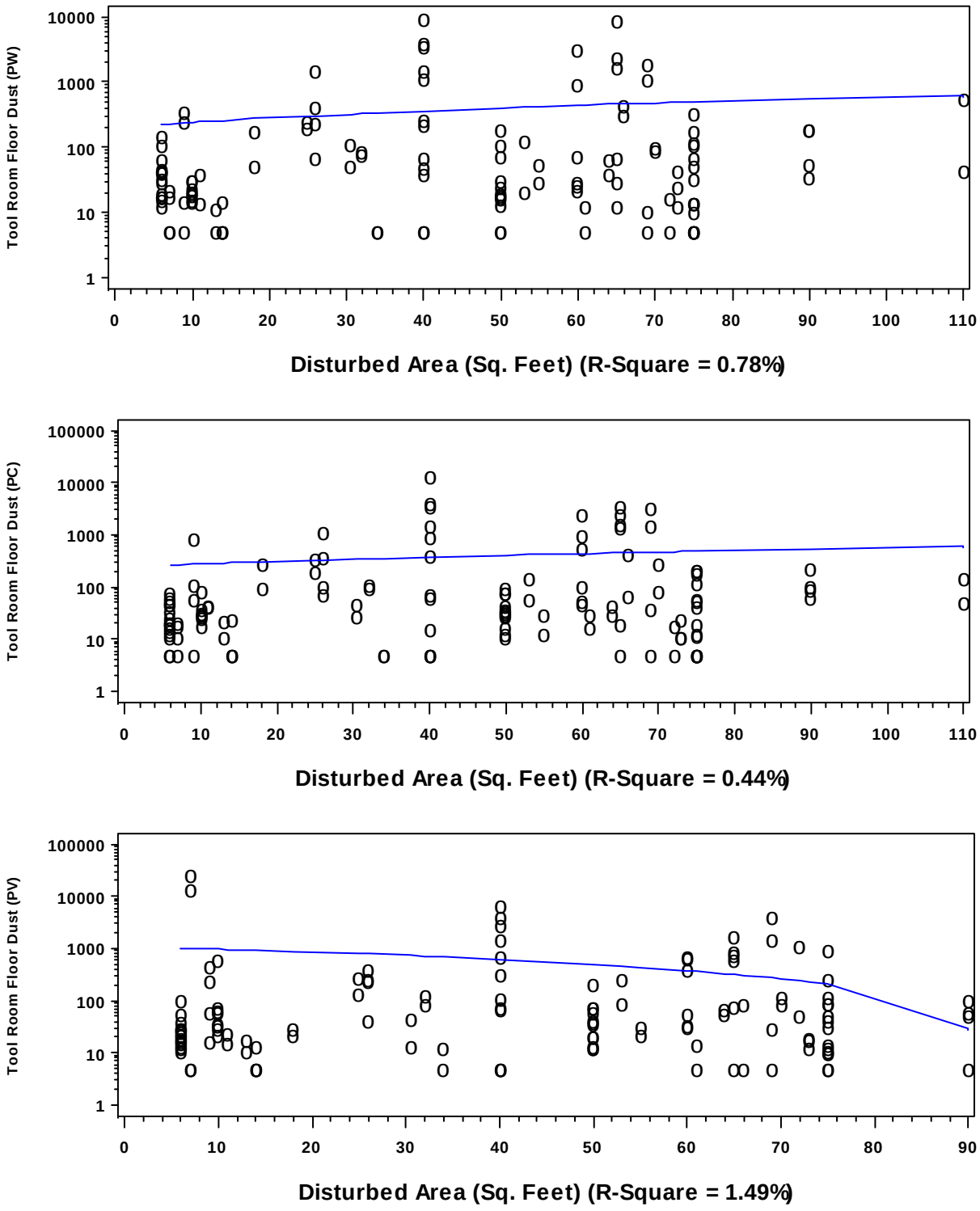


Figure C3.5b. Scatter Plots of Tool Room Floor Dust Lead Loading (µg/ft^2) by Stage and Disturbed Area (ft^2)

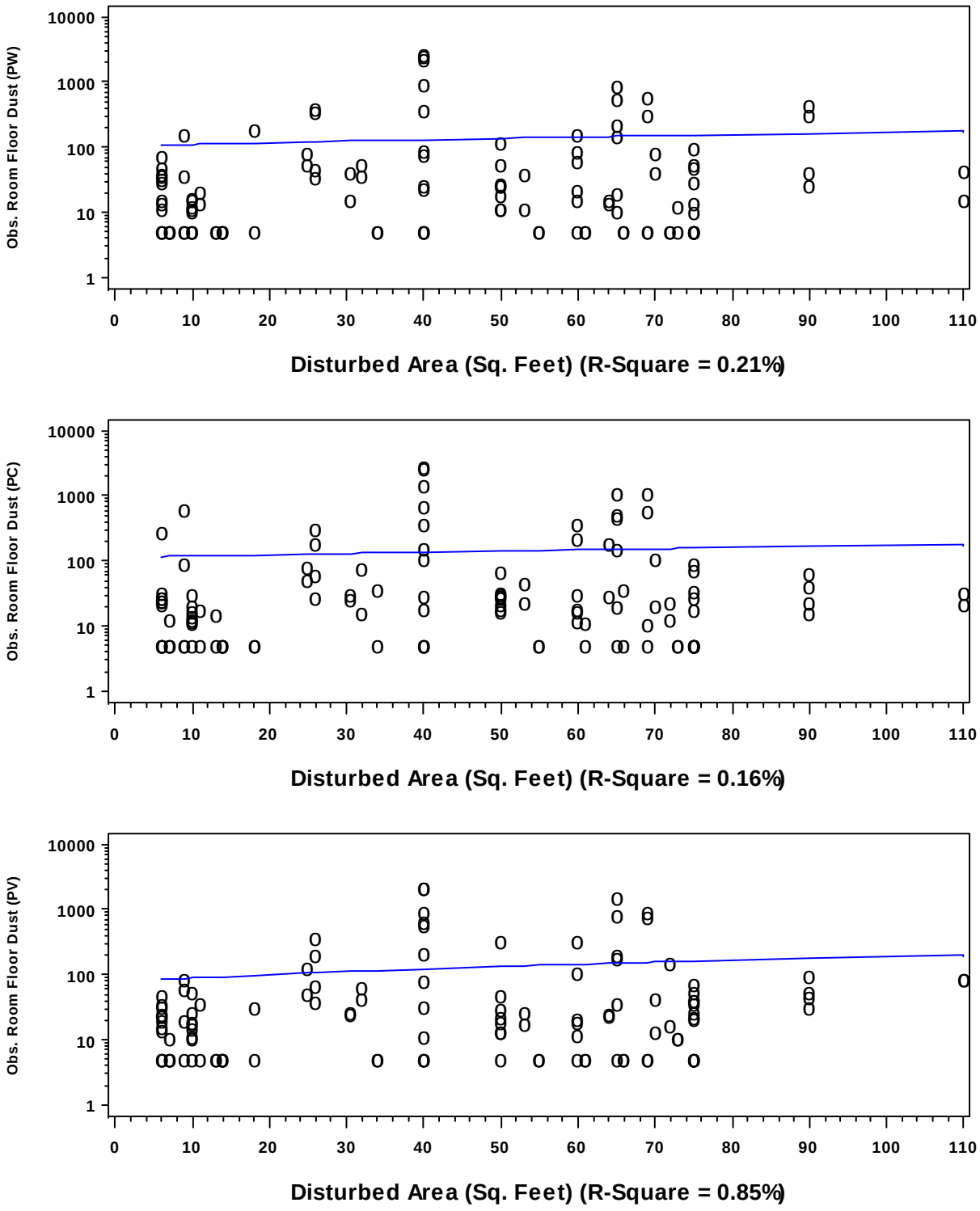
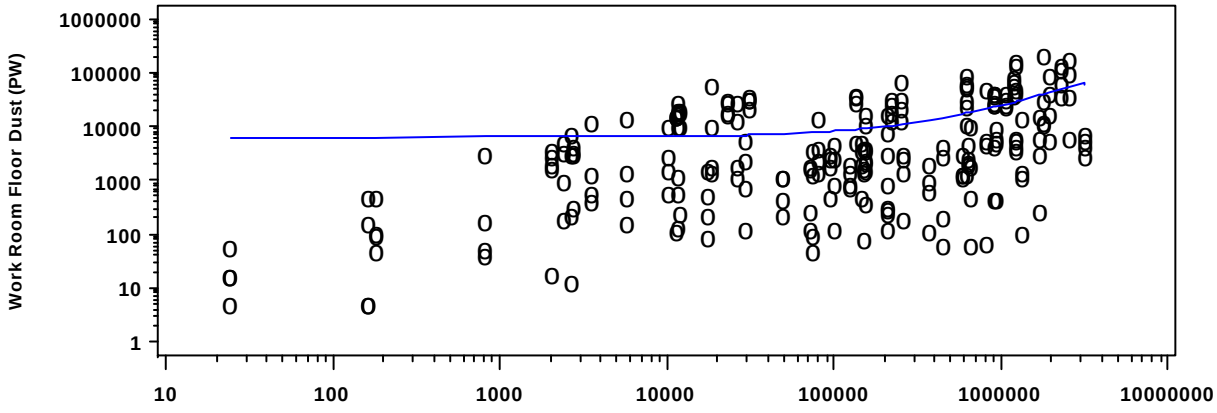
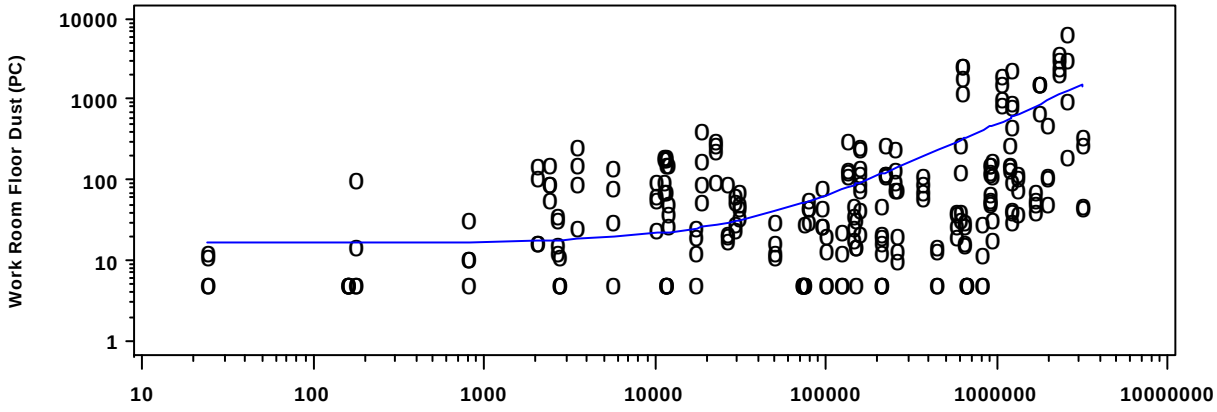


Figure C3.5c. Scatter Plots of Observation Room Floor Dust Lead Loading (μg/ft^2) by Stage and Disturbed Area (ft^2)





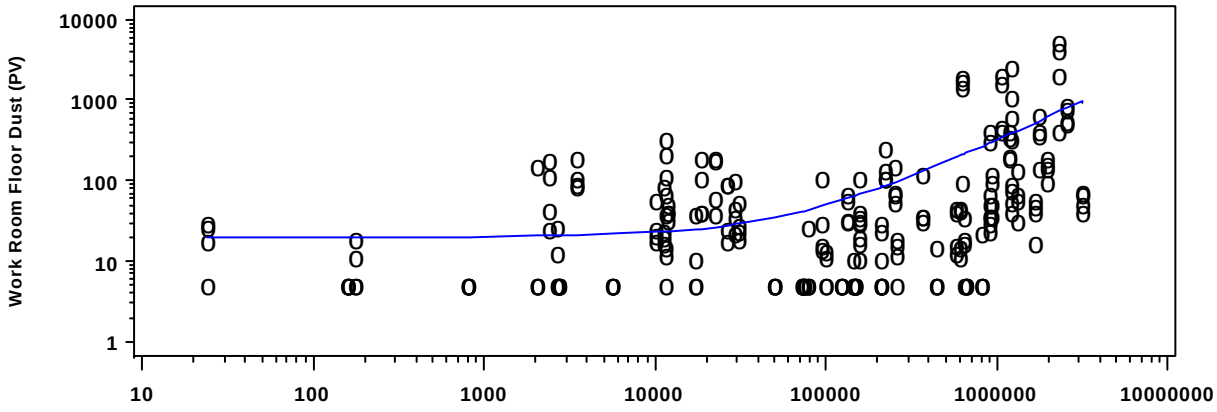
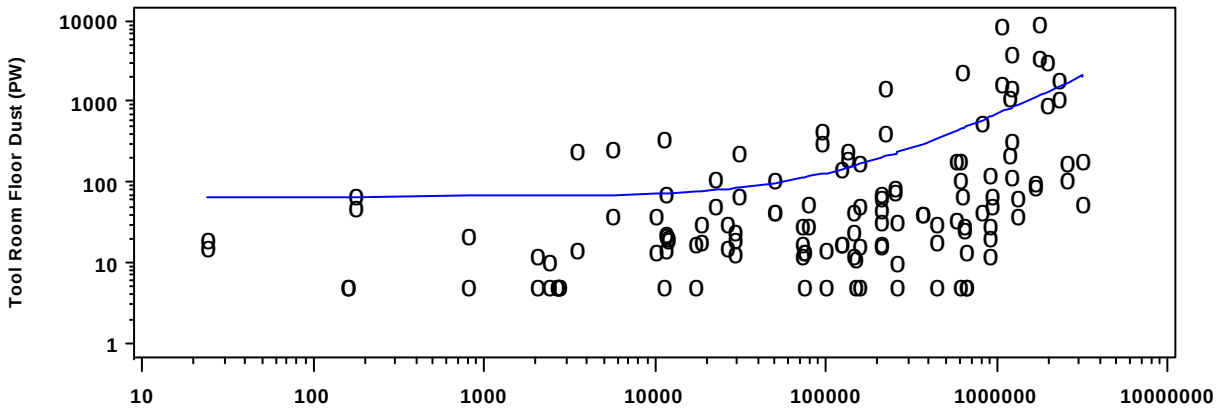
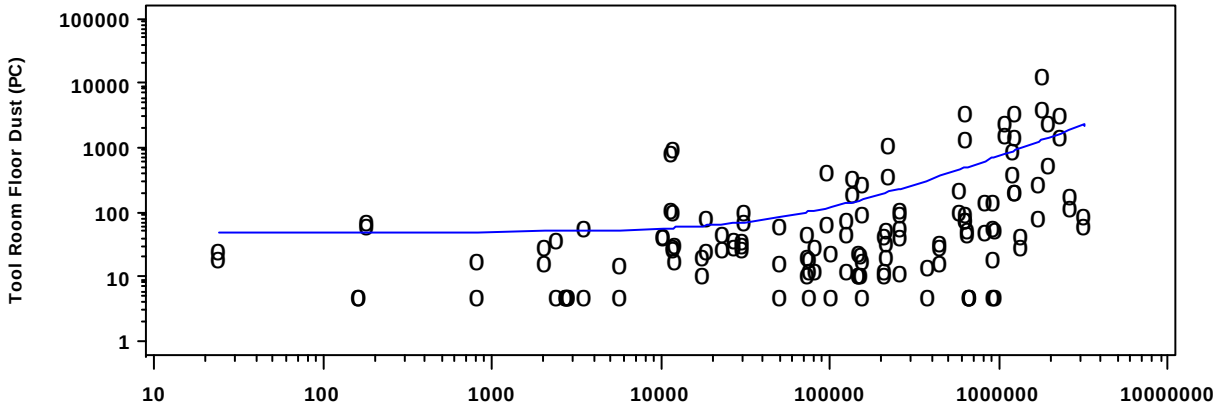


Figure C3.6a. Scatter Plots of Work Room Floor Dust Lead Loading (µg/ft^2) by Stage and Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room (µg/ft^2)





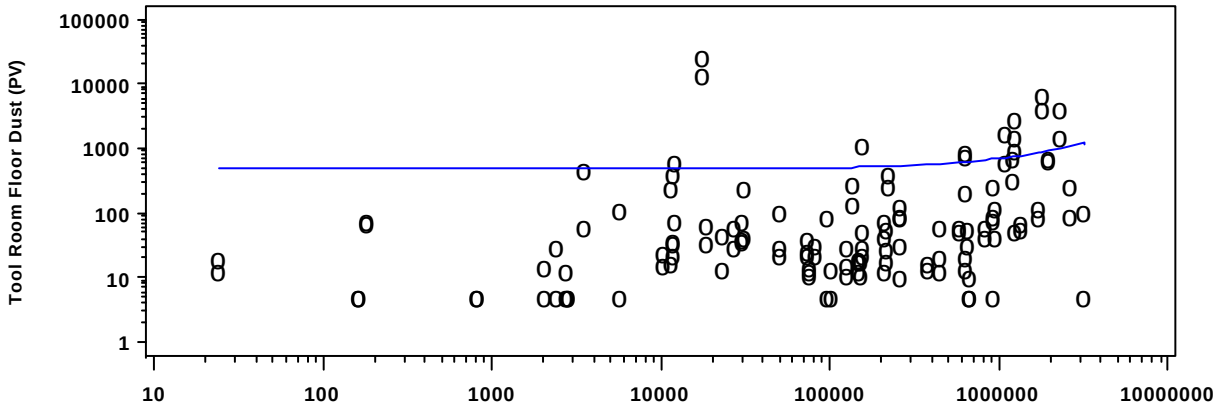


Figure C3.6b. Scatter Plots of Tool Room Floor Dust Lead Loading (µg/ft^2) by Stage and Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room (µg/ft^2)

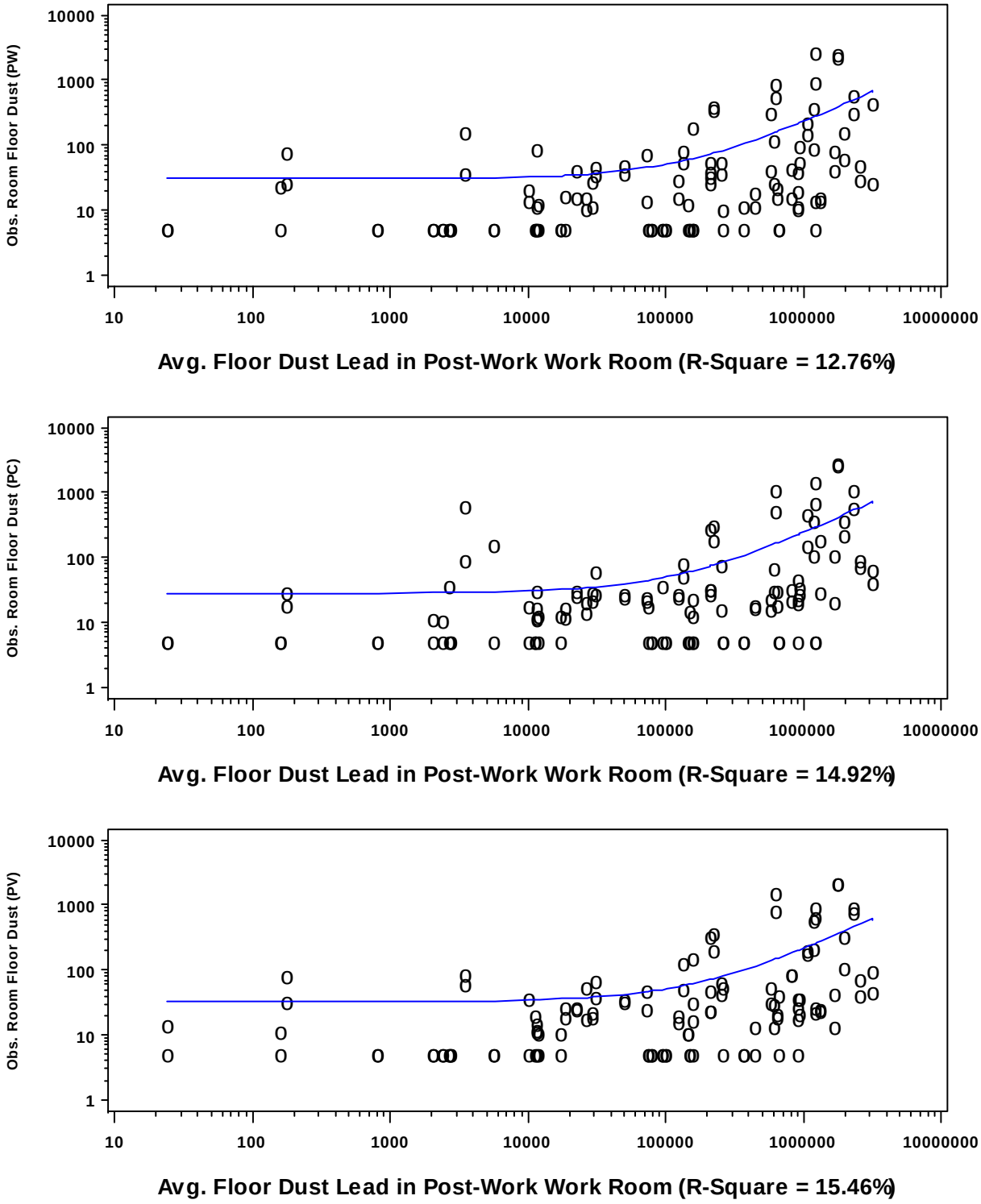


Figure C3.6c. Scatter Plots of Observation Room Floor Dust Lead Loading (µg/ft^2) by Stage and Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room (µg/ft^2)

APPENDIX D

DETAILED DESCRIPTIVE ANALYSES OF INTERIOR WINDOW SILL DUST LEAD LOADINGS

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D1. Distribution Check for Sill Dust Lead Loadings

Distribution of Non-Detectable Sill Lead Measurements

Measurements recorded at or below the detection limit were set to half that limit for this analysis. Table D1.1 summarizes the frequency for these measurements. As with the floor dust measurements in Section C1, the percentage of Work Room samples under the detection limit increases with each successive sampling stage. This makes sense as the sill surfaces become cleaner with each stage. The opposite generally hold true for the Tool and Observation Rooms, which is logical given the lack of cleaning in those rooms.

Table D1.1. Summary of Sill Dust Lead Loading Measurements below Detection Limit Measurements by Room and Stage

	# (%) of Samples by Room Type		
Stage	**Work**	**Tool**	**Observation**
Post-Work	6 (10.0%)	25 (41.7%)	35 (58.3%)
Post-Cleaning	24 (40.0%)	22 (36.7%)	43 (71.7%)
Post-Verification	34 (56.7%)	28 (46.7%)	43 (71.7%)

Normality of the Sill Lead Measurement Distribution

Prior to any analysis of the lead dust Loadings, the underlying distribution of the response data was examined for normality. Note that a Wilkes-Shapiro p-value < 0.001 indicates a significant departure from normality. With larger sample sizes, normality tests can indicate statistically significant but unimportant departures from normality. For the data collected for this study, the log-transformation of the data was accepted even when the Wilkes-Shapiro statistics indicated non-normality. With additional time, potential outliers and other influential points could be explored to determine if other data adjustments would be beneficial to the analyses.

Figures D1.1a and D1.1b summarize the distribution of the raw and natural log-transformed Sill dust lead measurements from the work room. Note that 64 (36%) of these measurements fell below the measurement detection level.

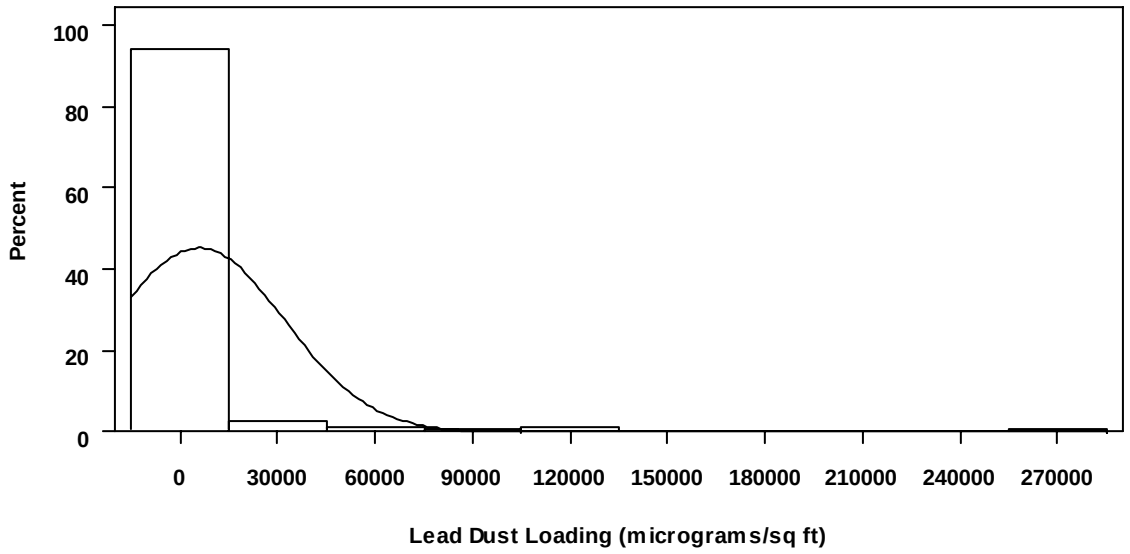


Figure D1.1a. Histogram of Sill Dust Lead Loading Measurements ($\mu g/ft^2$) in the Work Room across All Stages (Wilkes-Shapiro p-value < 0.001)

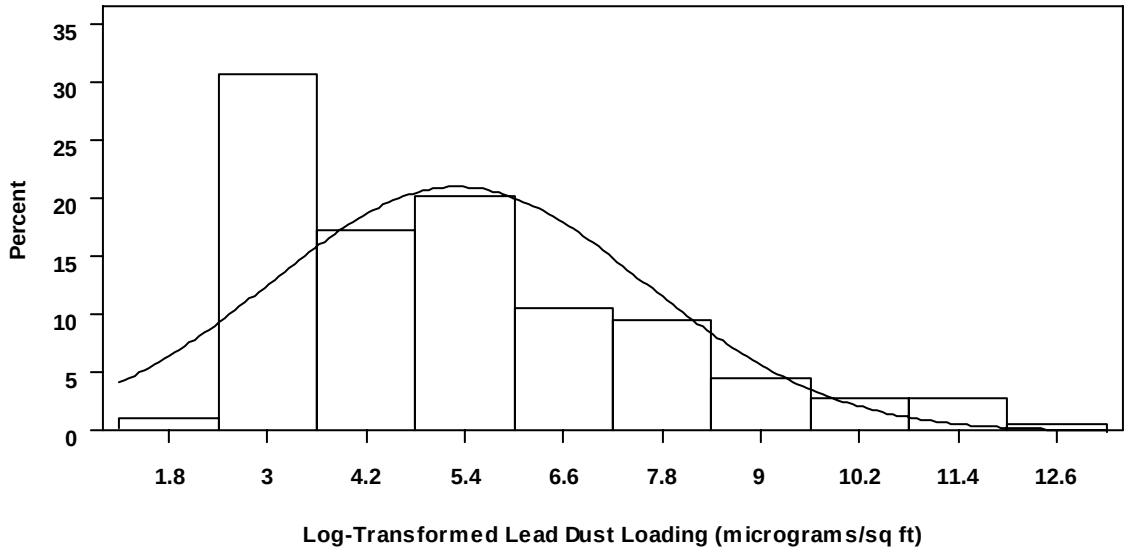


Figure D1.1b. Histogram of Log Transformed Sill Dust Lead Loading Measurements ($\mu g/ft^2$) in the Work Room across All Stages (Wilkes-Shapiro p-value = < 0.001)

Figures D1.2a and D1.2b summarize the distribution of the raw and natural log-transformed Sill dust lead measurements from the tool room. Note that 75 (42%) of these measurements fell below the measurement detection level.

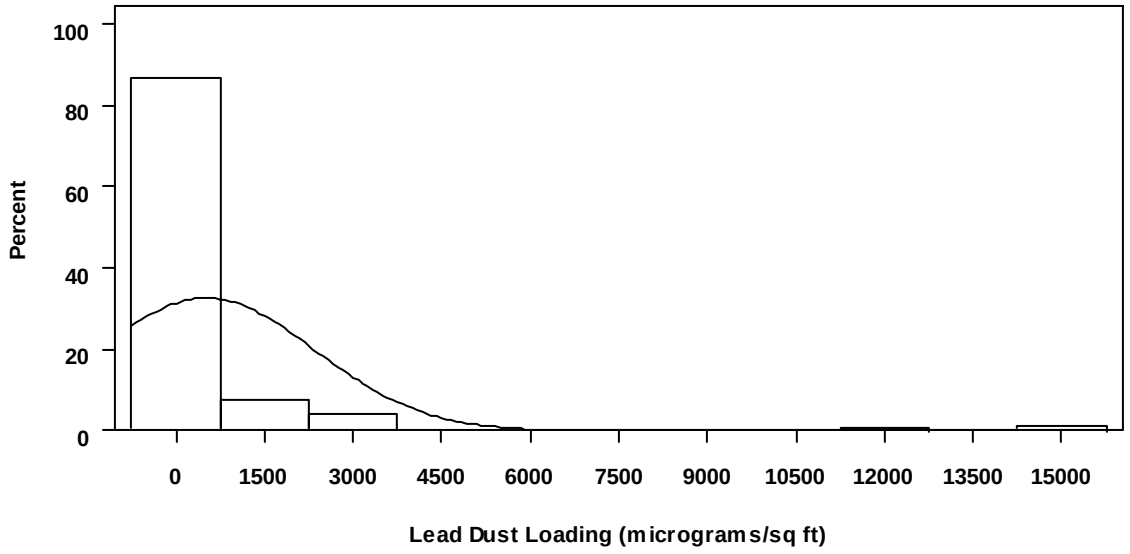


Figure D1.2a. Histogram of Sill Dust Lead Loading Measurements (μg/ft^2) in the Tool Room across All Stages (Wilkes-Shapiro p-value < 0.001)

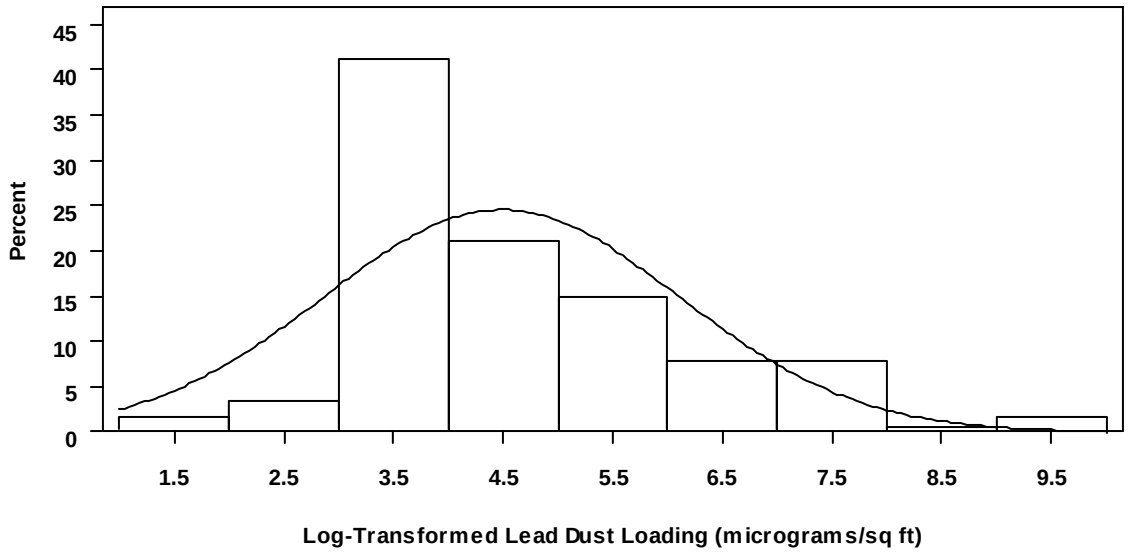


Figure D1.2b. Histogram of Log Transformed Sill Dust Lead Loading Measurements (μg/ft^2) in the Tool Room across All Stages (Wilkes-Shapiro p-value = < 0.001)

Figures D1.3a and D1.3b summarize the distribution of the raw and natural log-transformed Sill dust lead measurements from the observation room. Note that 111 (62%) of these measurements fell below the measurement detection level.

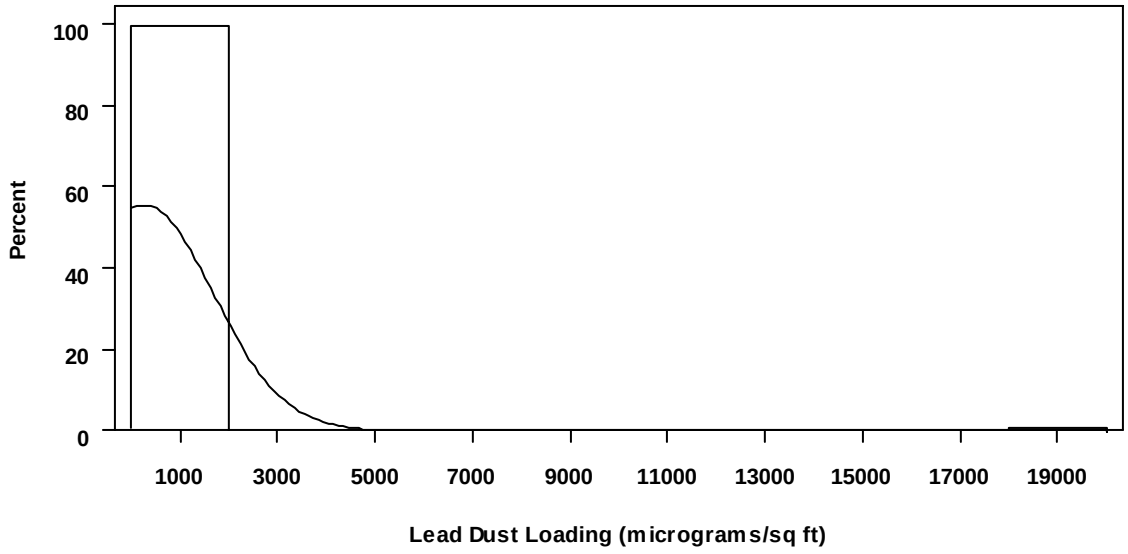


Figure D1.3a. Histogram of Sill Dust Lead Loading Measurements (μg/ft^2) in the Observation Room across All Stages (Wilkes-Shapiro p-value < 0.001)

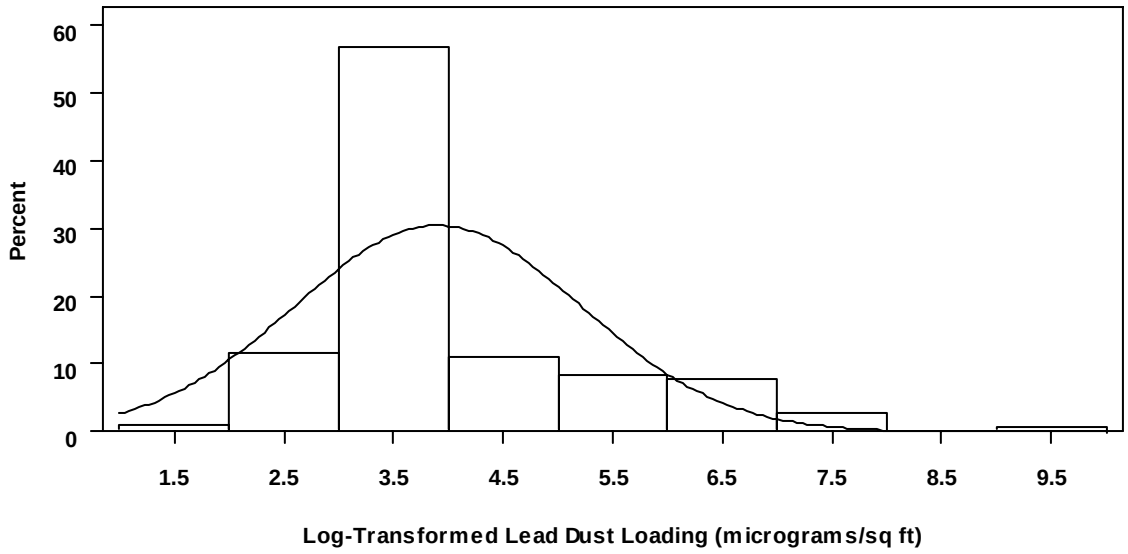


Figure D1.3b. Histogram of Log Transformed Sill Dust Lead Loading Measurements (μg/ft^2) in the Observation Room across All Stages (Wilkes-Shapiro p-value = < 0.001)

D2. Exploratory Summaries of Sill Dust Lead Dust Loadings vs. Select Categorical Characteristics

Box plots of the dust lead Loadings recorded from Sills as well as descriptive statistical summary tables are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. Box plots are a technique for displaying one-dimensional data and their summary characteristics. A box plot displays the median (represented by the center horizontal line), the 25^{th} percentile (represented by the bottom of the box), and the 75^{th} percentile (represented by the top of the box). The vertical lines, or whiskers, are drawn from the box to the most extreme point within 1.5 * interquartile range. (An interquartile range is the distance between the 25^{th} and the 75^{th} percentiles.) Any value more extreme than this is identified individually with stars. The data are plotted using a log-base 10 scale. The summary statistics provided in the tables are sample size, arithmetic average, geometric average, minimum, 25^{th} percentile, median, 75^{th} percentile, maximum, and the percentage of measurements exceeding the federal standards for Sill lead of 250 $\mu g/ft^2$.

The selected characteristics are as follows:

1. Job intensity
2. City
3. Job type
4. Contractor
5. Housing unit
6. Rule Plastic Use
7. Cleaning Type
8. Phase
9. Restricted vs. non-restricted jobs
10. Work room Floor Type
11. Work room Floor condition

Figure D2.1a. Box Plots of Sill Dust Lead Loading Measured in the Work Room by Stage and Job Intensity Level

Table D2.1a. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) Measured in the Work Room by Stage and Job Intensity Level

Stage	Work Room - Sill Dust (Intensity)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-High	20	8299	486	20	84	353	2158	120227	55%
	2-Medium	20	33749	2706	54	158	2301	33293	284914	70%
	3-Low	20	5339	770	31	183	542	4152	57334	70%
Post-Clean	1-High	20	1689	182	20	23	112	1179	18133	40%
	2-Medium	20	366	126	5	26	144	282	2546	35%
	3-Low	20	160	69	20	23	47	208	785	20%
Post-Verification	1-High	20	348	74	20	23	30	161	2670	20%
	2-Medium	19	452	77	5	25	58	116	3378	16%
	3-Low	20	156	58	20	21	25	171	893	20%

Figure D2.1b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and Job Intensity Level

Table D2.1b. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Job Intensity Level

Stage	Tool Room - Sill Dust (Intensity)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-High	20	472	97	20	22	37	330	3290	25%
	2-Medium	20	947	129	19	25	123	316	14426	30%
	3-Low	20	191	65	5	22	70	141	2182	10%
Post-Clean	1-High	20	469	123	21	23	81	547	2714	30%
	2-Medium	20	978	122	5	38	89	323	15001	30%
	3-Low	20	101	51	16	21	26	136	504	10%
Post-Verification	1-High	20	438	91	21	23	25	481	2449	30%
	2-Medium	20	818	110	5	35	75	244	11894	25%
	3-Low	20	230	55	16	21	25	132	2859	15%

Figure D2.1c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and Job Intensity Level

Table D2.1c. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Job Intensity Level

Stage	Obs. Room - Sill Dust (Intensity)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-High	20	1070	73	20	23	34	112	19074	15%
	2-Medium	20	218	75	19	25	49	158	1367	20%
	3-Low	20	98	41	20	21	26	53	673	10%
Post-Clean	1-High	20	203	63	20	23	26	286	1350	25%
	2-Medium	20	167	48	5	22	26	102	1597	15%
	3-Low	20	55	31	19	20	23	27	453	5%
Post-Verification	1-High	20	171	61	20	23	26	170	1173	15%
	2-Medium	20	170	46	5	22	26	78	1449	15%
	3-Low	20	41	29	20	21	24	27	267	5%

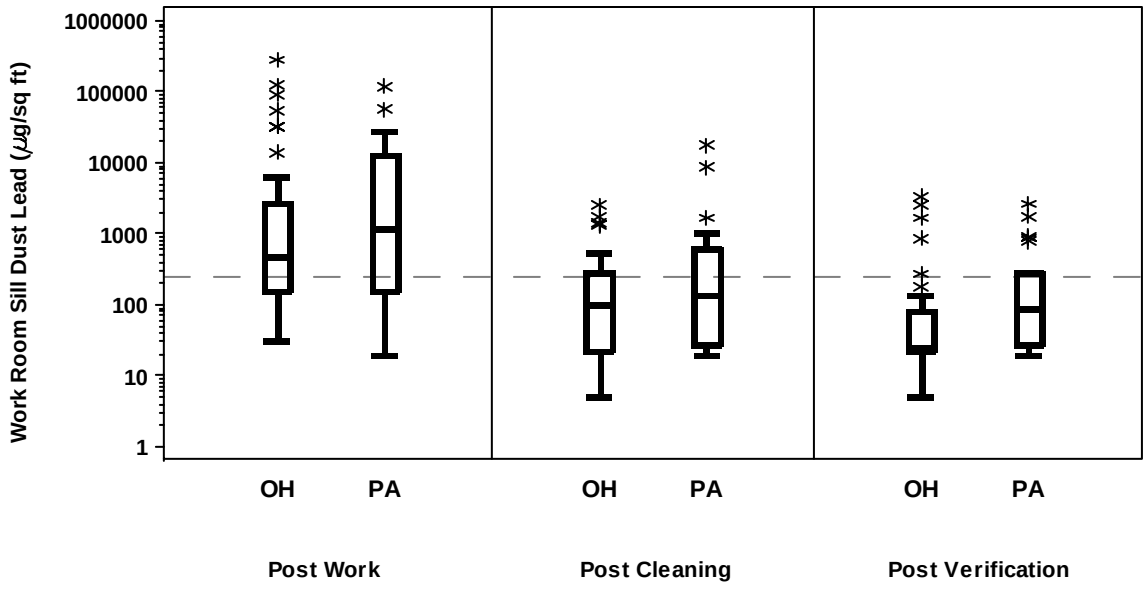


Figure D2.2a. Box Plots of Sill Dust Lead Loading in the Work Room by Stage and City

Table D2.2a. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Work Room by Stage and City

Stage	Work Room - Sill Dust (City)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Columbus, OH	38	17469	876	31	155	462	2724	284914	66%
	Pittsburgh, PA	22	12906	1272	20	160	1139	12624	120227	64%
Post-Clean	Columbus, OH	38	297	91	5	23	98	278	2546	29%
	Pittsburgh, PA	22	1501	178	20	26	141	612	18133	36%
Post-Verification	Columbus, OH	37	278	54	5	23	25	81	3378	14%
	Pittsburgh, PA	22	381	105	20	26	86	282	2670	27%

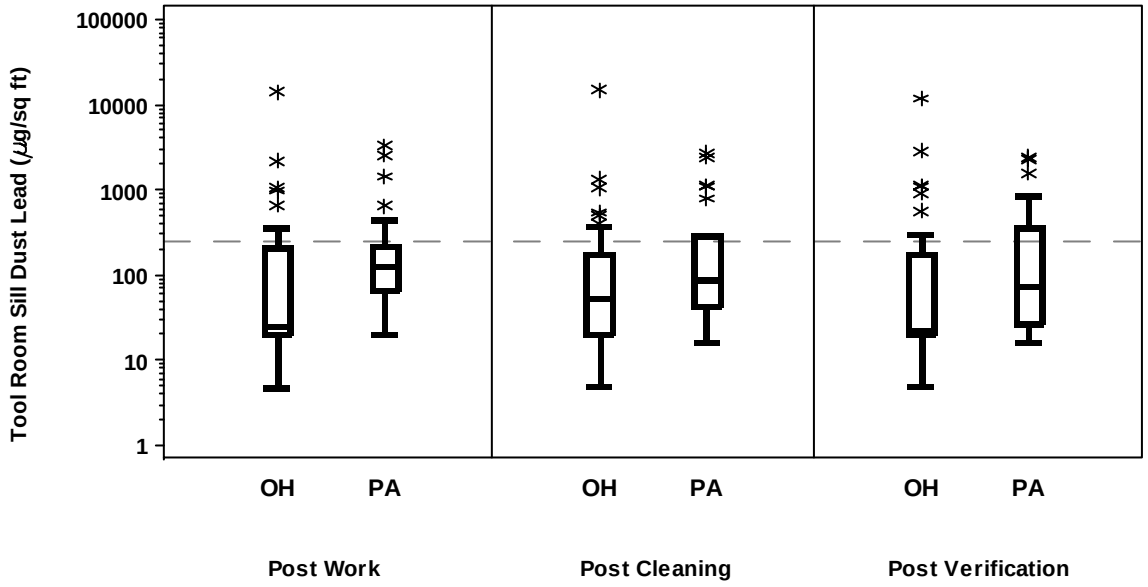


Figure D2.2b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and City

Table D2.2b. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and City

Stage	Tool Room - Sill Dust (City)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Columbus, OH	38	581	71	5	21	25	209	14426	21%
	Pittsburgh, PA	22	460	148	20	67	127	226	3290	23%
Post-Clean	Columbus, OH	38	556	72	5	21	54	175	15001	21%
	Pittsburgh, PA	22	447	137	16	43	89	295	2714	27%
Post-Verification	Columbus, OH	38	542	70	5	21	23	175	11894	21%
	Pittsburgh, PA	22	416	107	16	26	73	359	2449	27%

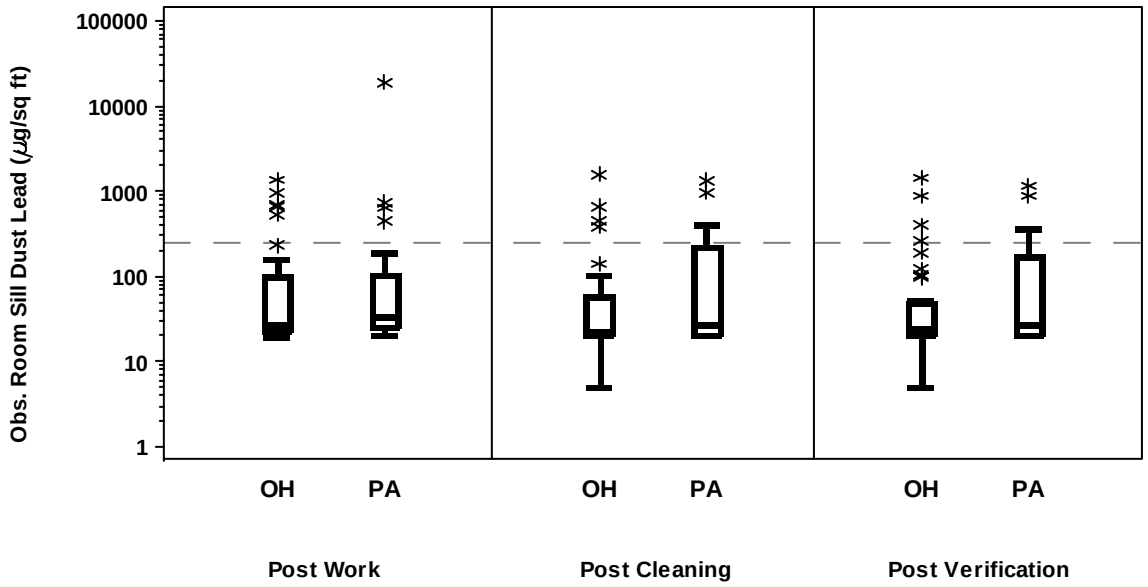


Figure D2.2c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and City

Table D2.2c. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and City

Stage	Obs. Room - Sill Dust (City)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Columbus, OH	38	155	54	19	23	26	100	1367	13%
	Pittsburgh, PA	22	993	76	20	25	34	102	19074	18%
Post-Clean	Columbus, OH	38	113	39	5	21	23	59	1597	11%
	Pittsburgh, PA	22	191	61	20	20	26	227	1350	23%
Post-Verification	Columbus, OH	38	112	39	5	21	24	48	1449	11%
	Pittsburgh, PA	22	154	53	20	20	26	168	1173	14%

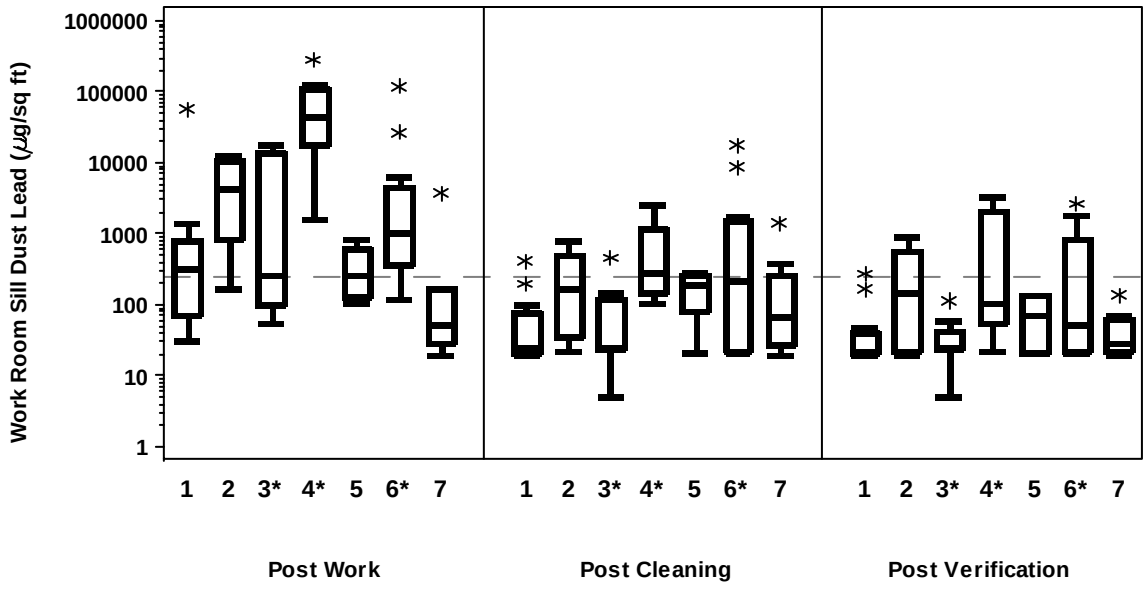


Figure D2.3a. Box Plots of Sill Dust Lead Loading in the Work Room by Stage and Job Type

Table D2.3a. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Job Type

Stage	Work Room - Sill Dust (Job Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I1-Cut Outs	12	5151	348	31	73	319	798	57334	58%
	I2-Replace Windows	8	5621	2535	168	847	4152	10852	13101	88%
	I3-Scrape Surface *	8	5639	740	54	98	256	13435	17477	50%
	I4-Scrape Door *	8	78551	31490	1622	18118	44022	108797	284914	100%
	I5-Heat gun < 1100°	4	367	267	106	131	262	602	835	50%
	I6-Heat gun > 1100° *	12	13472	1486	118	353	1004	4574	120227	83%
	I7-Kitchen	8	540	91	20	30	51	166	3808	13%
Post-Clean	I1-Cut Outs	12	81	44	20	21	26	76	417	8%
	I2-Replace Windows	8	278	137	23	35	163	512	785	38%
	I3-Scrape Surface *	8	101	43	5	24	26	118	467	13%
	I4-Scrape Door *	8	728	378	104	149	278	1160	2546	63%
	I5-Heat gun < 1100°	4	173	119	21	79	192	266	285	25%
	I6-Heat gun > 1100° *	12	2636	289	21	23	212	1525	18133	50%
	I7-Kitchen	8	269	91	20	28	68	263	1414	25%
Post-Verification	I1-Cut Outs	12	58	35	20	21	23	41	277	8%
	I2-Replace Windows	8	302	122	20	23	151	577	893	38%
	I3-Scrape Surface *	8	38	27	5	24	26	42	115	0%
	I4-Scrape Door *	8	1007	242	23	56	106	2167	3378	38%
	I5-Heat gun < 1100°	3	75	58	21	21	70	133	133	0%
	I6-Heat gun > 1100° *	12	547	116	21	23	52	859	2670	33%
	I7-Kitchen	8	48	38	20	22	30	62	138	0%

* Indicates job is restricted

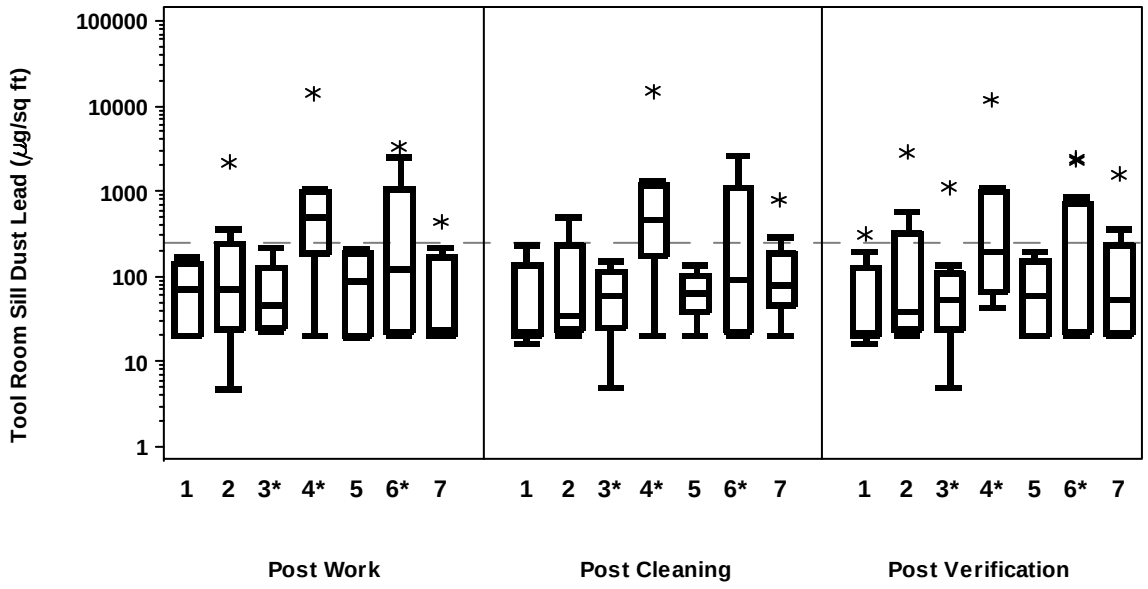


Figure D2.3b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and Job Type

Table D2.3b. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Job Type

Stage	Tool Room - Sill Dust (Job Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I1-Cut Outs	12	80	57	21	21	71	141	166	0%
	I2-Replace Windows	8	358	78	5	25	70	245	2182	25%
	I3-Scrape Surface *	8	81	54	23	25	46	127	226	0%
	I4-Scrape Door *	8	2236	450	21	190	499	1033	14426	75%
	I5-Heat gun < 1100°	4	102	61	19	20	91	185	209	0%
	I6-Heat gun > 1100° *	12	712	145	21	23	120	1053	3290	33%
	I7-Kitchen	8	112	53	20	20	25	174	441	13%
Post-Clean	I1-Cut Outs	12	76	45	16	21	23	136	240	0%
	I2-Replace Windows	8	140	61	21	25	35	238	504	25%
	I3-Scrape Surface *	8	70	47	5	26	60	116	152	0%
	I4-Scrape Door *	8	2341	465	21	175	465	1211	15001	75%
	I5-Heat gun < 1100°	4	70	58	21	39	64	102	133	0%
	I6-Heat gun > 1100° *	12	660	151	21	23	95	1116	2714	33%
	I7-Kitchen	8	182	90	21	46	81	191	798	25%
Post-Verification	I1-Cut Outs	12	79	42	16	21	22	132	312	8%
	I2-Replace Windows	8	456	82	21	25	40	321	2859	25%
	I3-Scrape Surface *	8	189	56	5	25	53	107	1134	13%
	I4-Scrape Door *	8	1814	307	44	69	197	1022	11894	50%
	I5-Heat gun < 1100°	4	85	54	21	21	60	150	201	0%
	I6-Heat gun > 1100° *	12	543	100	21	23	23	726	2449	33%
	I7-Kitchen	8	280	78	21	22	53	238	1594	25%

* Indicates job is restricted

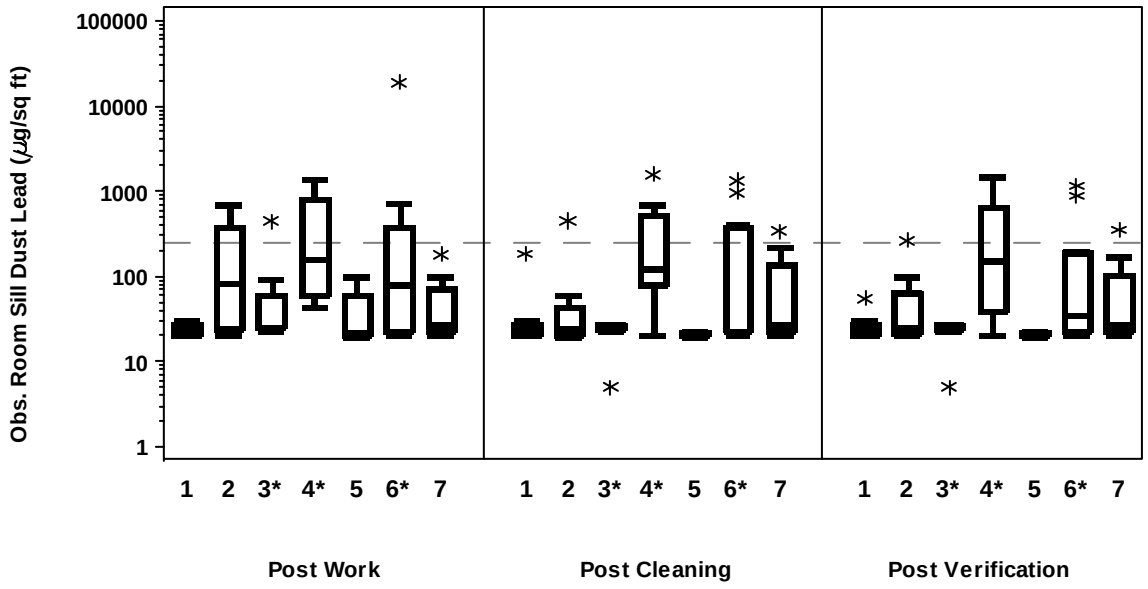


Figure D2.3c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and Job Type

Table D2.3c. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Job Type

Stage	Obs. Room - Sill Dust (Job Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I1-Cut Outs	12	24	23	20	21	23	26	29	0%
	I2-Replace Windows	8	210	96	20	25	84	386	673	25%
	I3-Scrape Surface *	8	87	42	23	25	26	61	453	13%
	I4-Scrape Door *	8	438	208	44	59	158	831	1367	38%
	I5-Heat gun < 1100°	4	41	31	19	20	22	62	100	0%
	I6-Heat gun > 1100° *	12	1746	111	21	23	80	382	19074	25%
	I7-Kitchen	8	55	39	20	23	26	70	184	0%
Post-Clean	I1-Cut Outs	12	37	28	20	21	23	27	185	0%
	I2-Replace Windows	8	81	37	19	20	25	44	453	13%
	I3-Scrape Surface *	8	23	21	5	24	26	26	26	0%
	I4-Scrape Door *	8	385	172	21	80	123	530	1597	38%
	I5-Heat gun < 1100°	4	21	21	19	20	21	22	23	0%
	I6-Heat gun > 1100° *	12	277	77	21	23	23	376	1350	33%
	I7-Kitchen	8	92	47	20	23	26	134	345	13%
Post-Verification	I1-Cut Outs	12	26	25	20	21	23	27	56	0%
	I2-Replace Windows	8	63	38	20	21	25	63	267	13%
	I3-Scrape Surface *	8	23	21	5	24	26	26	26	0%
	I4-Scrape Door *	8	392	152	21	39	148	646	1449	38%
	I5-Heat gun < 1100°	4	21	21	19	20	21	22	23	0%
	I6-Heat gun > 1100° *	12	228	73	21	23	35	186	1173	17%
	I7-Kitchen	8	85	45	20	23	26	105	354	13%

* Indicates job is restricted

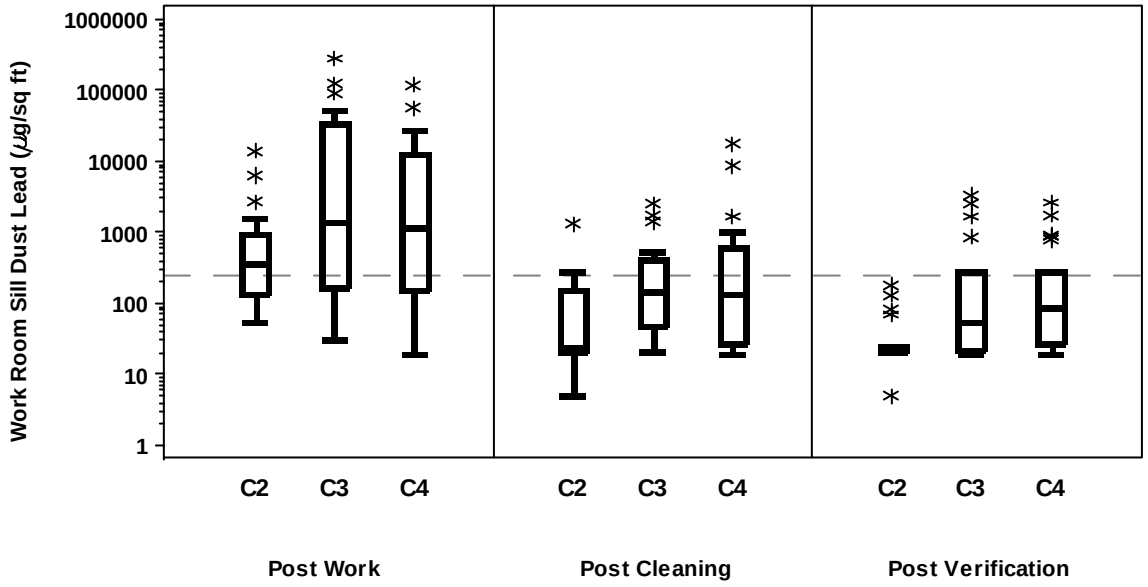


Figure D2.4a. Box Plots of Sill Dust Lead Loading in the Work Room by Stage and Contractor

Table D2.4a. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Contractor

Stage	Work Room - Sill Dust (Contractor)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C2	20	1525	432	54	136	366	975	14247	65%
	C3	18	35185	1922	31	168	1414	33329	284914	67%
	C4	22	12906	1272	20	160	1139	12624	120227	64%
Post-Clean	C2	20	142	50	5	21	24	154	1352	15%
	C3	18	469	180	21	50	149	417	2546	44%
	C4	22	1501	178	20	26	141	612	18133	36%
Post-Verification	C2	19	41	29	5	21	23	25	183	0%
	C3	18	527	105	20	23	56	277	3378	28%
	C4	22	381	105	20	26	86	282	2670	27%

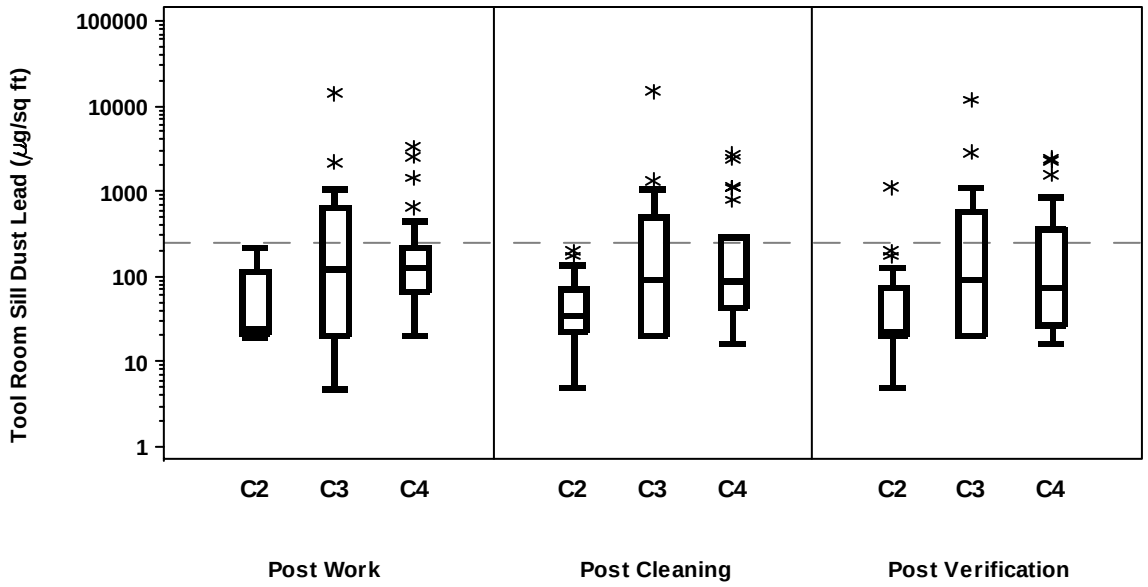


Figure D2.4b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and Contractor

Table D2.4b. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Contractor

Stage	Tool Room - Sill Dust (Contractor)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C2	20	68	42	19	22	24	118	220	0%
	C3	18	1152	128	5	21	122	668	14426	44%
	C4	22	460	148	20	67	127	226	3290	23%
Post-Clean	C2	20	60	41	5	23	35	70	198	0%
	C3	18	1108	137	21	21	92	504	15001	44%
	C4	22	447	137	16	43	89	295	2714	27%
Post-Verification	C2	20	104	38	5	21	23	75	1134	5%
	C3	18	1028	140	21	21	91	571	11894	39%
	C4	22	416	107	16	26	73	359	2449	27%

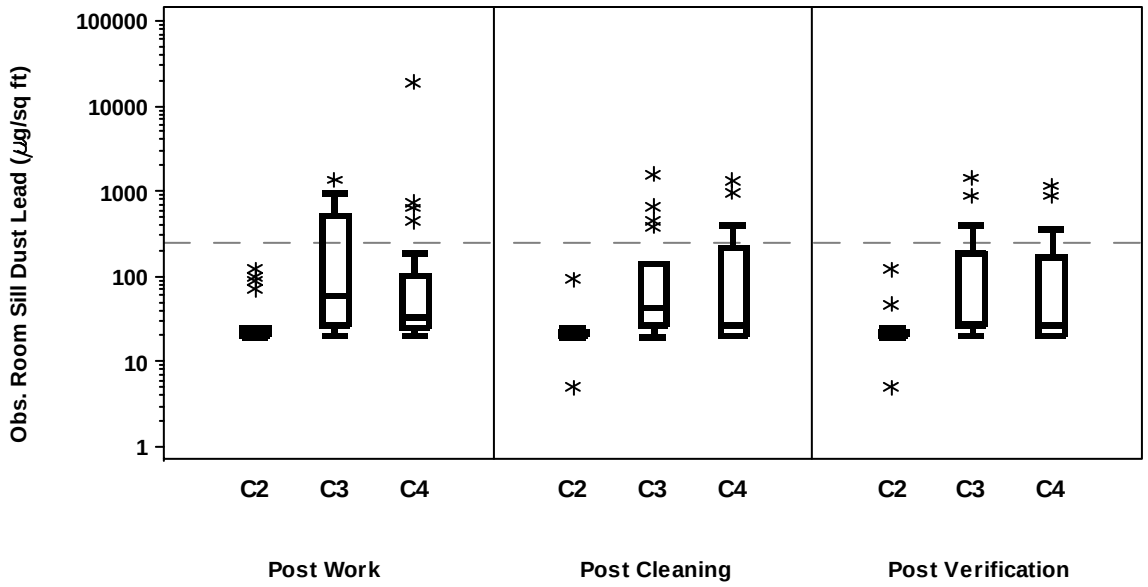


Figure D2.4c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and Contractor

Table D2.4c. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Contractor

Stage	Obs. Room - Sill Dust (Contractor)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C2	20	37	30	19	21	23	25	123	0%
	C3	18	285	104	21	26	59	540	1367	28%
	C4	22	993	76	20	25	34	102	19074	18%
Post-Clean	C2	20	25	22	5	21	23	23	93	0%
	C3	18	211	72	19	26	44	142	1597	22%
	C4	22	191	61	20	20	26	227	1350	23%
Post-Verification	C2	20	28	23	5	21	23	23	123	0%
	C3	18	206	69	21	26	29	192	1449	22%
	C4	22	154	53	20	20	26	168	1173	14%

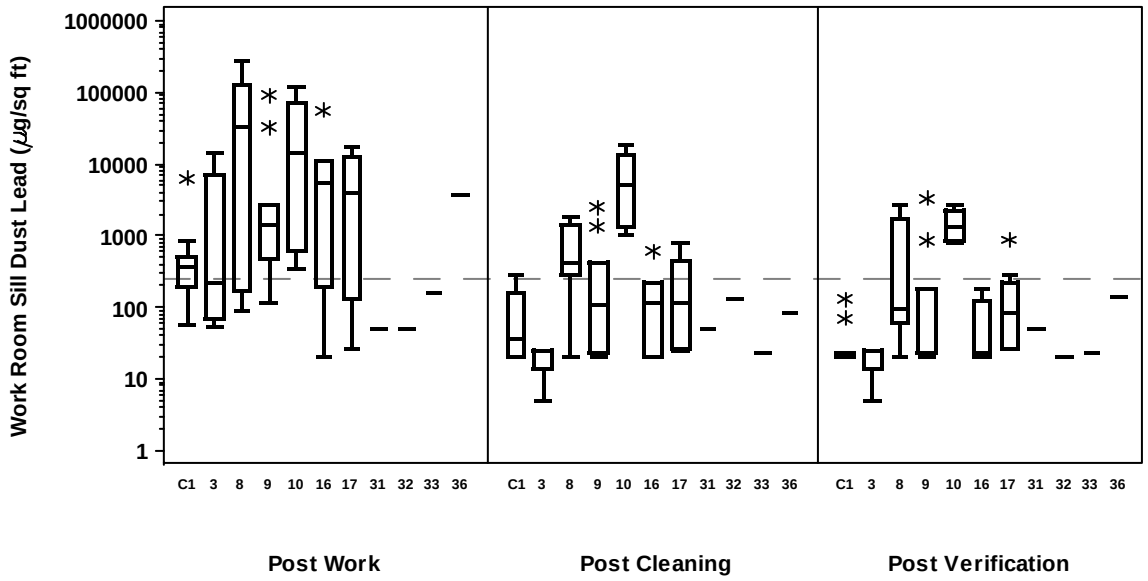


Figure D2.5a. Box Plots of Sill Dust Lead Loading in the Work Room by Stage and Housing Unit

Table D2.5a. Descriptive Summary of Sill Dust Lead Loading (μg/ft^2) in the Work Room by Stage and Housing Unit

Stage	Work Room - Sill Dust (Housing Unit)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C01	12	850	354	57	194	366	516	6424	67%
	H03	4	3685	390	54	70	219	7300	14247	50%
	H08	7	71276	7180	89	172	33257	124783	284914	71%
	H09	10	13524	1765	118	488	1399	2724	92810	80%
	H10	4	37180	5634	345	619	14074	73741	120227	100%
	H16	6	13273	1472	20	197	5575	10937	57334	67%
	H17	8	6437	1368	26	135	3999	12863	17477	63%
	H31	1	50	50	50	50	50	50	50	0%
	H32	1	51	51	51	51	51	51	51	0%
	H33	1	160	160	160	160	160	160	160	0%
	H35	5	943	191	31	33	50	1622	2980	40%
	H36	1	3808	3808	3808	3808	3808	3808	3808	100%
Post-Clean	C01	12	93	55	21	21	36	154	285	8%
	H03	4	19	16	5	14	24	25	25	0%
	H08	7	675	367	21	278	417	1414	1799	86%
	H09	10	489	134	21	23	106	412	2546	40%
	H10	4	7419	4067	1005	1351	5268	13486	18133	100%
	H16	6	182	81	20	20	112	218	612	17%
	H17	8	245	116	25	26	118	432	785	38%
	H31	1	50	50	50	50	50	50	50	0%
	H32	1	130	130	130	130	130	130	130	0%
	H33	1	23	23	23	23	23	23	23	0%
	H35	5	96	82	33	50	101	127	170	0%
	H36	1	86	86	86	86	86	86	86	0%
Post-Verification	C01	11	36	29	21	21	23	23	133	0%
	H03	4	19	16	5	14	24	25	25	0%
	H08	7	695	196	21	62	97	1708	2625	43%
	H09	10	465	74	20	23	23	183	3378	20%
	H10	4	1543	1367	790	859	1356	2227	2670	100%
	H16	6	65	41	20	20	23	126	176	0%
	H17	8	199	92	26	26	86	224	893	25%
	H31	1	50	50	50	50	50	50	50	0%
	H32	1	21	21	21	21	21	21	21	0%
	H33	1	23	23	23	23	23	23	23	0%
	H35	5	56	50	31	33	50	50	116	0%
	H36	1	138	138	138	138	138	138	138	0%

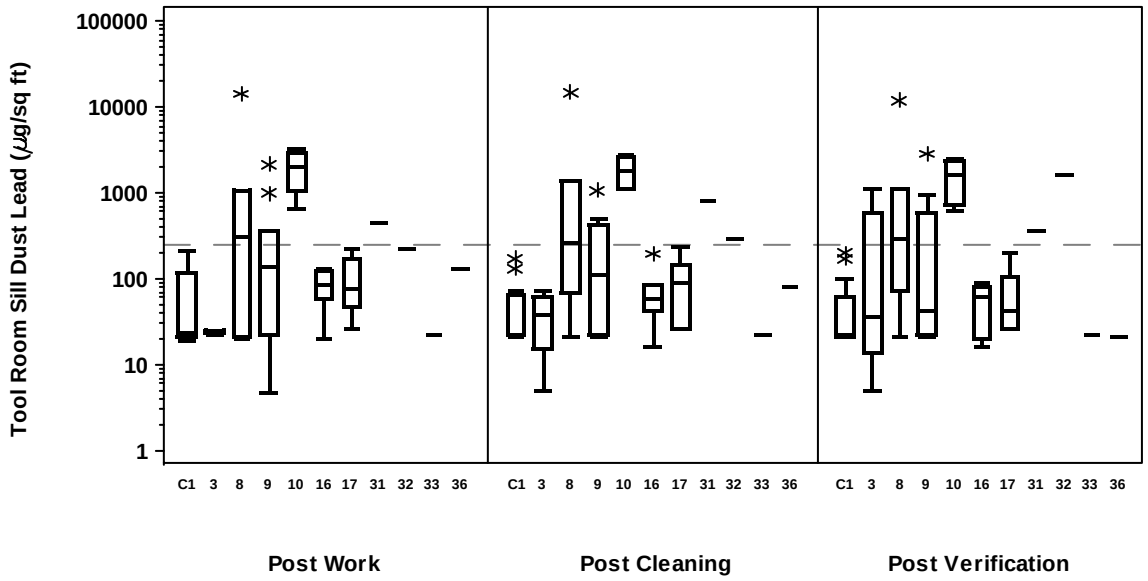


Figure D2.5b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and Housing Unit

Table D2.5b. Descriptive Summary of Sill Dust Lead Loading (μg/ft^2) in the Tool Room by Stage and Housing Unit

Stage	Tool Room - Sill Dust (Housing Unit)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C01	12	67	43	19	21	23	118	209	0%
	H03	4	24	24	23	24	25	25	25	0%
	H08	7	2333	270	20	21	301	1072	14426	57%
	H09	10	410	103	5	23	135	364	2182	30%
	H10	4	1995	1688	661	1053	2014	2937	3290	100%
	H16	6	85	72	20	59	87	126	129	0%
	H17	8	104	80	26	47	77	167	226	0%
	H31	1	441	441	441	441	441	441	441	100%
	H32	1	216	216	216	216	216	216	216	0%
	H33	1	23	23	23	23	23	23	23	0%
	H35	5	150	42	21	21	21	21	668	20%
	H36	1	131	131	131	131	131	131	131	0%
Post-Clean	C01	12	53	39	21	23	23	64	175	0%
	H03	4	38	26	5	15	38	60	70	0%
	H08	7	2454	311	21	69	263	1345	15001	57%
	H09	10	254	111	21	23	110	415	1076	30%
	H10	4	1849	1696	1113	1116	1784	2582	2714	100%
	H16	6	76	58	16	43	57	87	197	0%
	H17	8	98	72	26	26	87	147	240	0%
	H31	1	798	798	798	798	798	798	798	100%
	H32	1	295	295	295	295	295	295	295	100%
	H33	1	23	23	23	23	23	23	23	0%
	H35	5	126	40	21	21	21	21	547	20%
	H36	1	79	79	79	79	79	79	79	0%
Post-Verification	C01	12	56	35	21	21	23	61	201	0%
	H03	4	303	50	5	14	37	592	1134	25%
	H08	7	1974	299	21	74	286	1112	11894	57%
	H09	10	467	96	21	23	43	571	2859	30%
	H10	4	1559	1308	604	726	1592	2392	2449	100%
	H16	6	55	45	16	20	63	80	89	0%
	H17	8	72	53	26	26	41	107	203	0%
	H31	1	359	359	359	359	359	359	359	100%
	H32	1	1594	1594	1594	1594	1594	1594	1594	100%
	H33	1	23	23	23	23	23	23	23	0%
	H35	5	43	34	21	21	21	44	109	0%
	H36	1	21	21	21	21	21	21	21	0%

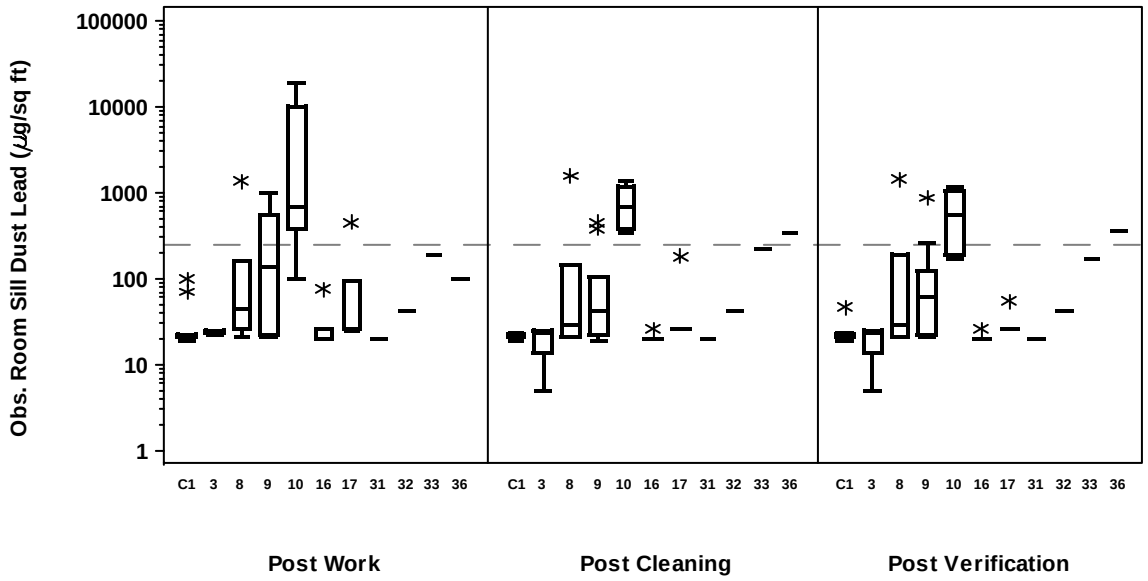


Figure D2.5c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and Housing Unit

Table D2.5c. Descriptive Summary of Sill Dust Lead Loading (μg/ft^2) in the Observation Room by Stage and Housing Unit

Stage	Obs. Room - Sill Dust (Housing Unit)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	C01	12	32	27	19	21	23	23	100	0%
	H03	4	24	24	23	24	25	25	25	0%
	H08	7	243	70	21	26	44	162	1367	14%
	H09	10	285	131	21	23	138	540	971	30%
	H10	4	5139	979	102	371	690	9906	19074	75%
	H16	6	30	26	20	20	20	26	76	0%
	H17	8	96	51	25	26	26	94	453	13%
	H31	1	20	20	20	20	20	20	20	0%
	H32	1	42	42	42	42	42	42	42	0%
	H33	1	184	184	184	184	184	184	184	0%
	H35	5	167	61	26	26	28	65	691	20%
	H36	1	99	99	99	99	99	99	99	0%
Post-Clean	C01	12	22	22	19	21	22	23	24	0%
	H03	4	19	16	5	14	24	25	25	0%
	H08	7	271	64	21	21	29	142	1597	14%
	H09	10	121	59	19	23	42	104	453	20%
	H10	4	769	656	346	376	690	1162	1350	100%
	H16	6	21	21	20	20	20	20	26	0%
	H17	8	46	34	26	26	26	26	185	0%
	H31	1	20	20	20	20	20	20	20	0%
	H32	1	42	42	42	42	42	42	42	0%
	H33	1	227	227	227	227	227	227	227	0%
	H35	5	170	66	26	26	28	100	672	20%
	H36	1	345	345	345	345	345	345	345	100%
Post-Verification	C01	12	24	23	19	21	22	23	48	0%
	H03	4	19	16	5	14	24	25	25	0%
	H08	7	256	65	21	21	29	192	1449	14%
	H09	10	159	67	21	23	62	123	887	20%
	H10	4	608	435	173	186	543	1030	1173	50%
	H16	6	21	21	20	20	20	20	26	0%
	H17	8	30	29	26	26	26	26	56	0%
	H31	1	20	20	20	20	20	20	20	0%
	H32	1	42	42	42	42	42	42	42	0%
	H33	1	168	168	168	168	168	168	168	0%
	H35	5	102	46	26	26	26	28	405	20%
	H36	1	354	354	354	354	354	354	354	100%

Figure D2.6a. Box Plots of Sill Dust Lead Loading in the Work Room by Stage and Rule Plastic Use

Table D2.6a. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Rule Plastic Use

Stage	Work Room - Sill Dust (Plastic)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	30	10961	867	20	168	490	10767	124783	70%
	2-no	30	20630	1163	26	118	744	6613	284914	60%
Post-Clean	1-yes	30	457	90	5	23	93	254	8839	27%
	2-no	30	1020	151	21	25	141	417	18133	37%
Post-Verification	1-yes	30	159	51	5	23	29	115	1708	10%
	2-no	29	479	95	20	23	50	277	3378	28%

Figure D2.6b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and Rule Plastic Use

Table D2.6b. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Rule Plastic Use

Stage	Tool Room - Sill Dust (Plastic)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	30	235	79	20	23	75	191	2583	20%
	2-no	30	839	111	5	23	100	226	14426	23%
Post-Clean	1-yes	30	214	67	5	23	48	152	1345	20%
	2-no	30	819	124	16	26	87	263	15001	27%
Post-Verification	1-yes	30	269	65	5	21	35	99	2859	23%
	2-no	30	722	103	16	23	75	203	11894	23%

Figure D2.6c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and Rule Plastic Use

Table D2.6c. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Rule Plastic Use

Stage	Obs. Room - Sill Dust (Plastic)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	30	709	58	20	23	27	100	19074	7%
	2-no	30	215	64	19	23	26	123	1367	23%
Post-Clean	1-yes	30	76	37	5	21	23	28	453	10%
	2-no	30	207	57	19	23	26	93	1597	20%
Post-Verification	1-yes	30	55	34	5	21	24	28	267	3%
	2-no	30	199	56	19	23	26	100	1449	20%

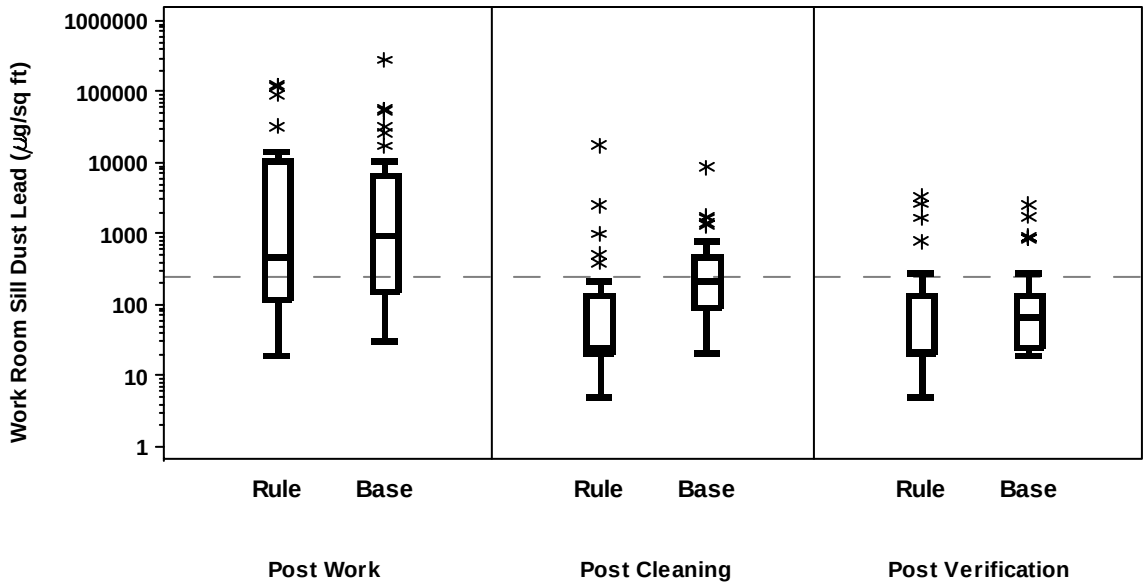


Figure D2.7a. Box Plots of Sill Dust Lead Loading in the Work Room by Stage and Cleaning Type

Table D2.7a. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Cleaning Type

Stage	Work Room - Sill Dust (Cleaning)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-rule	30	14585	959	20	118	462	10937	124783	63%
	2-base	30	17007	1051	31	160	946	6613	284914	67%
Post-Clean	1-rule	30	795	64	5	21	26	138	18133	17%
	2-base	30	681	212	21	94	223	467	8839	47%
Post-Verification	1-rule	29	340	57	5	21	23	138	3378	17%
	2-base	30	294	84	20	25	66	133	2625	20%

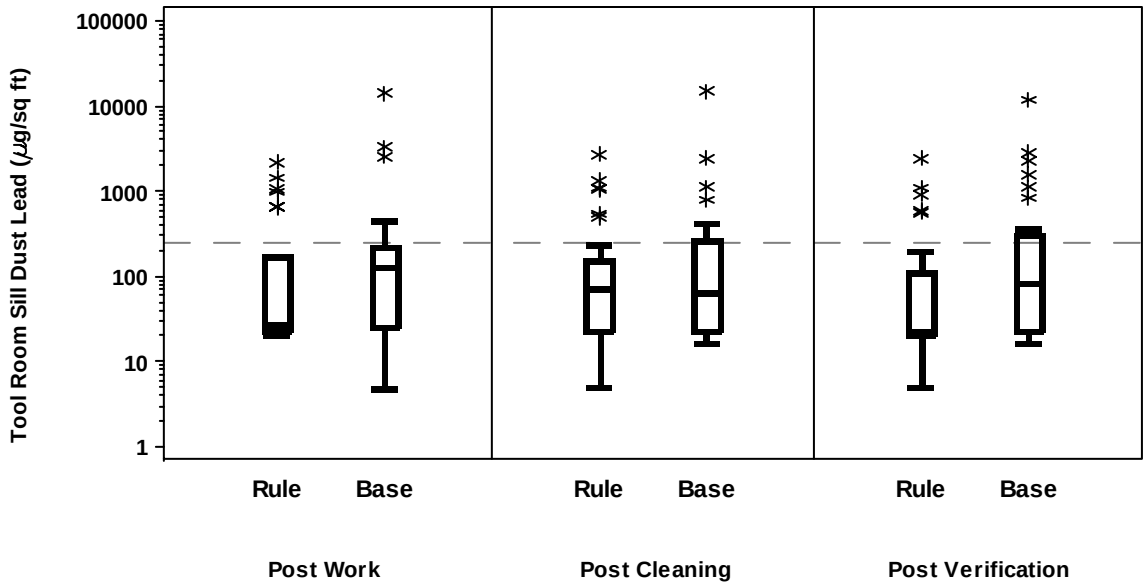


Figure D2.7b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and Cleaning Type

Table D2.7b. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Cleaning Type

Stage	Tool Room - Sill Dust (Cleaning)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-rule	30	278	74	20	23	26	166	2182	20%
	2-base	30	796	117	5	25	127	226	14426	23%
Post-Clean	1-rule	30	292	81	5	23	70	152	2714	20%
	2-base	30	740	103	16	23	65	263	15001	27%
Post-Verification	1-rule	30	225	54	5	21	23	109	2449	17%
	2-base	30	766	125	16	23	83	312	11894	30%

Figure D2.7c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and Cleaning Type

Table D2.7c. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Cleaning Type

Stage	Obs. Room - Sill Dust (Cleaning)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-rule	30	158	61	20	21	26	153	971	17%
	2-base	30	766	61	19	23	27	89	19074	13%
Post-Clean	1-rule	30	140	47	5	21	23	142	1350	17%
	2-base	30	143	44	19	23	26	59	1597	13%
Post-Verification	1-rule	30	136	48	5	21	26	104	1173	13%
	2-base	30	119	39	19	23	26	29	1449	10%

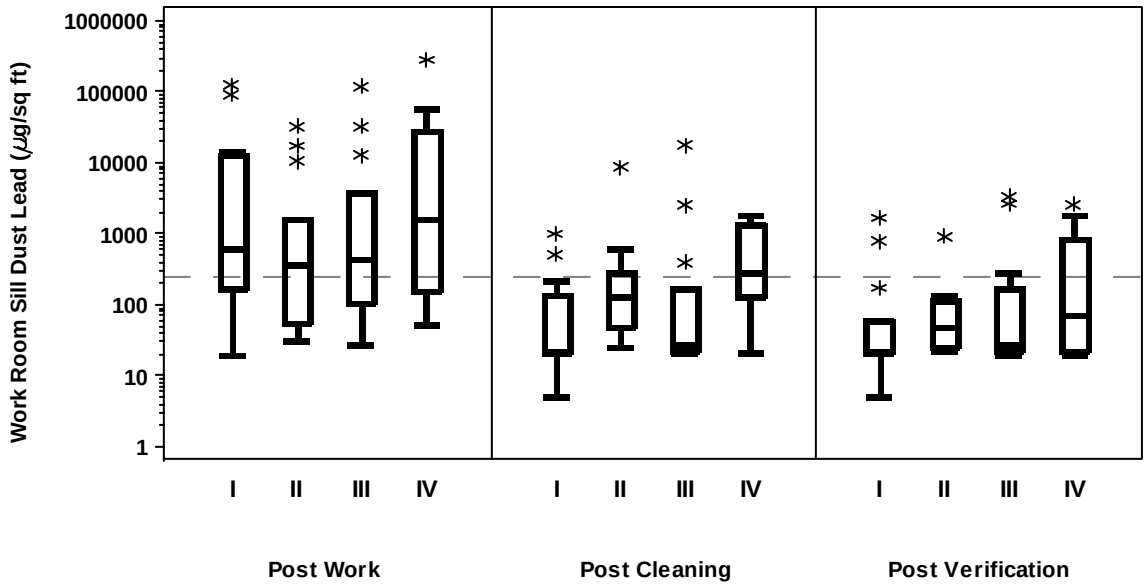


Figure D2.8a. Box Plots of Sill Dust Lead Loading in the Work Room by Stage and Phase

Table D2.8a. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Phase

Stage	Work Room - Sill Dust (Phase)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I-Rule w/ Plastic	15	17404	1281	20	168	597	12624	124783	73%
	II-Base w/ Plastic	15	4519	587	31	57	370	1622	33257	67%
	III-Rule w/o Plastic	15	11766	719	26	106	436	3808	120227	53%
	IV-Base w/o Plastic	15	29495	1883	51	160	1592	27255	284914	67%
Post-Clean	I-Rule w/ Plastic	15	152	53	5	21	23	138	1005	13%
	II-Base w/ Plastic	15	762	154	25	49	127	285	8839	40%
	III-Rule w/o Plastic	15	1439	78	21	23	26	170	18133	20%
	IV-Base w/o Plastic	15	601	293	21	130	278	1352	1799	53%
Post-Verification	I-Rule w/ Plastic	15	199	43	5	21	23	58	1708	13%
	II-Base w/ Plastic	15	120	60	23	25	50	116	927	7%
	III-Rule w/o Plastic	14	490	76	20	23	26	166	3378	21%
	IV-Base w/o Plastic	15	467	118	20	23	74	873	2625	33%

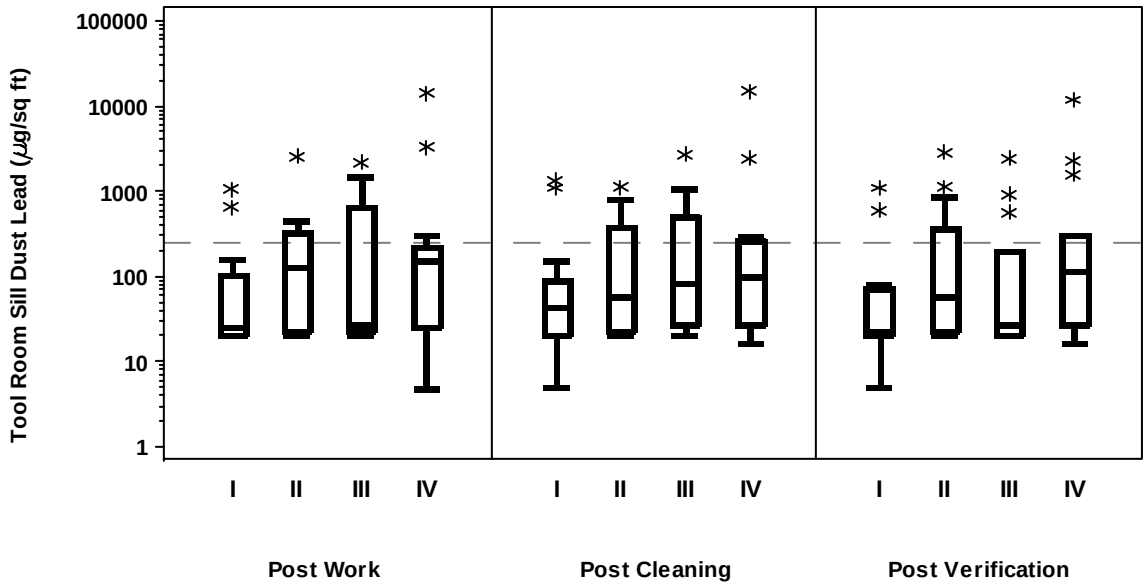


Figure D2.8b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and Phase

Table D2.8b. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Phase

Stage	Tool Room - Sill Dust (Phase)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I-Rule w/ Plastic	15	159	57	20	21	25	103	1072	13%
	II-Base w/ Plastic	15	310	108	21	23	126	331	2583	27%
	III-Rule w/o Plastic	15	396	97	21	23	26	668	2182	27%
	IV-Base w/o Plastic	15	1283	127	5	25	154	226	14426	20%
Post-Clean	I-Rule w/ Plastic	15	206	55	5	21	43	88	1345	13%
	II-Base w/ Plastic	15	222	81	21	23	58	383	1118	27%
	III-Rule w/o Plastic	15	378	119	21	26	83	504	2714	27%
	IV-Base w/o Plastic	15	1259	131	16	26	96	263	15001	27%
Post-Verification	I-Rule w/ Plastic	15	142	41	5	21	23	71	1112	13%
	II-Base w/ Plastic	15	396	104	21	23	56	359	2859	33%
	III-Rule w/o Plastic	15	307	71	21	21	26	203	2449	20%
	IV-Base w/o Plastic	15	1136	150	16	26	117	312	11894	27%

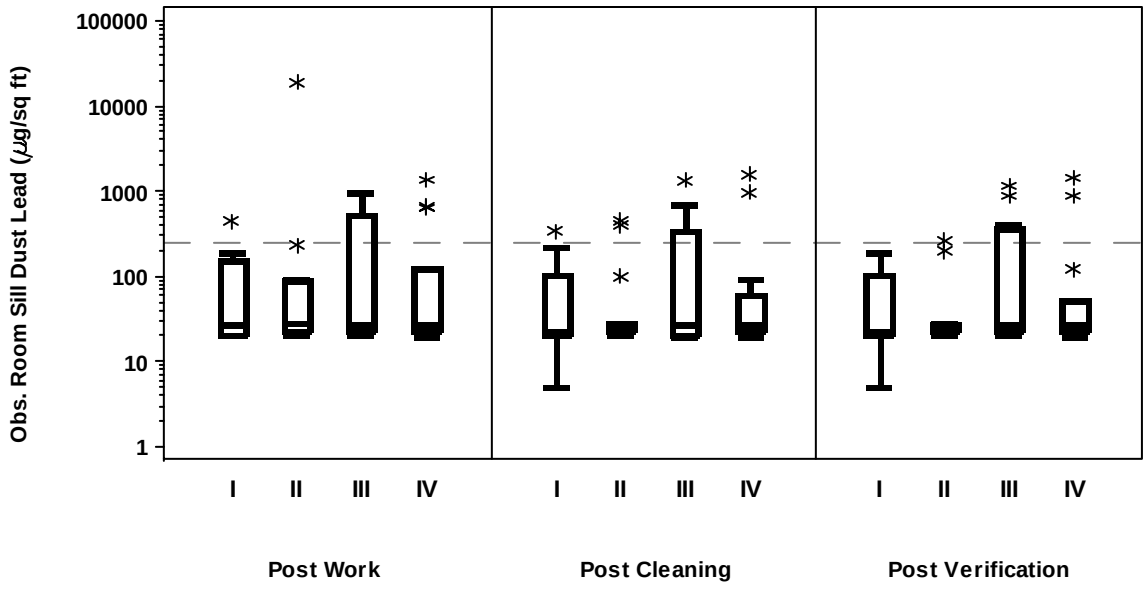


Figure D2.8c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and Phase

Table D2.8c. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Phase

Stage	Obs. Room - Sill Dust (Phase)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	I-Rule w/ Plastic	15	93	53	20	21	26	153	453	7%
	II-Base w/ Plastic	15	1325	64	20	23	28	89	19074	7%
	III-Rule w/o Plastic	15	223	70	21	23	26	540	971	27%
	IV-Base w/o Plastic	15	207	58	19	23	26	123	1367	20%
Post-Clean	I-Rule w/ Plastic	15	70	35	5	20	23	104	346	7%
	II-Base w/ Plastic	15	83	38	20	23	25	28	453	13%
	III-Rule w/o Plastic	15	211	63	19	21	26	345	1350	27%
	IV-Base w/o Plastic	15	203	52	19	23	26	61	1597	13%
Post-Verification	I-Rule w/ Plastic	15	59	35	5	20	23	104	192	0%
	II-Base w/ Plastic	15	52	32	20	23	25	26	267	7%
	III-Rule w/o Plastic	15	212	65	21	23	26	354	1173	27%
	IV-Base w/o Plastic	15	186	49	19	23	26	51	1449	13%

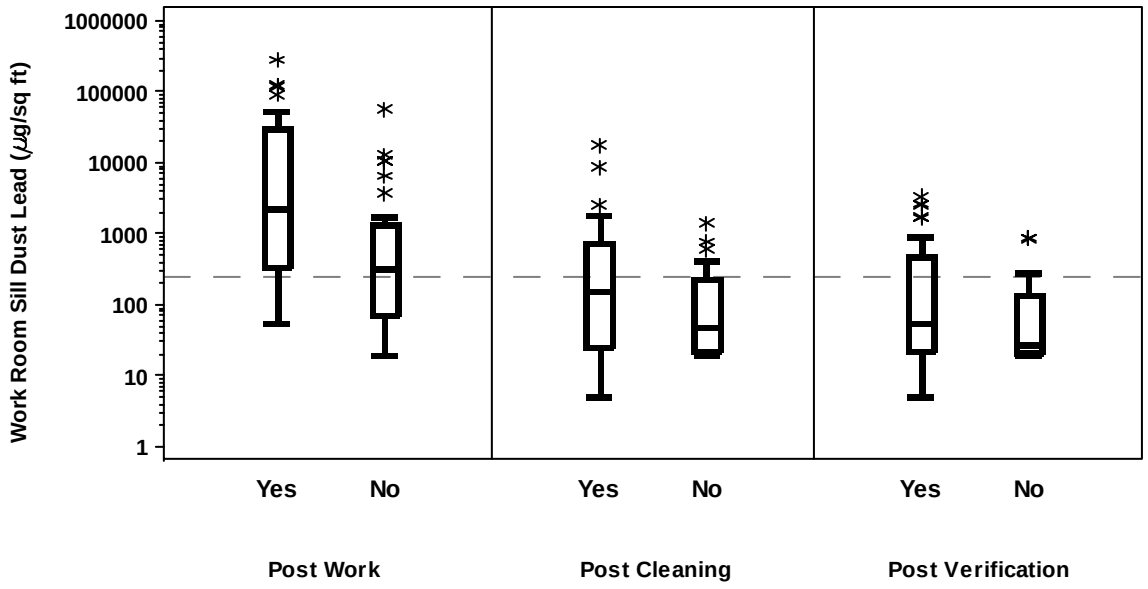


Figure D2.9a. Box Plots of Sill Dust Lead Loading in the Work Room by Stage and Restricted Job

Table D2. 9a. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Restricted Job

Stage	Work Room - Sill Dust (Restricted Job)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	28	29828	2913	54	349	2173	30256	284914	79%
	2-no	32	3518	396	20	73	312	1296	57334	53%
Post-Clean	1-yes	28	1367	181	5	25	161	763	18133	43%
	2-no	32	189	80	20	23	50	232	1414	22%
Post-Verification	1-yes	28	533	95	5	23	54	486	3378	25%
	2-no	31	120	52	20	21	26	133	893	13%

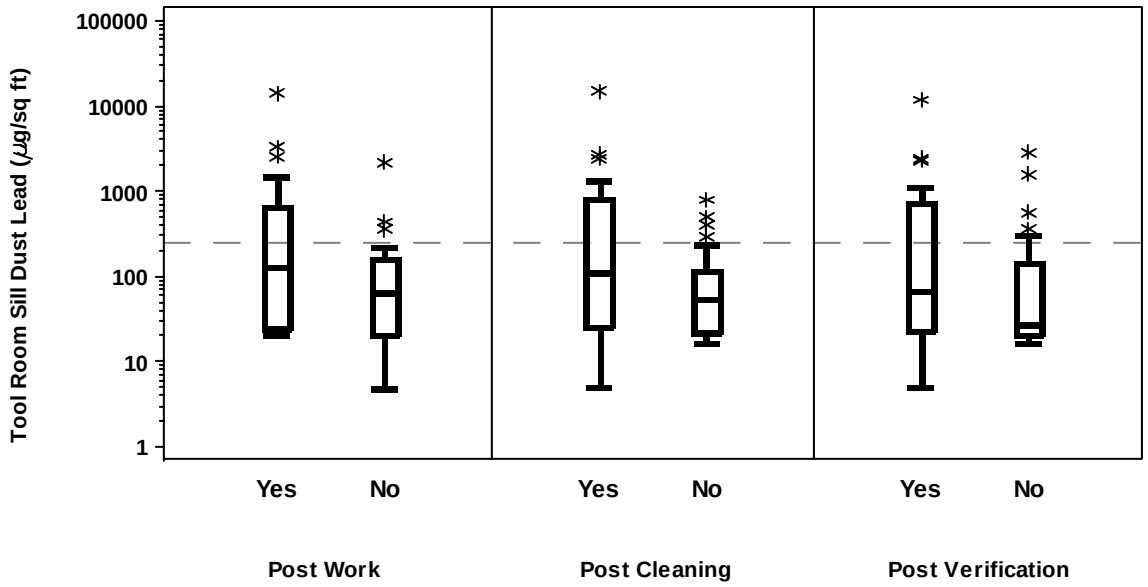


Figure D2.9b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and Restricted Job

Table D2. 9b. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Restricted Job

Stage	Tool Room - Sill Dust (Restricted Job)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	28	967	151	21	24	127	664	14426	36%
	2-no	32	161	61	5	21	64	157	2182	9%
Post-Clean	1-yes	28	972	149	5	26	112	812	15001	36%
	2-no	32	118	59	16	22	55	115	798	13%
Post-Verification	1-yes	28	805	117	5	23	69	726	11894	32%
	2-no	32	224	60	16	21	26	146	2859	16%

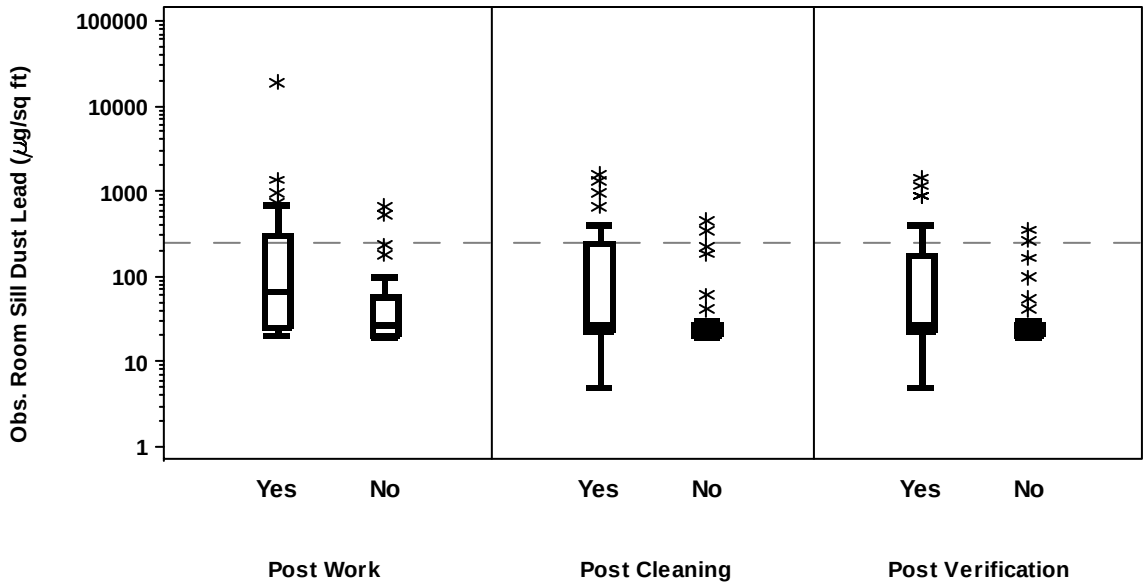


Figure D2.9c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and Restricted Job

Table D2. 9c. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Restricted Job

Stage	Obs. Room - Sill Dust (Restricted Job)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	1-yes	28	898	101	21	25	68	308	19074	25%
	2-no	32	80	39	19	21	26	59	673	6%
Post-Clean	1-yes	28	235	67	5	23	26	244	1597	25%
	2-no	32	60	33	19	20	23	27	453	6%
Post-Verification	1-yes	28	216	63	5	23	26	183	1449	18%
	2-no	32	50	31	19	21	24	27	354	6%

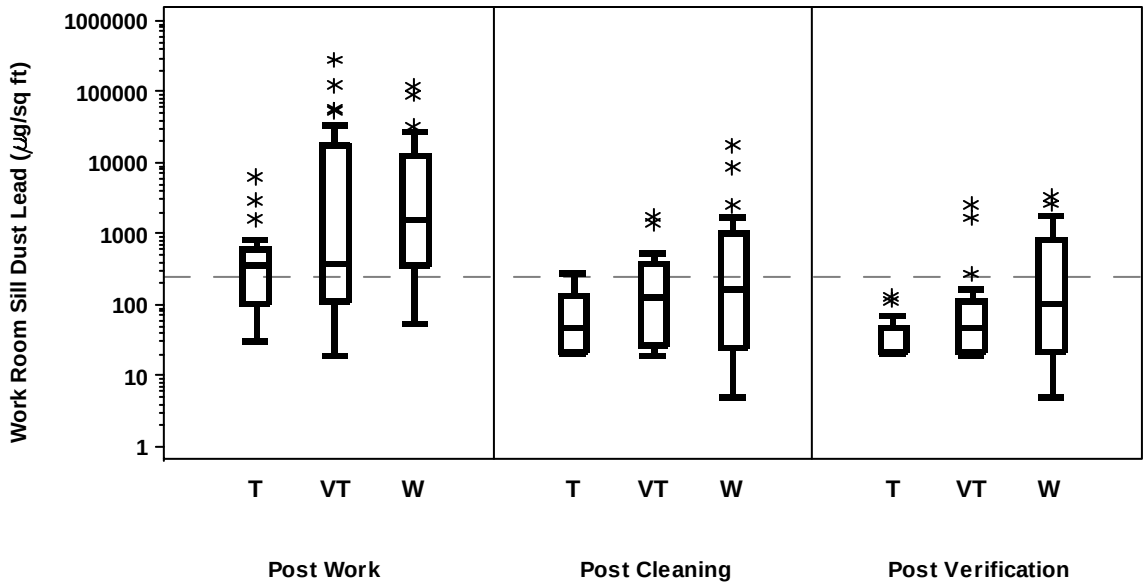


Figure D2.10a. Box Plots of Sill Dust Lead Loading in the Work Room by Stage and Work Room Floor Type

Table D2. 10a. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Work Room Floor Type

Stage	Work Room - Sill Dust (Floor Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Tile	17	878	295	31	106	362	597	6424	59%
	Vinyl Tile	21	28225	1150	20	110	383	17477	284914	52%
	Wood	22	15460	2273	54	353	1642	13101	120227	82%
Post-Clean	Tile	17	94	62	21	23	50	138	285	6%
	Vinyl Tile	21	306	119	20	26	130	397	1799	38%
	Wood	22	1649	188	5	25	163	1005	18133	45%
Post-Verification	Tile	16	43	34	21	22	23	50	133	0%
	Vinyl Tile	21	267	66	20	23	50	115	2625	14%
	Wood	22	562	121	5	23	104	873	3378	36%

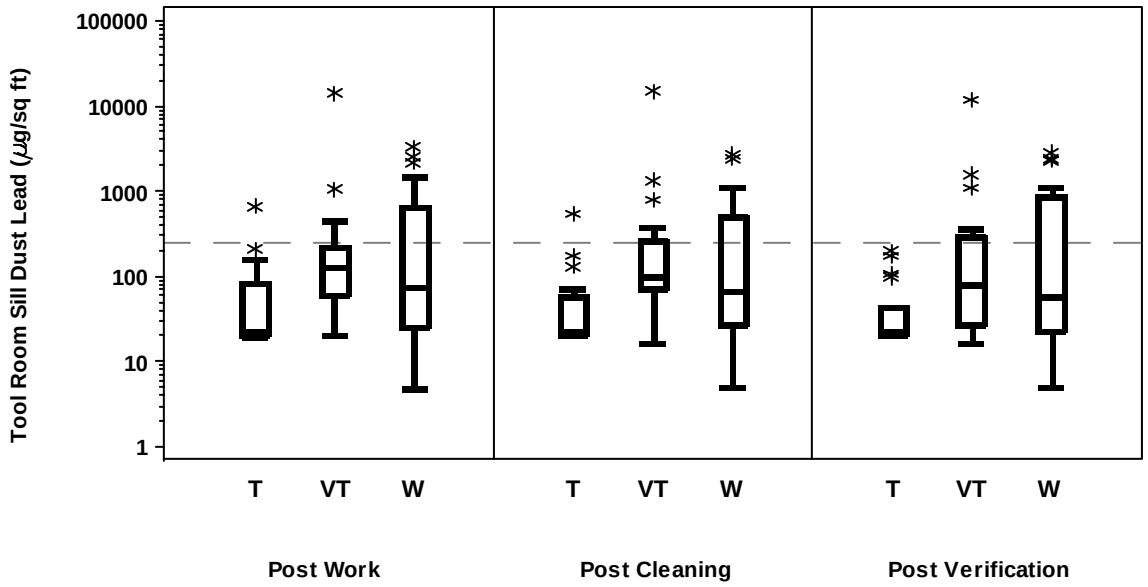


Figure D2.10b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and Work Room Floor Type

Table D2. 10b. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Work Room Floor Type

Stage	Tool Room - Sill Dust (Floor Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Tile	17	91	43	19	21	23	83	668	6%
	Vinyl Tile	21	866	134	20	59	131	226	14426	24%
	Wood	22	567	121	5	25	75	661	3290	32%
Post-Clean	Tile	17	75	39	21	21	23	57	547	6%
	Vinyl Tile	21	927	143	16	69	96	263	15001	29%
	Wood	22	465	115	5	26	66	504	2714	32%
Post-Verification	Tile	17	52	35	21	21	23	44	201	0%
	Vinyl Tile	21	788	112	16	26	80	286	11894	29%
	Wood	22	559	117	5	23	59	849	2859	36%

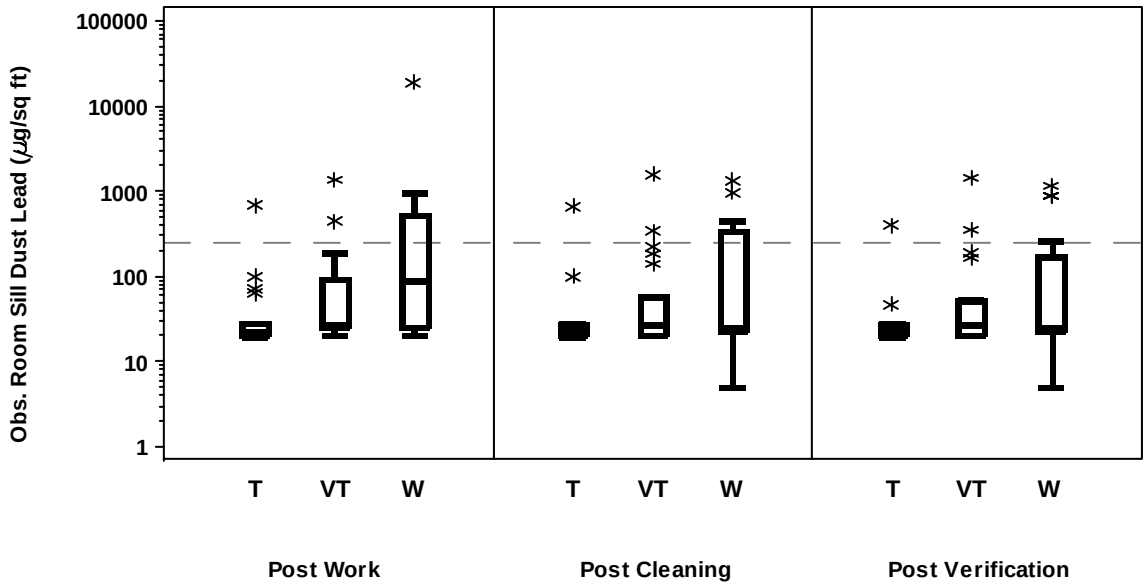


Figure D2.10c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and Work Room Floor Type

Table D2. 10c. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Work Room Floor Type

Stage	Obs. Room - Sill Dust (Floor Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Tile	17	72	34	19	21	23	28	691	6%
	Vinyl Tile	21	133	50	20	25	26	96	1367	10%
	Wood	22	1078	114	20	25	91	540	19074	27%
Post-Clean	Tile	17	65	30	19	21	23	26	672	6%
	Vinyl Tile	21	140	47	20	21	26	59	1597	10%
	Wood	22	202	61	5	23	26	346	1350	27%
Post-Verification	Tile	17	47	28	19	21	23	26	405	6%
	Vinyl Tile	21	126	44	20	21	26	51	1449	10%
	Wood	22	191	60	5	23	26	173	1173	18%

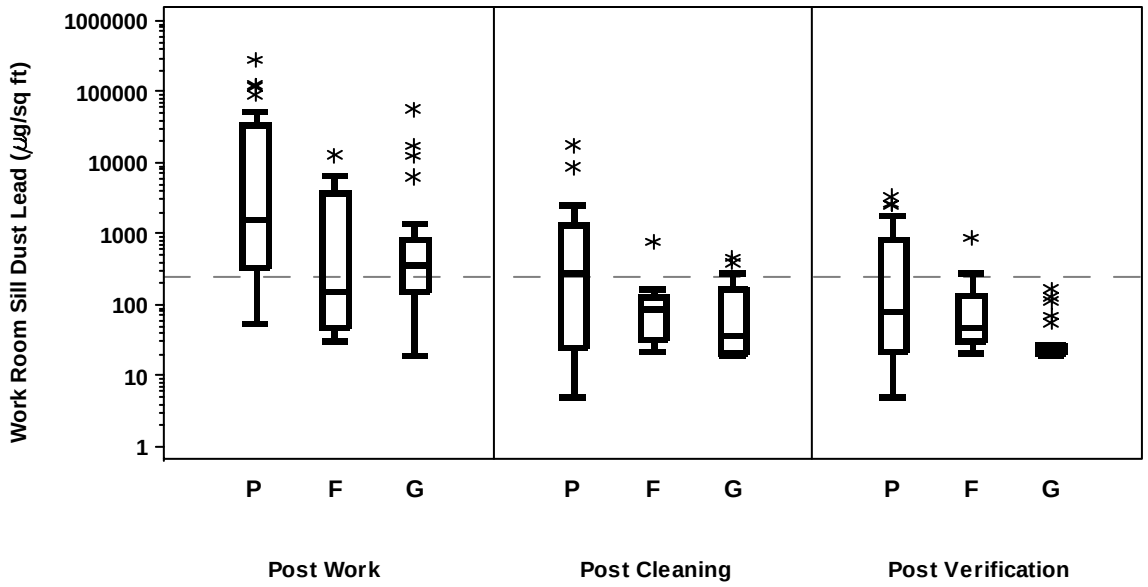


Figure D2.11a. Box Plots of Sill Dust Lead Loading in the Work Room by Stage and Work Room Floor Condition

Table D2. 11a. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Work Room by Stage and Work Room Floor Condition

Stage	Work Room - Sill Dust (Floor Condition)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Poor	27	30346	2759	54	345	1592	33257	284914	78%
	Fair	11	2591	393	31	50	160	3808	13101	45%
	Good	22	4542	465	20	155	366	835	57334	59%
Post-Clean	Poor	27	1489	228	5	25	278	1352	18133	56%
	Fair	11	144	81	23	33	86	130	785	9%
	Good	22	115	62	20	21	38	170	467	14%
Post-Verification	Poor	27	595	124	5	23	81	873	3378	33%
	Fair	11	153	71	21	31	50	138	893	18%
	Good	21	43	32	20	21	23	26	166	0%

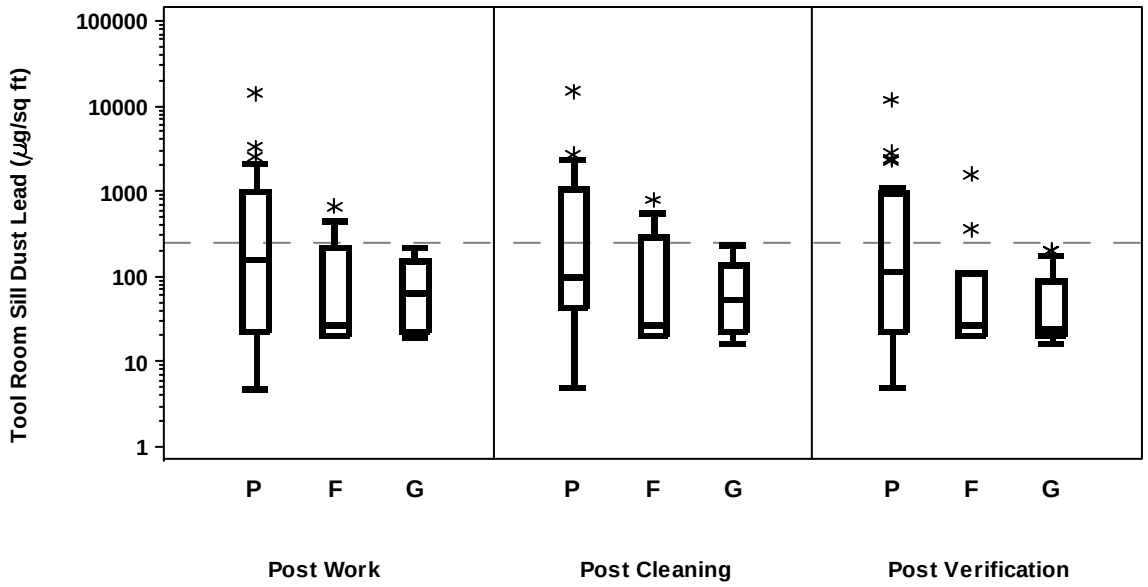


Figure D2.11b. Box Plots of Sill Dust Lead Loading in the Tool Room by Stage and Work Room Floor condition

Table D2. 11b. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Tool Room by Stage and Work Room Floor condition

Stage	Tool Room - Sill Dust (Floor Condition)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Poor	27	1063	161	5	23	164	993	14426	41%
	Fair	11	151	63	21	21	26	216	668	18%
	Good	22	84	58	19	23	63	154	226	0%
Post-Clean	Poor	27	1014	166	5	43	96	1076	15001	41%
	Fair	11	171	59	21	21	26	295	798	27%
	Good	22	78	55	16	23	55	133	240	0%
Post-Verification	Poor	27	965	167	5	23	117	933	11894	44%
	Fair	11	206	52	21	21	26	109	1594	18%
	Good	22	64	43	16	21	25	89	203	0%

Figure D2.11c. Box Plots of Sill Dust Lead Loading in the Observation Room by Stage and Work Room Floor condition

Table D2. 11c. Descriptive Summary of Sill Dust Lead Loading (µg/ft^2) in the Observation Room by Stage and Work Room Floor condition

Stage	Obs. Room - Sill Dust (Floor Condition)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum	% Exceed the Federal Standard
Post-Work	Poor	27	937	107	20	25	76	540	19074	26%
	Fair	11	118	59	20	26	42	99	691	9%
	Good	22	51	31	19	21	23	26	453	5%
Post-Clean	Poor	27	233	66	5	21	26	346	1597	26%
	Fair	11	140	63	20	26	28	227	672	18%
	Good	22	30	25	19	21	23	26	185	0%
Post-Verification	Poor	27	220	65	5	23	26	192	1449	19%
	Fair	11	104	52	20	26	26	168	405	18%
	Good	22	25	24	19	21	23	26	56	0%

D3. Exploratory Summaries of Sill Dust Lead Dust Loadings vs. Select Continuous Characteristics

Scatter plots of the dust lead Loadings recorded from Sills are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. The fitted linear regression line (using untransformed data) is displayed in each plot along with its associated r-square value.

The selected characteristics are as follows:

1. Paint Lead Concentration
2. Sill Dust Lead Loading at Clearance
3. Initial Average Soil Lead Concentration
4. Final Average Soil Lead Concentration
5. Disturbed Area
6. Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room

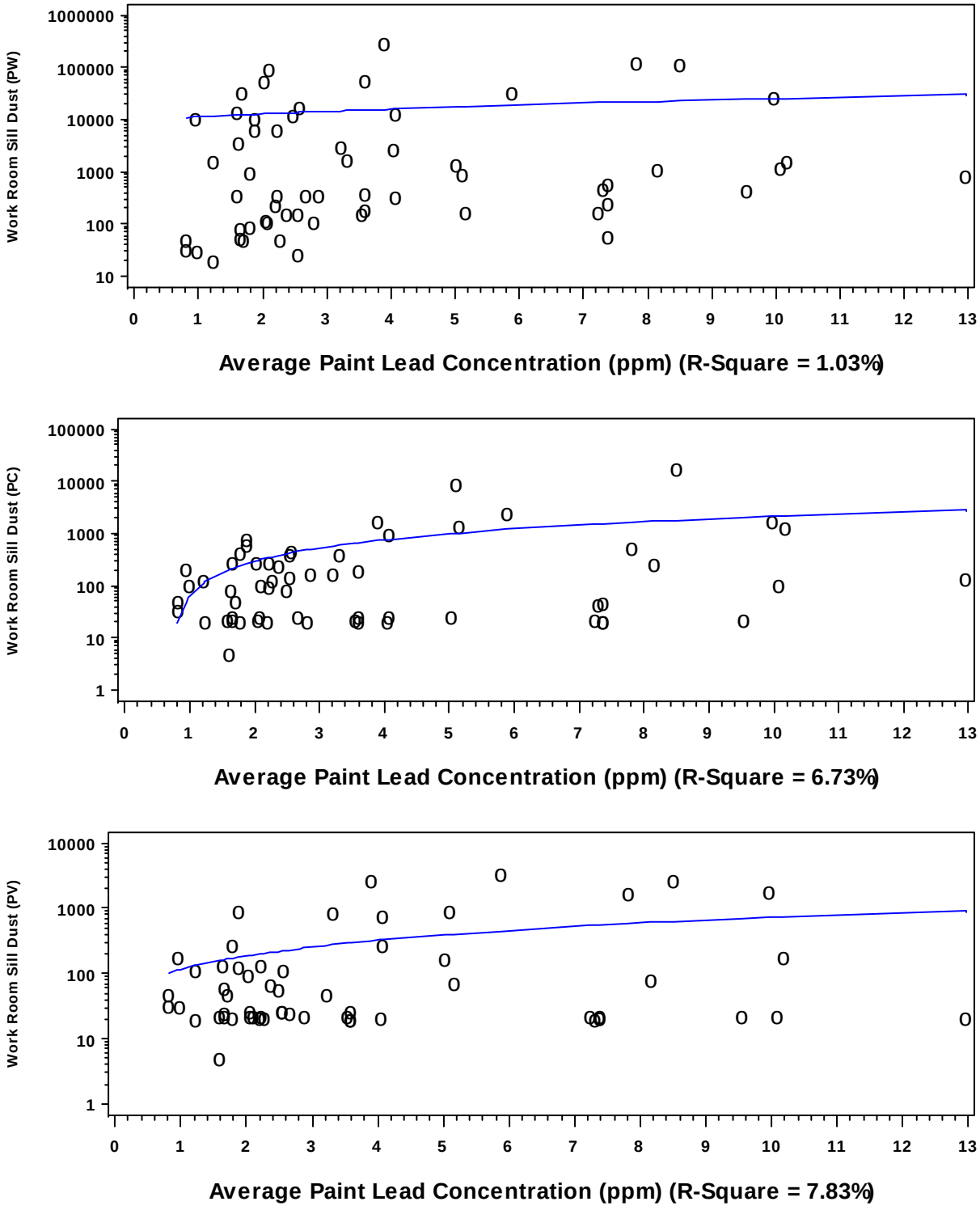


Figure D3.1a. Scatter Plots of Work Room Sill Dust Lead Loading (µg/ft^2) by Stage and Average Paint Lead Concentration (ppm)

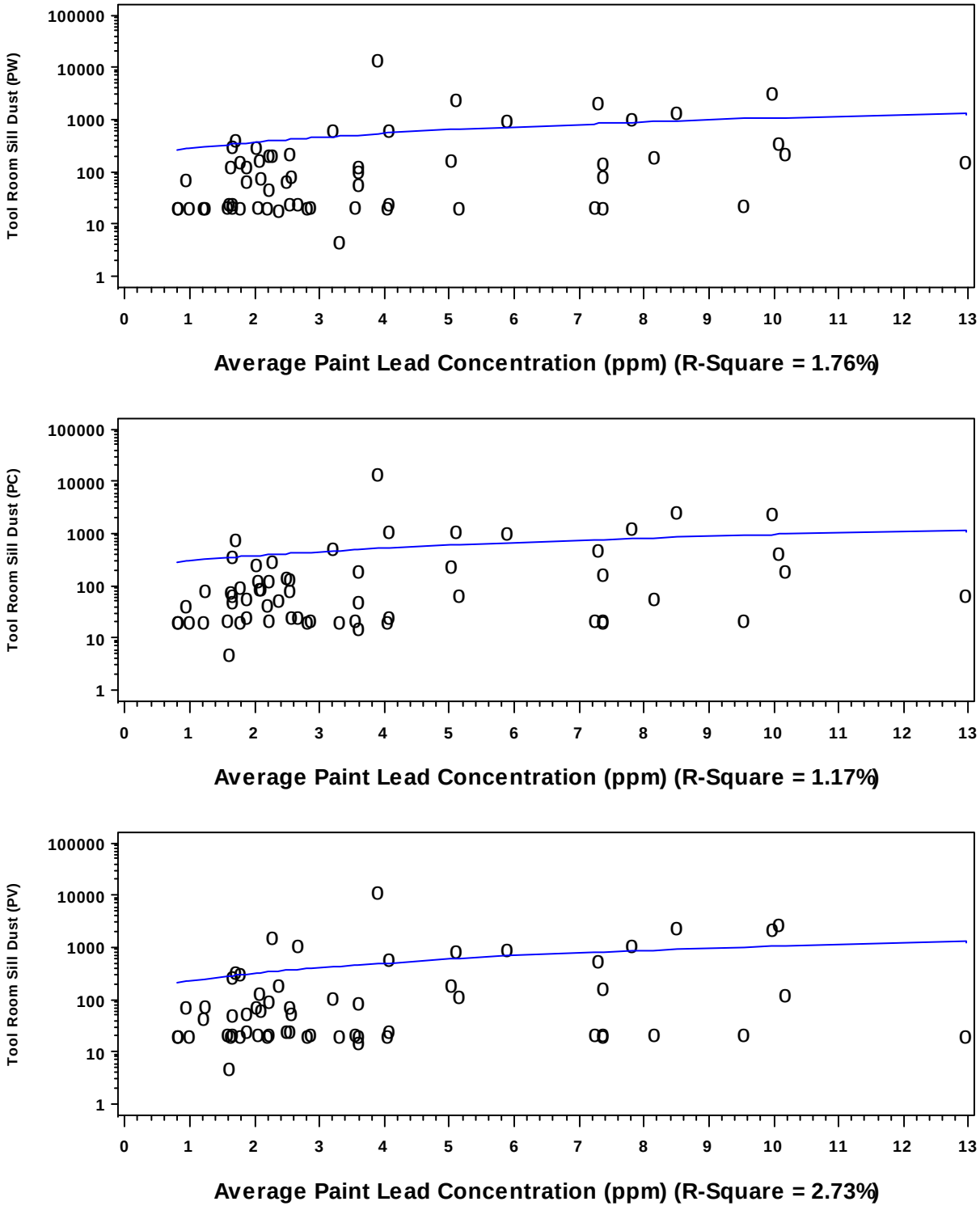


Figure D3.1b. Scatter Plots of Tool Room Sill Dust Lead Loading (µg/ft^2) by Stage and Average Paint Lead Concentration (ppm)

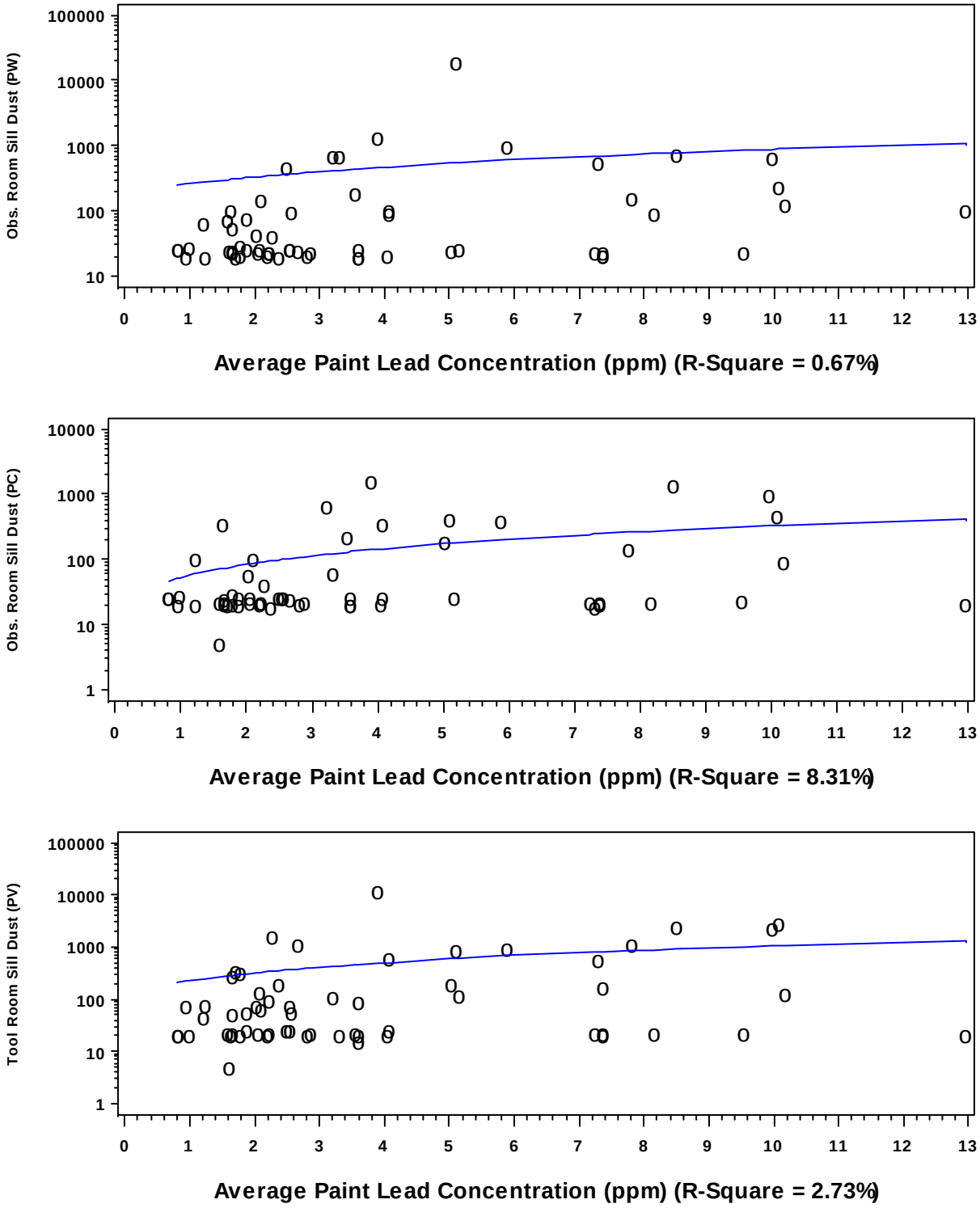


Figure D3.1c. Scatter Plots of Observation Room Sill Dust Lead Loading (µg/ft^2) by Stage and Average Paint Lead Concentration (ppm)

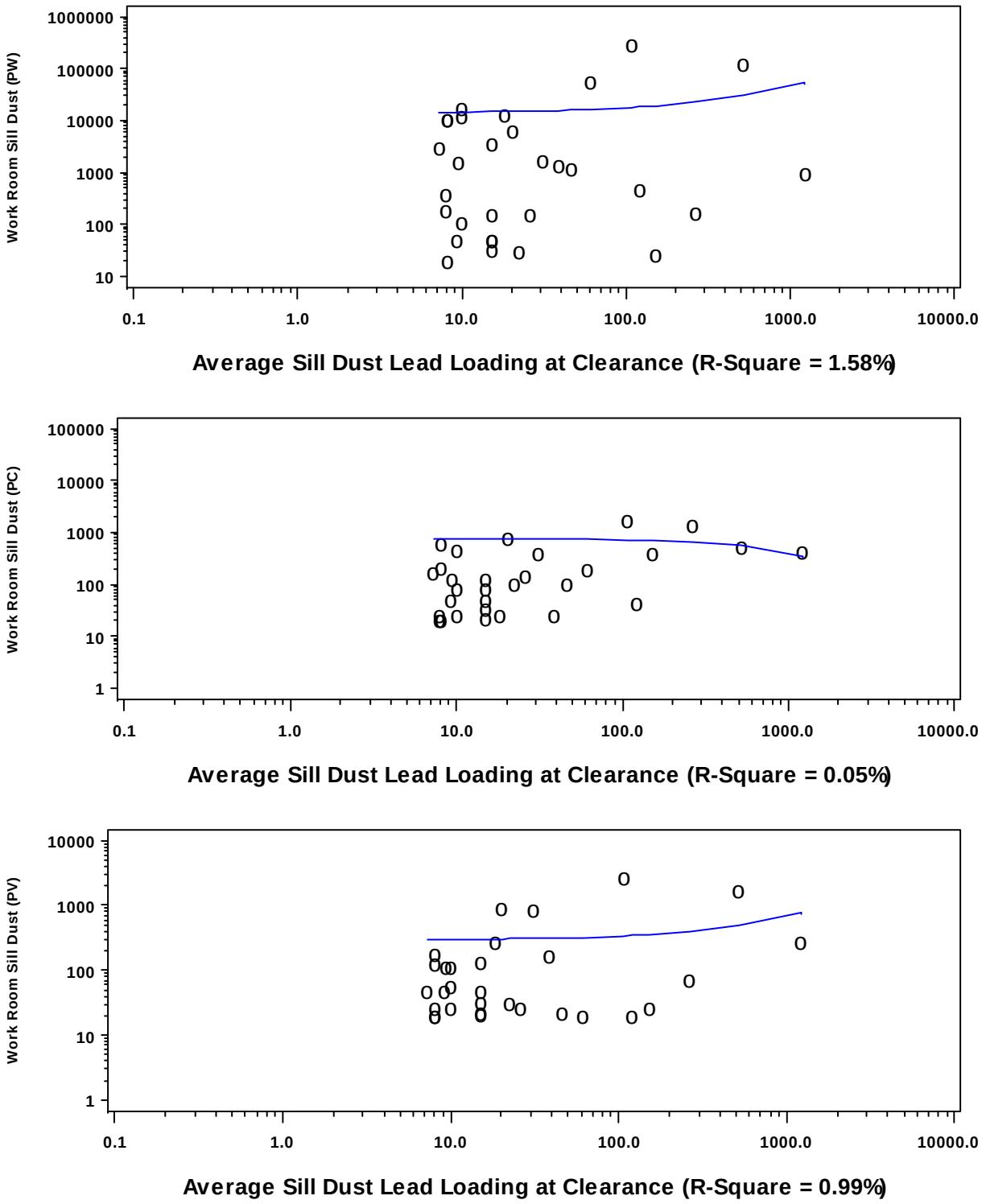


Figure D3.2a. Scatter Plots of Work Room Sill Dust Lead Loading (µg/ft^2) by Stage and Sill Dust Lead Loading at Clearance (µg/ft^2)

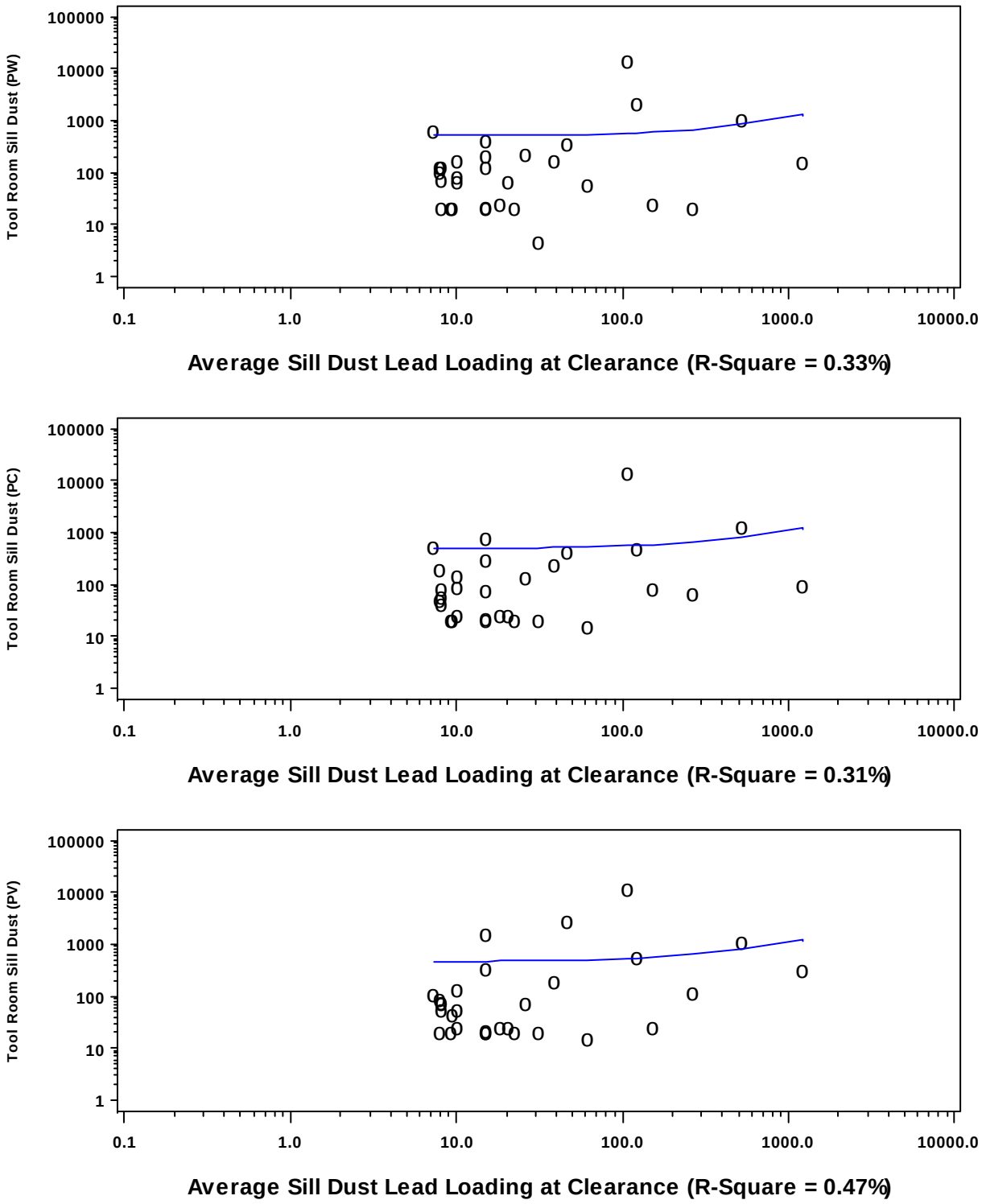


Figure D3.2b. Scatter Plots of Tool Room Sill Dust Lead Loading (µg/ft^2) by Stage and Sill Dust Lead Loading at Clearance (µg/ft^2)

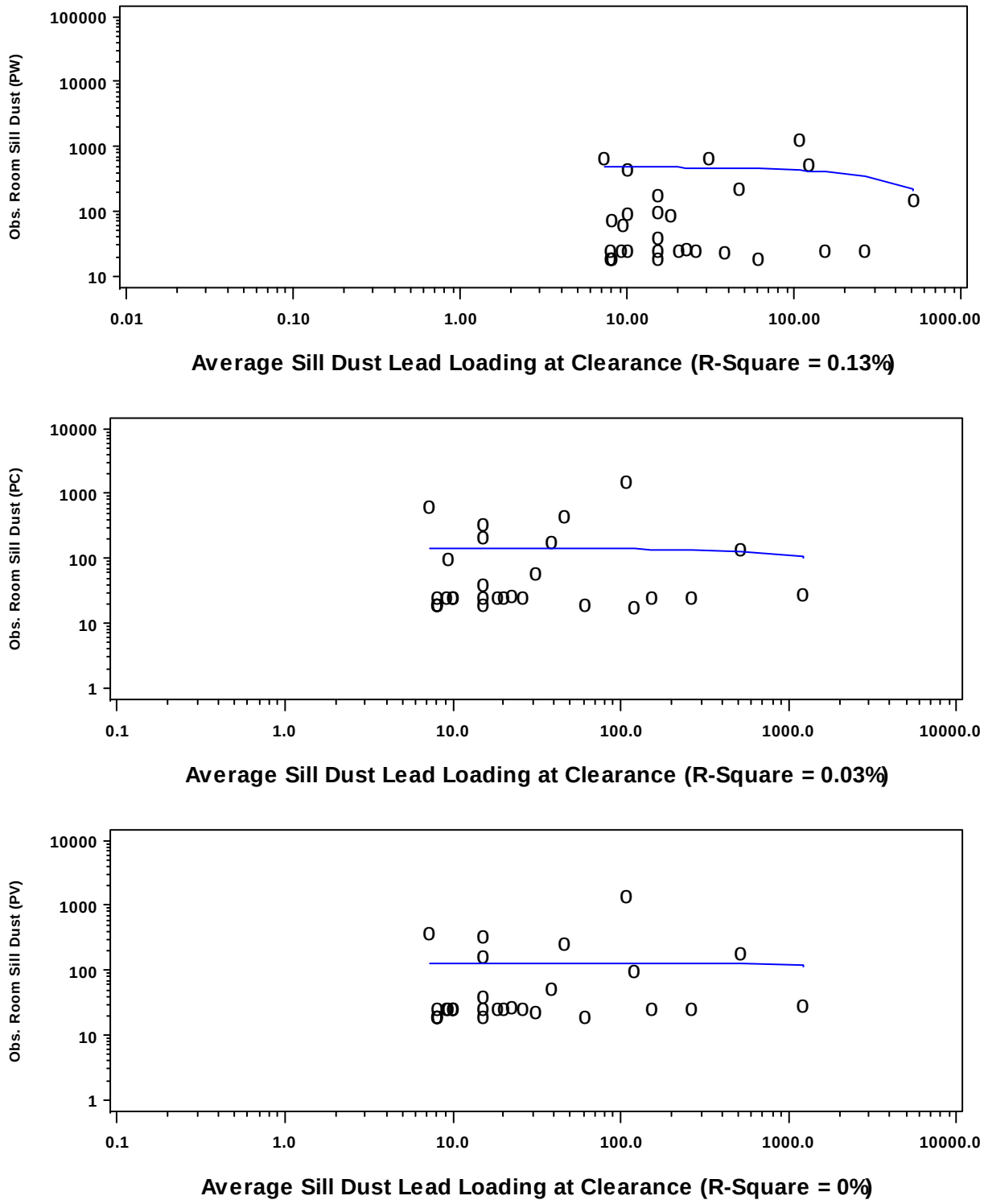


Figure D3.2c. Scatter Plots of Observation Room Sill Dust Lead Loading (µg/ft^2) by Stage and Sill Dust Lead Loading at Clearance (µg/ft^2)

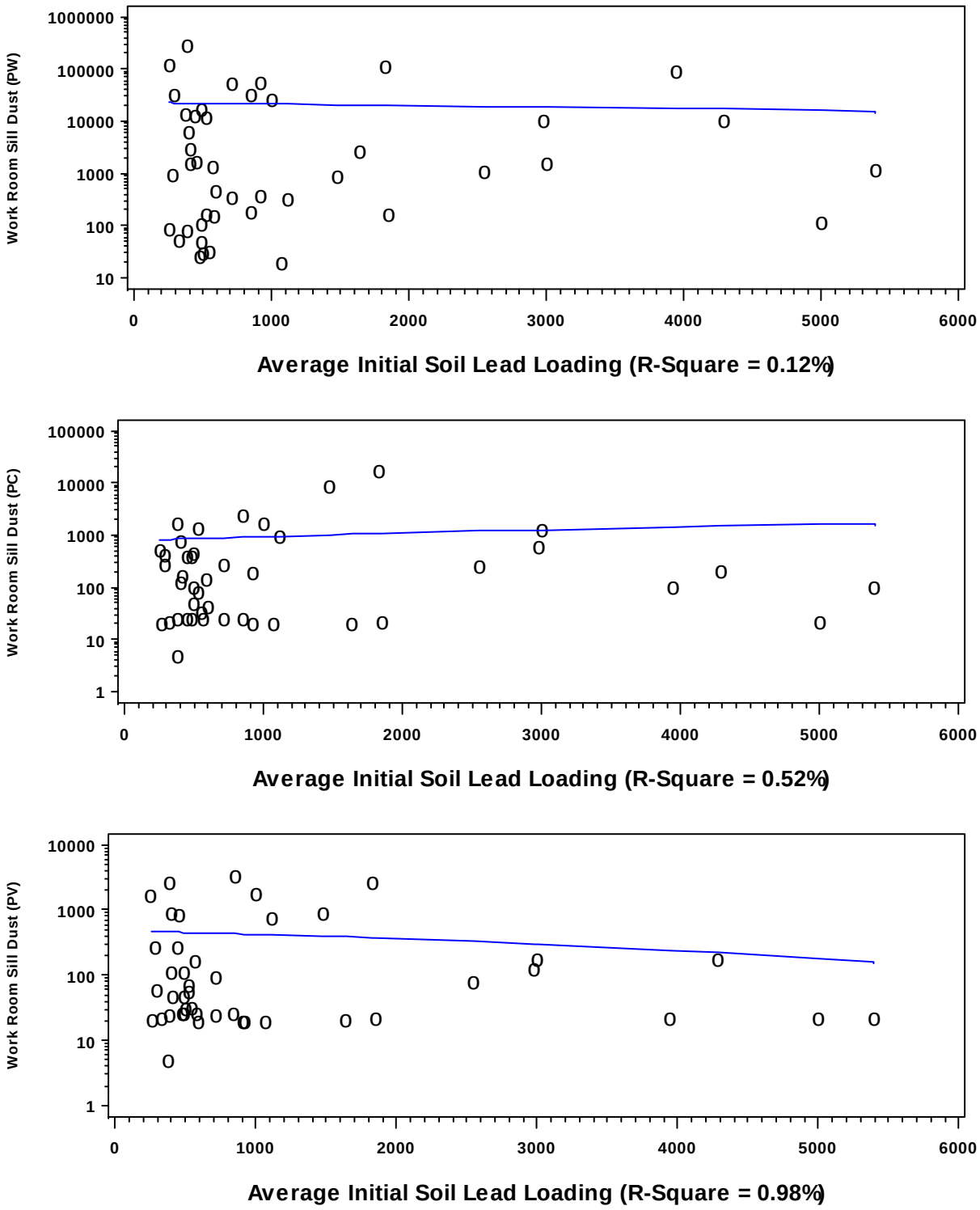


Figure D3.3a. Scatter Plots of Work Room Sill Dust Lead Loading (µg/ft^2) by Stage and Initial Average Soil Lead Concentration (ppm)

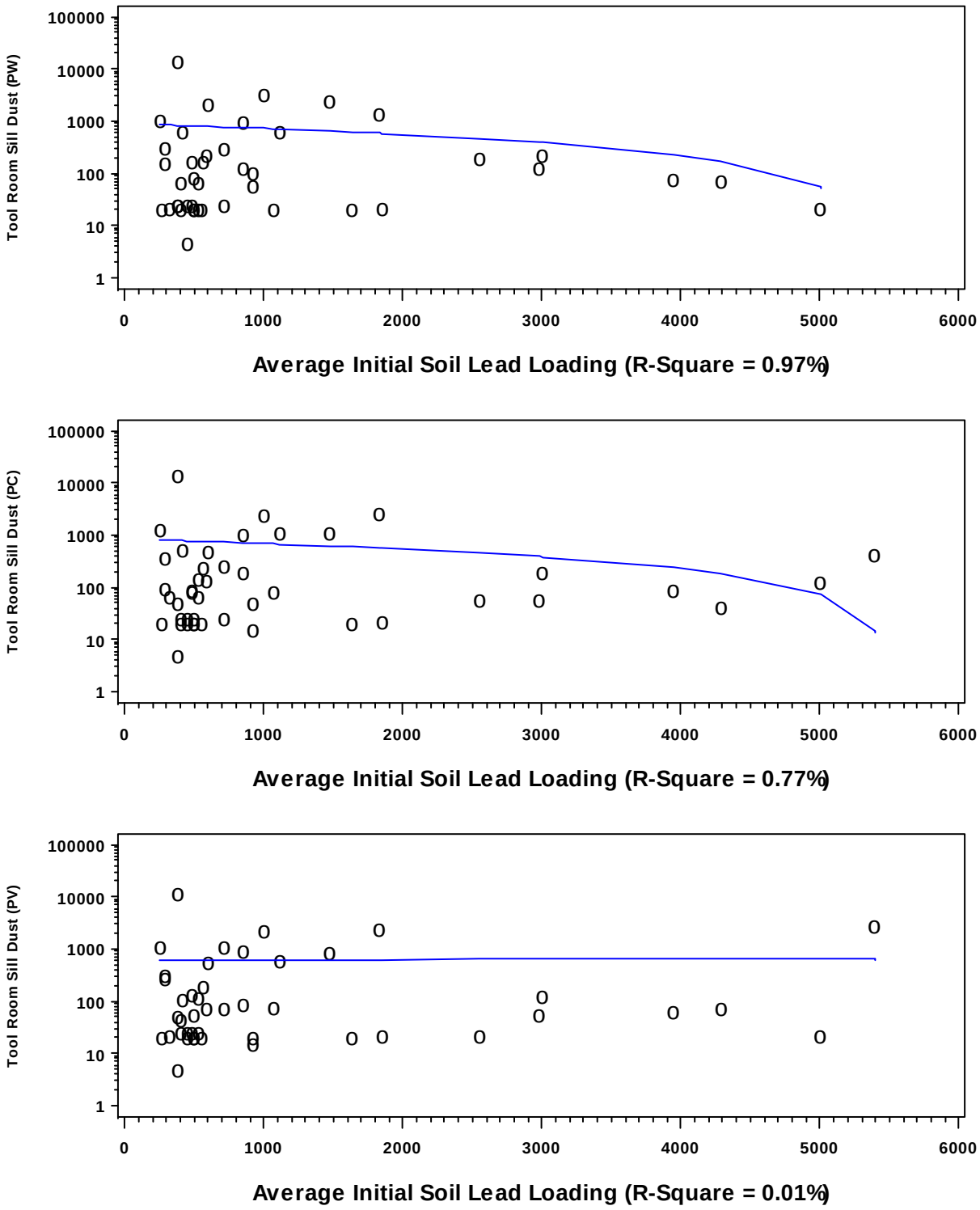


Figure D3.3b. Scatter Plots of Tool Room Sill Dust Lead Loading (µg/ft^2) by Stage and Initial Average Soil Lead Concentration (ppm)

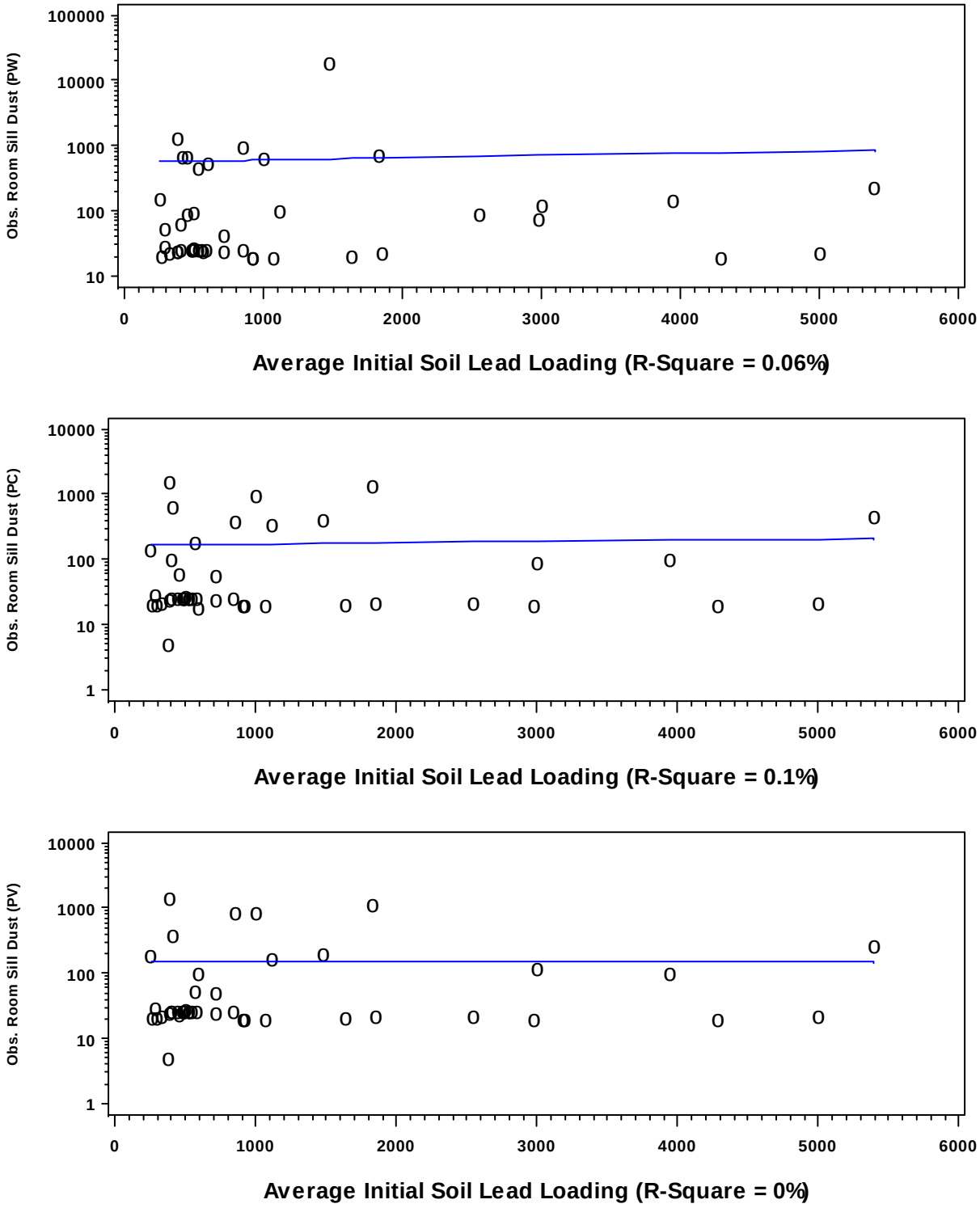


Figure D3.3c. Scatter Plots of Observation Room Sill Dust Lead Loading (µg/ft^2) by Stage and Initial Average Soil Lead Concentration (ppm)

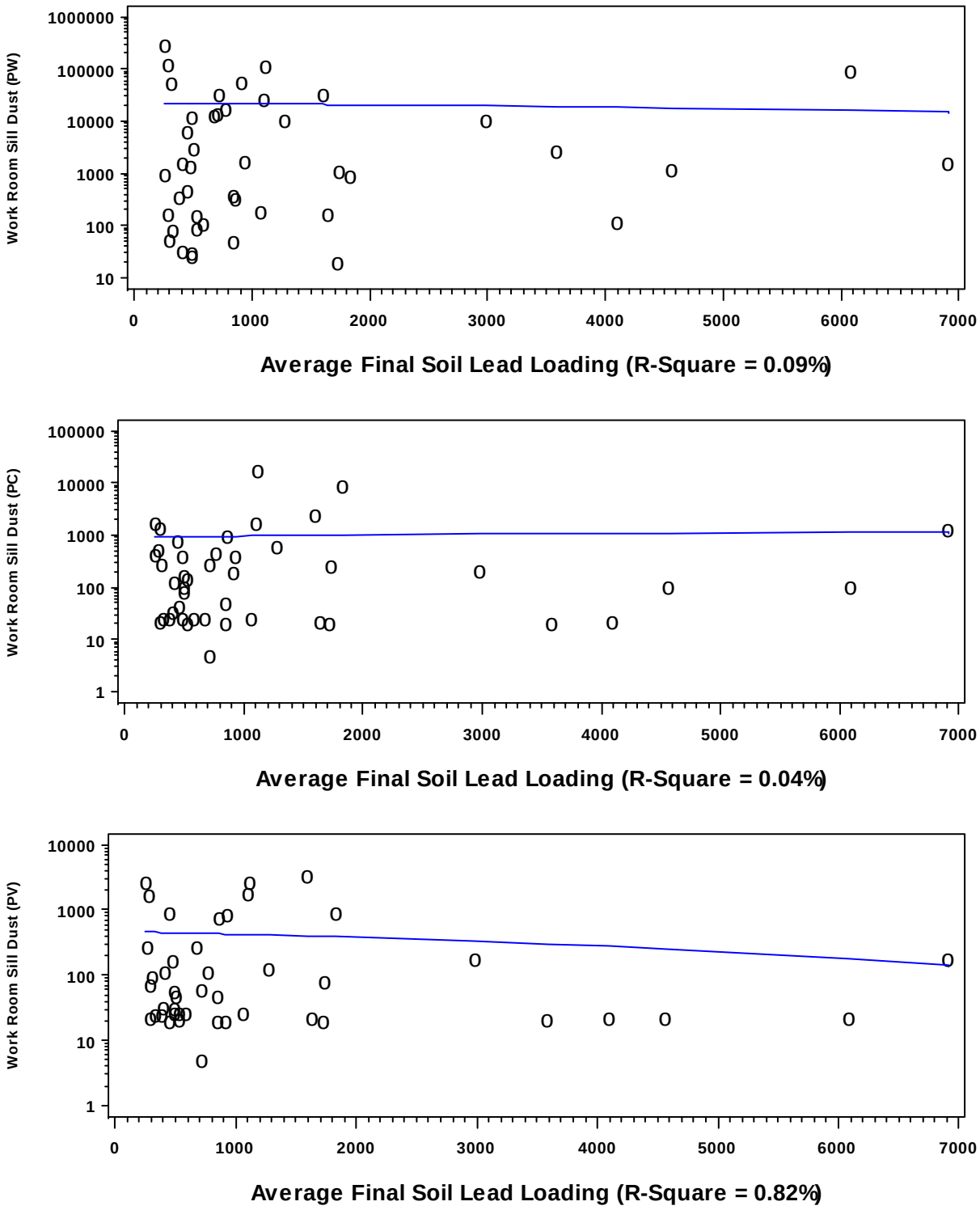


Figure D3.4a. Scatter Plots of Work Room Sill Dust Lead Loading (µg/ft^2) by Stage and Final Average Soil Lead Concentration (ppm)

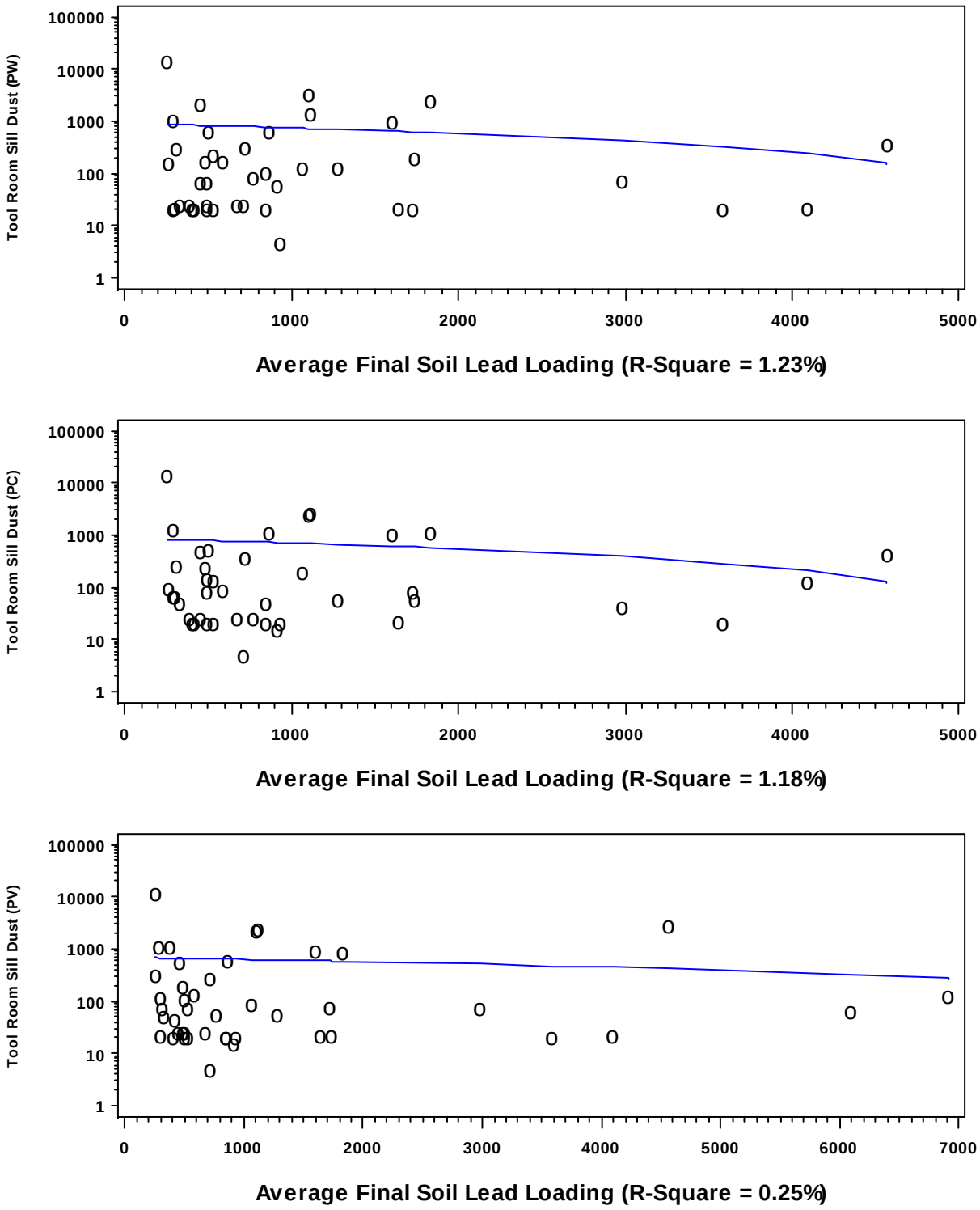


Figure D3.4b. Scatter Plots of Tool Room Sill Dust Lead Loading (µg/ft^2) by Stage and Final Average Soil Lead Concentration (ppm)

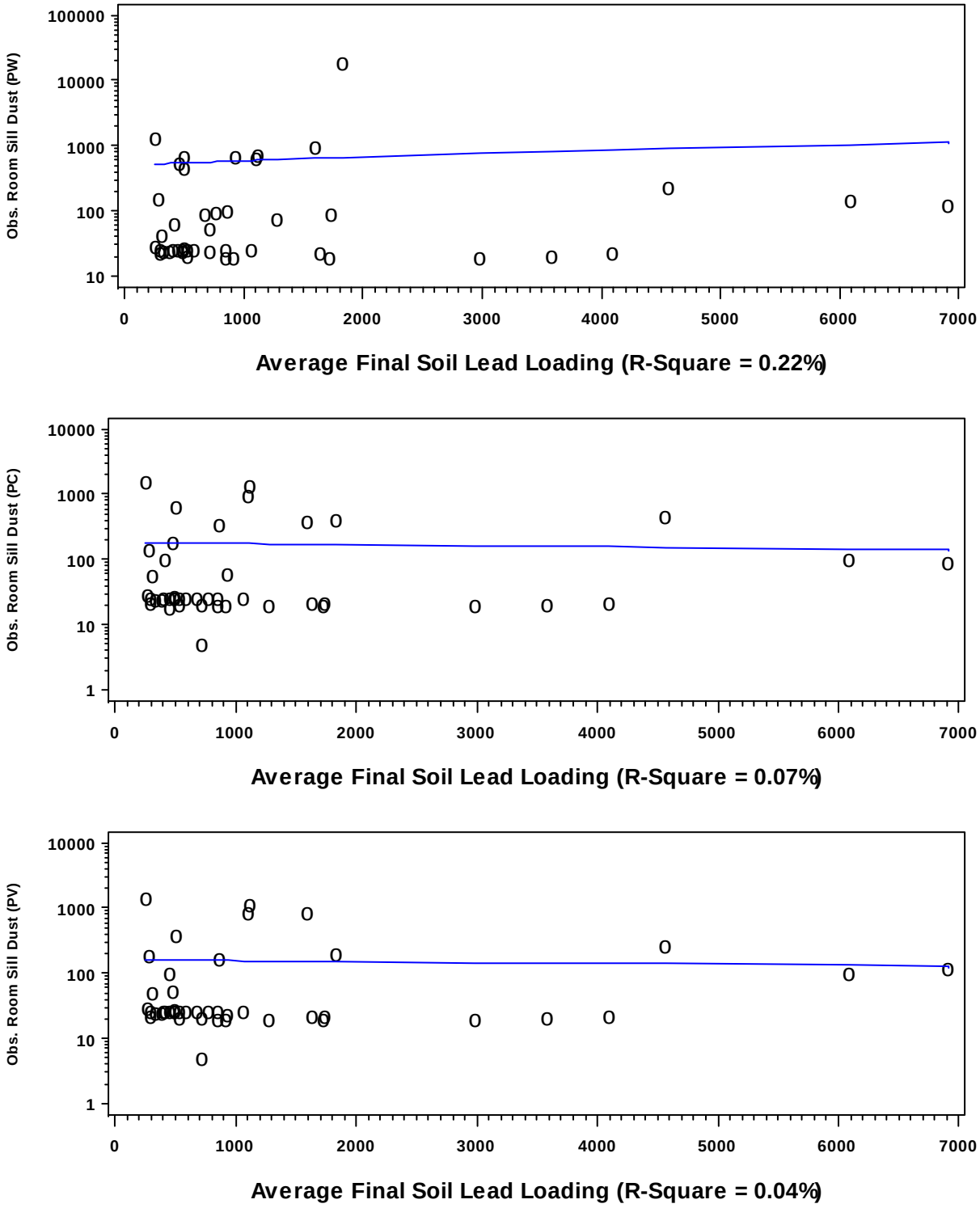


Figure D3.4c. Scatter Plots of Observation Room Sill Dust Lead Loading (µg/ft^2) by Stage and Final Average Soil Lead Concentration (ppm)

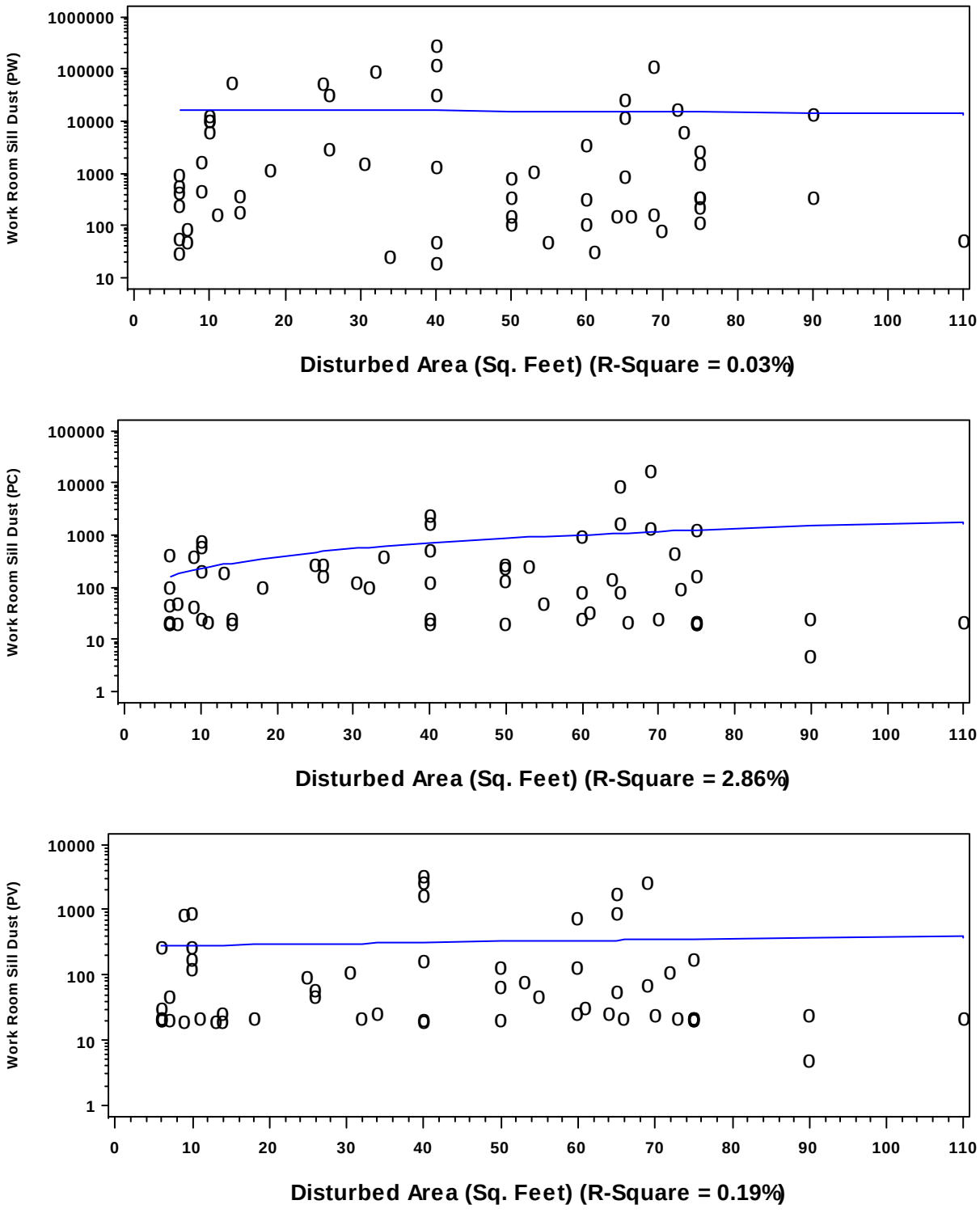


Figure D3.5a. Scatter Plots of Work Room Sill Dust Lead Loading (µg/ft^2) by Stage and Disturbed Area (ft^2)

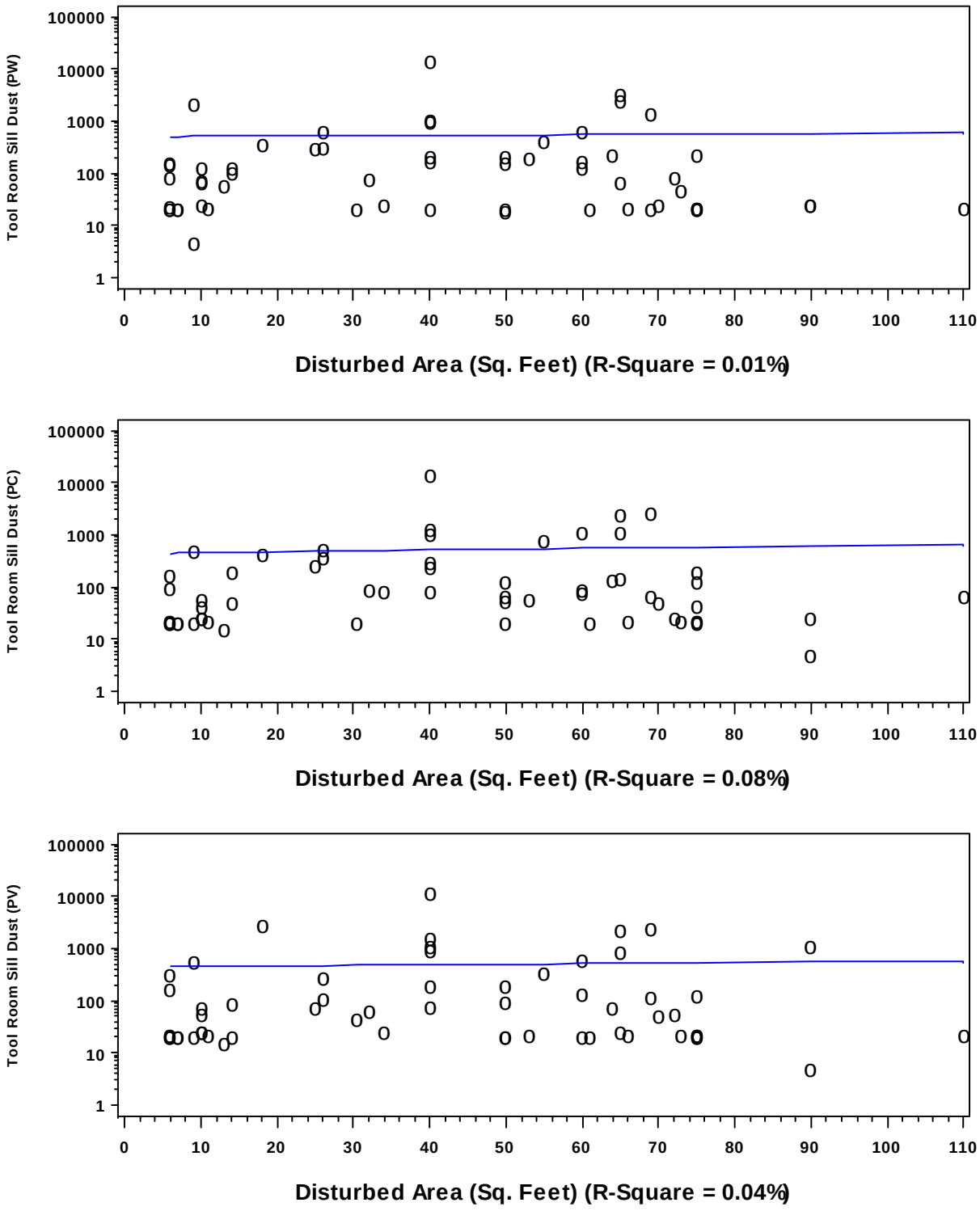


Figure D3.5b. Scatter Plots of Tool Room Sill Dust Lead Loading (µg/ft^2) by Stage and Disturbed Area (ft^2)

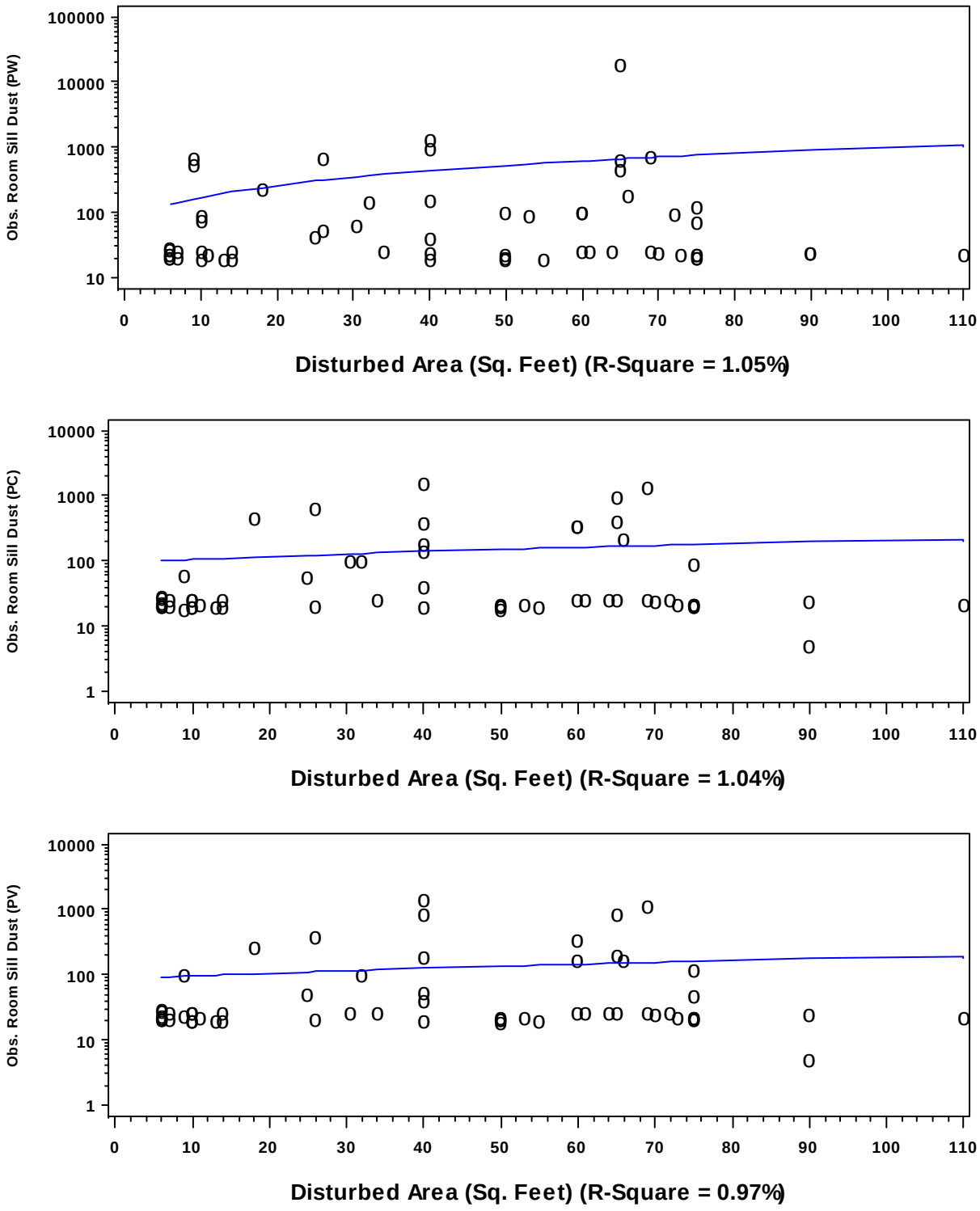
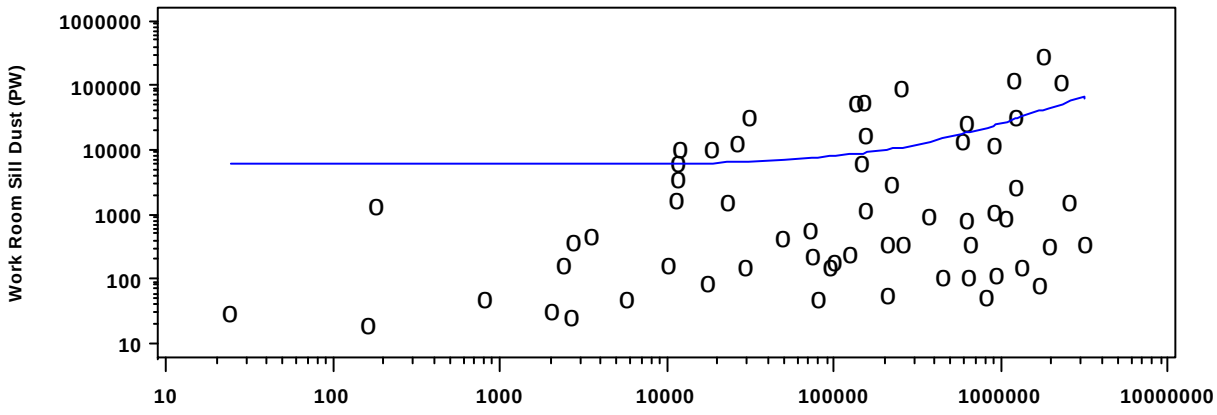
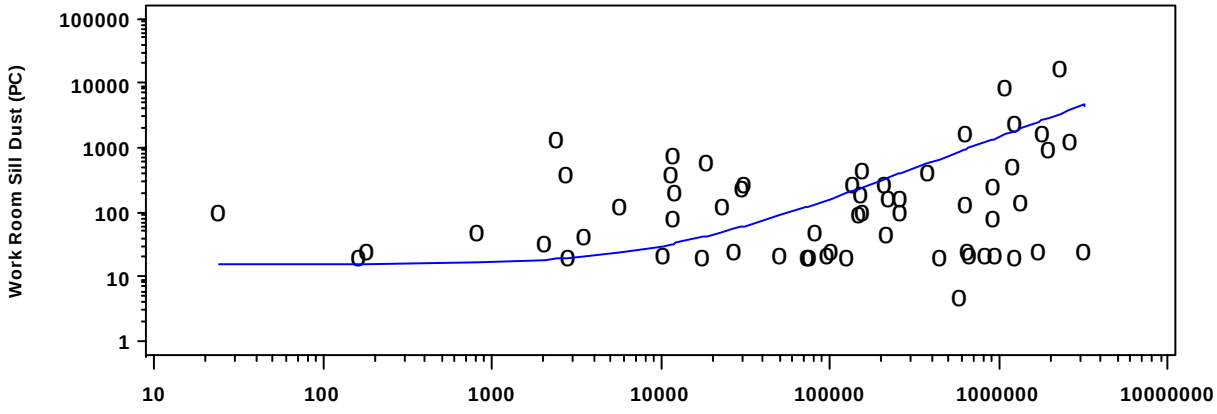


Figure D3.5c. Scatter Plots of Observation Room Sill Dust Lead Loading (µg/ft^2) by Stage and Disturbed Area (ft^2)





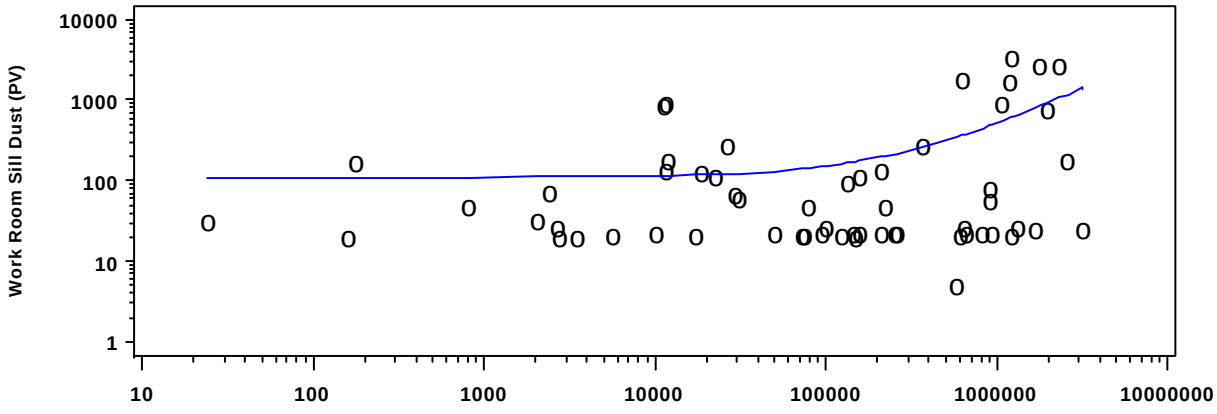
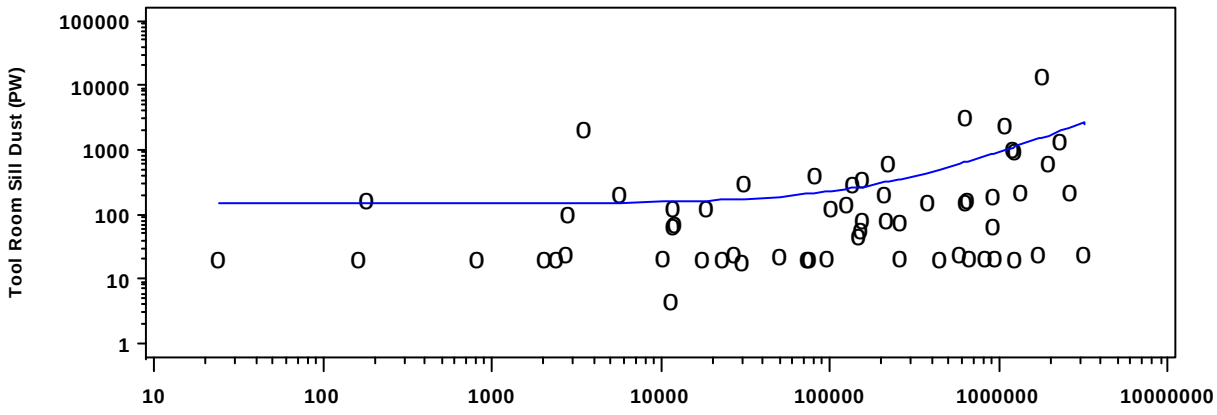
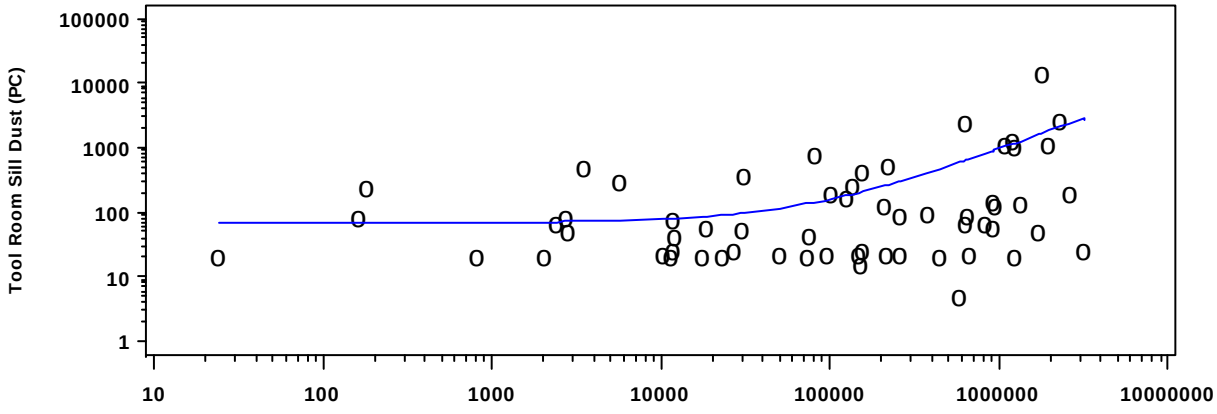


Figure D3.6a. Scatter Plots of Work Room Sill Dust Lead Loading (µg/ft^2) by Stage and Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room (µg/ft^2)





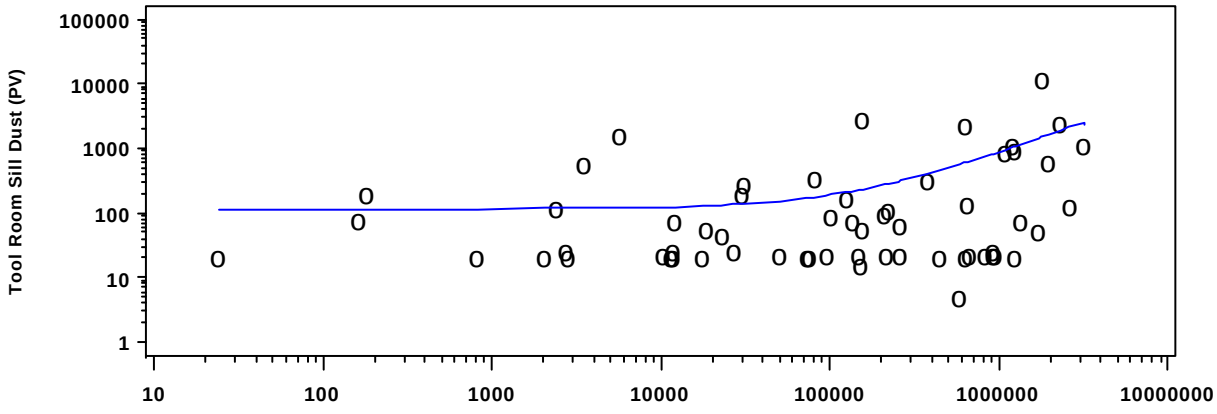
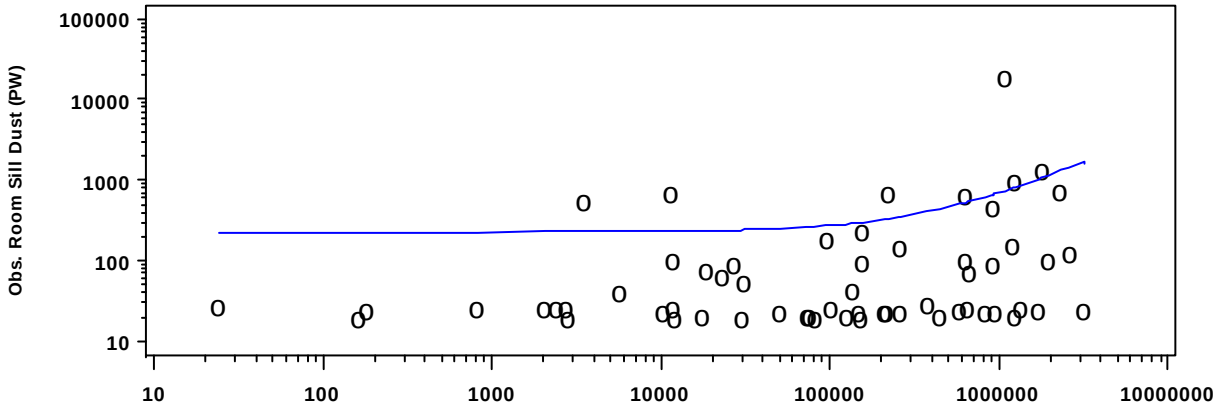
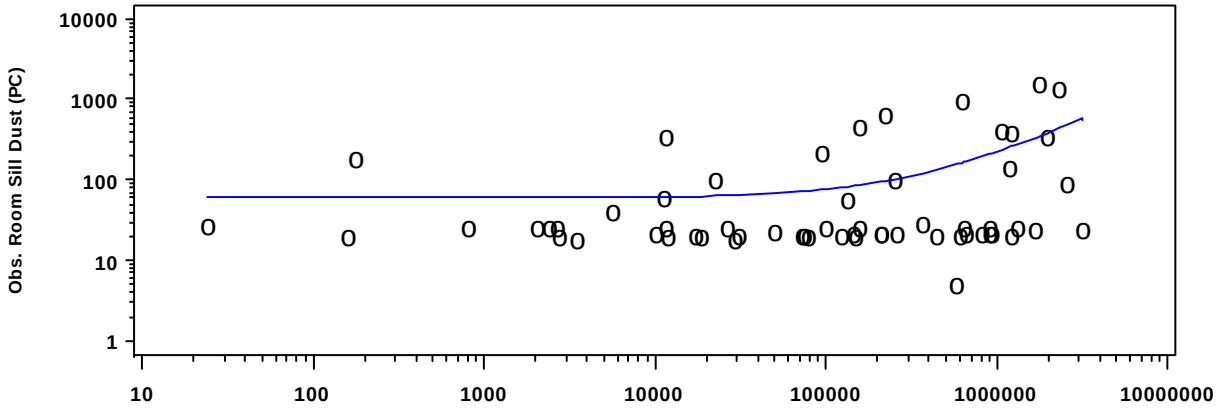


Figure D3.6b. Scatter Plots of Tool Room Sill Dust Lead Loading (µg/ft^2) by Stage and Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room (µg/ft^2)





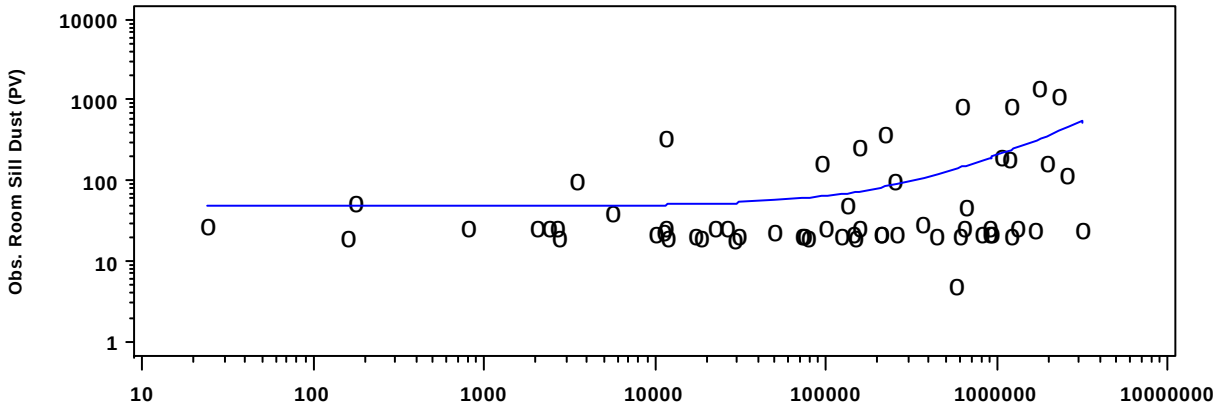


Figure D3.6c. Scatter Plots of Observation Room Sill Dust Lead Loading (µg/ft^2) by Stage and Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room (µg/ft^2)

APPENDIX E

DETAILED DESCRIPTIVE ANALYSES OF EXTERIOR DUST LEAD LOADINGS (WITHOUT BULK DEBRIS SAMPLES)

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E. Normality Check for Exterior Lead Dust Loadings

Prior to any analysis of the lead dust loadings, the underlying distribution of the response data was examined for normality. Note that a Wilkes-Shapiro p-value < 0.01 indicates a significant departure from normality. With larger sample sizes, normality tests can indicate statistically significant but unimportant departures from normality. For the data collected for this study, the log-transformation of the data was accepted even when the Wilkes-Shapiro statistics indicated non-normality. With additional time, potential outliers and other influential points could be explored to determine if other data adjustments would be beneficial to the analyses.

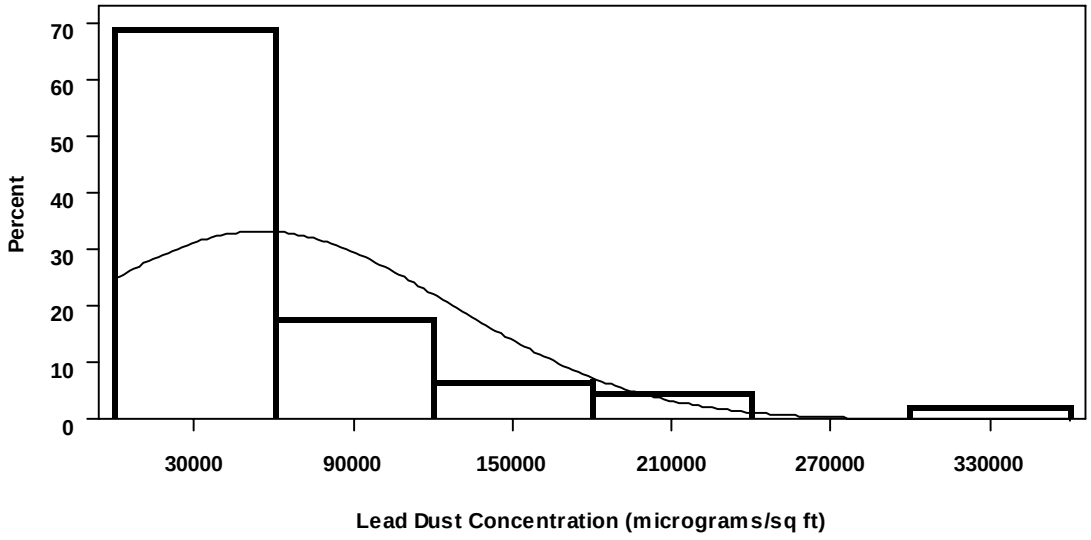

Figure E.1a. Histogram of Dust Lead Measurements (μg/ft^2) from Top of Rule Plastic (Wilkes-Shapiro p-value < 0.001)

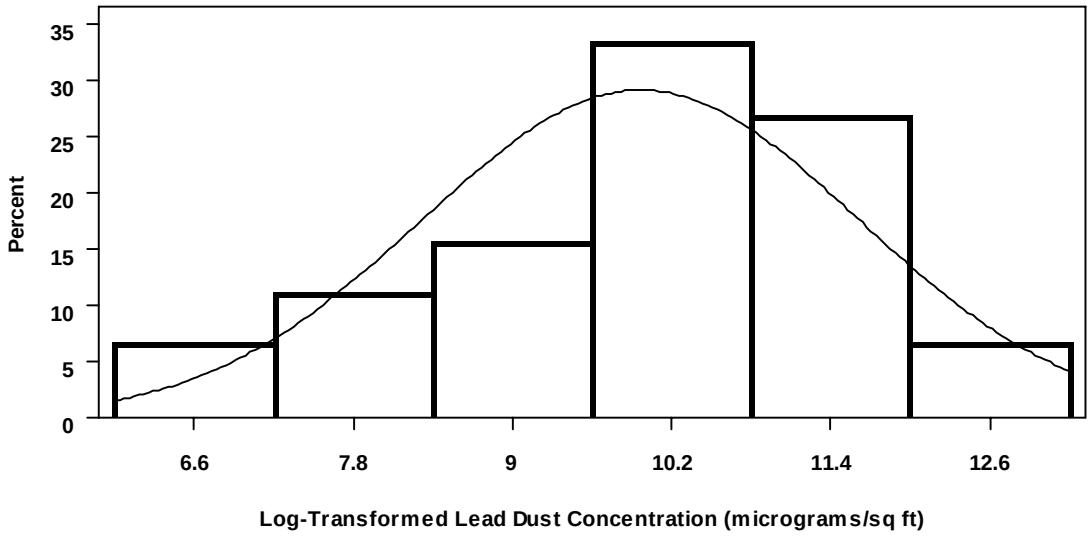

Figure E.1b. Histogram of Log Transformed Dust Lead Measurements (μg/ft^2) from Top of Rule Plastic (Wilkes-Shapiro p-value = 0.109)

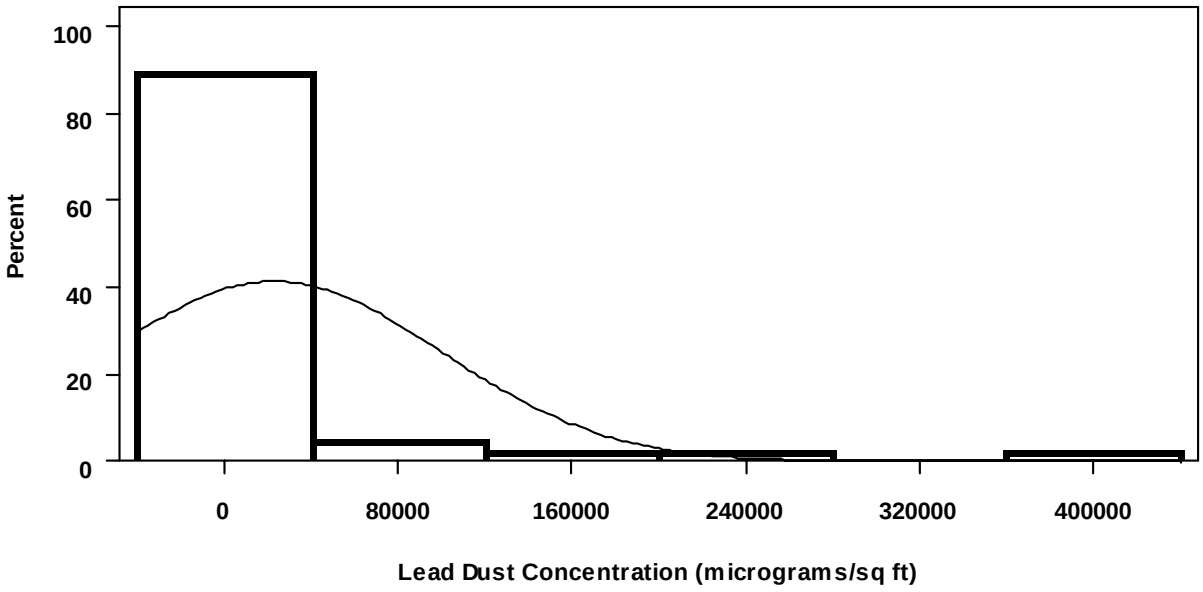

Figure E.2a. Histogram of Dust Lead Measurements (μg/ft^2) from Under Rule Plastic (Wilkes-Shapiro p-value < 0.001)

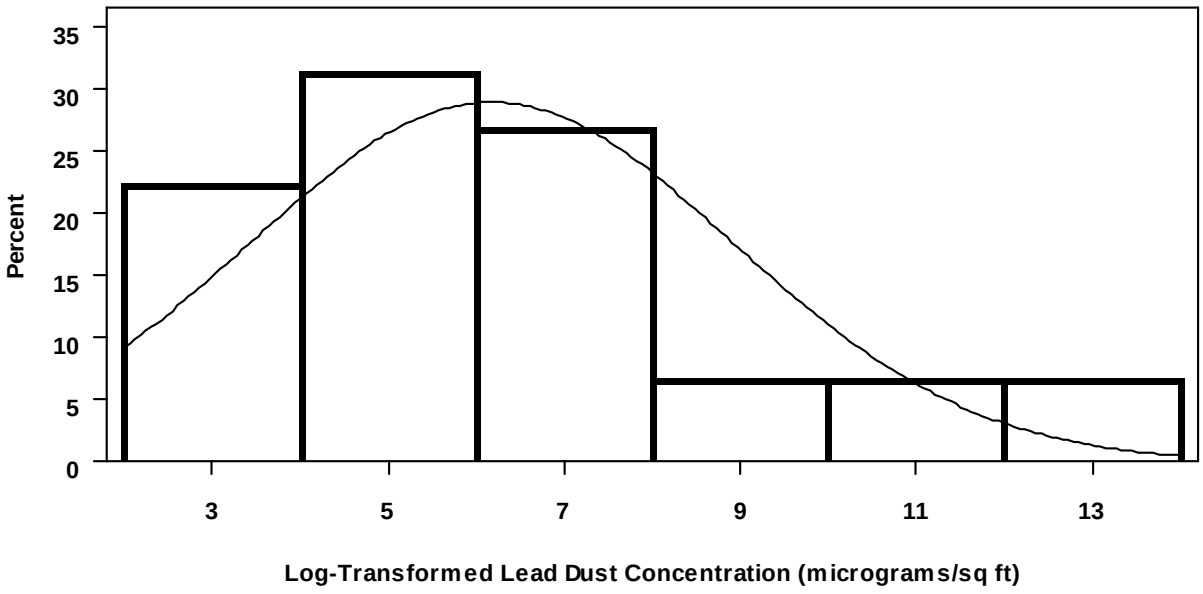

Figure E.2b. Histogram of Log Transformed Dust Lead Measurements (μg/ft^2) from Under Rule Plastic (Wilkes-Shapiro p-value = 0.003)

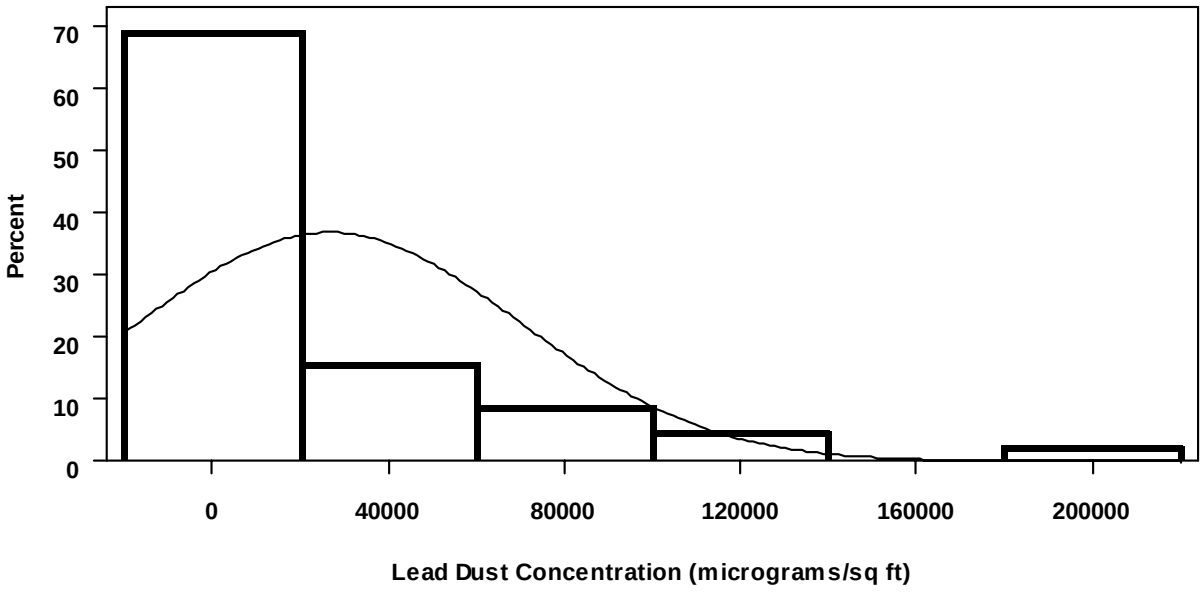

Figure E.3a. Histogram of Dust Lead Measurements (μg/ft^2) from Near Rule Plastic (Wilkes-Shapiro p-value < 0.001)

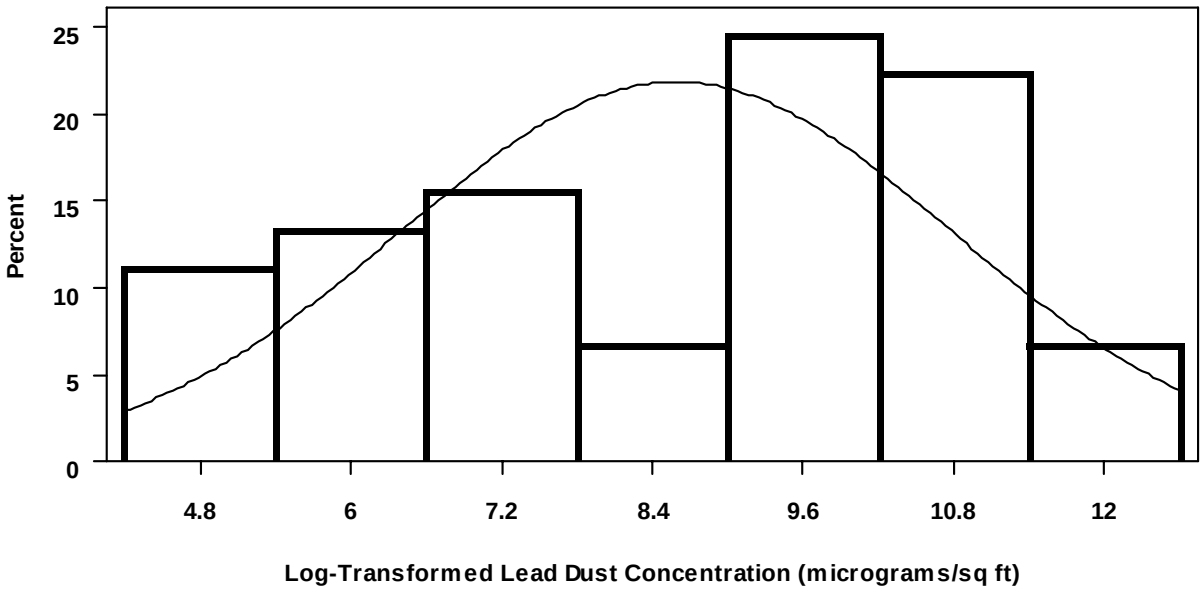

Figure E.3b. Histogram of Log Transformed Dust Lead Measurements (μg/ft^2) from Near Rule Plastic (Wilkes-Shapiro p-value = 0.011)

E1. Exploratory Summaries of Exterior Lead Dust Loadings vs. Select Characteristics

Box plots of the dust lead loadings recorded from top of, under and near rule plastic as well as descriptive statistical summary tables are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. Box plots are a technique for displaying one-dimensional data and their summary characteristics. A box plot displays the median (represented by the center horizontal line), the 25^{th} percentile (represented by the bottom of the box), and the 75^{th} percentile (represented by the top of the box). The vertical lines, or whiskers, are drawn from the box to the most extreme point within 1.5 * interquartile range. (An interquartile range is the distance between the 25^{th} and the 75^{th} percentiles.) Any value more extreme than this is identified individually with stars. The data are plotted using a log-base 10 scale. The summary statistics provided in the tables are sample size, geometric mean, geometric standard error, minimum, 10^{th} percentile, 25^{th} percentile, median, 75^{th} percentile, 90^{th} percentile, and maximum.

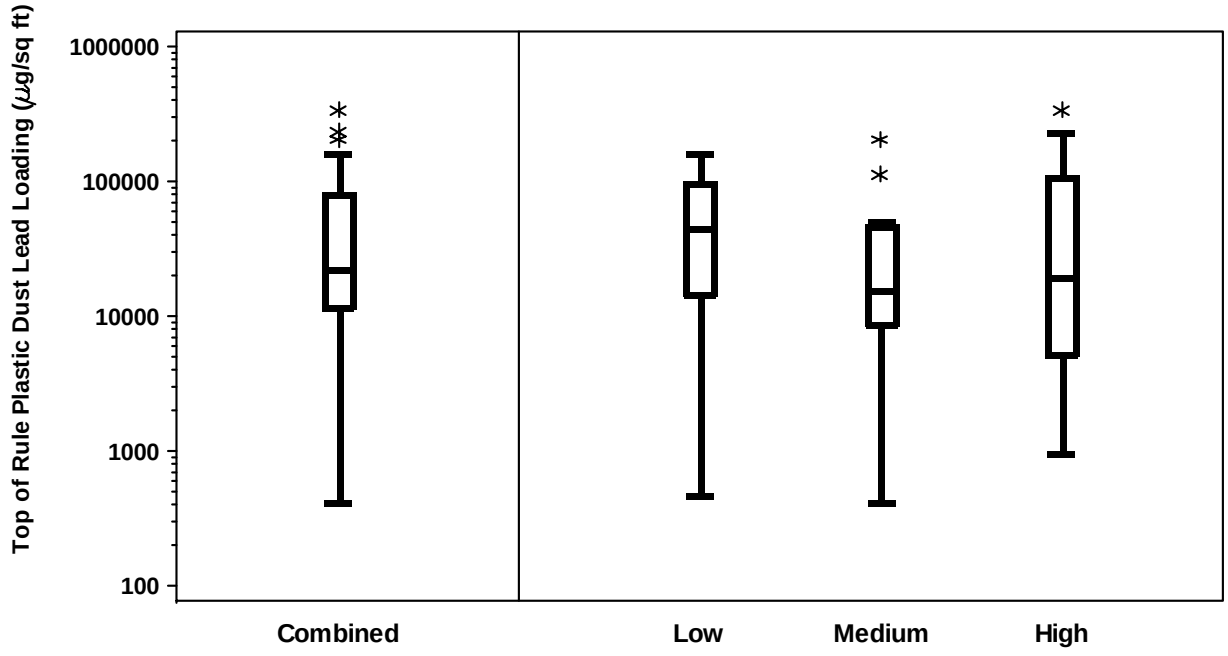

Figure E.1a. Box Plots of Dust Lead Loading Measured Top of Rule Plastic by Job Intensity Level

Table E.1a. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Top of Rule Plastic by Job Intensity Level

Top of Rule Plastic - Intensity Level	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
1-High	15	71331	23134	956	5151	19376	106383	341492
2-Medium	15	37084	15070	417	8556	15754	45710	205451
3-Low	15	56929	27686	472	14441	43976	96758	161018
Combined	45	55114	21292	417	11512	22004	79163	341492

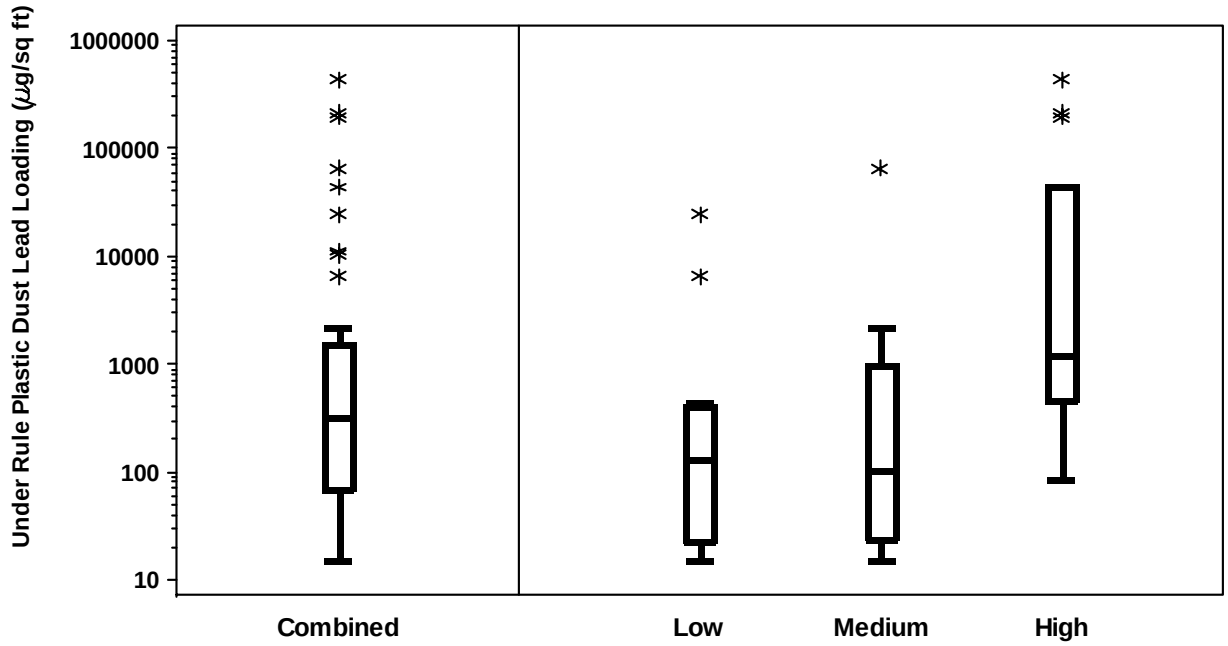

Figure E.1b. Box Plots of Dust Lead Loading Measured Under Rule Plastic by Job Intensity Level

Table E.1b. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Under Rule Plastic by Job Intensity Level

Under Rule Plastic - Intensity Level	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
1-High	15	61639	3689	87	469	1204	44098	438699
2-Medium	15	4789	182	15	24	105	967	65815
3-Low	15	2230	164	15	23	129	411	24744
Combined	45	22886	479	15	68	322	1523	438699

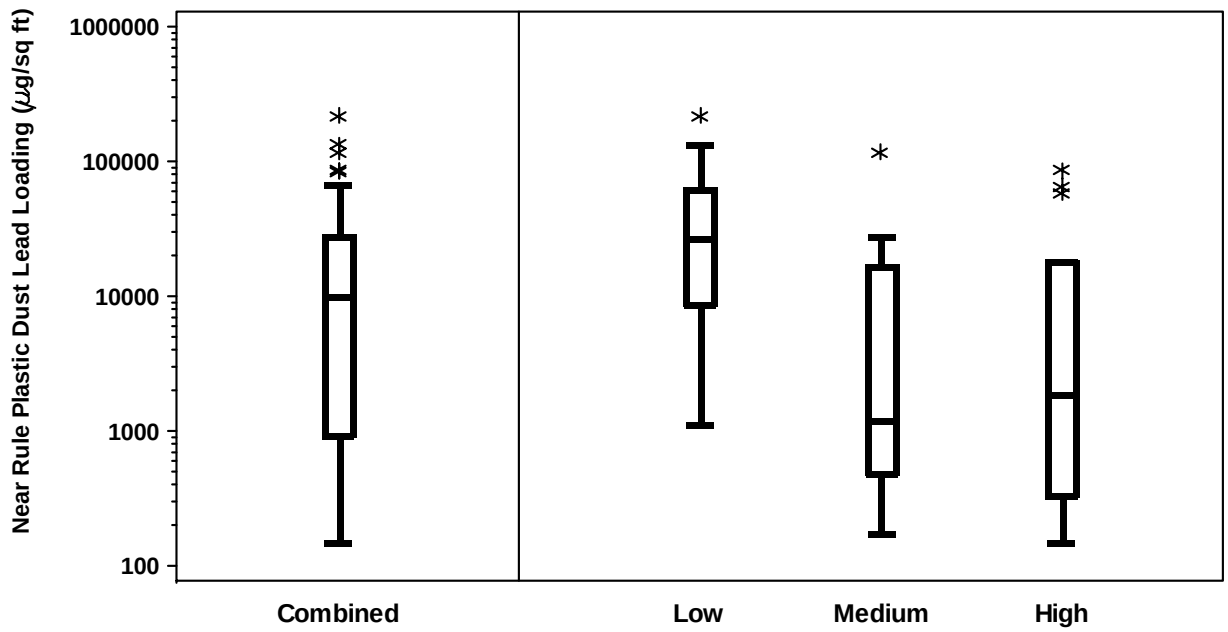

Figure E.1c. Box Plots of Dust Lead Loading Measured Near Rule Plastic by Job Intensity Level

Table E.1c. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Near Rule Plastic by Job Intensity Level

Near Rule Plastic - Intensity Level	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
1-High	15	18311	2937	150	331	1836	18002	85985
2-Medium	15	13802	2501	172	488	1205	16597	117170
3-Low	15	47629	21232	1129	8768	27082	61388	217900
Combined	45	26581	5383	150	929	9865	27650	217900

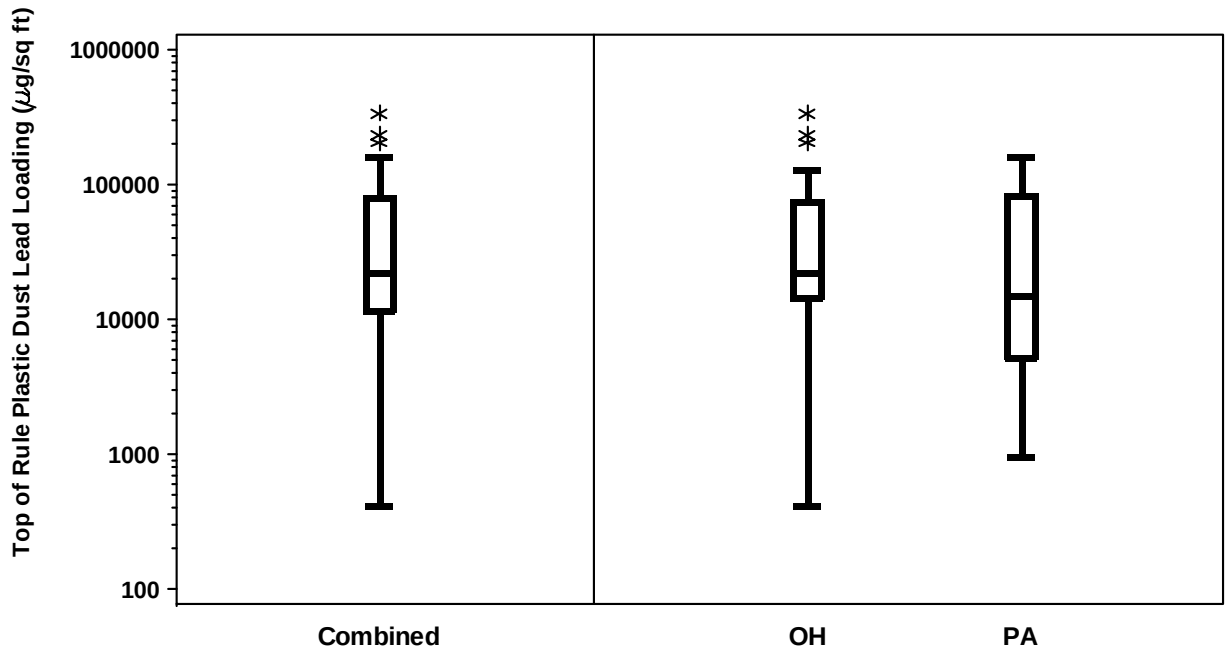

Figure E.2a. Box Plots of Dust Lead Loading Measured Top of Rule Plastic by City

Table E.2a. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Top of Rule Plastic by City

Top of Rule Plastic - City	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Columbus, OH	30	59219	23094	417	14348	22746	73457	341492
Pittsburgh, PA	15	46905	18099	956	5151	14846	83480	161018
Combined	45	55114	21292	417	11512	22004	79163	341492

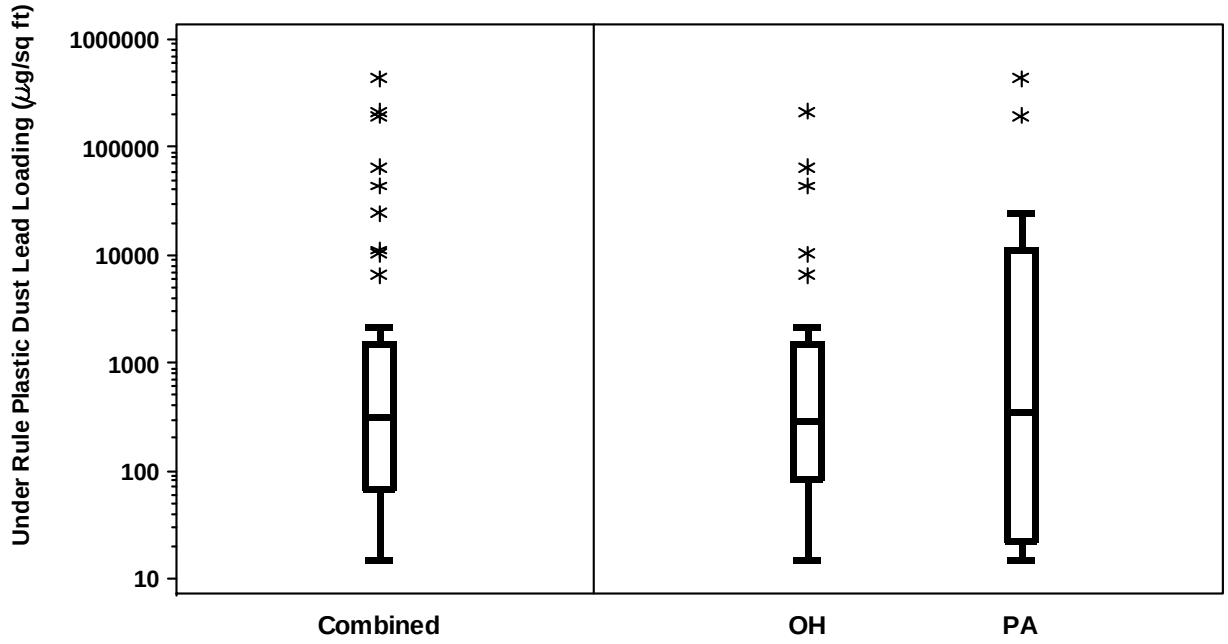

Figure E.2b. Box Plots of Dust Lead Loading Measured Under Rule Plastic by City

Table E.2b. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Under Rule Plastic by City

Under Rule Plastic - City	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Columbus, OH	30	11821	450	15	87	295	1523	216592
Pittsburgh, PA	15	45017	544	15	23	360	11220	438699
Combined	45	22886	479	15	68	322	1523	438699

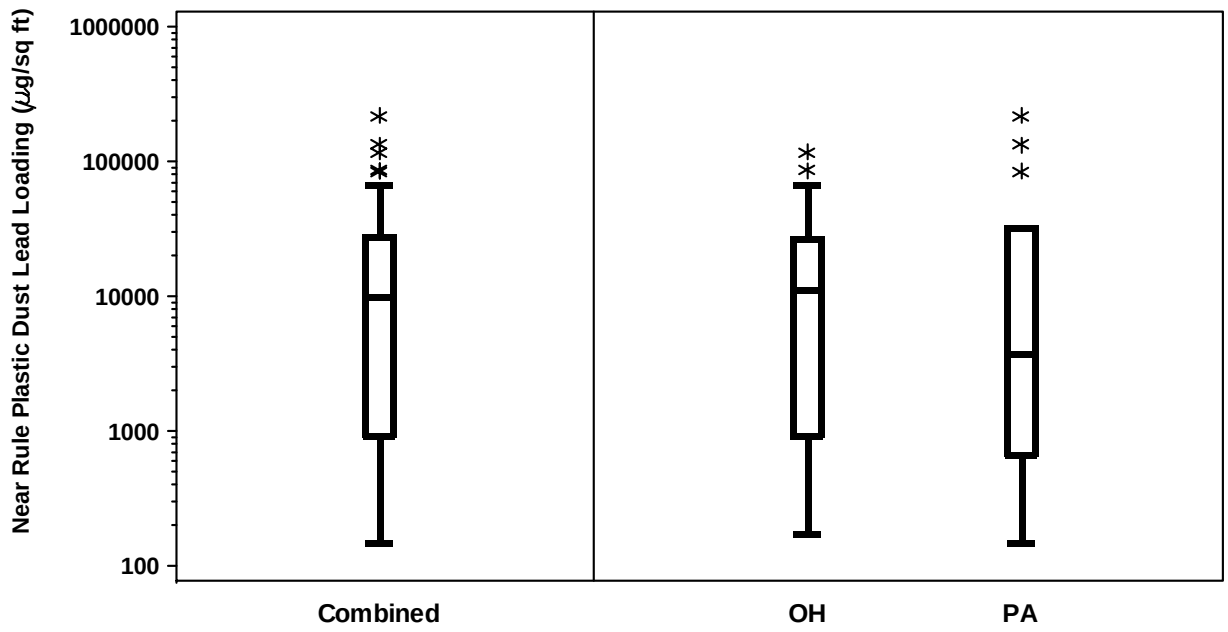

Figure E.2c. Box Plots of Dust Lead Loading Measured Near Rule Plastic by City

Table E.2c. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Near Rule Plastic by City

Near Rule Plastic - City	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Columbus, OH	30	21741	5660	172	929	11017	27082	117170
Pittsburgh, PA	15	36259	4867	150	658	3793	31708	217900
Combined	45	26581	5383	150	929	9865	27650	217900

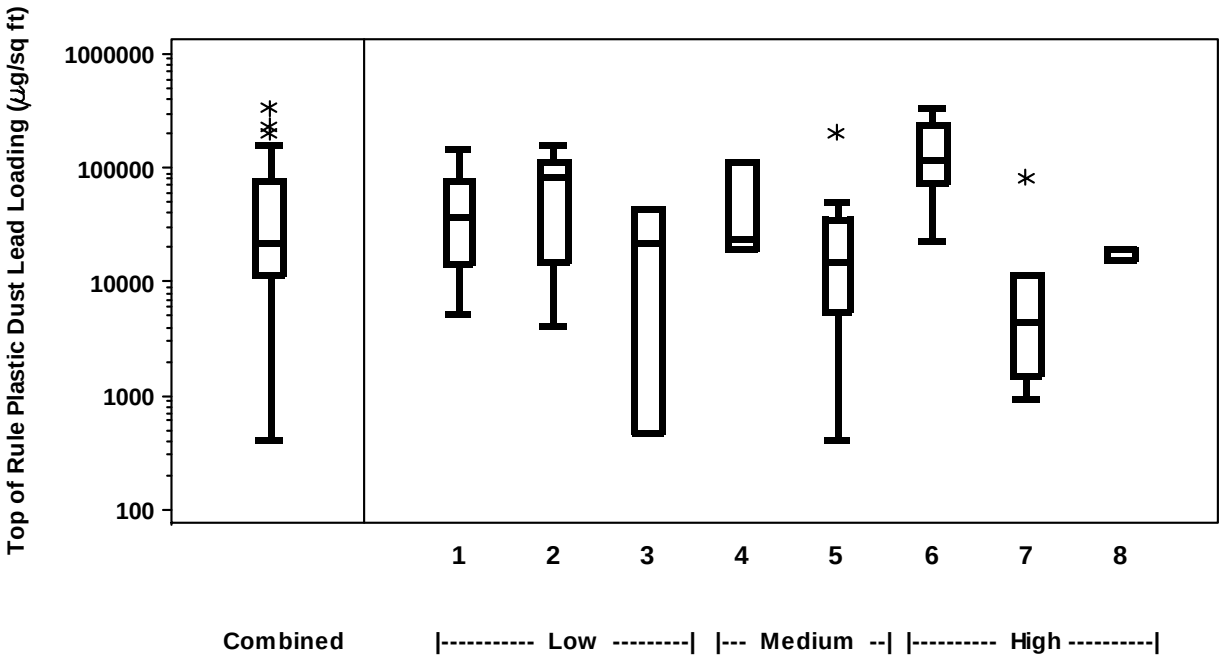

Figure E.3a. Box Plots of Dust Lead Loading Measured Top of Rule Plastic by Job Type

Table E.3a. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Top of Rule Plastic by Job Type

Top of Rule Plastic - Job Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
E1-Door Replacement	6	54110	32653	5286	14441	37018	79163	151734
E2-Trim Soffit Replacement	6	77103	44474	4109	14846	83718	115207	161018
E3-Rotopene	3	22218	7713	472	472	22004	44178	44178
E4-Heat gun under 1100 degrees	3	52302	37431	19466	19466	23684	113756	113756
E5-Dry Scrape	12	33280	12004	417	5457	14758	35148	205451
E6-Power Sanding	6	151573	111388	23488	73457	118061	234877	341492
E7-Torching	6	17714	5447	956	1495	4422	11512	83480
E8-Heat gun over 1100 degrees	3	18079	18000	15750	15750	19111	19376	19376
Combined	45	55114	21292	417	11512	22004	79163	341492

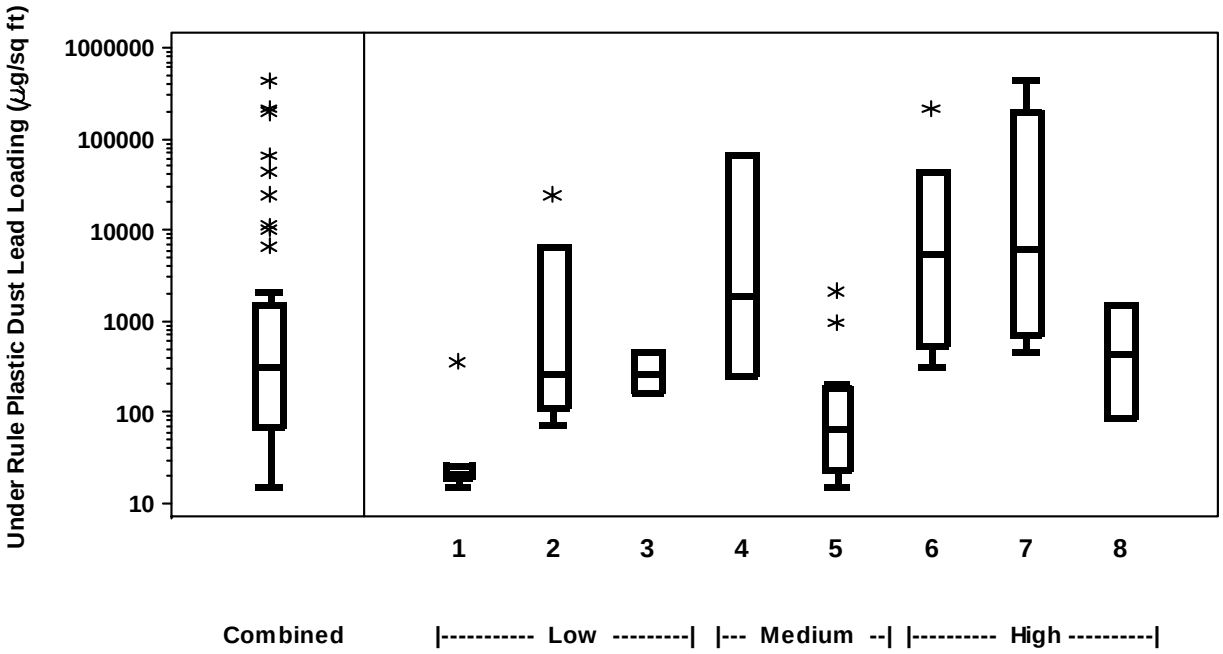

Figure E.3b. Box Plots of Dust Lead Loading Measured Under Rule Plastic by Job Type

Table E.3b. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Under Rule Plastic by Job Type

Under Rule Plastic - Job Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
E1-Door Replacement	6	77	32	15	19	21	26	360
E2-Trim Soffit Replacement	6	5351	648	74	115	270	6635	24744
E3-Rotopene	3	294	270	162	162	268	451	451
E4-Heat gun under 1100 degrees	3	22659	3149	248	248	1914	65815	65815
E5-Dry Scrape	12	322	89	15	23	67	186	2156
E6-Power Sanding	6	45447	4896	322	554	5558	44098	216592
E7-Torching	6	108308	8565	469	719	6212	197538	438699
E8-Heat gun over 1100 degrees	3	684	388	87	87	442	1523	1523
Combined	45	22886	479	15	68	322	1523	438699

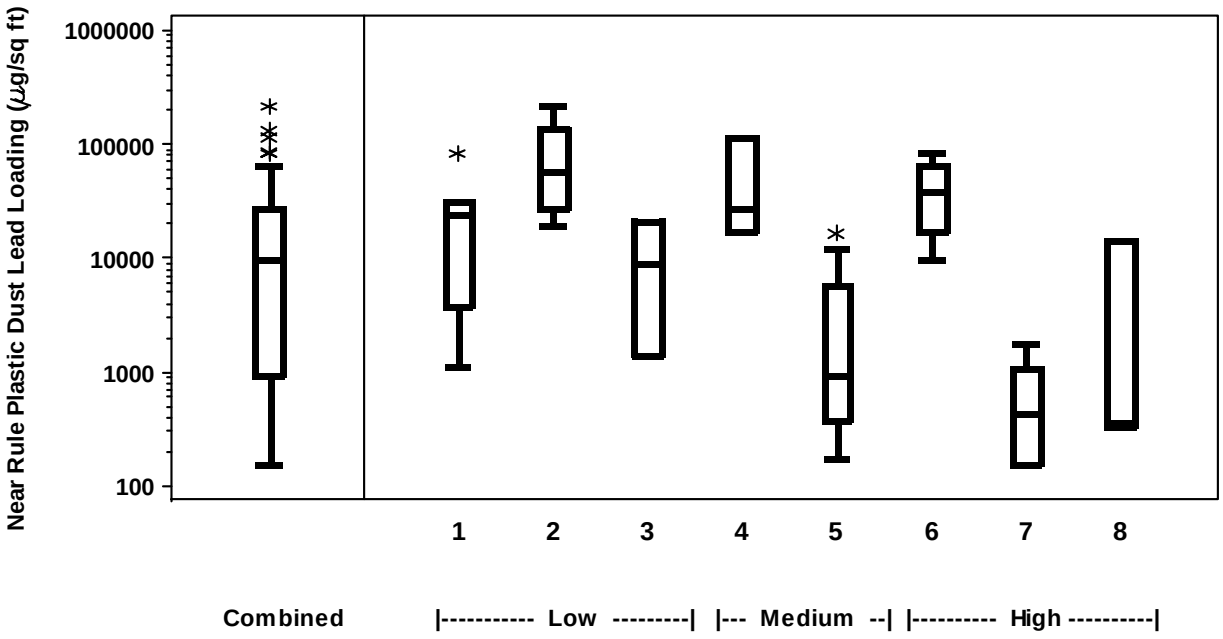

Figure E.3c. Box Plots of Dust Lead Loading Measured Near Rule Plastic by Job Type

Table E.3c. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Near Rule Plastic by Job Type

Near Rule Plastic - Job Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
E1-Door Replacement	6	28156	13527	1129	3793	24008	31708	84290
E2-Trim Soffit Replacement	6	85698	60939	19278	27082	58120	133690	217900
E3-Rotopene	3	10435	6350	1380	1380	8768	21158	21158
E4-Heat gun under 1100 degrees	3	53901	37960	16884	16884	27650	117170	117170
E5-Dry Scrape	12	3777	1267	172	381	941	5887	16597
E6-Power Sanding	6	42532	31602	9865	16905	38360	65719	85985
E7-Torching	6	681	425	150	151	428	1093	1836
E8-Heat gun over 1100 degrees	3	5128	1208	331	331	363	14689	14689
Combined	45	26581	5383	150	929	9865	27650	217900

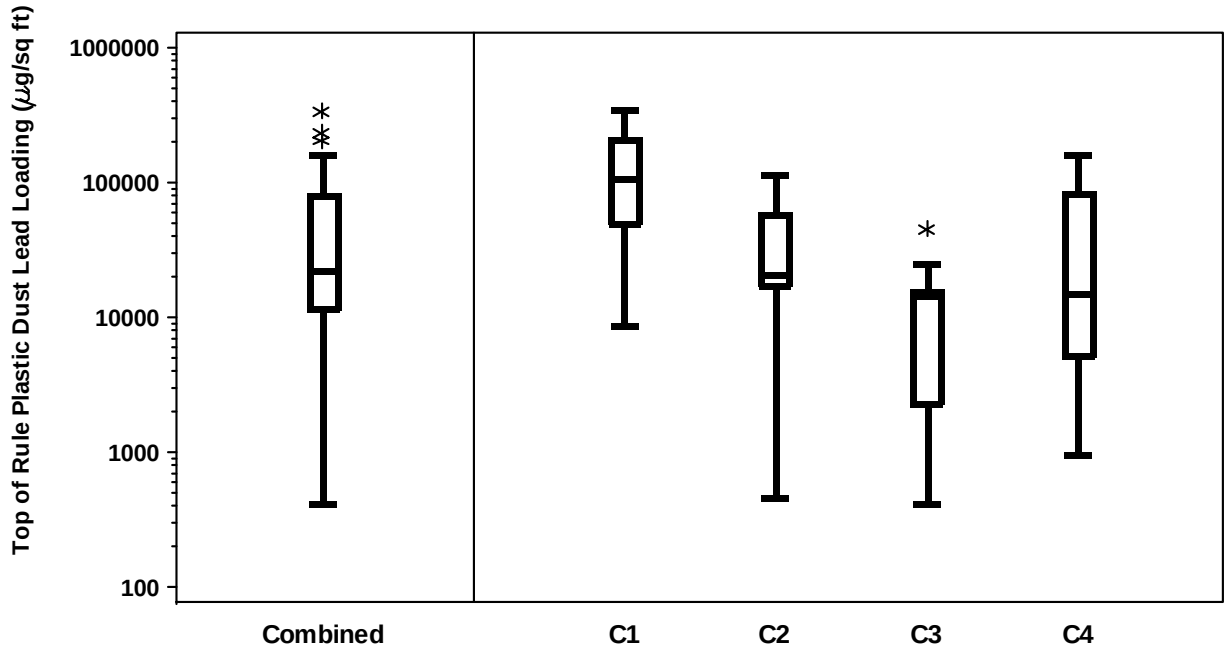

Figure E.4a. Box Plots of Dust Lead Loading Measured Top of Rule Plastic by Contractor

Table E.4a. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Top of Rule Plastic by Contractor

Top of Rule Plastic - Contractor	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C1	9	130473	82162	8556	50819	106383	205451	341492
C2	12	38983	20229	472	17431	20735	57428	115207
C3	9	14948	7745	417	2357	14348	15754	45710
C4	15	46905	18099	956	5151	14846	83480	161018
Combined	45	55114	21292	417	11512	22004	79163	341492

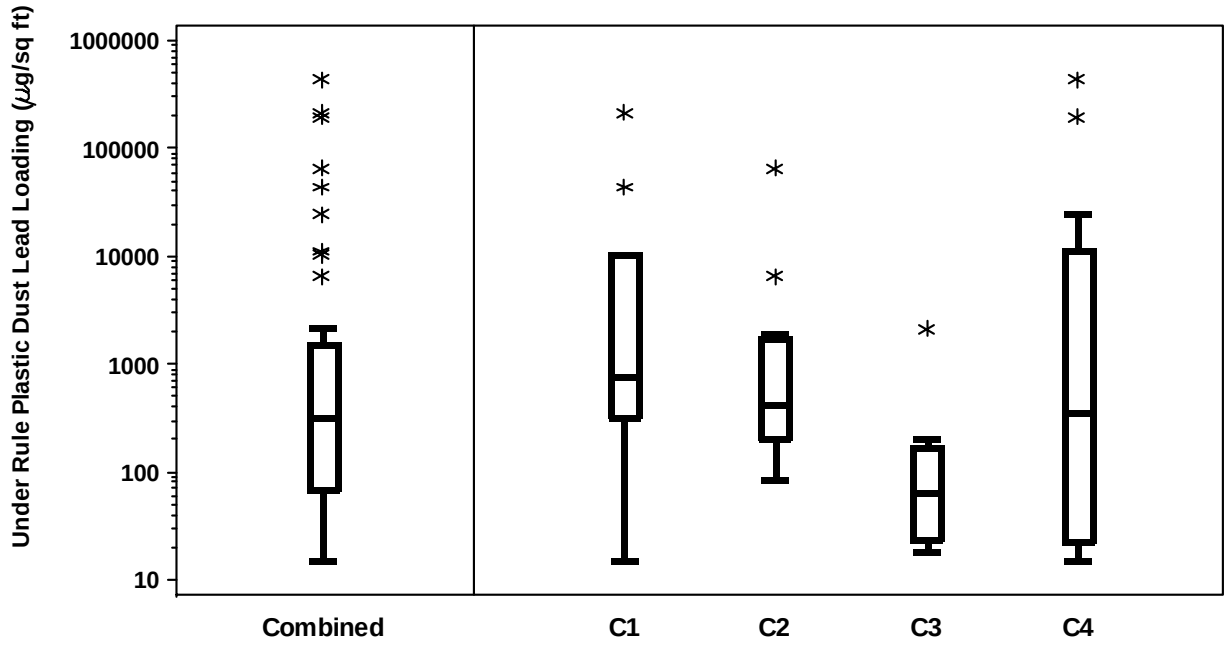

Figure E.4b. Box Plots of Dust Lead Loading Measured Under Rule Plastic by Contractor

Table E.4b. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Under Rule Plastic by Contractor

Under Rule Plastic - Contractor	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C1	9	30419	1402	15	322	782	10334	216592
C2	12	6506	688	87	205	427	1719	65815
C3	9	309	82	18	24	66	170	2156
C4	15	45017	544	15	23	360	11220	438699
Combined	45	22886	479	15	68	322	1523	438699

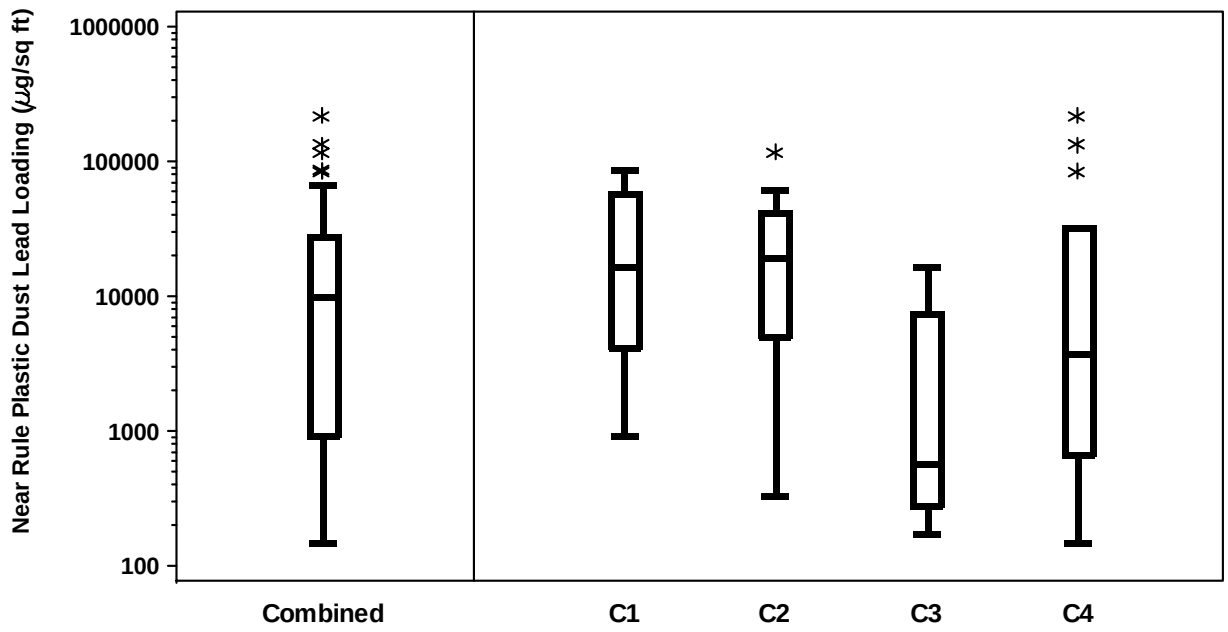

Figure E.4c. Box Plots of Dust Lead Loading Measured Near Rule Plastic by Contractor

Table E.4c. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Near Rule Plastic by Contractor

Near Rule Plastic - Contractor	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C1	9	29028	11559	929	4178	16905	58718	85985
C2	12	29310	10701	331	5074	19021	41251	117170
C3	9	4363	1186	172	274	574	7596	16597
C4	15	36259	4867	150	658	3793	31708	217900
Combined	45	26581	5383	150	929	9865	27650	217900

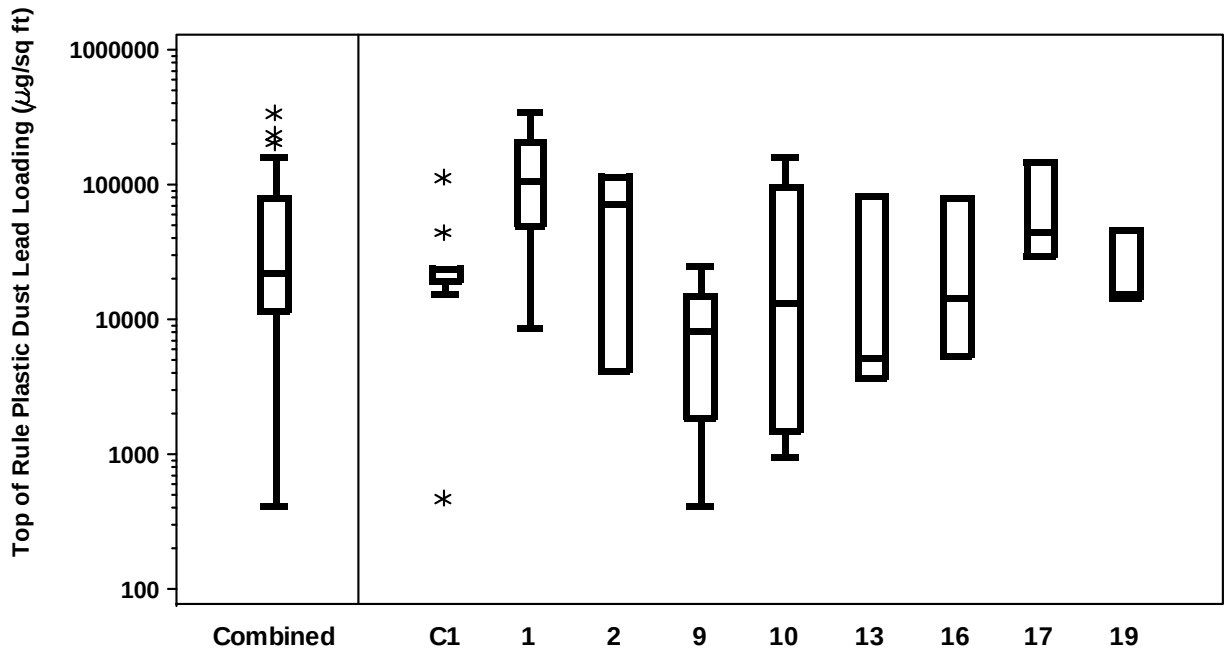

Figure E.5a. Box Plots of Dust Lead Loading Measured Top of Rule Plastic by Housing Unit

Table E.5a. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Top of Rule Plastic by Housing Unit

Top of Rule Plastic - Housing Unit	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C01	9	30866	17321	472	19111	19466	23684	113756
H01	9	130473	82162	8556	50819	106383	205451	341492
H02	3	63331	32223	4109	4109	70677	115207	115207
H09	6	9786	4618	417	1845	8351	15168	24585
H10	6	47764	12495	956	1495	13179	96758	161018
H13	3	30774	11666	3692	3692	5151	83480	83480
H16	3	32963	18214	5286	5286	14441	79163	79163
H17	3	75257	58537	30060	30060	43976	151734	151734
H19	3	25271	21780	14348	14348	15754	45710	45710
Combined	45	55114	21292	417	11512	22004	79163	341492

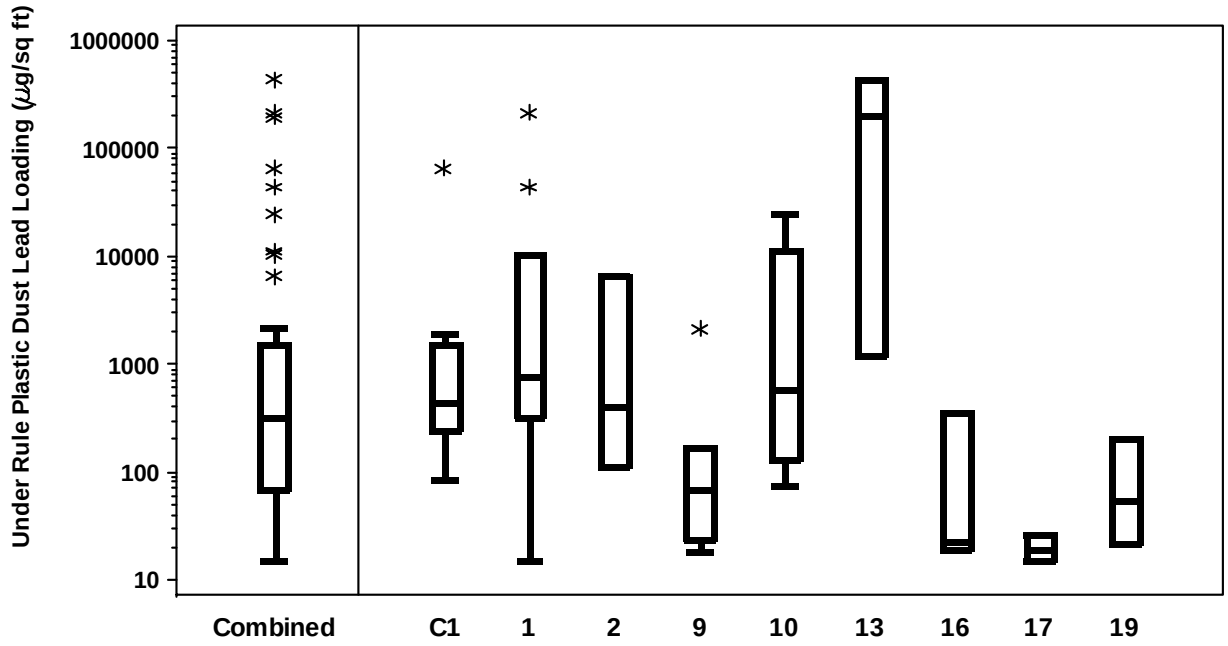

Figure E.5b. Box Plots of Dust Lead Loading Measured Under Rule Plastic by Housing Unit

Table E.5b. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Under Rule Plastic by Housing Unit

Under Rule Plastic - Housing Unit	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C01	9	7879	691	87	248	442	1523	65815
H01	9	30419	1402	15	322	782	10334	216592
H02	3	2387	679	115	115	411	6635	6635
H09	6	417	94	18	24	67	170	2156
H10	6	6226	981	74	129	594	11220	24744
H13	3	212480	47078	1204	1204	197538	438699	438699
H16	3	134	54	19	19	23	360	360
H17	3	20	19	15	15	19	26	26
H19	3	92	62	22	22	53	201	201
Combined	45	22886	479	15	68	322	1523	438699

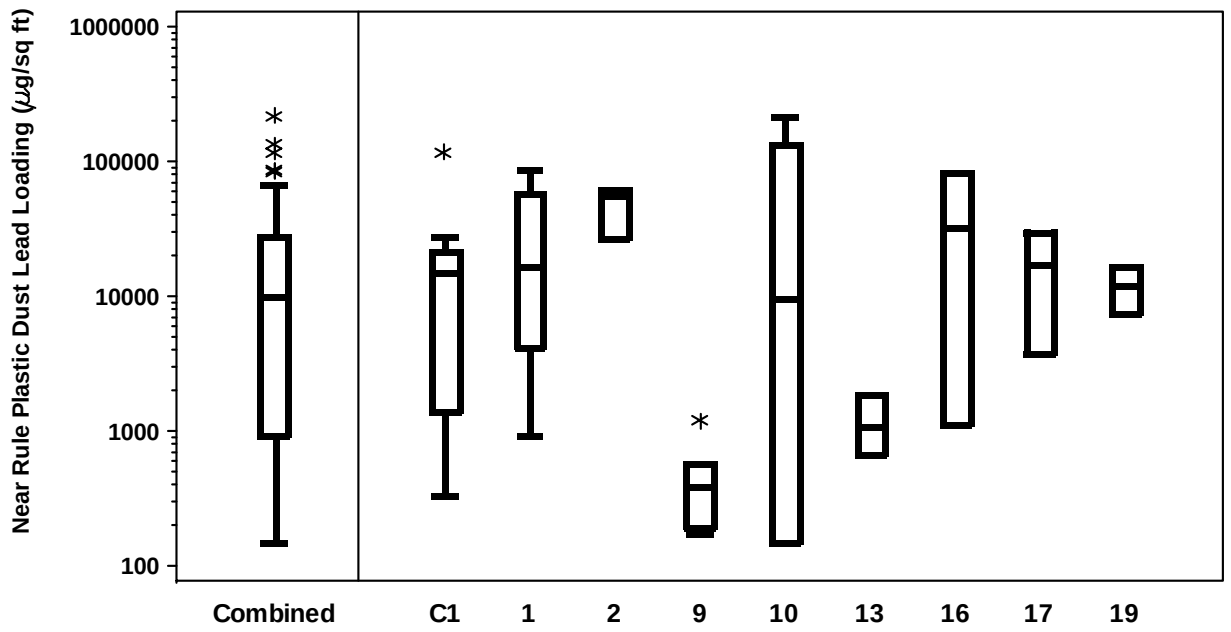

Figure E.5c. Box Plots of Dust Lead Loading Measured Near Rule Plastic by Housing Unit

Table E.5c. Descriptive Summary of Dust Lead Loading (µg/ft^2) Measured Near Rule Plastic by Housing Unit

Near Rule Plastic - Housing Unit	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
C01	9	23155	6629	331	1380	14689	21158	117170
H01	9	29028	11559	929	4178	16905	58718	85985
H02	3	47774	45011	27082	27082	54851	61388	61388
H09	6	484	380	172	190	381	574	1205
H10	6	61895	3689	150	151	9738	133690	217900
H13	3	1196	1097	658	658	1093	1836	1836
H16	3	39042	14450	1129	1129	31708	84290	84290
H17	3	17270	12662	3793	3793	17590	30426	30426
H19	3	12121	11533	7596	7596	12169	16597	16597
Combined	45	26581	5383	150	929	9865	27650	217900

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APPENDIX F

DETAILED DESCRIPTIVE ANALYSES OF INTERIOR AIR LEAD CONCENTRATIONS

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F1. Distribution Check for Interior Air Dust Lead Concentrations

Distribution of Non-Detectable Air Lead Measurements

Measurements recorded at or below the detection limit were set to half that limit for this analysis. Table F1.1 summarizes the frequency for these measurements.

Table F1.1. Summary of Interior Air Dust Lead Concentration Measurements below Detection Limit Measurements by Room and Stage

	# (%) Samples by Room Type		
Stage	**Work**	**Tool**	**Observation**
Post-Work	29 (48.3%)	43 (71.7%)	45 (75.0%)
Post-Cleaning	50 (82.0%)	53 (88.3%)	54 (90.0%)
Post-Verification	59 (98.3%)	59 (98.3%)	58 (96.7%)

Normality of the Air Lead Measurement Distribution

Prior to any analysis of the lead dust concentrations, the underlying distribution of the response data was examined for normality. Note that a Wilkes-Shapiro p-value < 0.001 indicates a significant departure from normality. With larger sample sizes, normality tests can indicate statistically significant but unimportant departures from normality. For the data collected for this study, the log-transformation of the data was accepted even when the Wilkes-Shapiro statistics indicated non-normality. With additional time, potential outliers and other influential points could be explored to determine if other data adjustments would be beneficial to the analyses.

Figures F1.1a and F1.1b summarize the distribution of the raw and natural log-transformed air dust lead measurements from the work room.

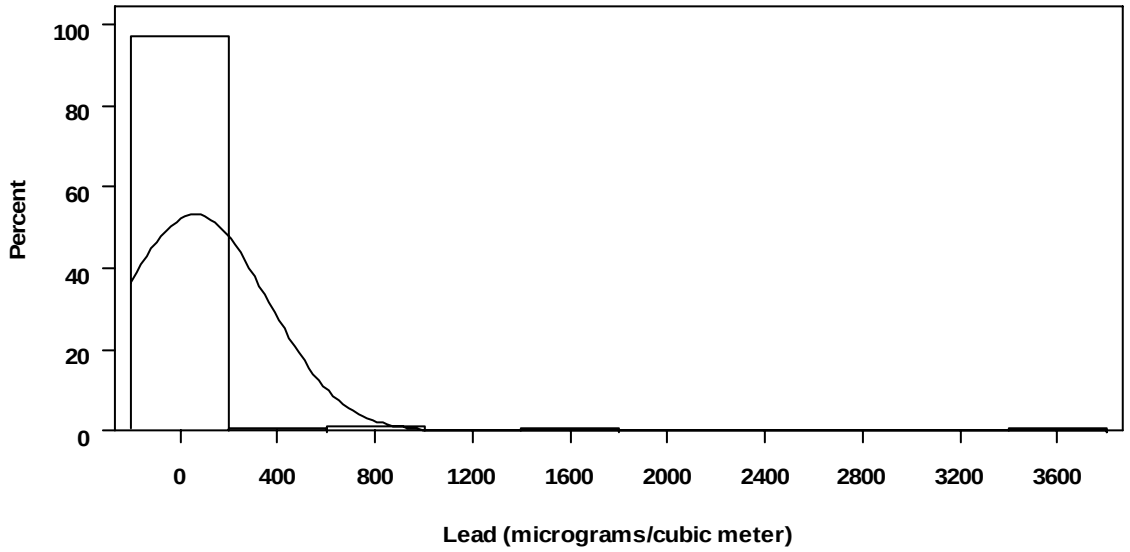


Figure F1.1a. Histogram of Air Dust Lead Loading Concentrations (μg/m^3) in the Work Room across All Stages (Wilkes-Shapiro p-value < 0.001)

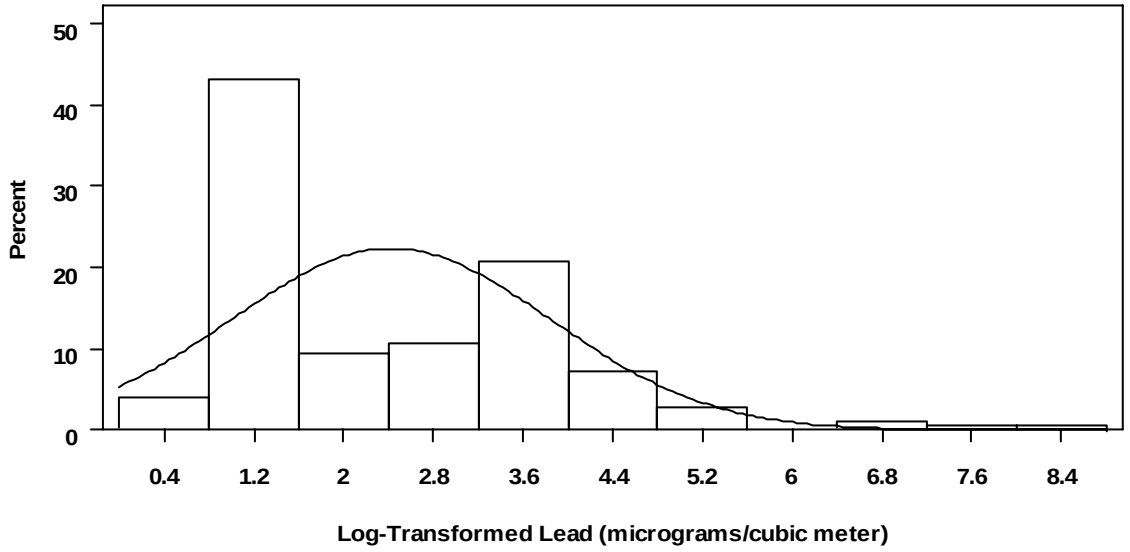


Figure F1.1b. Histogram of Log Transformed Air Dust Lead Concentration Measurements (μg/m^3) in the Work Room across All Stages (Wilkes-Shapiro p-value = < 0.001)

F2. Exploratory Summaries of Interior Air Dust Lead Concentrations vs. Select Categorical Characteristics

Box plots of the dust lead concentrations recorded in the air as well as descriptive statistical summary tables are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. Only work room results are presented. Box plots are a technique for displaying one-dimensional data and their summary characteristics. A box plot displays the median (represented by the center horizontal line), the 25^{th} percentile (represented by the bottom of the box), and the 75^{th} percentile (represented by the top of the box). The vertical lines, or whiskers, are drawn from the box to the most extreme point within 1.5 * interquartile range. (An interquartile range is the distance between the 25^{th} and the 75^{th} percentiles.) Any value more extreme than this is identified individually with stars. The data are plotted using a log-base 10 scale. The summary statistics provided in the tables are sample size, arithmetic average, geometric average, minimum, 25^{th} percentile, median, 75^{th} percentile, and maximum.

The selected characteristics are as follows:

1. Job intensity
2. City
3. Job type
4. Contractor
5. Housing unit
6. Rule Plastic Use
7. Cleaning Type
8. Phase
9. Restricted vs. non-restricted jobs
10. Work room floor type
11. Work room floor condition

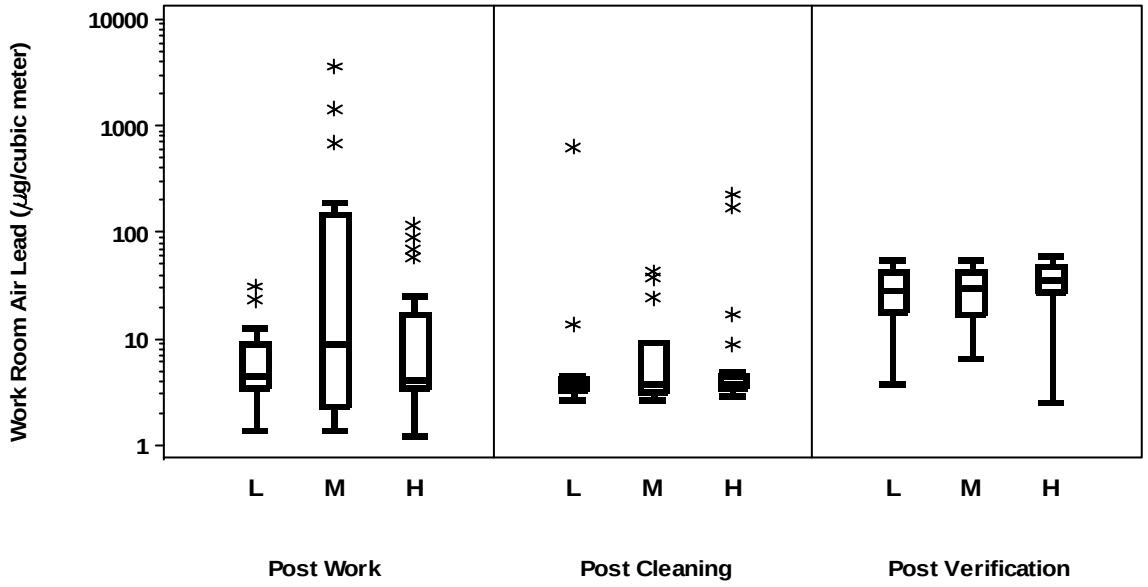


Figure F2.1a. Box Plots of Interior Air Dust Lead Concentration Measured in the Work Room by Stage and Job Intensity Level

Table F2.1a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) Measured in the Work Room by Stage and Job Intensity Level

Stage	Work Room - Air Lead (Intensity)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	1-High	20	21	8	1	4	4	17	118
	2-Medium	20	328	22	1	2	9	152	3651
	3-Low	20	8	5	1	4	4	9	31
Post-Clean	1-High	20	24	6	3	3	4	4	229
	2-Medium	20	9	6	3	3	4	9	43
	3-Low	20	36	5	3	3	4	4	637
Post-Verification	1-High	19	36	30	3	28	35	48	60
	2-Medium	20	30	25	7	18	31	42	56
	3-Low	20	29	24	4	18	28	43	56

Figure F2.2a. Box Plots of Interior Air Dust Lead Concentration in the Work Room by Stage and City

Table F2.2a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) in the Work Room by Stage and City

Stage	Work Room - Air Lead (City)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	Columbus, OH	38	175	10	1	3	4	25	3651
	Pittsburgh, PA	22	22	9	2	3	6	23	118
Post-Clean	Columbus, OH	38	24	5	3	3	4	5	637
	Pittsburgh, PA	22	22	6	3	4	4	4	229
Post-Verification	Columbus, OH	38	30	24	3	13	32	47	60
	Pittsburgh, PA	21	35	32	13	28	32	43	58

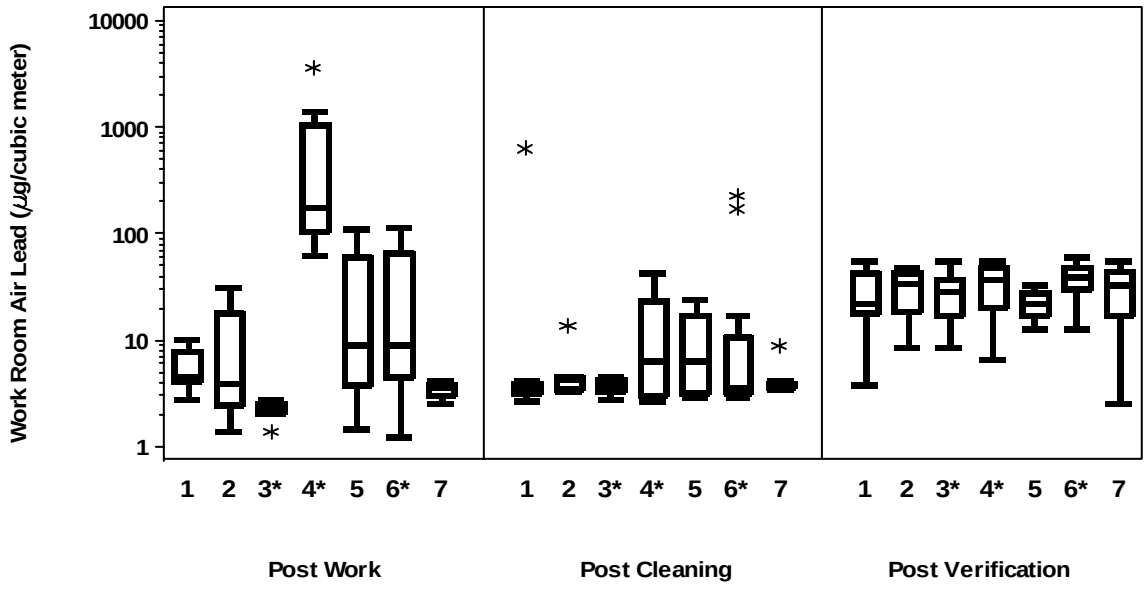


Figure F2.3a. Box Plots of Interior Air Dust Lead Concentration in the Work Room by Stage and Job Type

Table F2.3a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) in the Work Room by Stage and Job Type

Stage	Work Room - Air Lead (Job Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	I1-Cut Outs	12	6	5	3	4	4	8	10
	I2-Replace Windows	8	10	6	1	2	4	18	31
	I3-Scrape Surface *	8	2	2	1	2	2	3	3
	I4-Scrape Door *	8	802	300	63	105	176	1070	3651
	I5-Heat gun < 1100°	4	32	10	1	4	9	61	110
	I6-Heat gun > 1100° *	12	33	13	1	5	9	65	118
	I7-Kitchen	8	3	3	3	3	4	4	4
Post-Clean	I1-Cut Outs	12	56	5	3	3	4	4	637
	I2-Replace Windows	8	5	5	3	4	4	4	14
	I3-Scrape Surface *	8	4	4	3	3	4	4	5
	I4-Scrape Door *	8	14	8	3	3	6	24	43
	I5-Heat gun < 1100°	4	10	7	3	3	6	17	25
	I6-Heat gun > 1100° *	12	38	8	3	3	4	11	229
	I7-Kitchen	8	4	4	4	4	4	4	9
Post-Verification	I1-Cut Outs	12	28	23	4	18	22	42	56
	I2-Replace Windows	8	31	26	9	19	34	43	48
	I3-Scrape Surface *	8	29	25	8	17	28	37	56
	I4-Scrape Door *	8	35	28	7	21	38	49	56
	I5-Heat gun < 1100°	4	23	22	13	18	22	28	33
	I6-Heat gun > 1100° *	12	39	35	13	31	39	48	60
	I7-Kitchen	7	32	24	3	17	33	45	57

* Indicates job is restricted

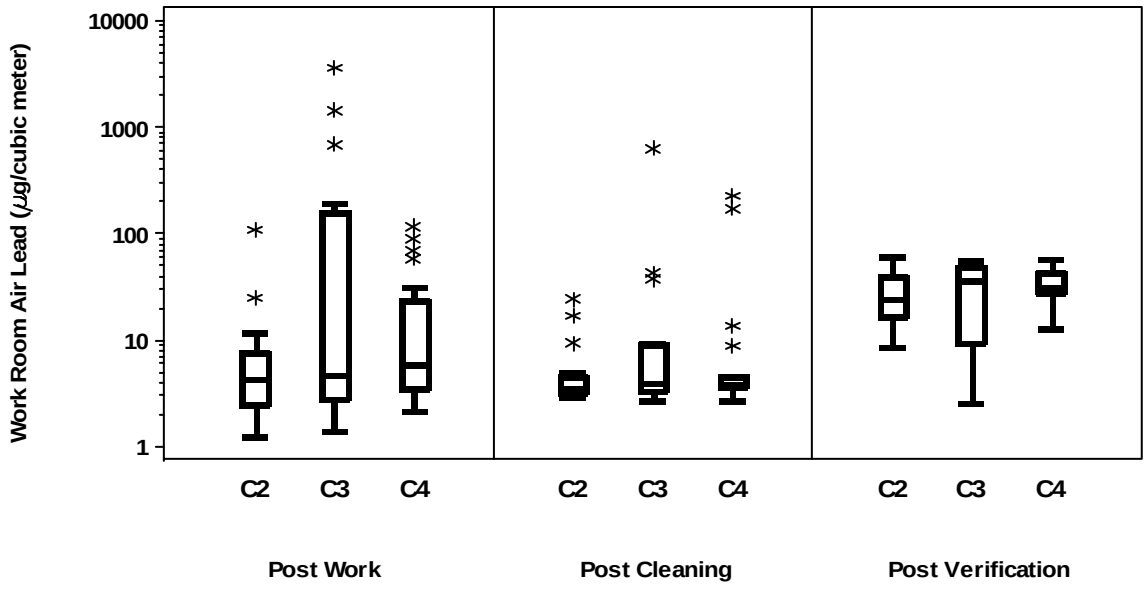


Figure F2.4a. Box Plots of Interior Air Dust Lead Concentration in the Work Room by Stage and Contractor

Table F2.4a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) in the Work Room by Stage and Contractor

Stage	Work Room - Air Lead (Contractor)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	C2	20	11	5	1	2	4	8	110
	C3	18	358	23	1	3	5	158	3651
	C4	22	22	9	2	3	6	23	118
Post-Clean	C2	20	6	4	3	3	3	4	25
	C3	18	43	7	3	3	4	9	637
	C4	22	22	6	3	4	4	4	229
Post-Verification	C2	20	29	25	8	16	24	39	60
	C3	18	31	22	3	10	36	48	56
	C4	21	35	32	13	28	32	43	58

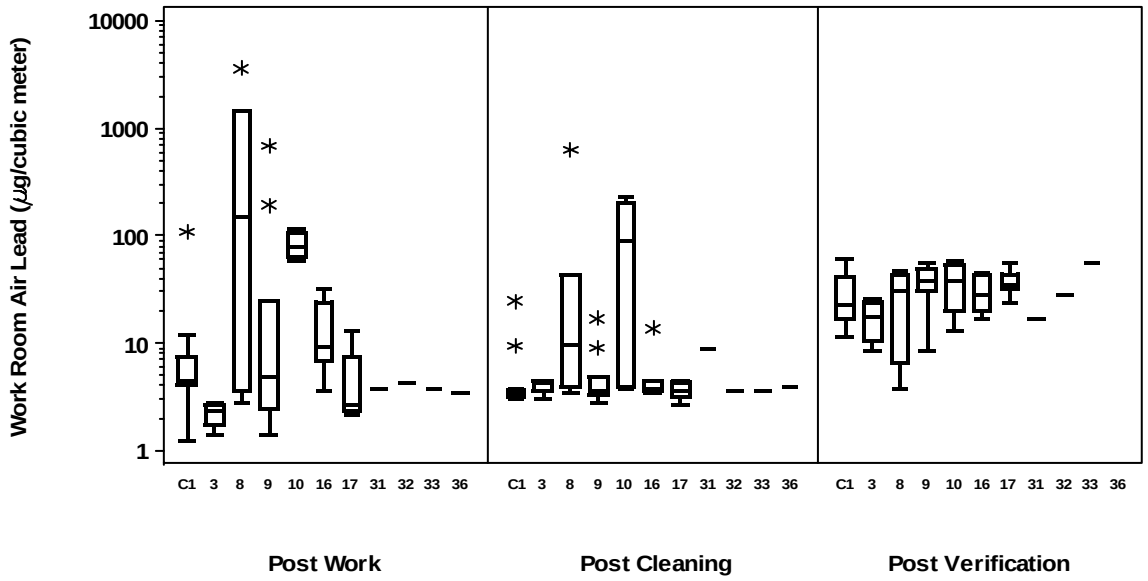


Figure F2.5a. Box Plots of Interior Air Dust Lead Concentration in the Work Room by Stage and Housing Unit

Table F2.5a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) in the Work Room by Stage and Housing Unit

Stage	Work Room - Air Lead (Housing Unit)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	C01	12	14	5	1	4	4	7	110
	H03	4	2	2	1	2	2	3	3
	H08	7	773	66	3	4	147	1444	3651
	H09	10	95	10	1	2	6	25	696
	H10	4	85	82	60	65	80	104	118
	H16	6	14	11	4	7	9	23	31
	H17	8	5	4	2	2	3	7	13
	H31	1	4	4	4	4	4	4	4
	H32	1	4	4	4	4	4	4	4
	H33	1	4	4	4	4	4	4	4
	H35	5	28	11	3	4	5	63	64
	H36	1	3	3	3	3	3	3	3
Post-Clean	C01	12	6	4	3	3	3	4	25
	H03	4	4	4	3	4	4	4	5
	H08	7	106	18	3	4	10	43	637
	H09	10	5	5	3	3	4	5	17
	H10	4	103	28	4	4	89	202	229
	H16	6	5	5	3	4	4	4	14
	H17	8	4	4	3	3	4	4	4
	H31	1	9	9	9	9	9	9	9
	H32	1	4	4	4	4	4	4	4
	H33	1	4	4	4	4	4	4	4
	H35	5	4	3	3	3	4	4	4
	H36	1	4	4	4	4	4	4	4
Post-Verification	C01	12	30	26	11	16	22	41	60
	H03	4	17	16	8	10	17	24	26
	H08	7	26	18	4	7	31	43	48
	H09	10	36	31	9	31	38	48	56
	H10	4	37	32	13	20	38	53	58
	H16	6	30	28	17	20	28	43	45
	H17	8	37	36	24	32	35	43	56
	H31	1	17	17	17	17	17	17	17
	H32	1	28	28	28	28	28	28	28
	H33	1	57	57	57	57	57	57	57
	H35	5	34	24	3	34	38	47	48
	H36	0							

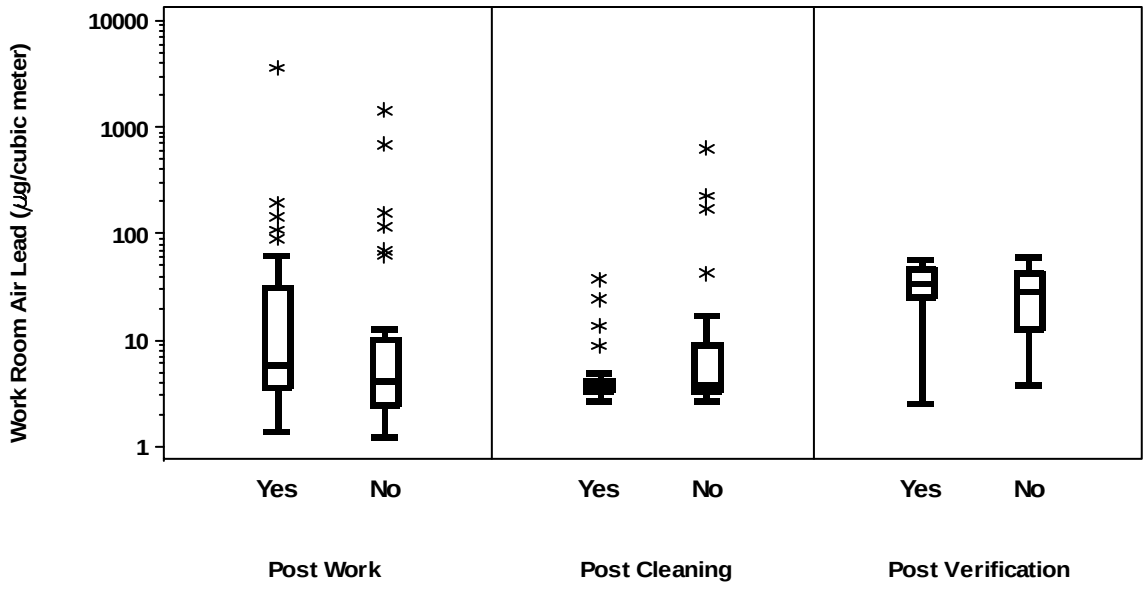


Figure F2.6a. Box Plots of Interior Air Dust Lead Concentration in the Work Room by Stage and Rule Plastic Use

Table F2.6a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) in the Work Room by Stage and Rule Plastic Use

Stage	Work Room - Air Lead (Plastic)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	1-yes	30	150	12	1	4	6	31	3651
	2-no	30	88	8	1	2	4	10	1444
Post-Clean	1-yes	30	6	5	3	3	4	4	38
	2-no	30	40	7	3	3	4	9	637
Post-Verification	1-yes	30	35	31	3	26	34	47	58
	2-no	29	28	23	4	13	28	42	60

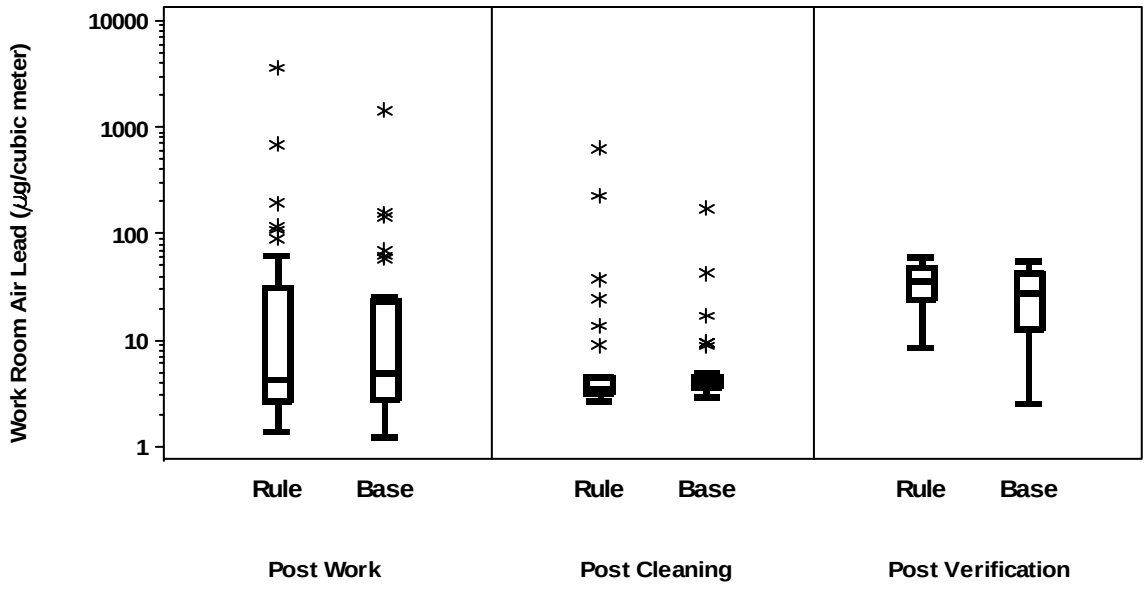


Figure F2.7a. Box Plots of Interior Air Dust Lead Concentration in the Work Room by Stage and Cleaning Type

Table F2.7a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) in the Work Room by Stage and Cleaning Type

Stage	Work Room - Air Lead (Cleaning)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	1-rule	30	168	10	1	3	4	31	3651
	2-base	30	70	9	1	3	5	23	1444
Post-Clean	1-rule	30	34	6	3	3	3	4	637
	2-base	30	12	5	3	4	4	4	175
Post-Verification	1-rule	29	37	33	9	24	35	48	60
	2-base	30	27	21	3	13	28	42	56

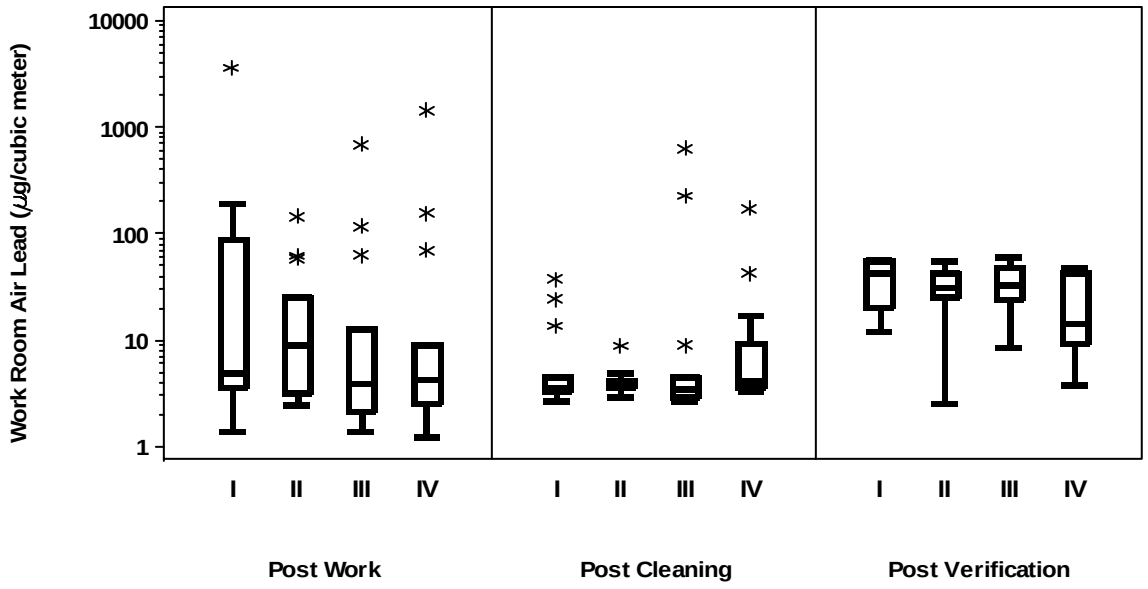


Figure F2.8a. Box Plots of Interior Air Dust Lead Concentration in the Work Room by Stage and Phase

Table F2.8a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) in the Work Room by Stage and Phase

Stage	Work Room - Air Lead (Phase)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	I-Rule w/ Plastic	15	275	14	1	4	5	91	3651
	II-Base w/ Plastic	15	25	10	2	3	7	25	147
	III-Rule w/o Plastic	15	62	7	1	2	4	13	696
	IV-Base w/o Plastic	15	115	8	1	3	4	9	1444
Post-Clean	I-Rule w/ Plastic	15	8	5	3	3	4	5	38
	II-Base w/ Plastic	15	4	4	3	4	4	4	9
	III-Rule w/o Plastic	15	61	7	3	3	3	4	637
	IV-Base w/o Plastic	15	20	7	3	4	4	10	175
Post-Verification	I-Rule w/ Plastic	15	38	34	12	21	42	56	58
	II-Base w/ Plastic	15	32	28	3	26	31	43	56
	III-Rule w/o Plastic	14	35	32	9	24	33	48	60
	IV-Base w/o Plastic	15	21	16	4	10	14	42	48

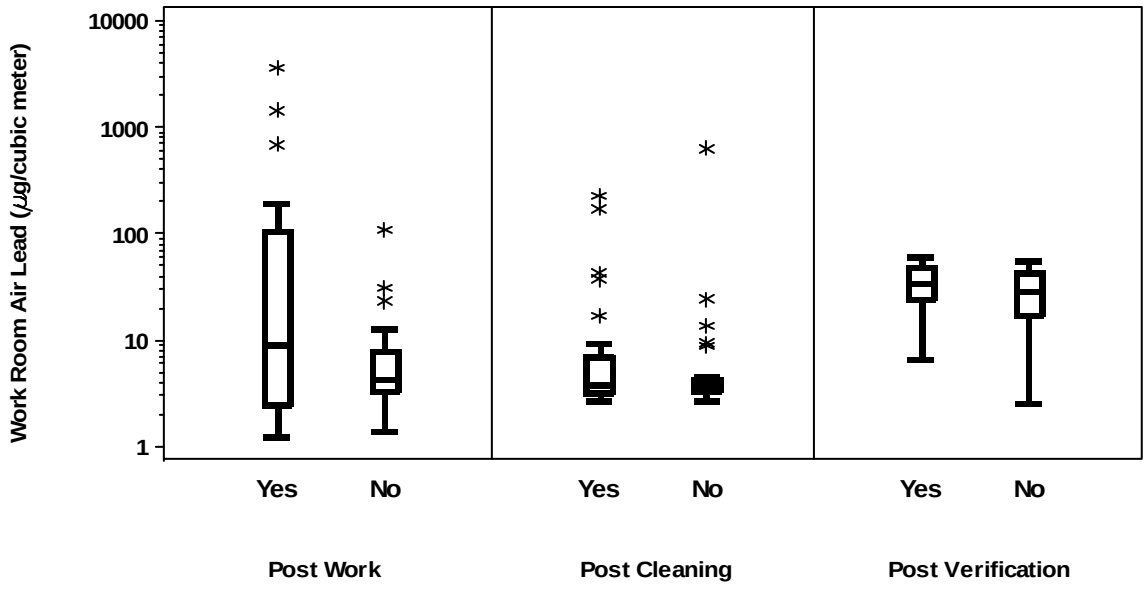


Figure F2.9a. Box Plots of Interior Air Dust Lead Concentration in the Work Room by Stage and Restricted Job

Table F2.9a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) in the Work Room by Stage and Restricted Job

Stage	Work Room - Air Lead (Restricted Job)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	1-yes	28	244	20	1	2	9	104	3651
	2-no	32	10	5	1	3	4	8	110
Post-Clean	1-yes	28	21	6	3	3	4	7	229
	2-no	32	25	5	3	3	4	4	637
Post-Verification	1-yes	28	35	30	7	24	34	48	60
	2-no	31	29	24	3	17	28	43	57

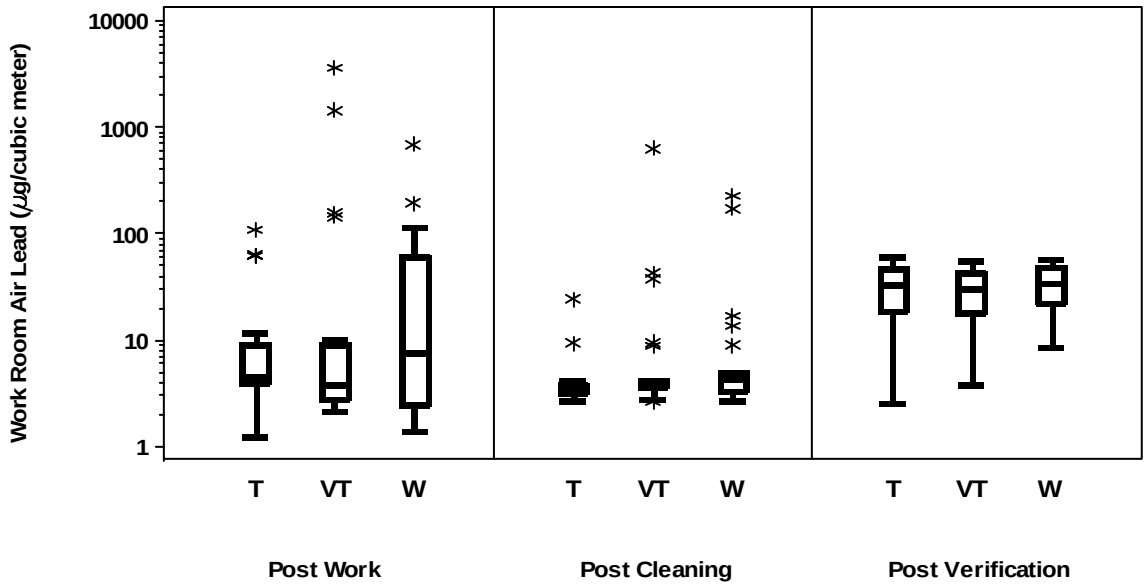


Figure F2.10a. Box Plots of Interior Air Dust Lead Concentration in the Work Room by Stage and Work Room Floor Type

Table F2.10a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) in the Work Room by Stage and Work Room Floor Type

Stage	Work Room - Air Lead (Floor Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	Tile	17	18	7	1	4	4	7	110
	Vinyl Tile	21	261	10	2	3	4	9	3651
	Wood	22	62	12	1	2	9	60	696
Post-Clean	Tile	17	5	4	3	3	3	4	25
	Vinyl Tile	21	38	6	3	4	4	4	637
	Wood	22	23	6	3	3	4	5	229
Post-Verification	Tile	17	31	25	3	19	33	47	60
	Vinyl Tile	20	31	26	4	18	31	43	57
	Wood	22	33	28	8	22	34	48	58

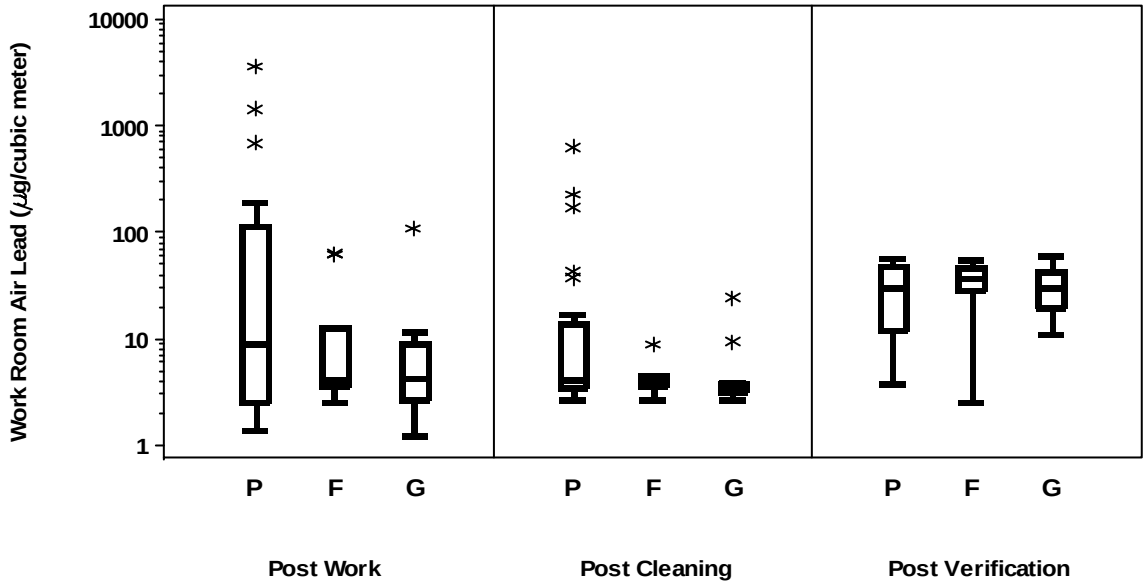


Figure F2.11a. Box Plots of Interior Air Dust Lead Concentration in the Work Room by Stage and Work Room Floor Condition

Table F2.11a. Descriptive Summary of Interior Air Dust Lead Concentration (µg/m^3) in the Work Room by Stage and Work Room Floor Condition

Stage	Work Room - Air Lead (Floor Condition)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Work	Poor	27	250	19	1	3	9	118	3651
	Fair	11	16	7	3	4	4	13	64
	Good	22	10	5	1	3	4	7	110
Post-Clean	Poor	27	46	9	3	3	4	14	637
	Fair	11	4	4	3	4	4	4	9
	Good	22	5	4	3	3	3	4	25
Post-Verification	Poor	27	31	25	4	12	31	48	58
	Fair	10	35	28	3	28	38	47	57
	Good	22	31	28	11	20	30	42	60

F3. Exploratory Summaries of Interior Air Dust Lead Concentrations vs. Select Continuous Characteristics

Scatter plots of the dust lead concentrations recorded in the air are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. The fitted linear regression line (using untransformed data) is displayed in each plot along with its associated r-square value.

The selected characteristics are as follows:

1. Paint Lead Concentration
2. Floor Dust Lead Loading at Clearance
3. Sill Dust Lead Loading at Clearance
4. Initial Average Soil Lead Concentration
5. Final Average Soil Lead Concentration
6. Disturbed Area
7. Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room

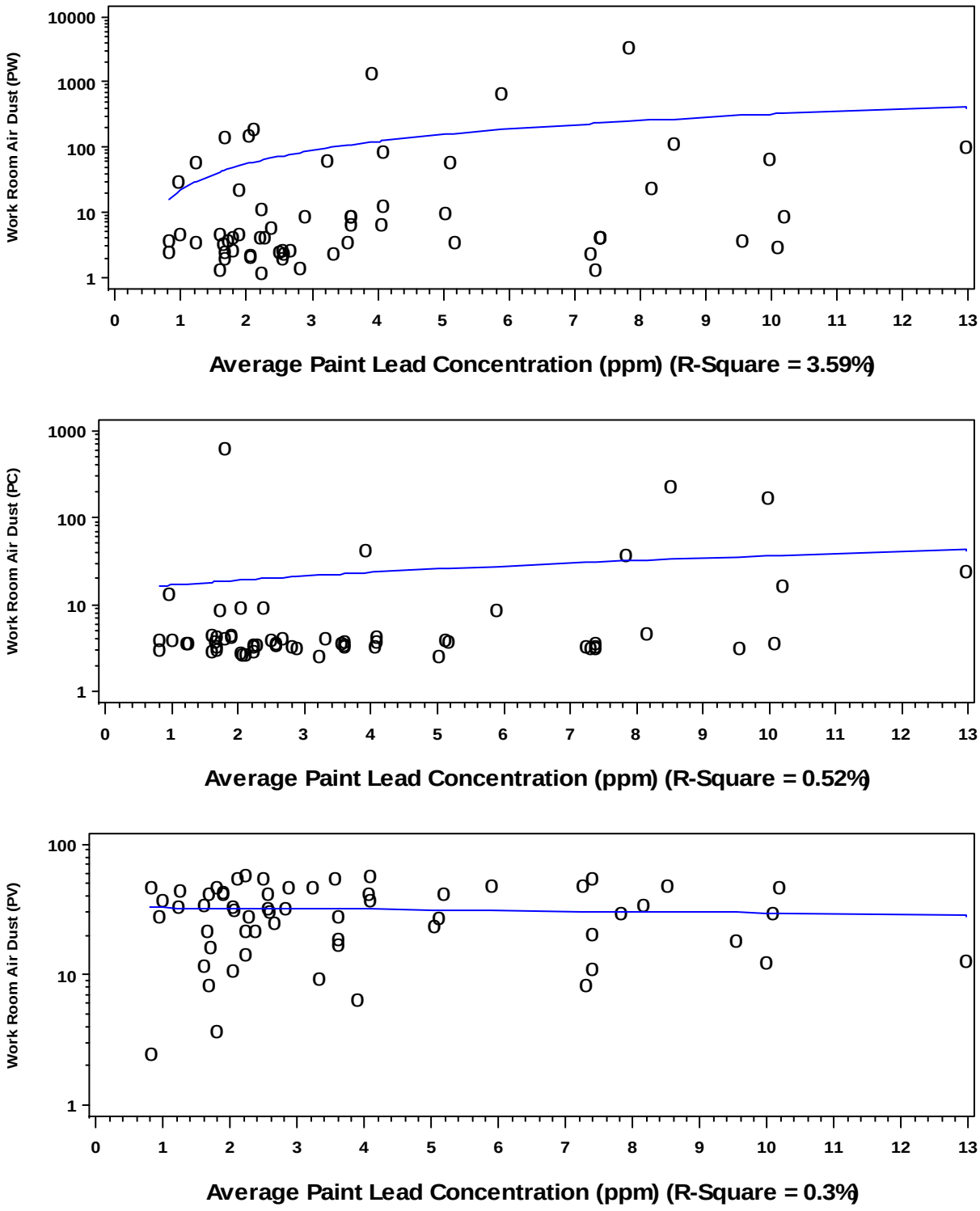


Figure F3.1a. Scatter Plots of Work Room Air Dust Lead Concentration (µg/m^3) by Stage and Average Paint Lead Concentration (ppm)

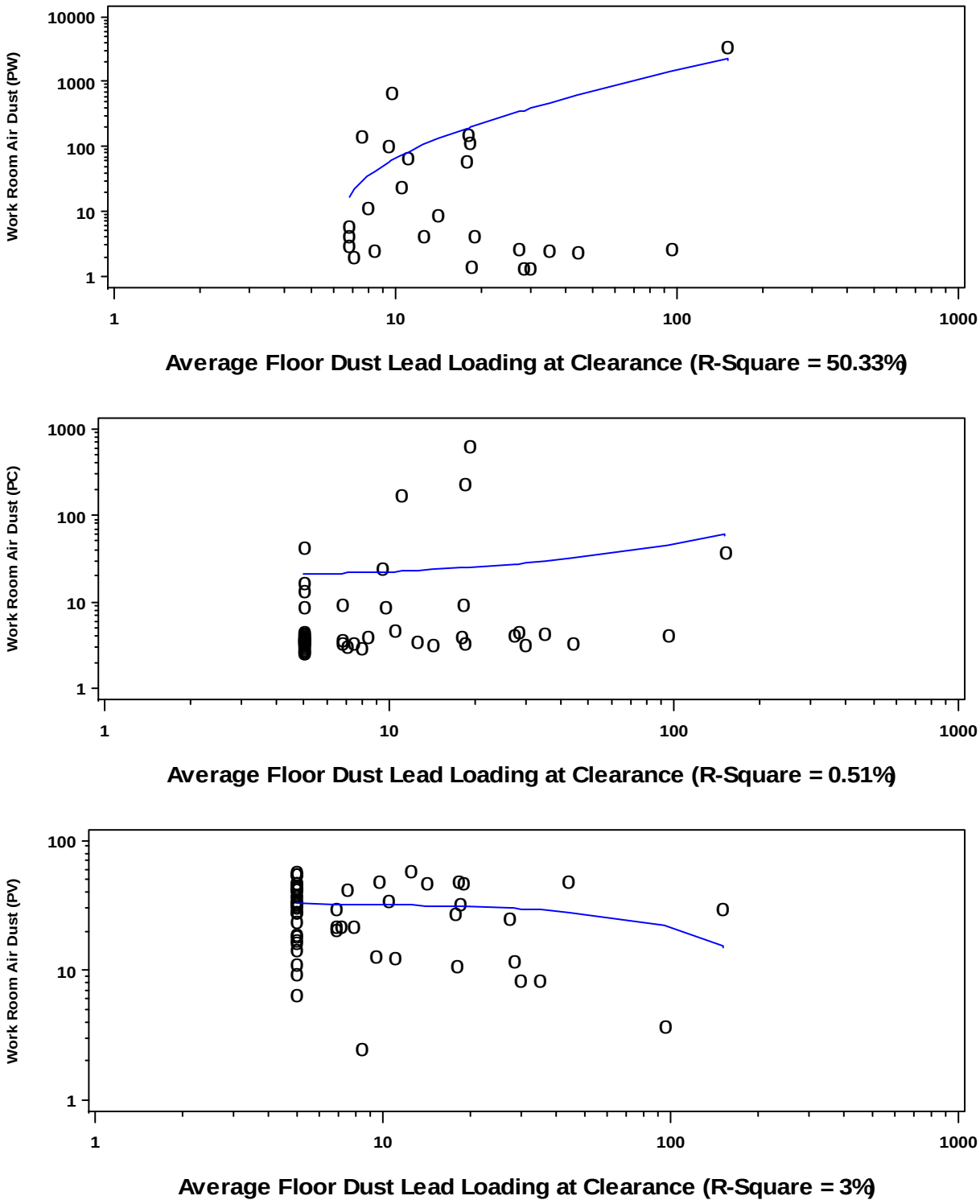


Figure F3.2a. Scatter Plots of Interior Air Dust Lead Concentration (µg/m^3) by Stage and Floor Dust Lead Loading at Clearance (µg/ft^2)

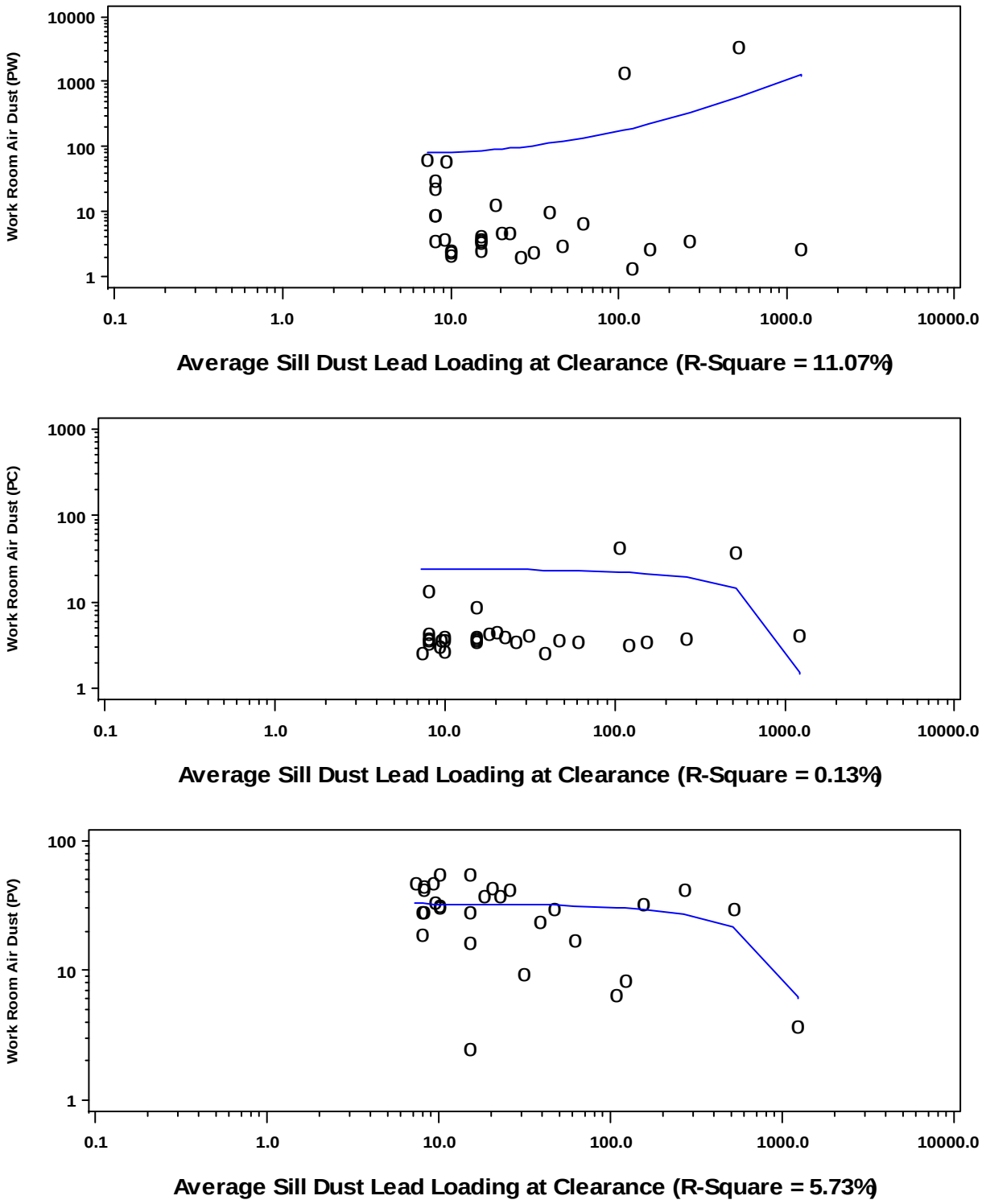


Figure F3.3a. Scatter Plots of Work Room Air Dust Lead Concentration (µg/m^3) by Stage and Sill Dust Lead Loading at Clearance (µg/ft^2)

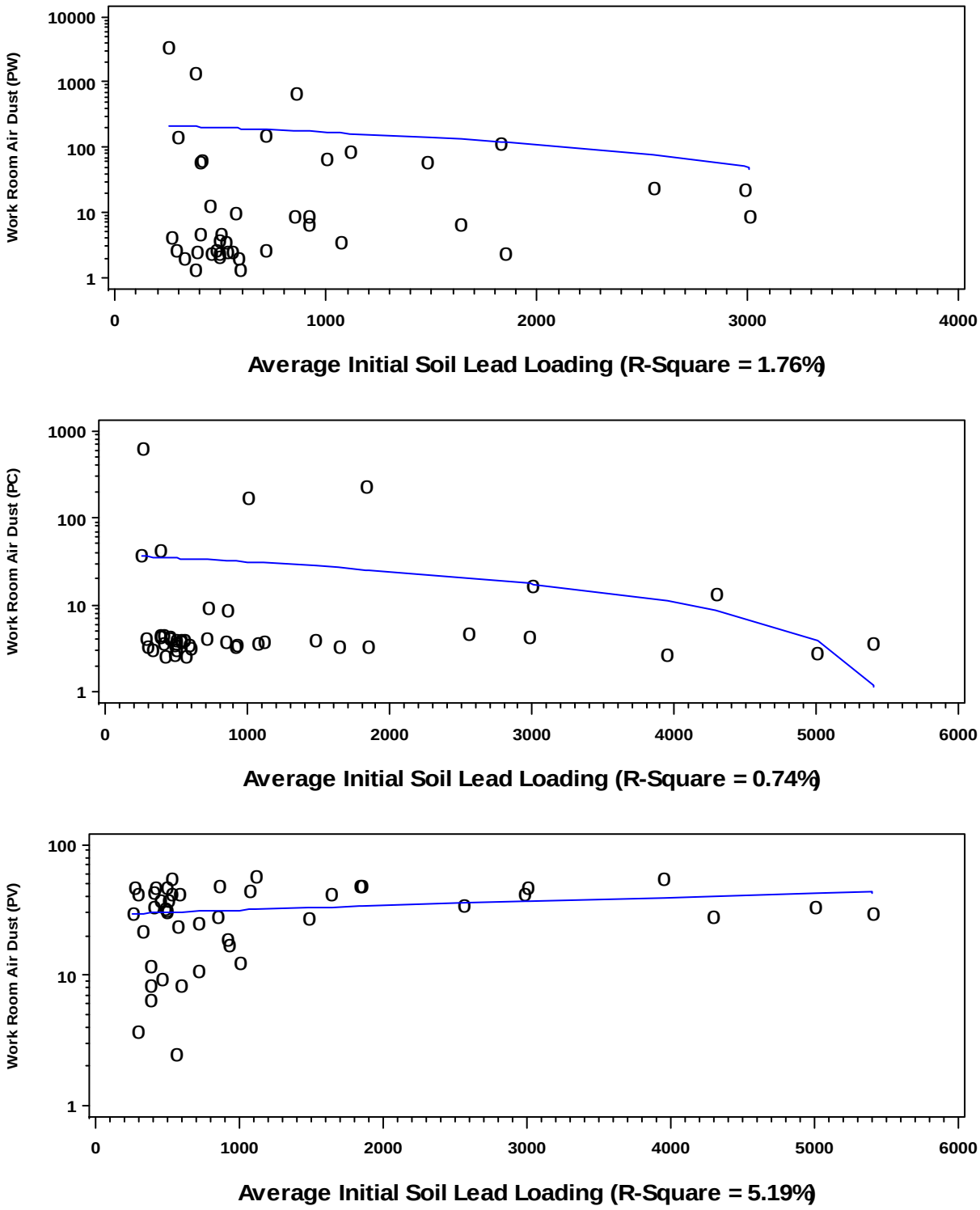


Figure F3.4a. Scatter Plots of Work Room Air Dust Lead Concentration (µg/m^3) by Stage and Initial Average Soil Lead Concentration (ppm)

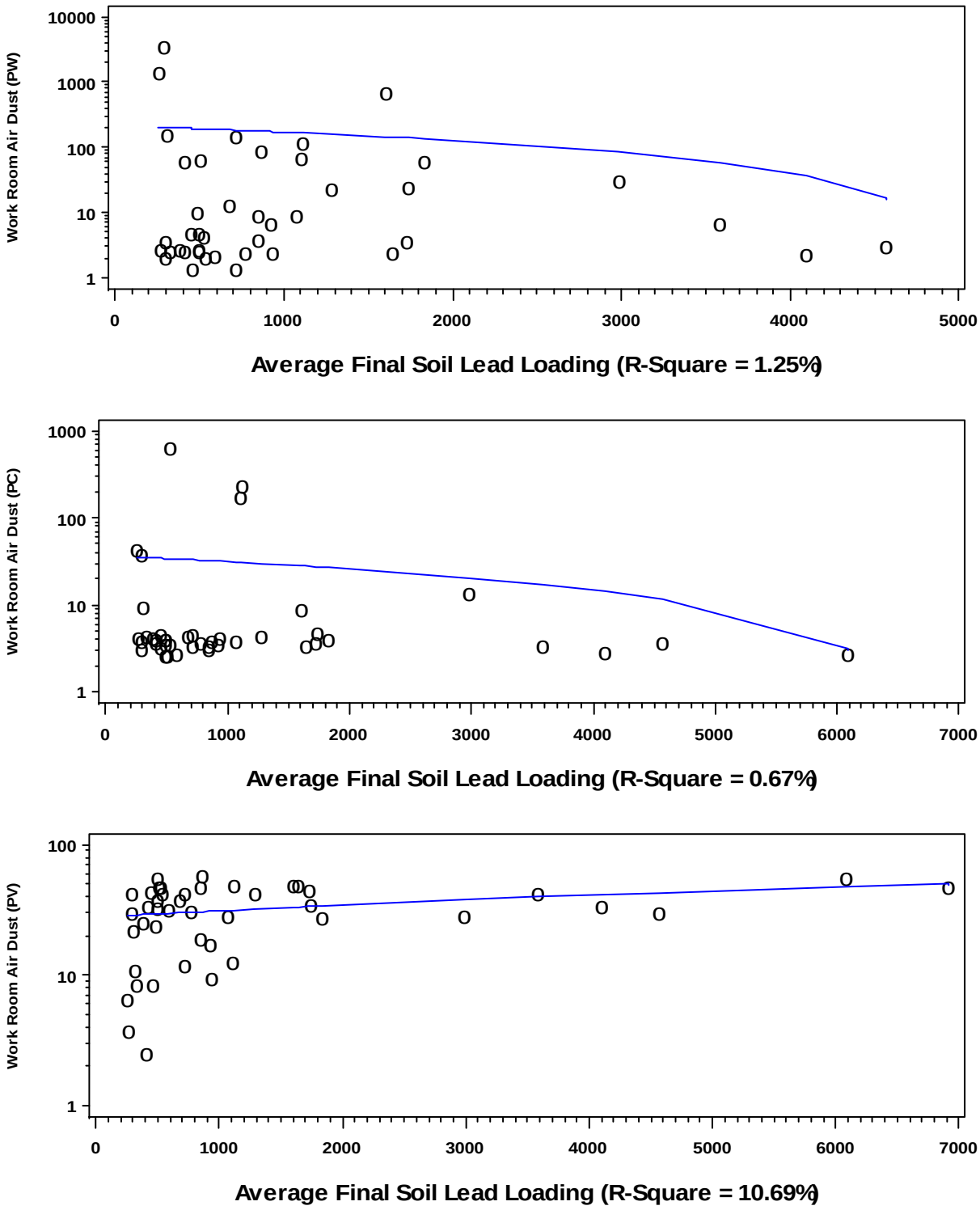


Figure F3.5a. Scatter Plots of Work Room Air Dust Lead Concentration (µg/m^3) by Stage and Final Average Soil Lead Concentration (ppm)

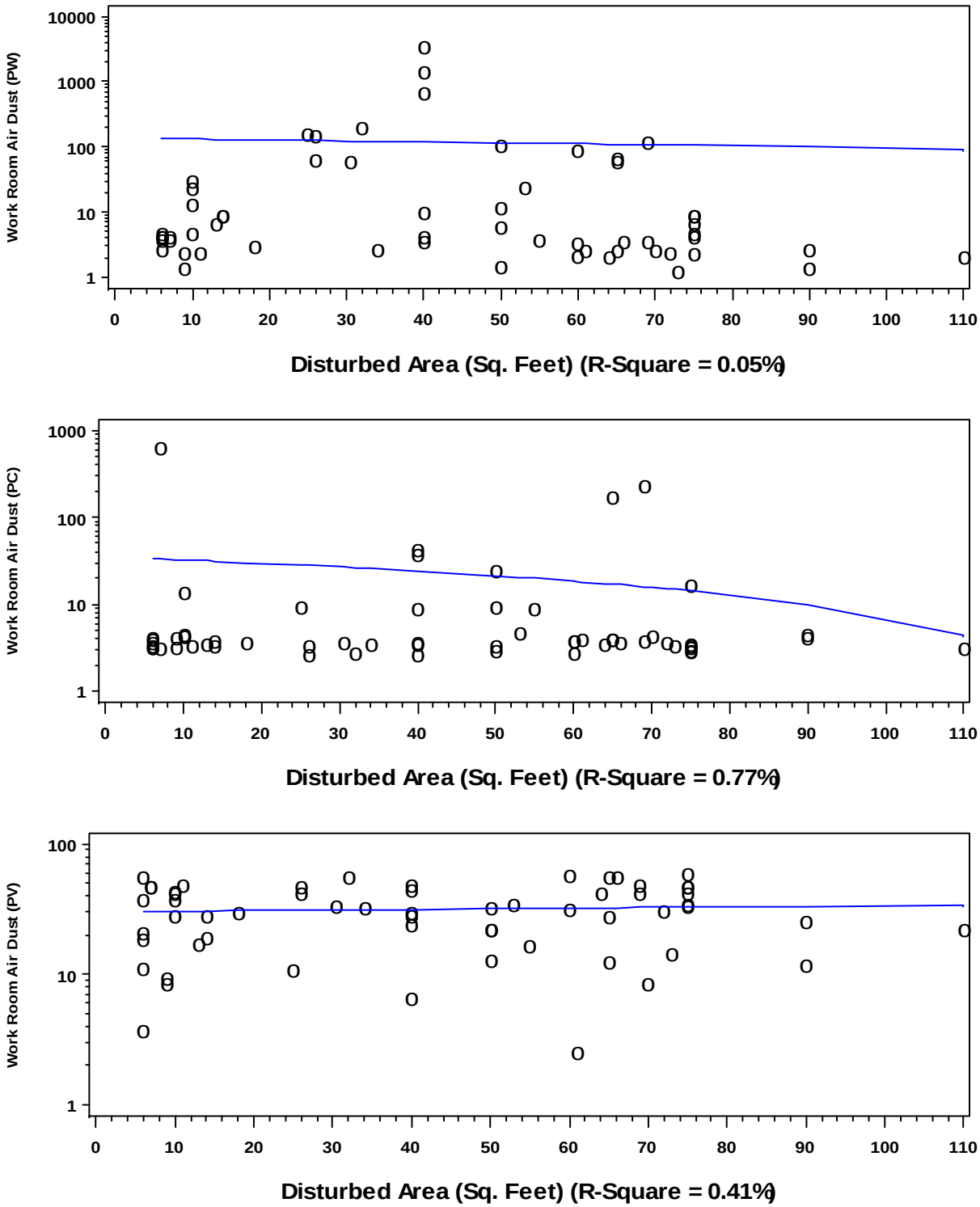
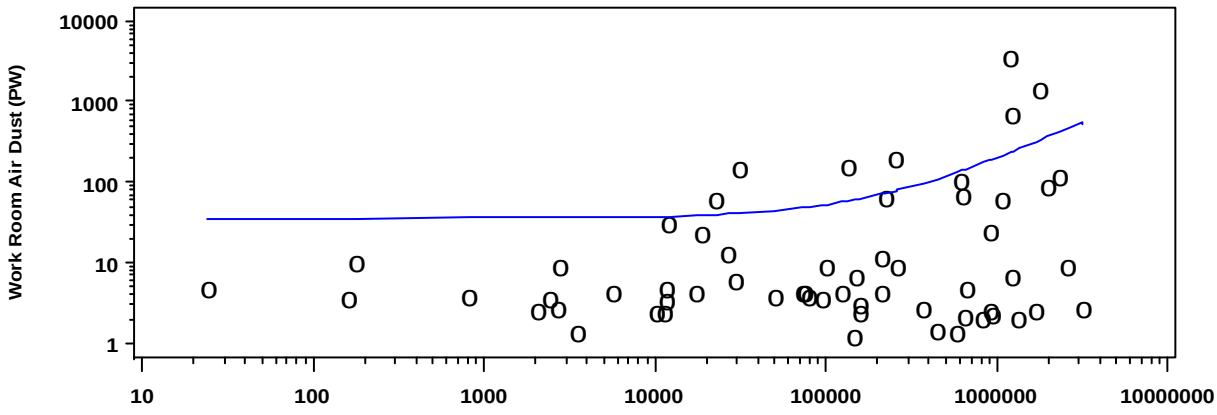
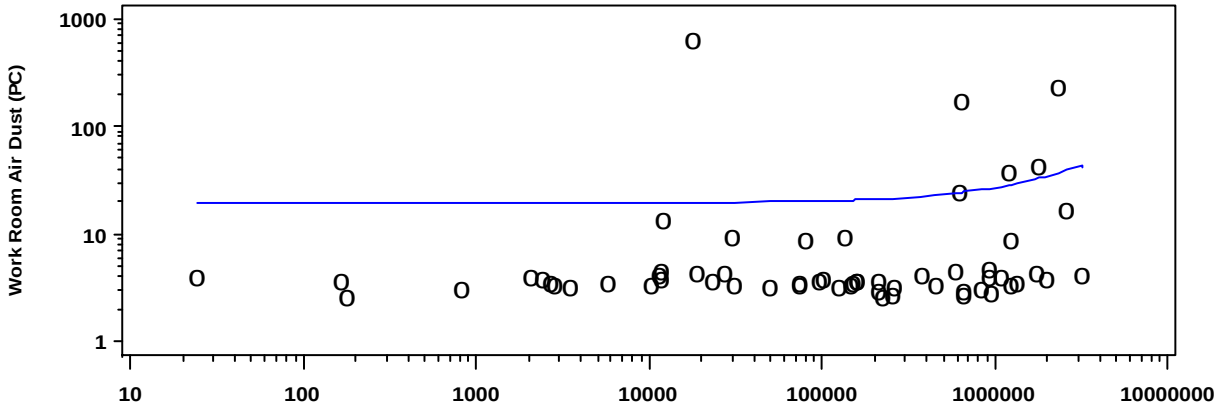


Figure F3.6a. Scatter Plots of Work Room Air Dust Lead Concentration (µg/m^3) by Stage and Disturbed Area (ft^2)





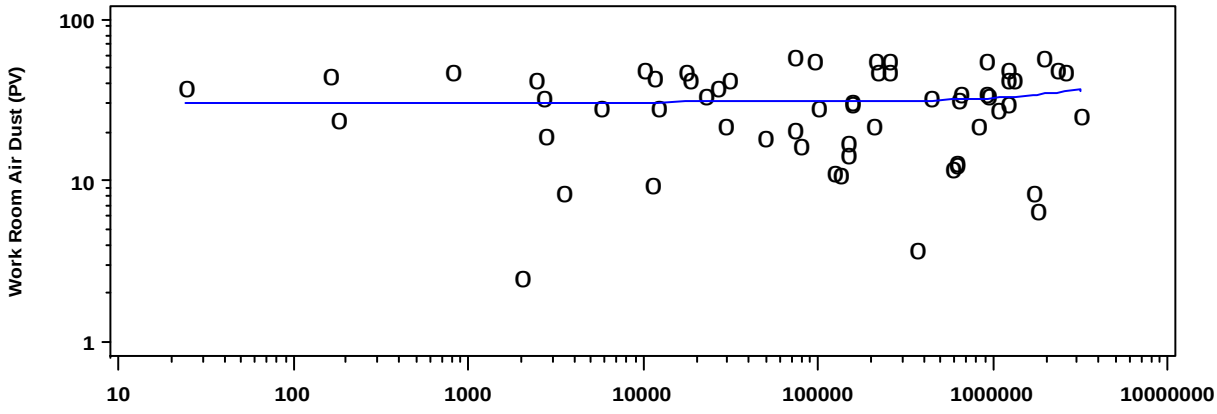


Figure F3.7a. Scatter Plots of Work Room Air Dust Lead Concentration (µg/m^3) by Stage and Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room (µg/ft^2)

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APPENDIX G

DETAILED DESCRIPTIVE ANALYSES OF AVERAGE POST-WORK WORK ROOM FLOOR DUST LEAD LOADING, AVERAGE PAINT LEAD LOADING, AND AREA DISTURBED

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APPENDIX G

Exploratory Analyses of Average Post-work Work Room Floor Dust Lead Loading, Average Paint Lead Concentration, and Square Footage Disturbed

G1. Exploratory Summaries of Average Post-Work Work Room Floor Dust Lead Loading vs. Select Categorical Characteristics

Box plots of the average post-work work room floor dust lead loading as well as descriptive statistical summary tables are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. Numerical summaries are presented for interior floor, sill, and exit samples; all exterior samples are missing this information. Exit samples have been excluded from the graphical displays, which contain placeholders for the exterior samples.

The selected characteristics are as follows:

1. Job intensity
2. City
3. Job type
4. Contractor
5. Rule Plastic Use
6. Cleaning Type
7. Phase
8. Restricted vs. non-restricted jobs
9. Work room floor type
10. Work room floor condition

Scatter plots of the average post-work work room floor dust lead loading are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. The fitted linear regression line (using untransformed data) is displayed in each plot along with its associated r-square value.

The selected characteristics are as follows:

11. Paint Lead Concentration
12. Floor Dust Lead Loading at Clearance
13. Initial Average Soil Lead Concentration
14. Final Average Soil Lead Concentration
15. Disturbed Area

In the summary tables, summary data are presented for three data sets – floors, sills, and interior exit samples; however, the floor and sill data are always equal and the interior exit data are a subset of the floor/sill results. Thus, it is generally sufficient to restrict review to the interior floor results. At the time of submission of this report, some boxplots mistakenly omitted plots for the interior exit samples, and some interior exit plots are mislabeled as Exterior data. These will be corrected if subsequent revisions are made to the report.

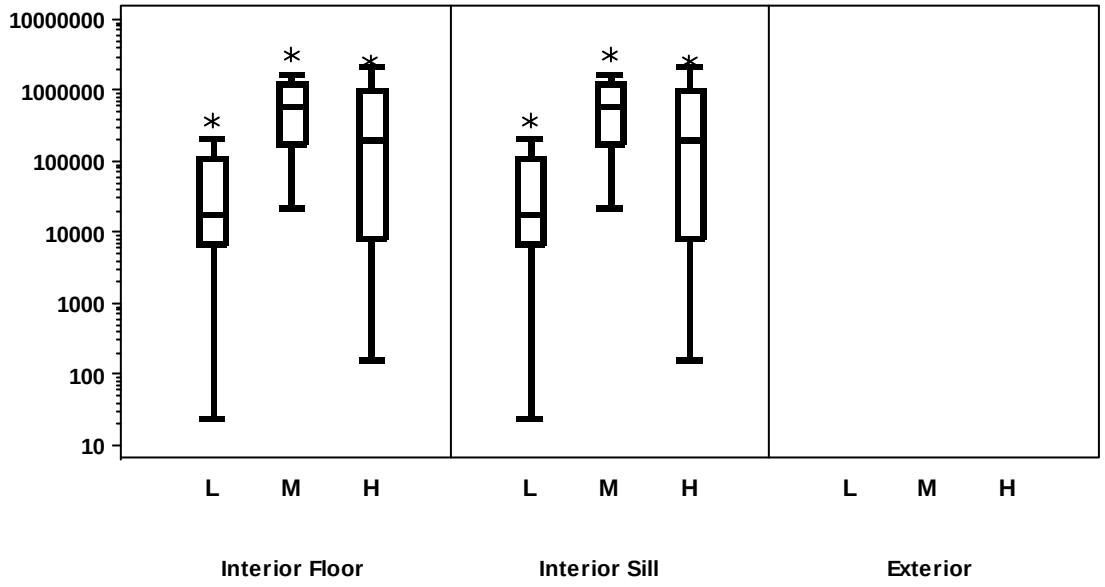


Figure G1.1a. Box Plots of Average Post-Work Work Room Floor Dust Lead Loading by Analysis and Job Intensity Level

Table G1.1a. Descriptive Summary of Average Post-Work Work Room Floor Dust Lead Loading (μg/ft^2) by Analysis and Job Intensity Level

Analysis	Avg. Post-Work Workroom Floor Lead Loading (w/ Bulk) by Intensity	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-High	16	807527	290961	2033	86933	640684	1143724	2581073
	2-Medium	15	828584	417251	22769	209260	584920	1233188	3159913
	3-Low	16	68593	17094	24	10819	18018	97860	372211
Interior Floor	1-High	20	646568	102268	162	8692	202458	1001517	2581073
	2-Medium	20	774671	392515	22769	182545	602531	1218968	3159913
	3-Low	20	67515	15134	24	6848	18018	112017	372211
Interior Sill	1-High	20	646568	102268	162	8692	202458	1001517	2581073
	2-Medium	20	774671	392515	22769	182545	602531	1218968	3159913
	3-Low	20	67515	15134	24	6848	18018	112017	372211

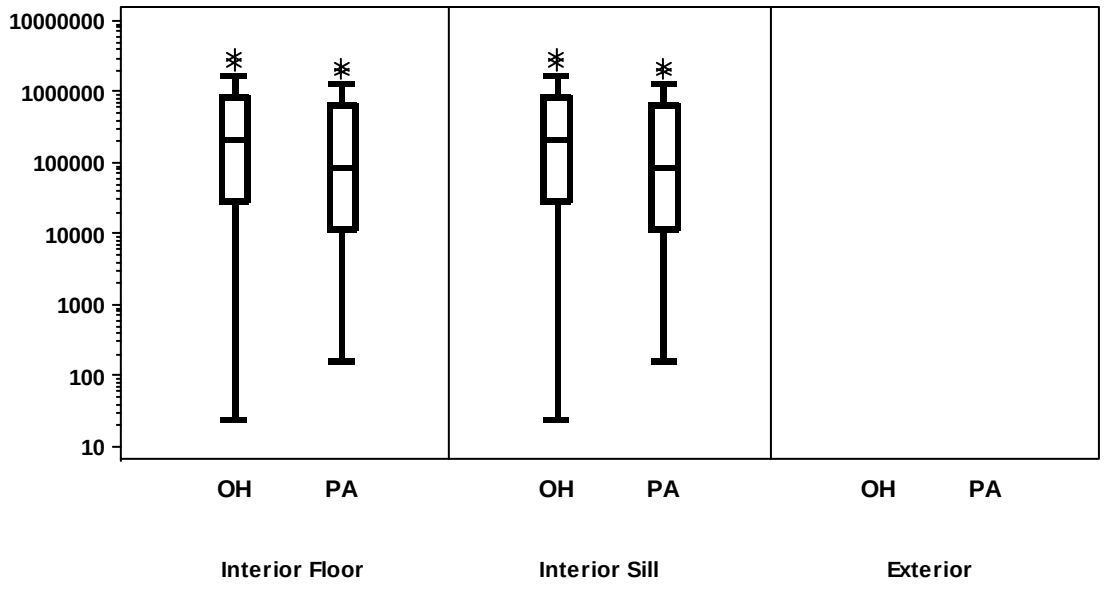


Figure G1.2a. Box Plots of Average Post-Work Work Room Floor Dust Lead Loading by Analysis and City

Table G1.2a. Descriptive Summary of Average Post-Work Work Room Floor Dust Lead Loading (μg/ft^2) by Analysis and City

Analysis	Avg. Post-Work Workroom Floor Lead Loading (w/ Bulk) by City	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	Columbus, OH	36	561974	130694	24	39780	216225	869404	3159913
	Pittsburgh, PA	11	565054	105766	11698	12044	79807	1074140	2308809
Interior Floor	Columbus, OH	38	533274	113269	24	29620	210147	824669	3159913
	Pittsburgh, PA	22	432304	51258	162	11698	86933	641336	2308809
Interior Sill	Columbus, OH	38	533274	113269	24	29620	210147	824669	3159913
	Pittsburgh, PA	22	432304	51258	162	11698	86933	641336	2308809

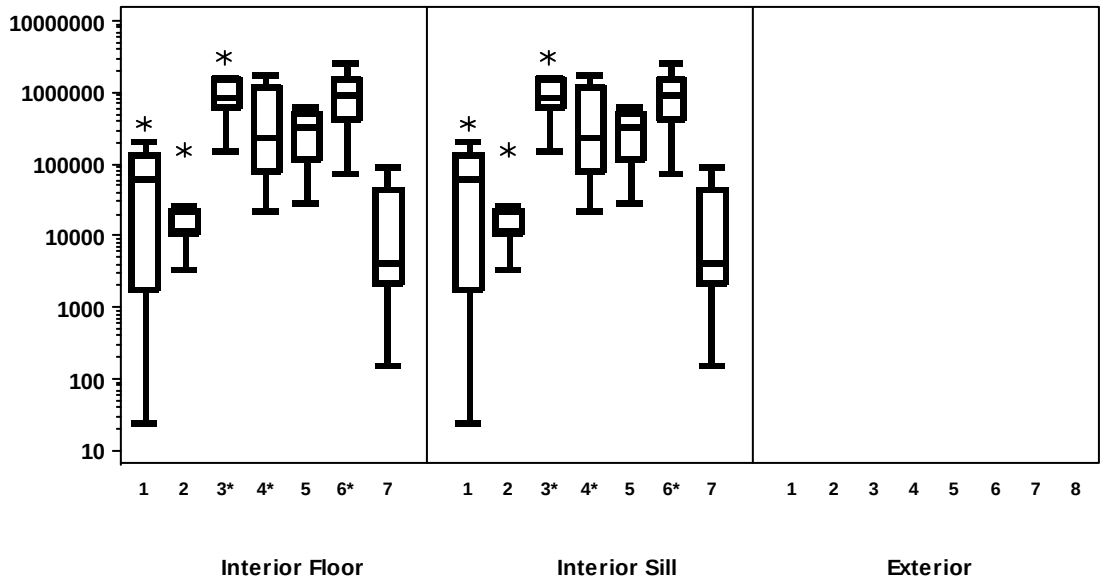


Figure G1.3a. Box Plots of Average Post-Work Work Room Floor Dust Lead Loading by Analysis and Job Type

Table G1.3a. Descriptive Summary of Average Post-Work Work Room Floor Dust Lead Loading (μg/ft^2) by Analysis and Job Type

Analysis	Avg. Post-Work Workroom Floor Lead Loading (w/ Bulk) by Job Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior-Exit	I1-Cut Outs	8	105900	18196	24	9136	61230	167117	372211
	I2-Replace Windows	8	31285	16060	3485	10819	11873	22586	156242
	I3-Scrape Surface *	4	1566578	1268151	584920	704795	1260739	2428361	3159913
	I4-Scrape Door *	7	693887	333204	22769	133611	255081	1233188	1786396
	I5-Heat gun < 1100°	4	326309	203505	29620	119440	327738	533179	620142
	I6-Heat gun > 1100° *	12	1061069	703829	73877	442082	921516	1582807	2581073
	I7-Kitchen	4	46899	20556	2033	6865	45752	86933	94059
Interior-Floor	I1-Cut Outs	12	91668	14547	24	1796	61230	136117	372211
	I2-Replace Windows	8	31285	16060	3485	10819	11873	22586	156242
	I3-Scrape Surface *	8	1162506	864342	155831	613128	865000	1514022	3159913
	I4-Scrape Door *	8	611017	247553	22769	82270	238248	1218968	1786396
	I5-Heat gun < 1100°	4	326309	203505	29620	119440	327738	533179	620142
	I6-Heat gun > 1100° *	12	1061069	703829	73877	442082	921516	1582807	2581073
	I7-Kitchen	8	24817	5664	162	2218	4188	45752	94059
Interior-Sill	I1-Cut Outs	12	91668	14547	24	1796	61230	136117	372211
	I2-Replace Windows	8	31285	16060	3485	10819	11873	22586	156242
	I3-Scrape Surface *	8	1162506	864342	155831	613128	865000	1514022	3159913
	I4-Scrape Door *	8	611017	247553	22769	82270	238248	1218968	1786396
	I5-Heat gun < 1100°	4	326309	203505	29620	119440	327738	533179	620142
	I6-Heat gun > 1100° *	12	1061069	703829	73877	442082	921516	1582807	2581073
	I7-Kitchen	8	24817	5664	162	2218	4188	45752	94059

* Indicates job is restricted

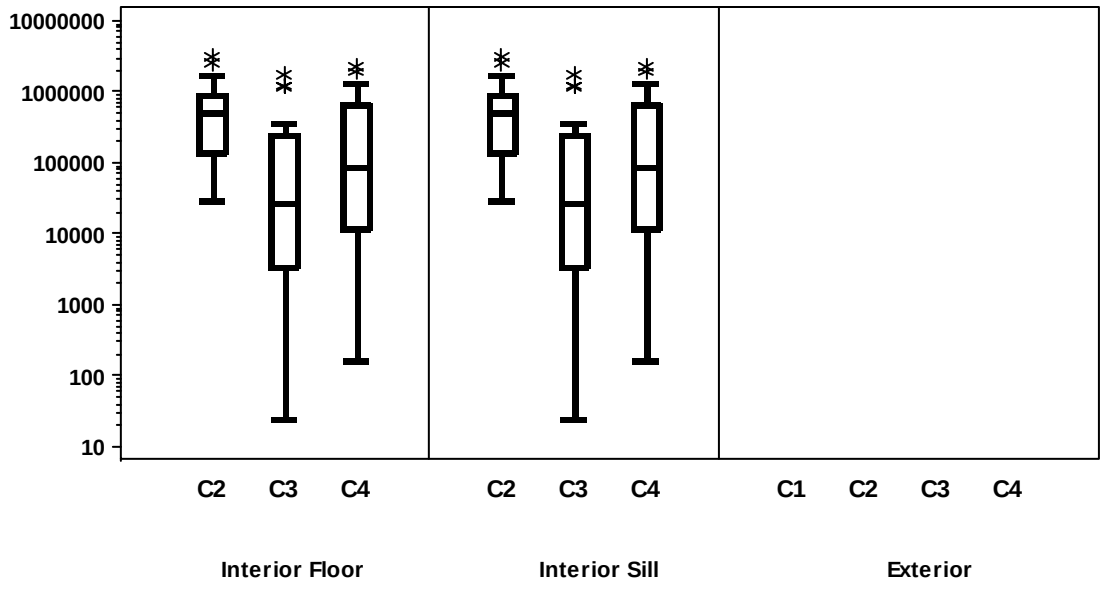


Figure G1.4a. Box Plots of Average Post-Work Work Room Floor Dust Lead Loading by Analysis and Contractor

Table G1.4a. Descriptive Summary of Average Post-Work Work Room Floor Dust Lead Loading (μg/ft^2) by Analysis and Contractor

Analysis	Avg. Post-Work Workroom Floor Lead Loading (w/ Bulk) by Contractor	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	C2	20	739998	367663	29620	134905	515568	921516	3159913
	C3	16	339445	35873	24	6848	78190	313646	1786396
	C4	11	565054	105766	11698	12044	79807	1074140	2308809
Interior Floor	C2	20	739998	367663	29620	134905	515568	921516	3159913
	C3	18	303580	30617	24	3485	26849	255081	1786396
	C4	22	432304	51258	162	11698	86933	641336	2308809
Interior Sill	C2	20	739998	367663	29620	134905	515568	921516	3159913
	C3	18	303580	30617	24	3485	26849	255081	1786396
	C4	22	432304	51258	162	11698	86933	641336	2308809

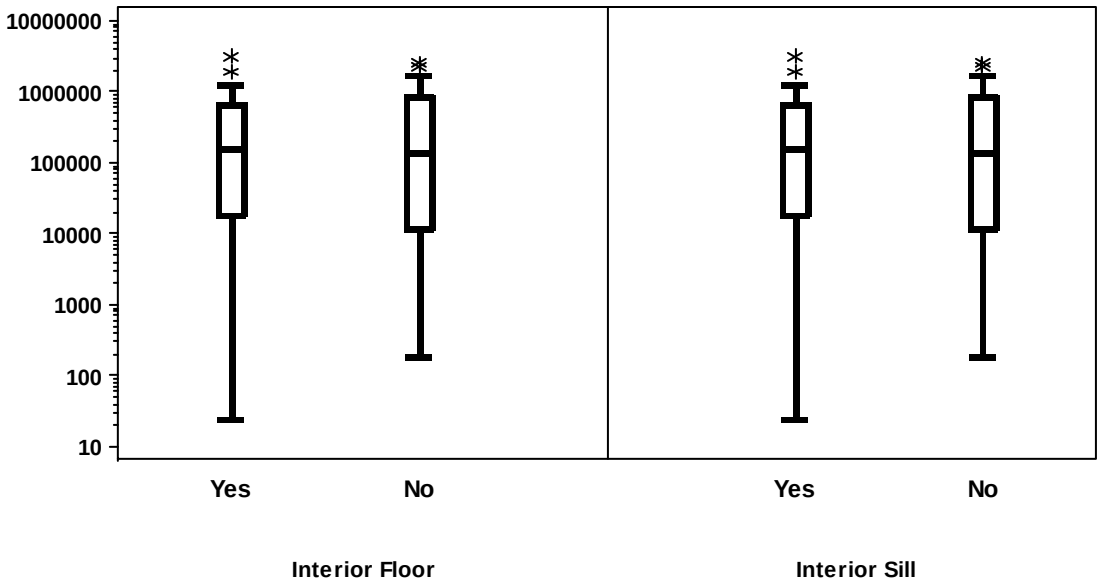


Figure G1.5a. Box Plots of Average Post-Work Work Room Floor Dust Lead Loading by Analysis and Rule Plastic Use

Table G1.5a. Descriptive Summary of Average Post-Work Work Room Floor Dust Lead Loading (μg/ft^2) by Analysis and Rule Plastic Use

Analysis	Avg. Post-Work Workroom Floor Lead Loading (w/ Bulk) by Plastic	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-yes	24	532580	100332	24	20674	210147	784826	3159913
	2-no	23	594120	155635	3485	26593	146609	928893	2581073
Interior Floor	1-yes	30	465926	75450	24	18580	156037	655512	3159913
	2-no	30	526577	95070	179	11701	140110	824669	2581073
Interior Sill	1-yes	30	465926	75450	24	18580	156037	655512	3159913
	2-no	30	526577	95070	179	11701	140110	824669	2581073

[A] Note that this variable was not applied to exterior data

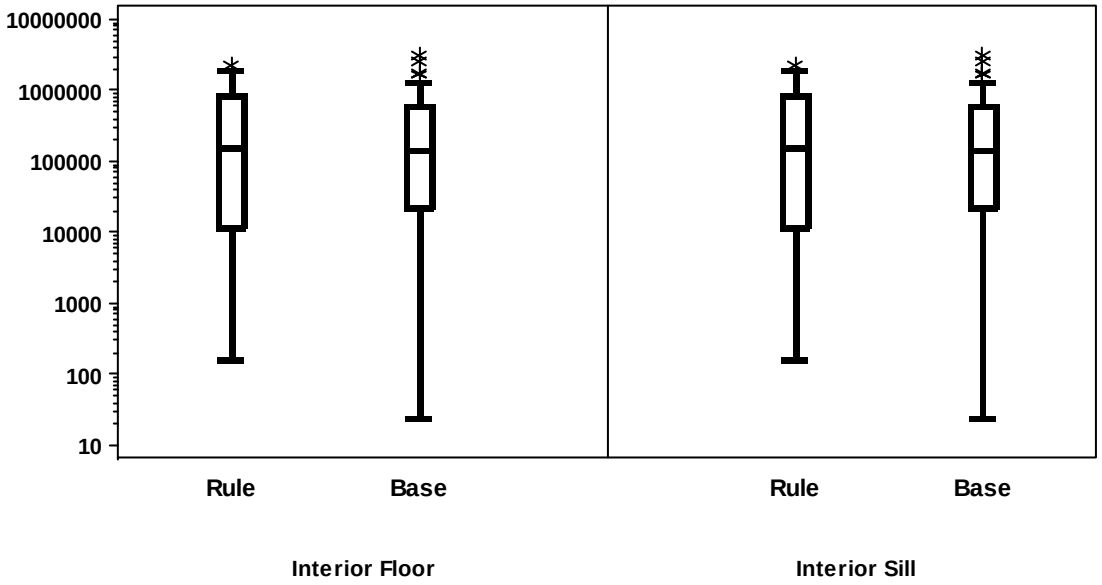


Figure G1.6a. Box Plots of Average Post-Work Work Room Floor Dust Lead Loading by Analysis and Cleaning Type

Table G1.6a. Descriptive Summary of Average Post-Work Work Room Floor Dust Lead Loading (μg/ft^2) by Analysis and Cleaning Type

Analysis	Avg. Post-Work Workroom Floor Lead Loading (w/ Bulk) by Cleaning	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-rule	24	534246	136603	816	22024	238248	876781	2308809
	2-base	23	592381	112787	24	22769	156242	914140	3159913
Interior Floor	1-rule	30	479146	75563	162	11698	157738	824669	2308809
	2-base	30	513357	94927	24	22769	147821	625856	3159913
Interior Sill	1-rule	30	479146	75563	162	11698	157738	824669	2308809
	2-base	30	513357	94927	24	22769	147821	625856	3159913

[A] Note that this variable was not applied to exterior data

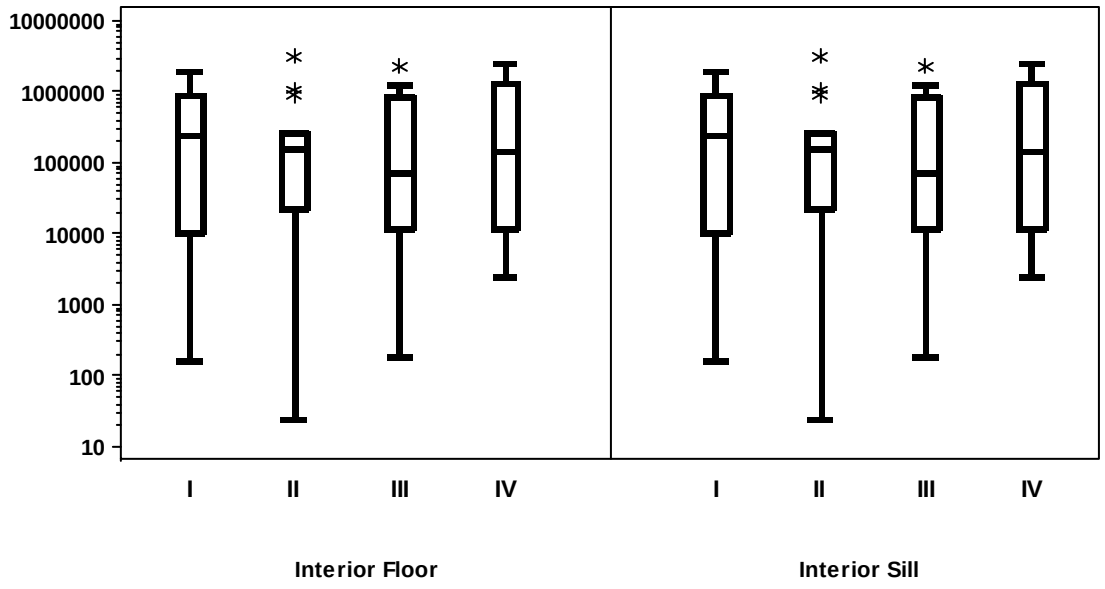


Figure G1.7a. Box Plots of Average Post-Work Work Room Floor Dust Lead Loading by Analysis and Phase

Table G1.7a. Descriptive Summary of Average Post-Work Work Room Floor Dust Lead Loading (μg/ft^2) by Analysis and Phase

Analysis	Avg. Post-Work Workroom Floor Lead Loading (w/ Bulk) by Phase	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	I-Rule w/ Plastic	12	556306	148869	816	42282	420000	930130	1952307
	II-Base w/ Plastic	12	508854	67620	24	20674	182751	586224	3159913
	III-Rule w/o Plastic	12	512187	125348	3485	22024	147647	876781	2308809
	IV-Base w/o Plastic	11	683501	197078	11427	29620	146609	1696810	2581073
Interior Floor	I-Rule w/ Plastic	15	505596	81686	162	10211	255081	905332	1952307
	II-Base w/ Plastic	15	426256	69690	24	22769	155831	258307	3159913
	III-Rule w/o Plastic	15	452696	69900	179	11698	73877	824669	2308809
	IV-Base w/o Plastic	15	600458	129302	2402	11701	146609	1331235	2581073
Interior Sill	I-Rule w/ Plastic	15	505596	81686	162	10211	255081	905332	1952307
	II-Base w/ Plastic	15	426256	69690	24	22769	155831	258307	3159913
	III-Rule w/o Plastic	15	452696	69900	179	11698	73877	824669	2308809
	IV-Base w/o Plastic	15	600458	129302	2402	11701	146609	1331235	2581073

[A] Note that this variable was not applied to exterior data

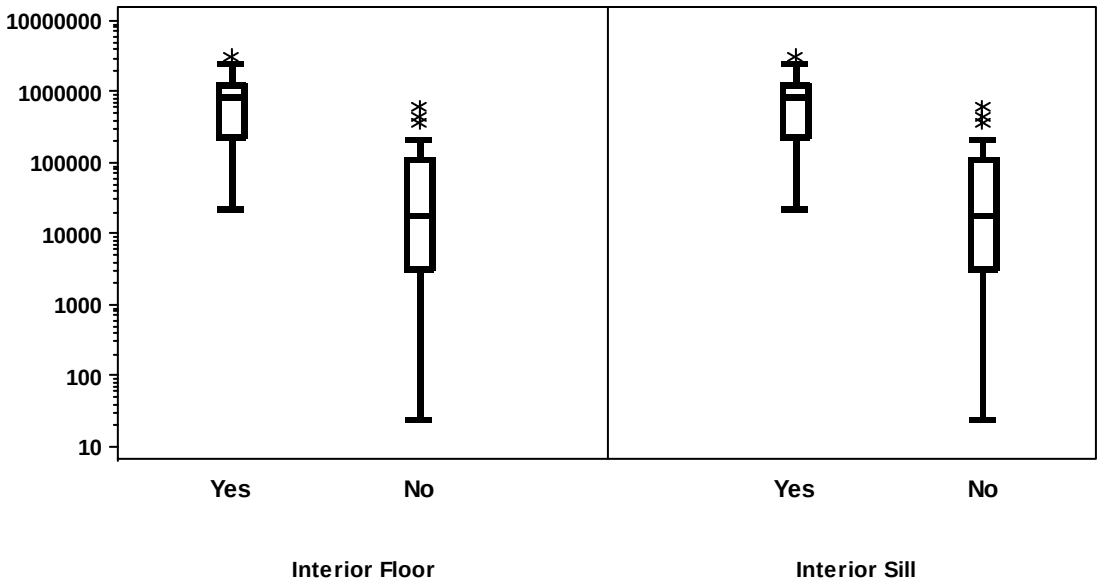


Figure G1.8a. Box Plots of Average Post-Work Work Room Floor Dust Lead Loading by Analysis and Restricted Job

Table G1. 8a. Descriptive Summary of Average Post-Work Work Room Floor Dust Lead Loading (μg/ft^2) by Analysis and Restricted Job

Analysis	Avg. Post-Work Workroom Floor Lead Loading (w/ Bulk) by Restricted Job	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-yes	23	1037233	621010	22769	255081	914140	1696810	3159913
	2-no	24	107930	26637	24	11562	28106	139721	620142
Interior Floor	1-yes	28	961465	553734	22769	238248	865000	1282212	3159913
	2-no	32	89190	16381	24	3130	18018	112017	620142
Interior Sill	1-yes	28	961465	553734	22769	238248	865000	1282212	3159913
	2-no	32	89190	16381	24	3130	18018	112017	620142

[A] Note that this variable was not applied to exterior data

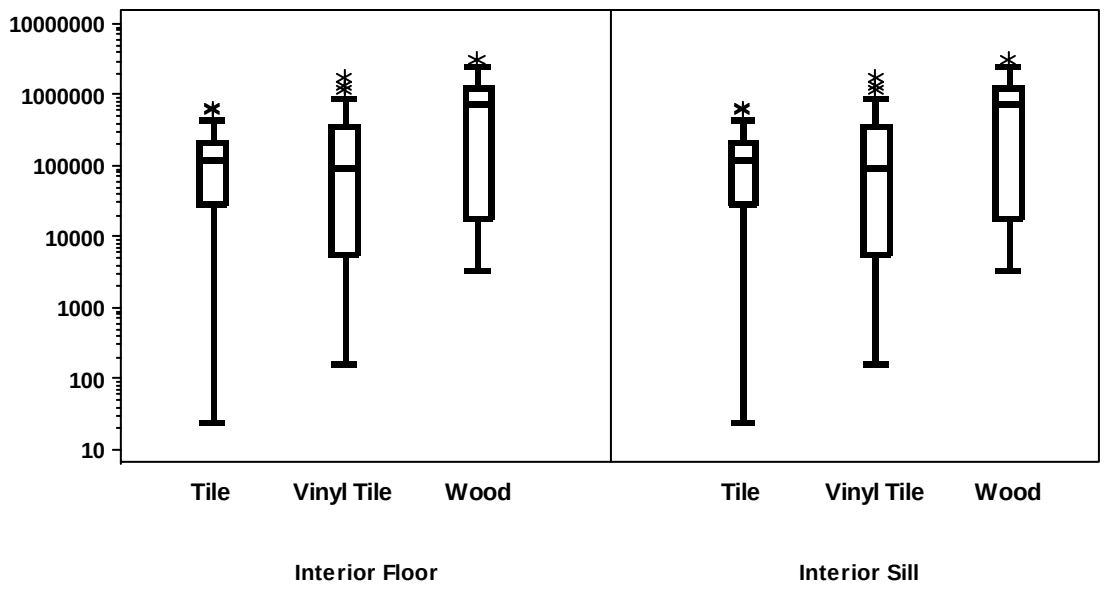


Figure G1.9a. Box Plots of Average Post-Work Work Room Floor Dust Lead Loading by Analysis and Work Room Floor Type

Table G1. 9a. Descriptive Summary of Average Post-Work Work Room Floor Dust Lead Loading (μg/ft^2) by Analysis and Work Room Floor Type

Analysis	Avg. Post-Work Workroom Floor Lead Loading (w/ Bulk) by Floor Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	Tile	17	184900	49281	24	29620	123200	221416	655512
	Vinyl Tile	8	462498	141863	11698	48631	113835	788479	1786396
	Wood	22	891063	242470	3485	18580	725262	1233188	3159913
Interior Floor	Tile	17	184900	49281	24	29620	123200	221416	655512
	Vinyl Tile	21	334686	43618	162	5687	94059	372211	1786396
	Wood	22	891063	242470	3485	18580	725262	1233188	3159913
Interior Sill	Tile	17	184900	49281	24	29620	123200	221416	655512
	Vinyl Tile	21	334686	43618	162	5687	94059	372211	1786396
	Wood	22	891063	242470	3485	18580	725262	1233188	3159913

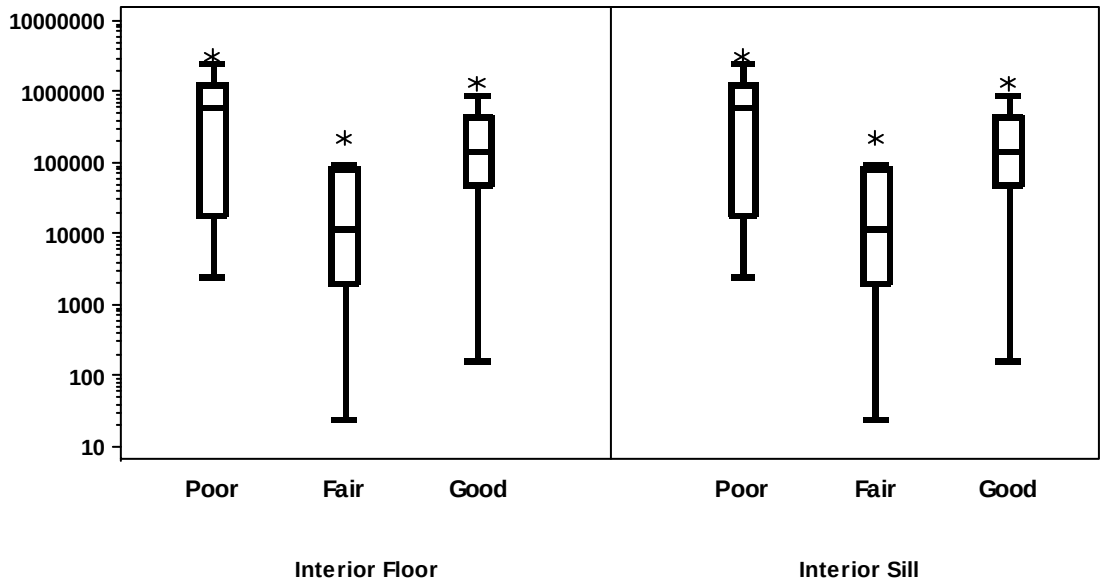
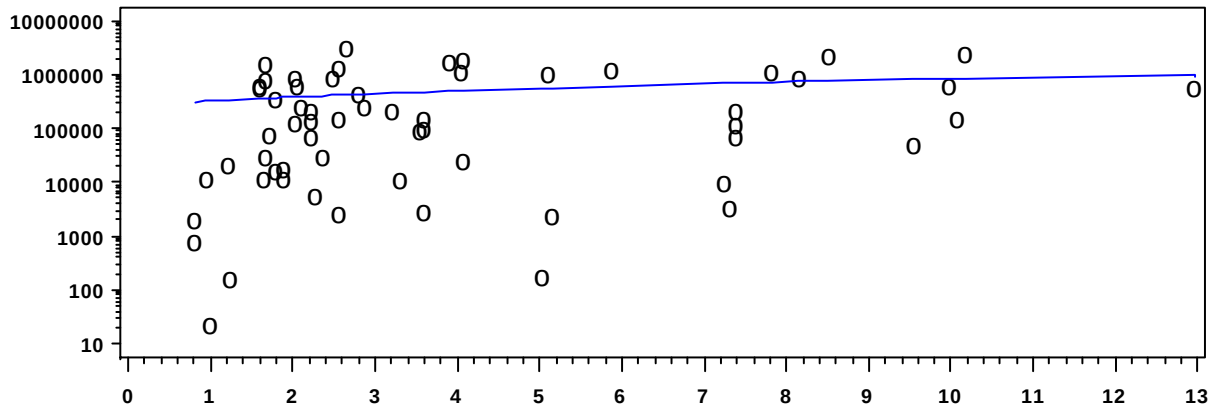


Figure G1.10a. Box Plots of Average Post-Work Work Room Floor Dust Lead Loading by Analysis and Work Room Floor Condition

Table G1.10a. Descriptive Summary of Average Post-Work Work Room Floor Dust Lead Loading ($\mu g/ft^2$) by Analysis and Work Room Floor Condition

Analysis	Avg. Post-Work Workroom Floor Lead Loading (w/ Bulk) by Floor Condition	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	Poor	25	923181	308771	3485	133611	824669	1233188	3159913
	Fair	10	47092	9420	24	2033	17235	79807	221416
	Good	12	241353	160681	29620	73199	177934	352262	655512
Interior Floor	Poor	27	856031	236873	2402	18580	625856	1233188	3159913
	Fair	11	43327	8998	24	2033	11701	79807	221416
	Good	22	281166	73541	162	49939	147821	446216	1331235
Interior Sill	Poor	27	856031	236873	2402	18580	625856	1233188	3159913
	Fair	11	43327	8998	24	2033	11701	79807	221416
	Good	22	281166	73541	162	49939	147821	446216	1331235



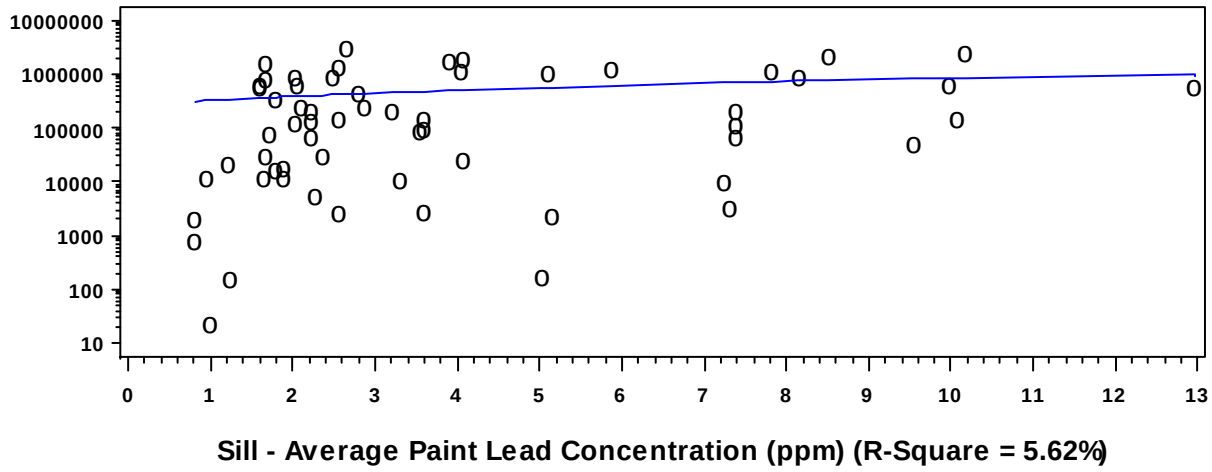
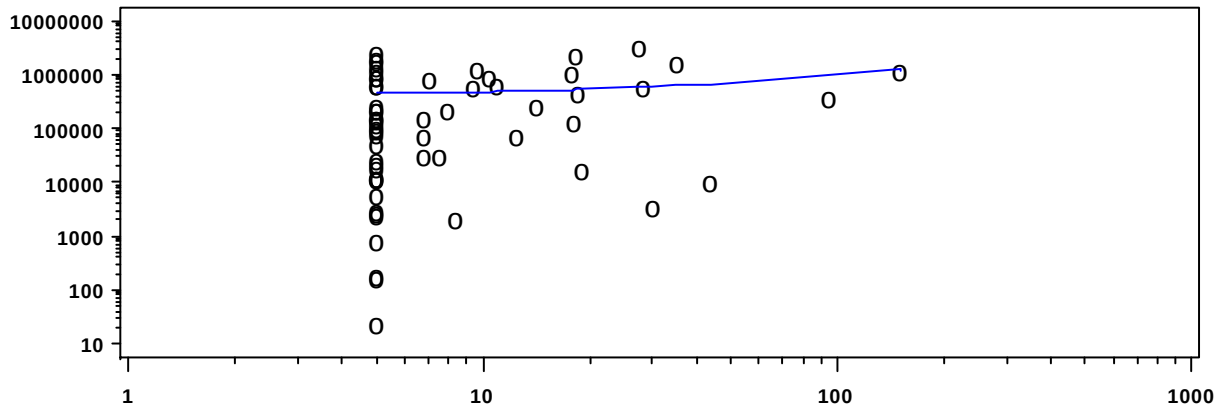


Figure G1.11. Scatter Plots of Average Post-Work Work Room Floor Dust Lead Loading (µg/ft^2) by Analysis and Average Paint Lead Concentration (ppm) for Interior Floors and Sills



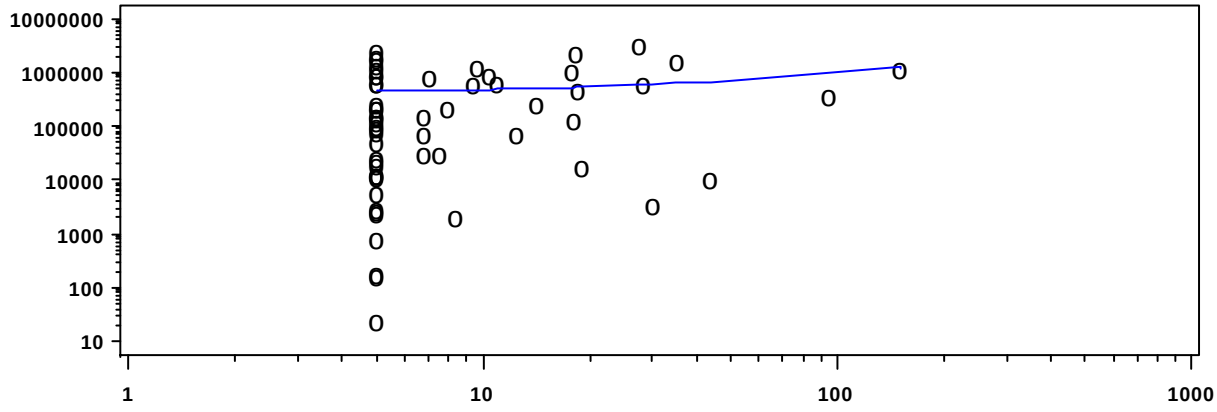
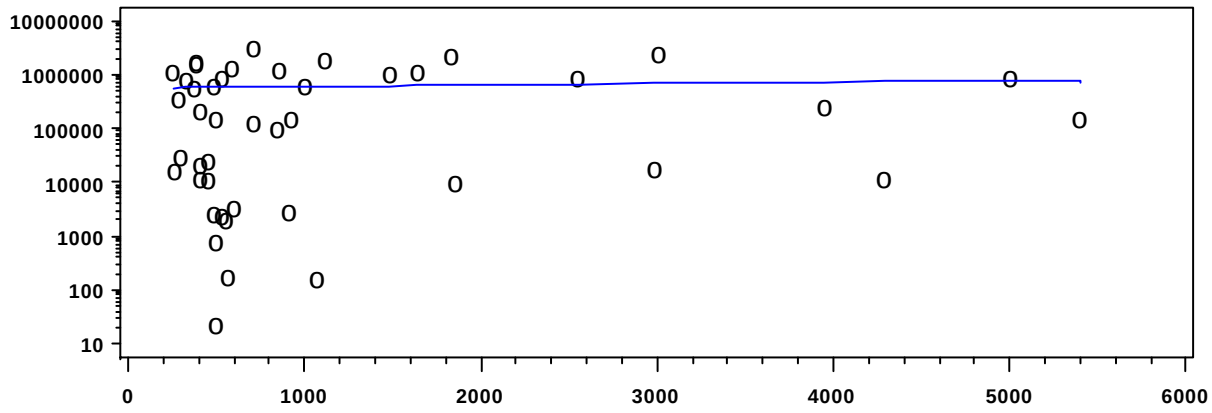


Figure G1.12. Scatter Plots of Average Post-Work Work Room Floor Dust Lead Loading (μg/ft^2) by Analysis and Floor Dust Lead Loading at Clearance (μg/ft^2)



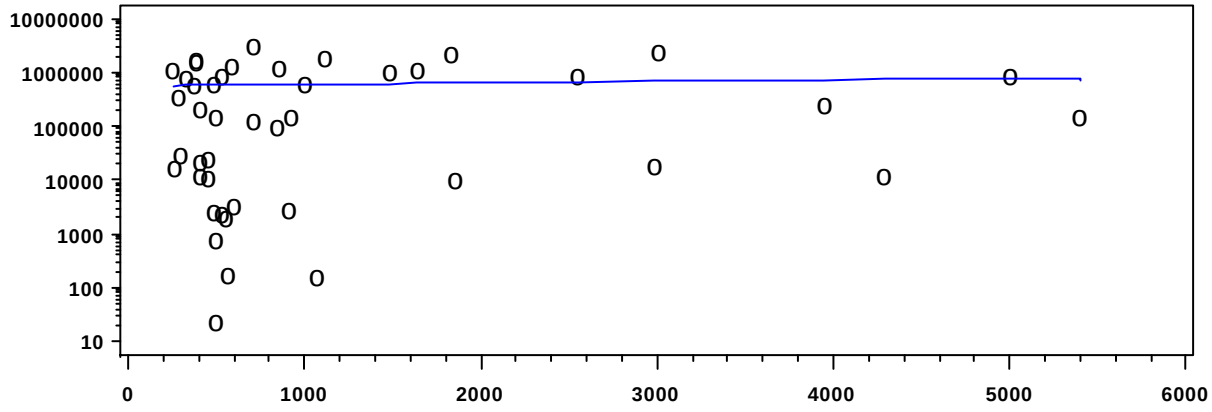


Figure G1.13. Scatter Plots of Average Post-Work Work Room Floor Dust Lead Loading (µg/ft^2) by Analysis and Initial Average Soil Lead Concentration (ppm)

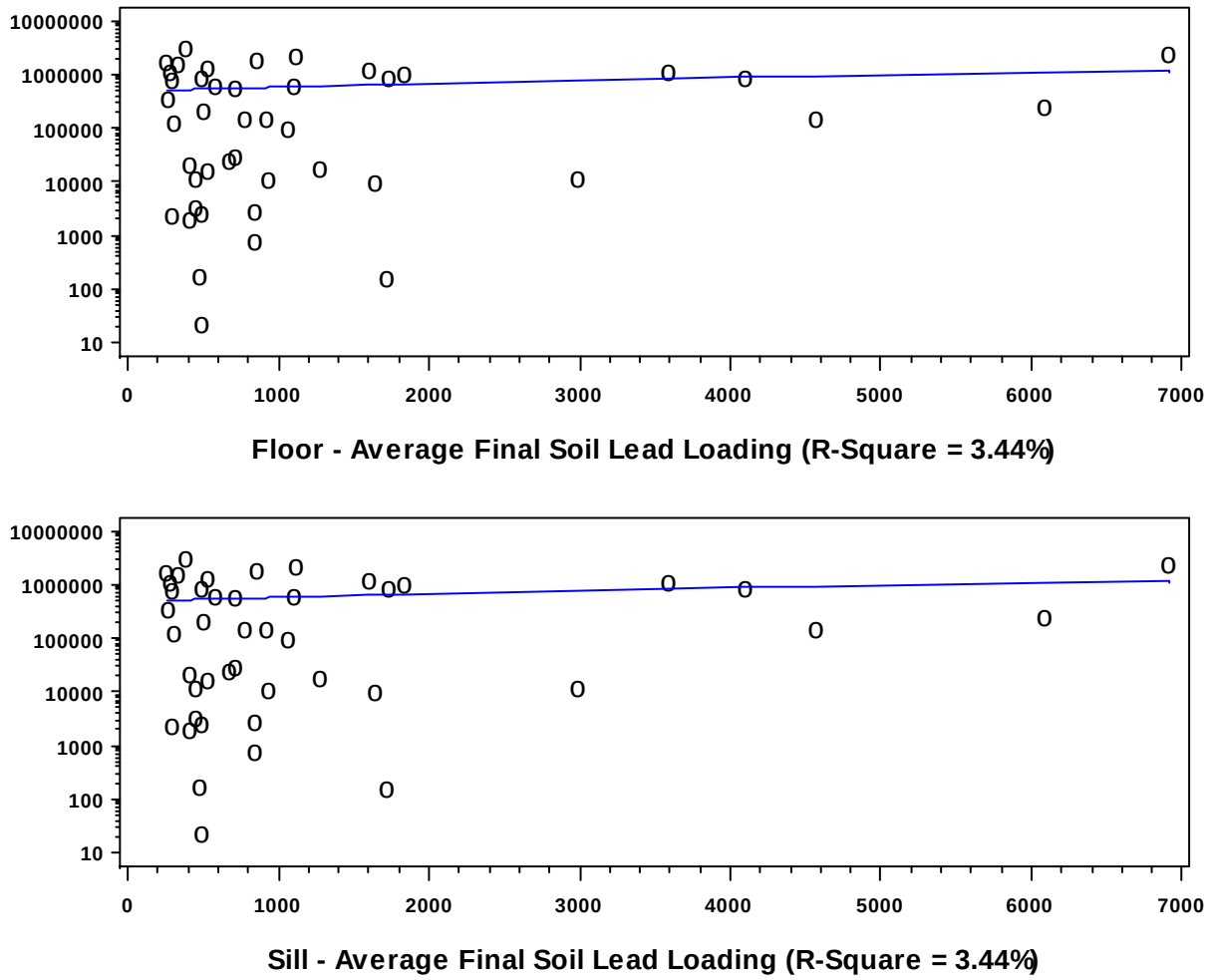


Figure G1.14. Scatter Plots of Average Post-Work Work Room Floor Dust Lead Loading (µg/ft^2) by Analysis and Final Average Soil Lead Concentration (ppm)

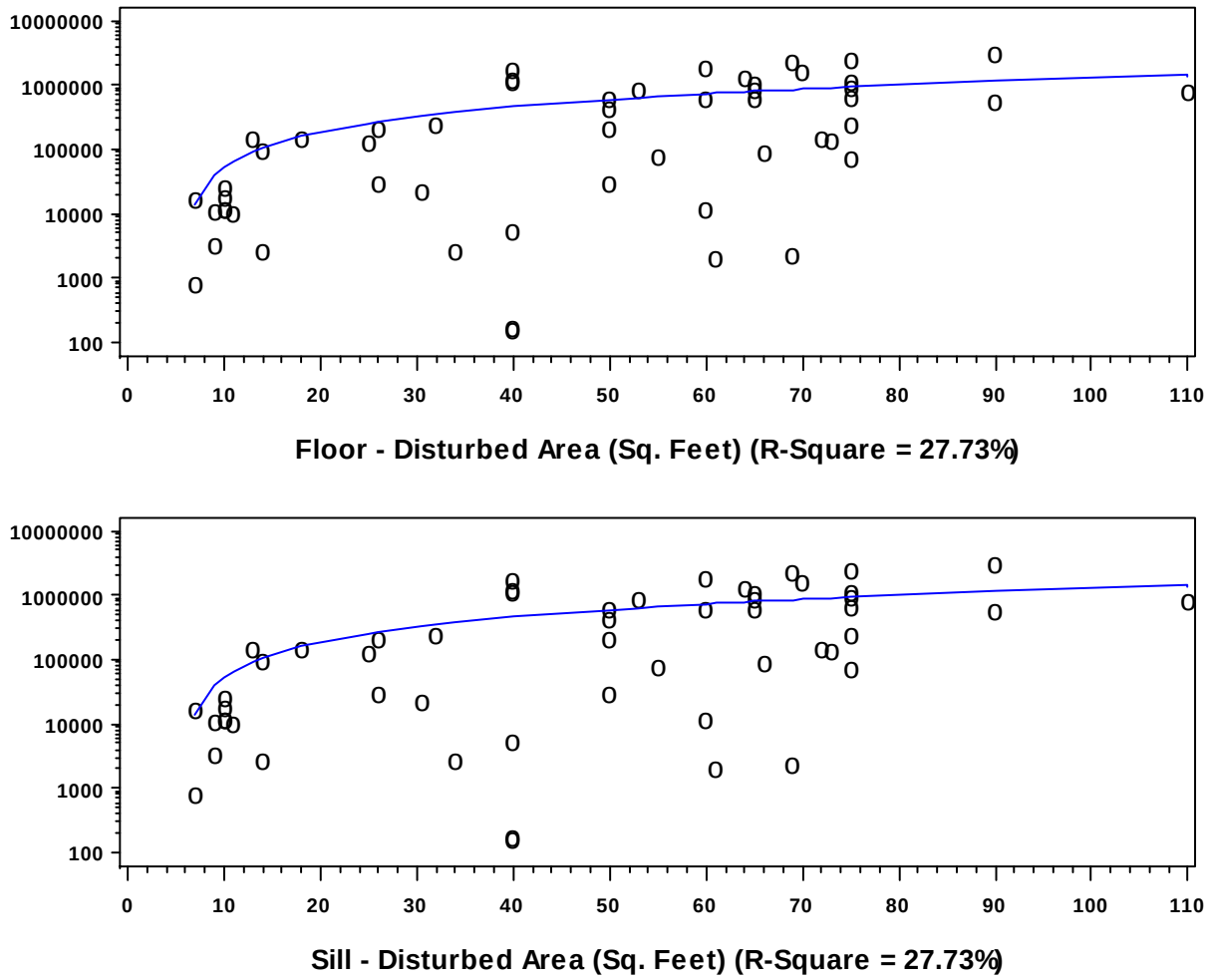


Figure G1.15. Scatter Plots of Average Post-Work Work Room Floor Dust Lead Loading (µg/ft^2) by Analysis and Disturbed Area (ft^2)

G2. Exploratory Summaries of Average Paint Lead Concentration vs. Select Categorical Characteristics

Box plots of the average paint lead concentration as well as descriptive statistical summary tables are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. Numerical summaries are presented for interior floor, sill and exit samples; all exterior samples are missing this information. Exit samples have been excluded from the graphical displays, which contain placeholders for the exterior samples.

The selected characteristics are as follows:

1. Job intensity
2. City
3. Job type
4. Contractor
5. Rule Plastic Use
6. Cleaning Type
7. Phase
8. Restricted vs. non-restricted jobs
9. Work room floor type
10. Work room floor condition

Scatter plots of the average paint lead concentration are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. The fitted linear regression line (using untransformed data) is displayed in each plot along with its associated r-square value.

The selected characteristics are as follows:

11. Average Post-Work Work Room Floor Dust Lead Loading
12. Floor Dust Lead Loading at Clearance
13. Initial Average Soil Lead Concentration
14. Final Average Soil Lead Concentration
15. Disturbed Area

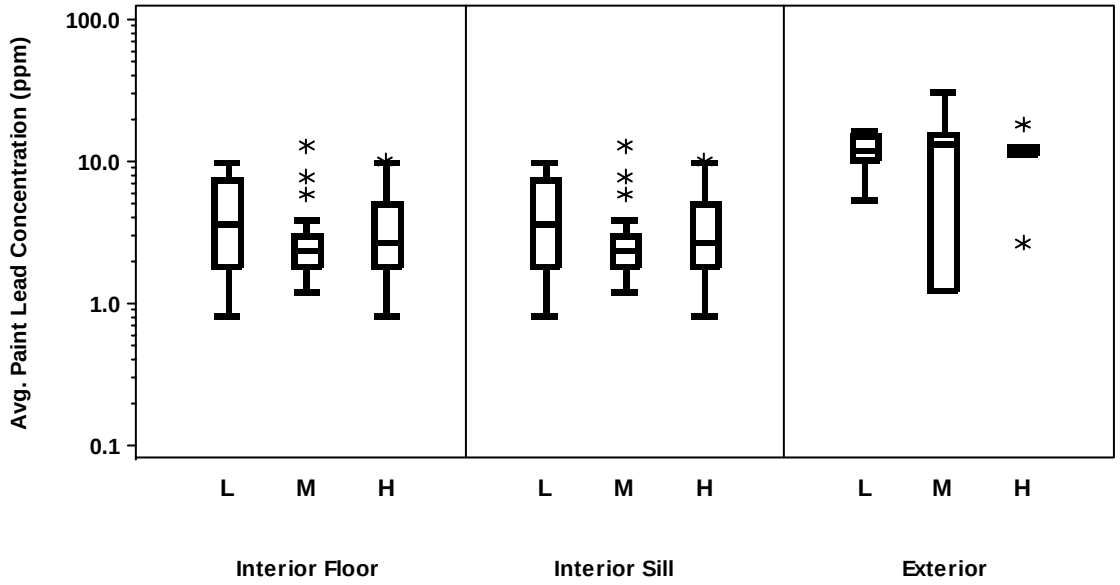


Figure G2.1a. Box Plots of Average Paint Lead Concentration by Analysis and Job Intensity Level

Table G2.1a. Descriptive Summary of Average Paint Lead Concentration (ppm) by Analysis and Job Intensity Level

Analysis	Avg. Paint Lead Concentration (ppm) by Intensity	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-High	16	4	3	1	2	3	7	10
	2-Medium	15	4	3	1	2	2	4	13
	3-Low	16	5	3	1	2	4	7	10
Interior Floor	1-High	20	4	3	1	2	3	5	10
	2-Medium	20	3	3	1	2	2	3	13
	3-Low	20	4	3	1	2	4	7	10
Interior Sill	1-High	20	4	3	1	2	3	5	10
	2-Medium	20	3	3	1	2	2	3	13
	3-Low	20	4	3	1	2	4	7	10
Exterior	1-High	5	11	10	3	11	12	13	18
	2-Medium	5	13	6	1	1	13	16	32
	3-Low	5	12	11	5	10	12	15	17

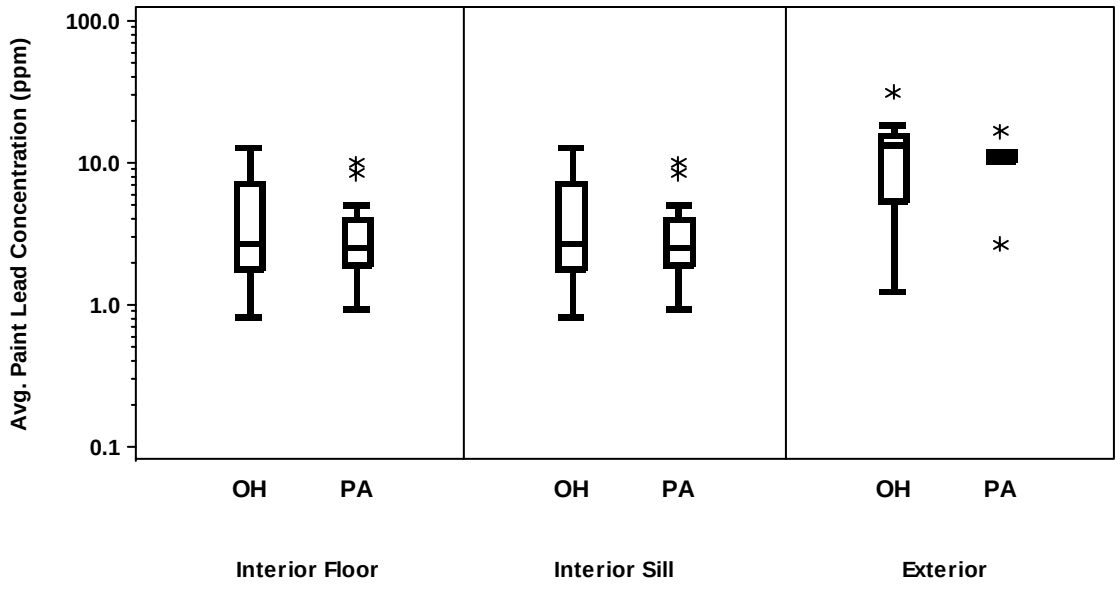


Figure G2.2a. Box Plots of Average Paint Lead Concentration by Analysis and City

Table G2.2a. Descriptive Summary of Average Paint Lead Concentration (ppm) by Analysis and City

Analysis	Avg. Paint Lead Concentration (ppm) by City	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	Columbus, OH	36	4	3	1	2	3	7	13
	Pittsburgh, PA	11	4	3	1	2	4	5	10
Interior Floor	Columbus, OH	38	4	3	1	2	3	7	13
	Pittsburgh, PA	22	3	3	1	2	3	4	10
Interior Sill	Columbus, OH	38	4	3	1	2	3	7	13
	Pittsburgh, PA	22	3	3	1	2	3	4	10
Exterior	Columbus, OH	10	13	9	1	5	13	16	32
	Pittsburgh, PA	5	11	9	3	10	11	12	17

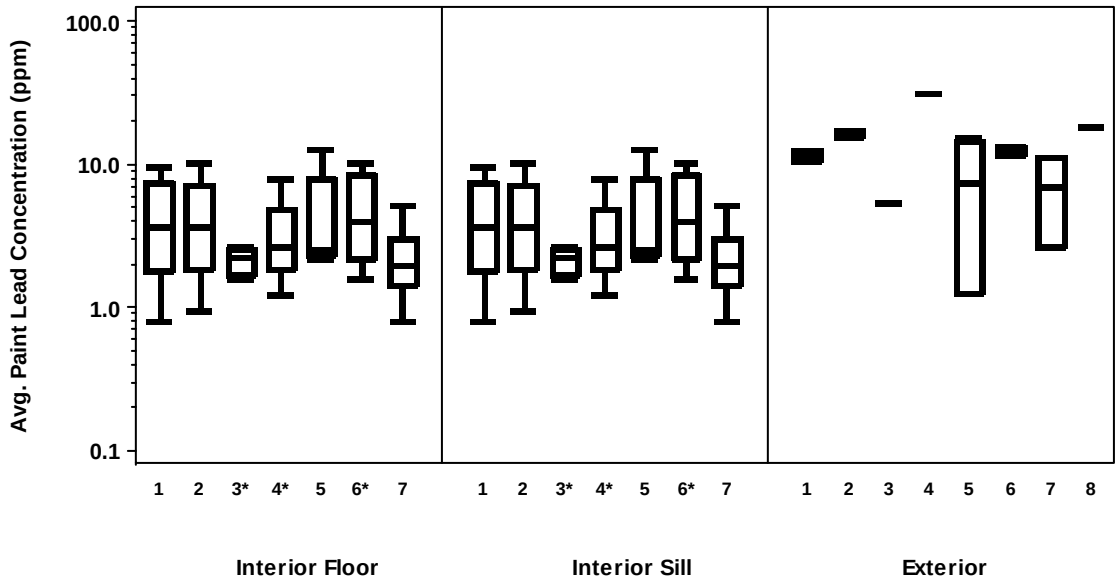


Figure G2.3a. Box Plots of Average Paint Lead Concentration by Analysis and Job Type

Table G2.3a. Descriptive Summary of Average Paint Lead Concentration (ppm) by Analysis and Job Type

Analysis	Avg. Paint Lead Concentration (ppm) by Job Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior-Exit	I1-Cut Outs	8	5	3	1	1	5	7	10
	I2-Replace Windows	8	5	4	1	2	4	7	10
	I3-Scrape Surface *	4	2	2	2	2	2	2	3
	I4-Scrape Door *	7	4	3	1	2	3	6	8
	I5-Heat gun < 1100°	4	5	4	2	2	3	8	13
	I6-Heat gun > 1100° *	12	5	4	2	2	4	8	10
	I7-Kitchen	4	2	2	1	1	2	3	4
Interior-Floor	I1-Cut Outs	12	4	3	1	2	4	7	10
	I2-Replace Windows	8	5	4	1	2	4	7	10
	I3-Scrape Surface *	8	2	2	2	2	2	3	3
	I4-Scrape Door *	8	3	3	1	2	3	5	8
	I5-Heat gun < 1100°	4	5	4	2	2	3	8	13
	I6-Heat gun > 1100° *	12	5	4	2	2	4	8	10
	I7-Kitchen	8	2	2	1	1	2	3	5
Interior-Sill	I1-Cut Outs	12	4	3	1	2	4	7	10
	I2-Replace Windows	8	5	4	1	2	4	7	10
	I3-Scrape Surface *	8	2	2	2	2	2	3	3
	I4-Scrape Door *	8	3	3	1	2	3	5	8
	I5-Heat gun < 1100°	4	5	4	2	2	3	8	13
	I6-Heat gun > 1100° *	12	5	4	2	2	4	8	10
	I7-Kitchen	8	2	2	1	1	2	3	5
Exterior	E1-Door Replacement	2	11	11	10	10	11	12	12
	E2-Replace Trim Soffit	2	16	16	15	15	16	17	17
	E3-Rotopene	1	5	5	5	5	5	5	5
	E4--Heat gun < 1100°	1	32	32	32	32	32	32	32
	E5-Dry Scrape	4	8	4	1	1	7	15	16
	E6-Power Sanding	2	12	12	12	12	12	13	13
	E7-Torching	2	7	6	3	3	7	11	11
	E8-Heat gun > 1100° *	1	18	18	18	18	18	18	18

* Indicates job is restricted

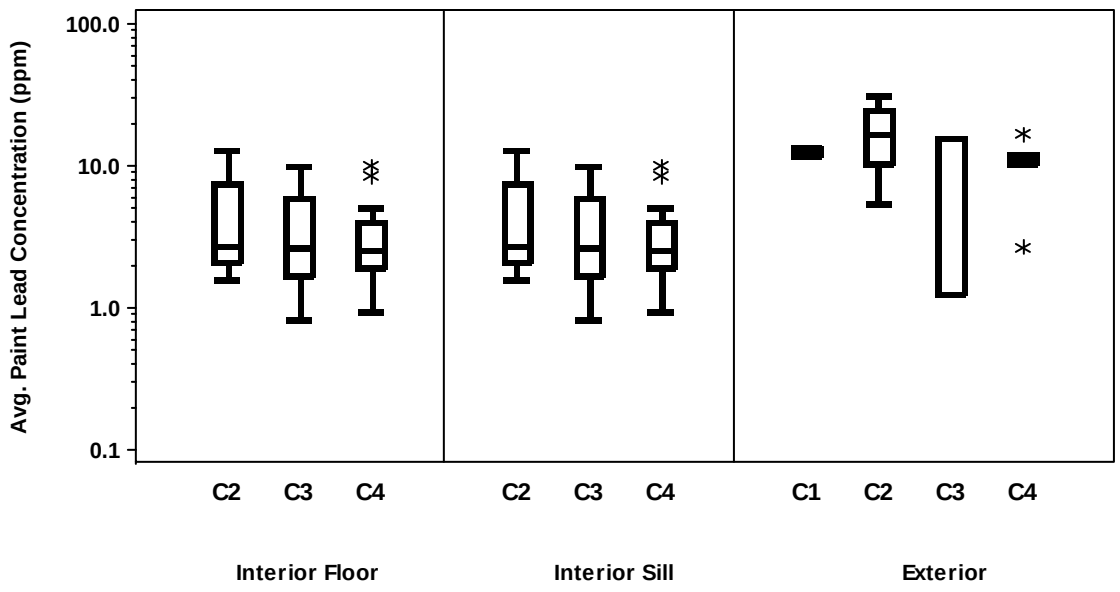


Figure G2.4a. Box Plots of Average Paint Lead Concentration by Analysis and Contractor

Table G2.4a. Descriptive Summary of Average Paint Lead Concentration (ppm) by Analysis and Contractor

Analysis	Avg. Paint Lead Concentration (ppm) by Contractor	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	C2	20	5	4	2	2	3	7	13
	C3	16	4	3	1	2	3	7	10
	C4	11	4	3	1	2	4	5	10
Interior Floor	C2	20	5	4	2	2	3	7	13
	C3	18	4	3	1	2	3	6	10
	C4	22	3	3	1	2	3	4	10
Interior Sill	C2	20	5	4	2	2	3	7	13
	C3	18	4	3	1	2	3	6	10
	C4	22	3	3	1	2	3	4	10
Exterior	C1	3	13	13	12	12	13	13	13
	C2	4	18	15	5	10	17	25	32
	C3	3	6	3	1	1	1	16	16
	C4	5	11	9	3	10	11	12	17

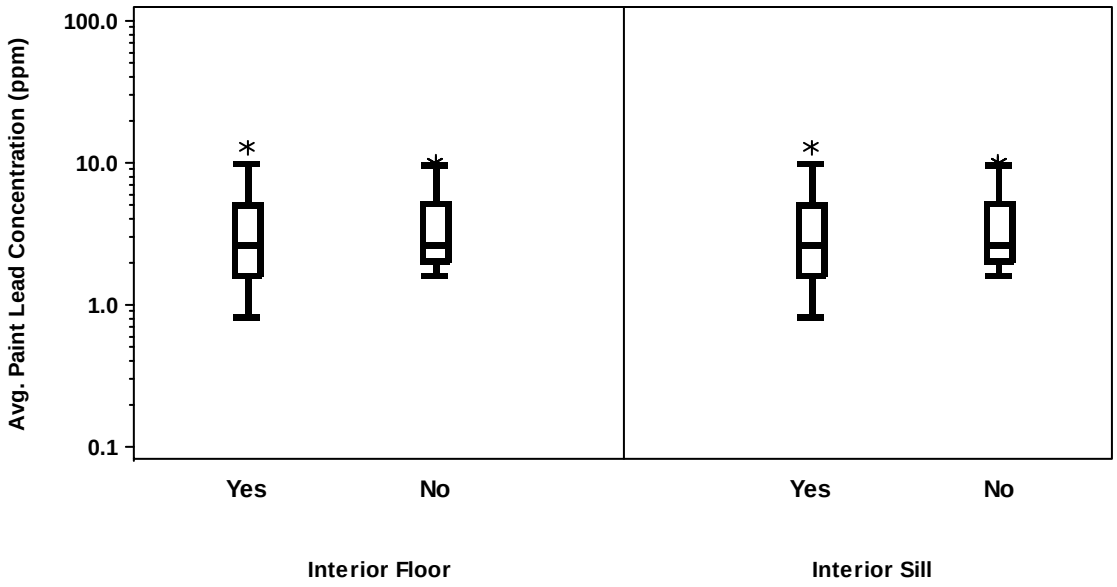


Figure G2.5a. Box Plots of Average Paint Lead Concentration by Analysis and Rule Plastic Use

Table G2.5a. Descriptive Summary of Average Paint Lead Concentration (ppm) by Analysis and Rule Plastic Use

Analysis	Avg. Paint Lead Concentration (ppm) by Plastic	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-yes	24	4	3	1	2	3	7	13
	2-no	23	4	3	2	2	3	7	10
Interior Floor	1-yes	30	4	3	1	2	3	5	13
	2-no	30	4	3	2	2	3	5	10
Interior Sill	1-yes	30	4	3	1	2	3	5	13
	2-no	30	4	3	2	2	3	5	10

[A] Note that this variable was not applied to exterior data

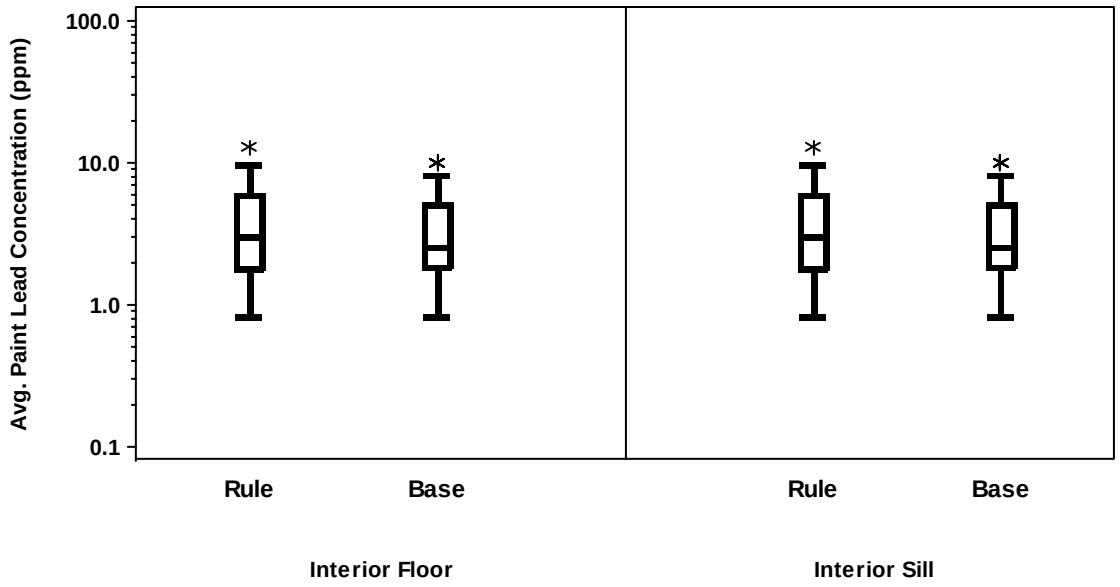


Figure G2.6a. Box Plots of Average Paint Lead Concentration by Analysis and Cleaning Type

Table G2.6a. Descriptive Summary of Average Paint Lead Concentration (ppm) by Analysis and Cleaning Type

Analysis	Avg. Paint Lead Concentration (ppm) by Cleaning	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-rule	24	4	3	1	2	3	7	13
	2-base	23	4	3	1	2	2	7	10
Interior Floor	1-rule	30	4	3	1	2	3	6	13
	2-base	30	4	3	1	2	3	5	10
Interior Sill	1-rule	30	4	3	1	2	3	6	13
	2-base	30	4	3	1	2	3	5	10

[A] Note that this variable was not applied to exterior data

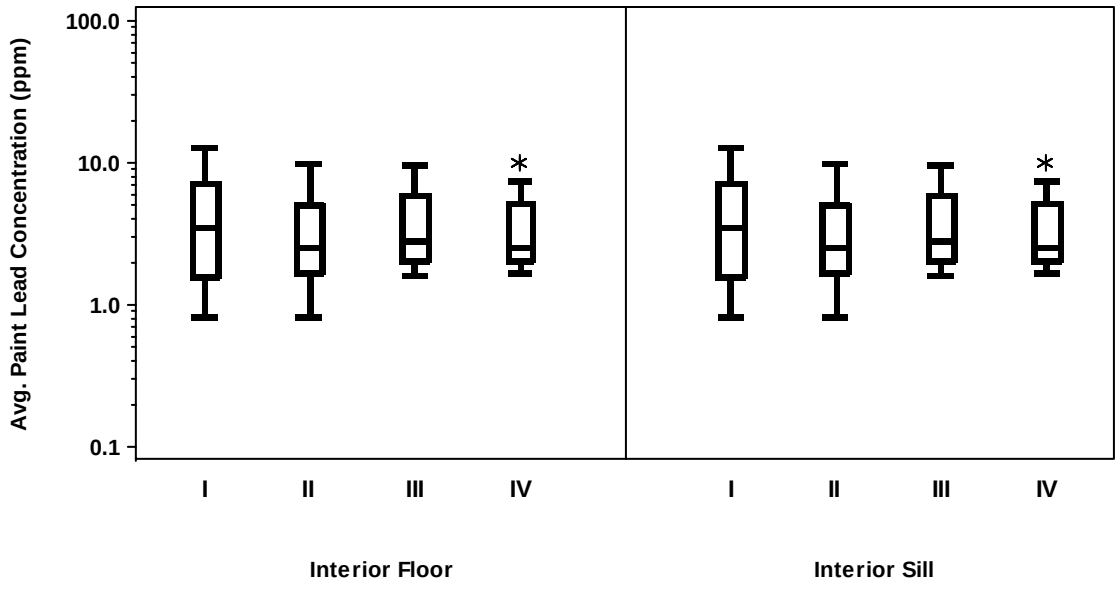


Figure G2.7a. Box Plots of Average Paint Lead Concentration by Analysis and Phase

Table G2.7a. Descriptive Summary of Average Paint Lead Concentration (ppm) by Analysis and Phase

Analysis	Avg. Paint Lead Concentration (ppm) by Phase	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	I-Rule w/ Plastic	12	5	3	1	2	4	7	13
	II-Base w/ Plastic	12	4	3	1	1	2	6	10
	III-Rule w/o Plastic	12	4	3	2	2	3	7	10
	IV-Base w/o Plastic	11	4	3	2	2	2	7	10
Interior Floor	I-Rule w/ Plastic	15	4	3	1	2	4	7	13
	II-Base w/ Plastic	15	4	3	1	2	3	5	10
	III-Rule w/o Plastic	15	4	3	2	2	3	6	10
	IV-Base w/o Plastic	15	4	3	2	2	3	5	10
Interior Sill	I-Rule w/ Plastic	15	4	3	1	2	4	7	13
	II-Base w/ Plastic	15	4	3	1	2	3	5	10
	III-Rule w/o Plastic	15	4	3	2	2	3	6	10
	IV-Base w/o Plastic	15	4	3	2	2	3	5	10

[A] Note that this variable was not applied to exterior data

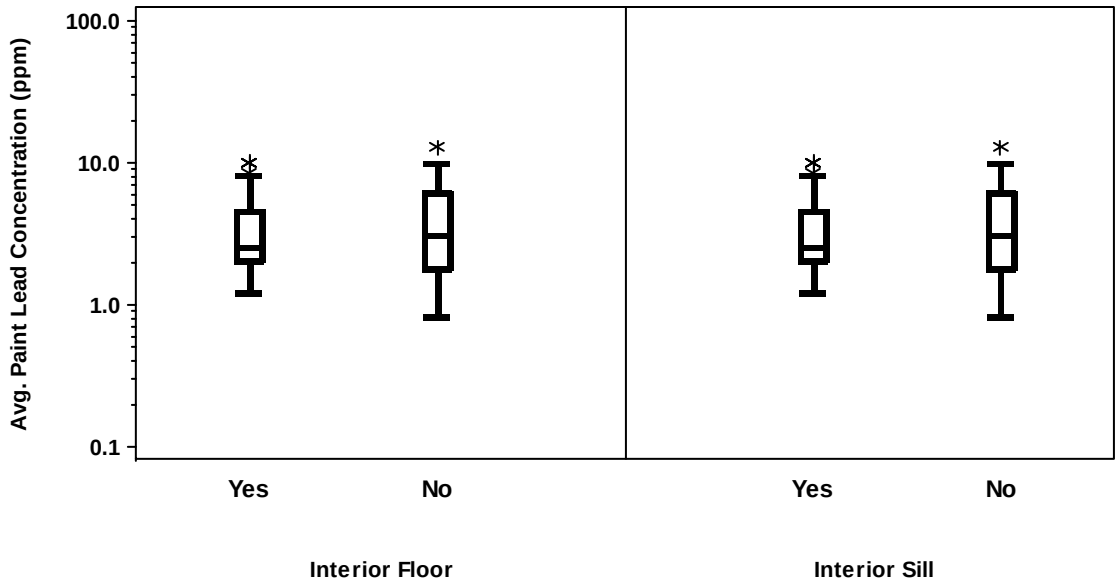


Figure G2.8a. Box Plots of Average Paint Lead Concentration by Analysis and Restricted Job

Table G2.8a. Descriptive Summary of Average Paint Lead Concentration (ppm) by Analysis and Restricted Job

Analysis	Avg. Paint Lead Concentration (ppm) by Restricted Job	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-yes	23	4	3	1	2	3	6	10
	2-no	24	4	3	1	2	3	7	13
Interior Floor	1-yes	28	4	3	1	2	3	5	10
	2-no	32	4	3	1	2	3	6	13
Interior Sill	1-yes	28	4	3	1	2	3	5	10
	2-no	32	4	3	1	2	3	6	13

[A] Note that this variable was not applied to exterior data

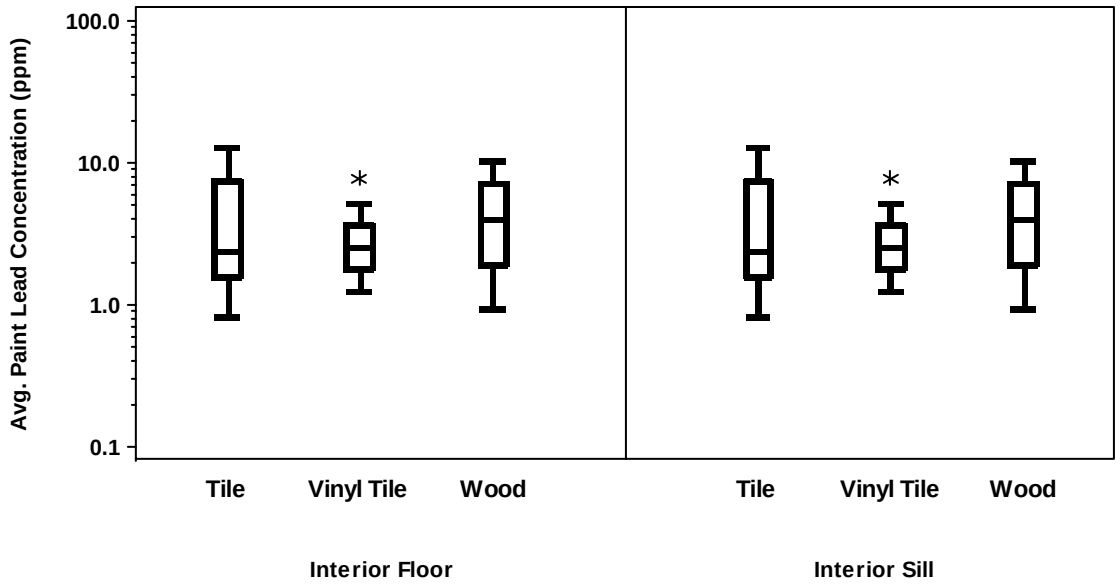


Figure G2.9a. Box Plots of Average Paint Lead Concentration by Analysis and Work Room Floor Type

Table G2.9a. Descriptive Summary of Average Paint Lead Concentration (ppm) by Analysis and Work Room Floor Type

Analysis	Avg. Paint Lead Concentration (ppm) by Floor Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	Tile	17	4	3	1	2	2	7	13
	Vinyl Tile	8	3	3	2	2	2	4	8
	Wood	22	5	4	1	2	4	7	10
Interior Floor	Tile	17	4	3	1	2	2	7	13
	Vinyl Tile	21	3	3	1	2	3	4	8
	Wood	22	5	4	1	2	4	7	10
Interior Sill	Tile	17	4	3	1	2	2	7	13
	Vinyl Tile	21	3	3	1	2	3	4	8
	Wood	22	5	4	1	2	4	7	10

[A] Note that this variable was not applied to exterior data

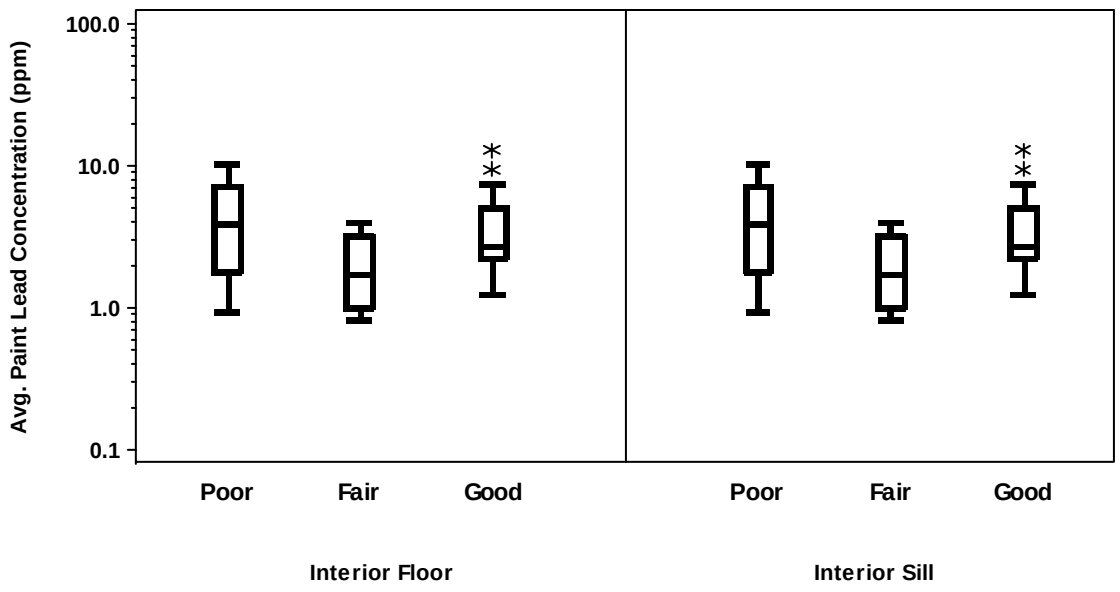
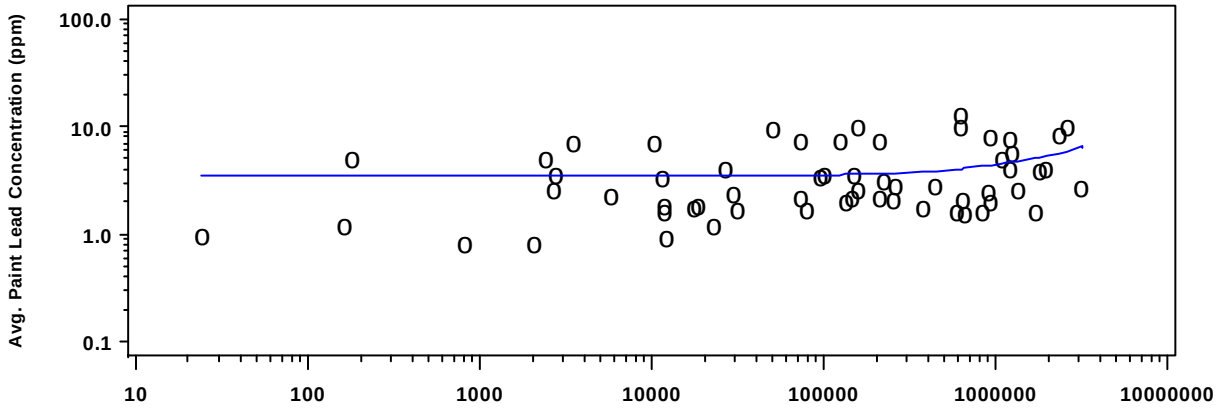


Figure G2.10a. Box Plots of Average Paint Lead Concentration by Analysis and Work Room Floor Condition

Table G2.10a.Descriptive Summary of Average Paint Lead Concentration (ppm) by Analysis and Work Room Floor Condition

Analysis	Avg. Paint Lead Concentration (ppm) by Floor Condition	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	Fair	10	2	2	1	1	2	3	4
	Good	12	5	4	2	2	3	7	13
	Poor	25	5	4	1	2	4	7	10
Interior Floor	Fair	11	2	2	1	1	2	3	4
	Good	22	4	3	1	2	3	5	13
	Poor	27	5	4	1	2	4	7	10
Interior Sill	Fair	11	2	2	1	1	2	3	4
	Good	22	4	3	1	2	3	5	13
	Poor	27	5	4	1	2	4	7	10

[A] Note that this variable was not applied to exterior data



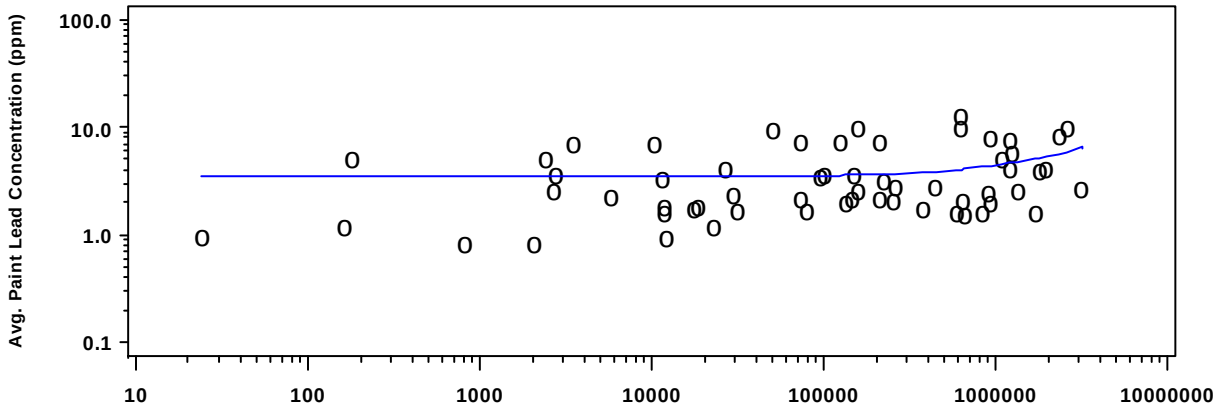


Figure G2.11. Scatter Plots of Average Paint Lead Concentration (ppm) and Average Post-Work Work Room Floor Dust Lead Loading (µg/ft^2) for Interior Floors and Sills

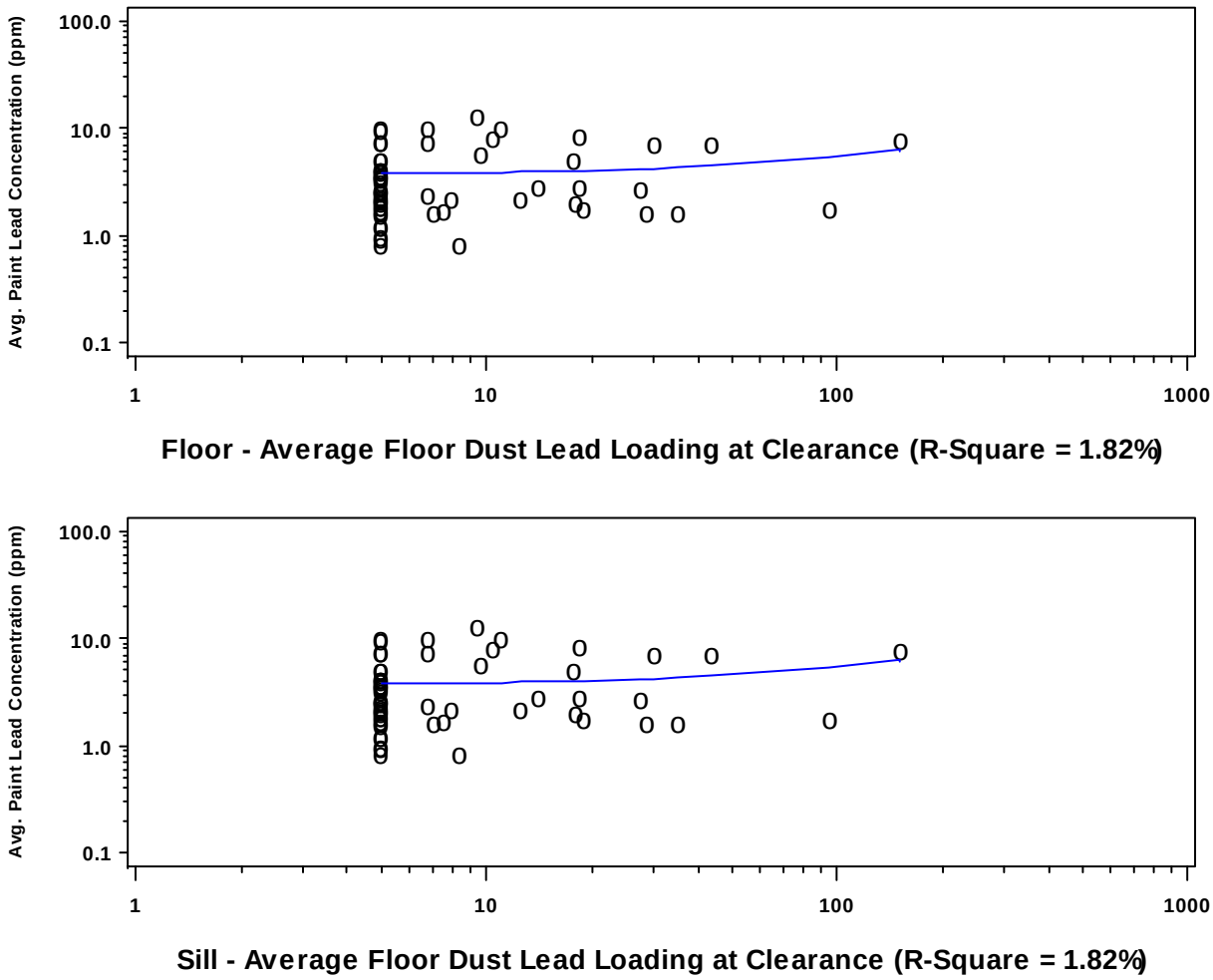


Figure G2.12. Scatter Plots of Average Paint Lead Concentration (ppm) and Floor Dust Lead Loading at Clearance (μg/ft^2) by Analysis for Interior Floors and Sills

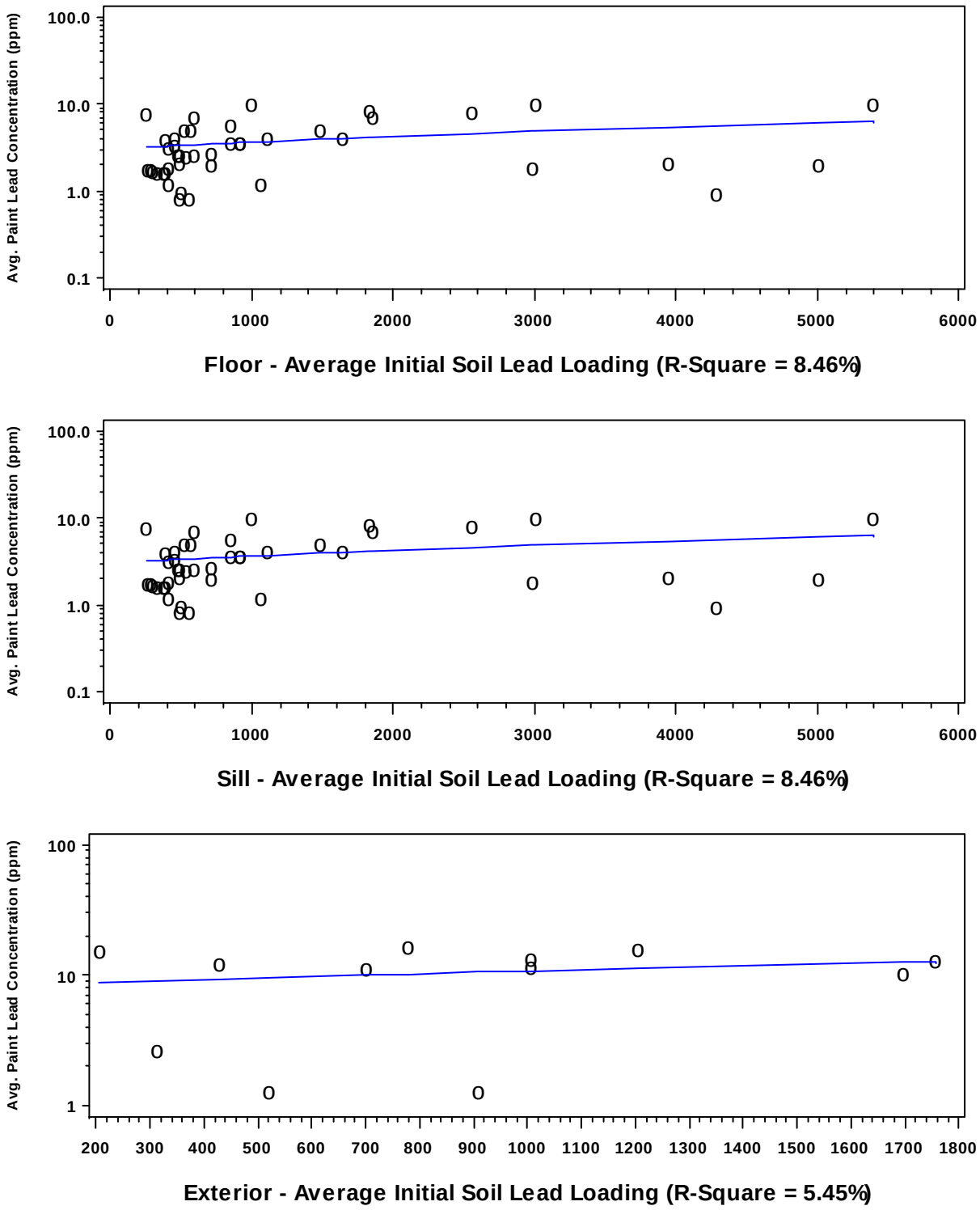


Figure G2.13. Scatter Plots of Average Paint Lead Concentration (ppm) by Analysis and Initial Average Soil Lead Concentration (ppm) for Interior Floors, Interior Sills, and Exterior

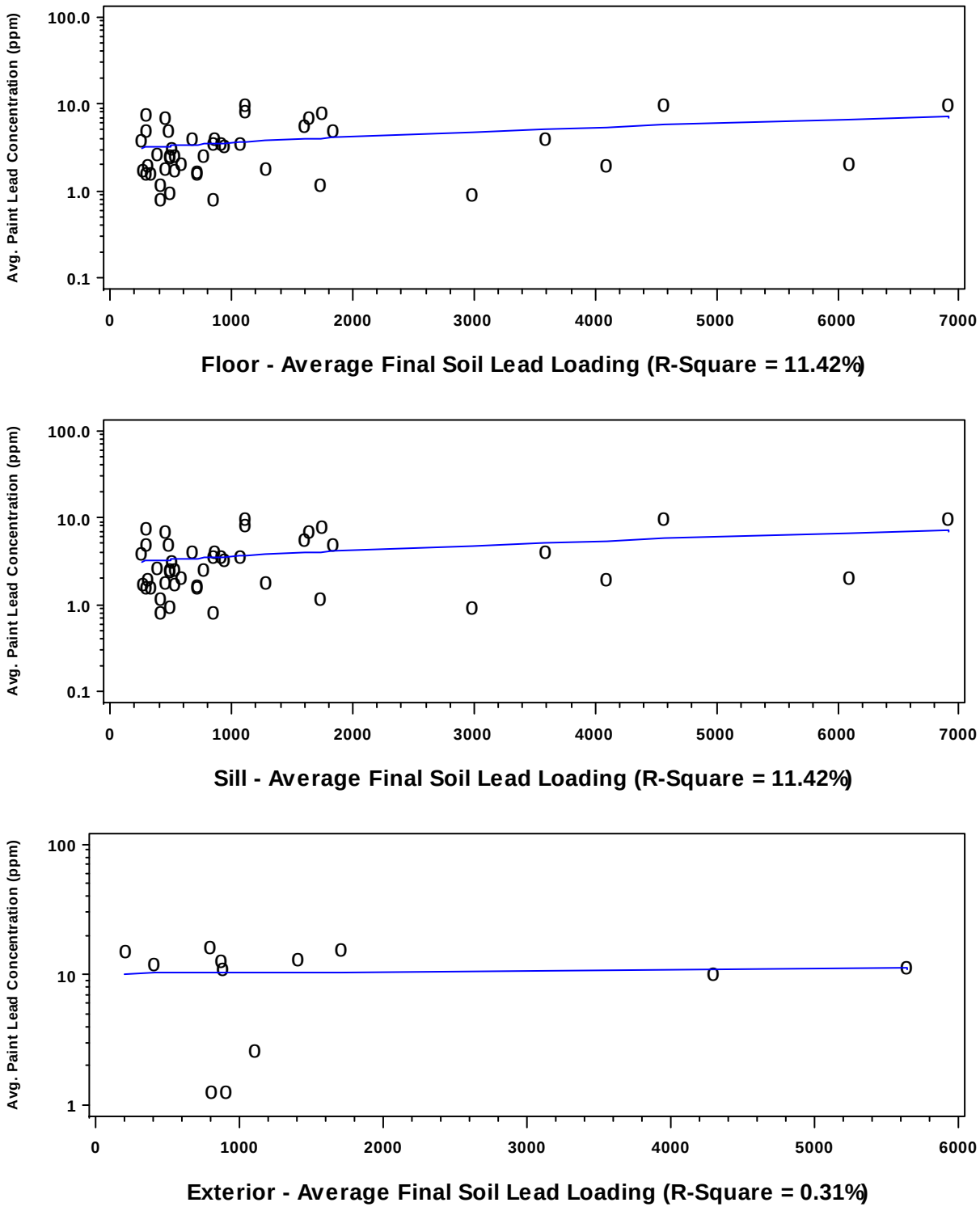


Figure G2.14. Scatter Plots of Average Paint Lead Concentration (ppm) by Analysis and Final Average Soil Lead Concentration (ppm) for Interior Floors, Interior Sills, and Exterior

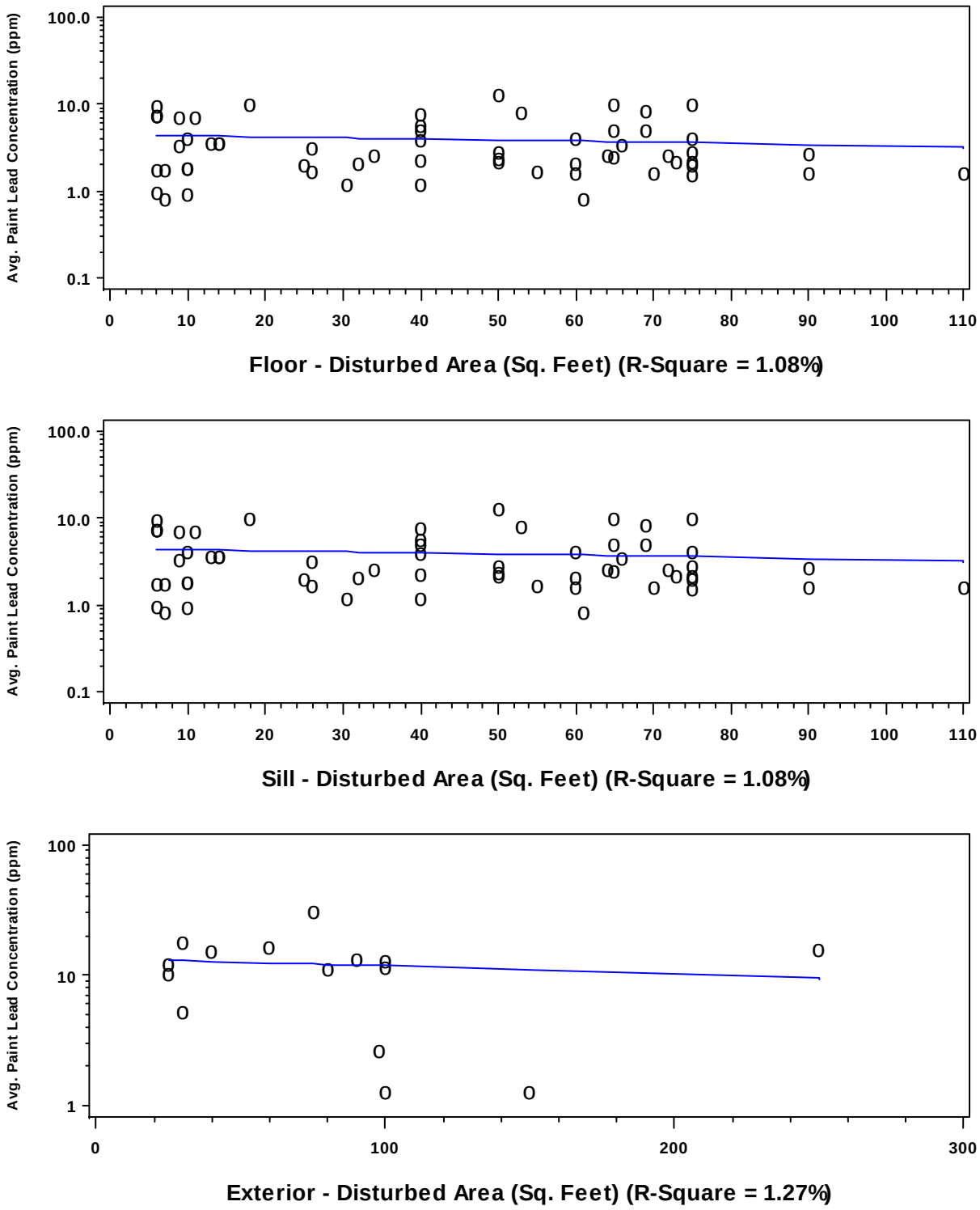


Figure G2.15. Scatter Plots of Average Paint Lead Concentration (ppm) by Analysis and Disturbed Area (ft^2) for Interior Floors, Interior Sills, and Exterior

G3. Exploratory Summaries of Square Feet Disturbed vs. Select Categorical Characteristics

Box plots of the square feet disturbed as well as descriptive statistical summary tables are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. Numerical summaries are presented for interior floor, sill and exit samples; all exterior samples are missing this information. Exit samples have been excluded from the graphical displays, which contain placeholders for the exterior samples.

The selected characteristics are as follows:

1. Job intensity
2. City
3. Job type
4. Contractor
5. Rule Plastic Use
6. Cleaning Type
7. Phase
8. Restricted vs. non-restricted jobs
9. Work room floor type
10. Work room floor condition

Scatter plots of the square feet disturbed are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. The fitted linear regression line (using untransformed data) is displayed in each plot along with its associated r-square value.

The selected characteristics are as follows:

11. Average Post-Work Work Room Floor Dust Lead Loading
12. Floor Dust Lead Loading at Clearance
13. Initial Average Soil Lead Concentration
14. Final Average Soil Lead Concentration
15. Average Paint Lead Concentration

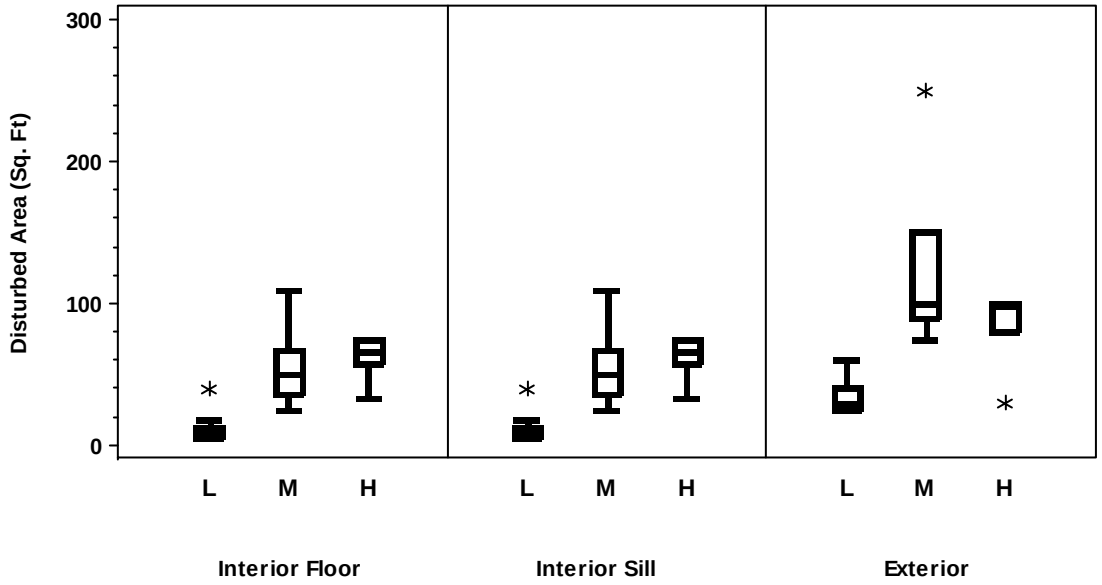


Figure G3.1a. Box Plots of Square Feet Disturbed by Analysis and Job Intensity Level

Table G3.1a. Descriptive Summary of Square Feet Disturbed (ft^2) by Analysis and Job Intensity Level

Analysis	Disturbed Area (Sq. Ft) by Intensity	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-High	16	67	67	53	61	68	75	75
	2-Medium	15	53	48	25	32	50	70	110
	3-Low	16	9	8	6	6	8	10	18
Interior Floor	1-High	20	63	62	34	58	66	75	75
	2-Medium	20	54	49	25	36	50	68	110
	3-Low	20	11	10	6	6	10	12	40
Interior Sill	1-High	20	63	62	34	58	66	75	75
	2-Medium	20	54	49	25	36	50	68	110
	3-Low	20	11	10	6	6	10	12	40
Exterior	1-High	5	82	75	30	80	98	100	100
	2-Medium	5	133	120	75	90	100	150	250
	3-Low	5	36	34	25	25	30	40	60

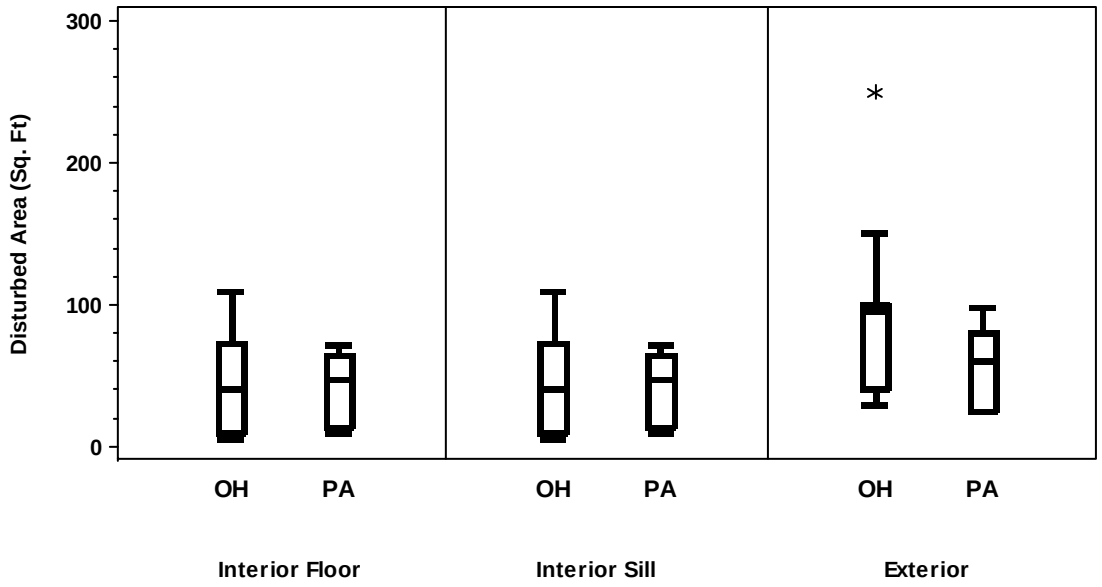


Figure G3.2a. Box Plots of Square Feet Disturbed by Analysis and City

Table G3.2a. Descriptive Summary of Square Feet Disturbed (ft^2) by Analysis and City

Analysis	Disturbed Area (Sq. Ft) by City	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	Columbus, OH	36	42	29	6	9	40	74	110
	Pittsburgh, PA	11	44	32	10	10	60	65	69
Interior Floor	Columbus, OH	38	43	29	6	9	40	73	110
	Pittsburgh, PA	22	43	34	10	14	48	65	72
Interior Sill	Columbus, OH	38	43	29	6	9	40	73	110
	Pittsburgh, PA	22	43	34	10	14	48	65	72
Exterior	Columbus, OH	10	97	79	30	40	95	100	250
	Pittsburgh, PA	5	58	49	25	25	60	80	98

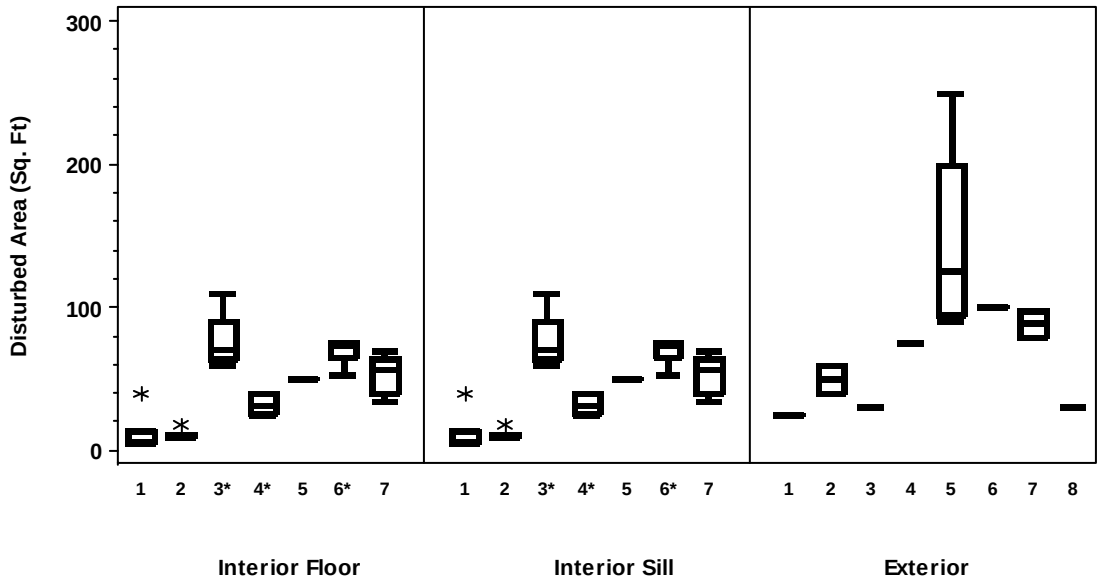


Figure G3.3a. Box Plots of Square Feet Disturbed by Analysis and Job Type

Table G3.3a. Descriptive Summary of Square Feet Disturbed (ft^2) by Analysis and Job Type

Analysis	Disturbed Area (Sq. Ft) by Job Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior-Exit	I1-Cut Outs	8	6	6	6	6	6	7	7
	I2-Replace Windows	8	11	11	9	10	10	11	18
	I3-Scrape Surface *	4	90	89	70	80	90	100	110
	I4-Scrape Door *	7	33	33	25	26	32	40	40
	I5-Heat gun < 1100°	4	50	50	50	50	50	50	50
	I6-Heat gun > 1100° *	12	70	69	53	65	74	75	75
	I7-Kitchen	4	61	60	55	58	61	64	66
Interior-Floor	I1-Cut Outs	12	11	9	6	6	7	14	40
	I2-Replace Windows	8	11	11	9	10	10	11	18
	I3-Scrape Surface *	8	78	76	60	65	71	90	110
	I4-Scrape Door *	8	32	32	25	26	31	40	40
	I5-Heat gun < 1100°	4	50	50	50	50	50	50	50
	I6-Heat gun > 1100° *	12	70	69	53	65	74	75	75
	I7-Kitchen	8	53	52	34	40	58	64	69
Interior-Sill	I1-Cut Outs	12	11	9	6	6	7	14	40
	I2-Replace Windows	8	11	11	9	10	10	11	18
	I3-Scrape Surface *	8	78	76	60	65	71	90	110
	I4-Scrape Door *	8	32	32	25	26	31	40	40
	I5-Heat gun < 1100°	4	50	50	50	50	50	50	50
	I6-Heat gun > 1100° *	12	70	69	53	65	74	75	75
	I7-Kitchen	8	53	52	34	40	58	64	69
Exterior	E1-Door Replacement	2	25	25	25	25	25	25	25
	E2-Replace Trim Soffit	2	50	49	40	40	50	60	60
	E3-Rotopene	1	30	30	30	30	30	30	30
	E4--Heat gun < 1100°	1	75	75	75	75	75	75	75
	E5-Dry Scrape	4	148	136	90	95	125	200	250
	E6-Power Sanding	2	100	100	100	100	100	100	100
	E7-Torching	2	89	89	80	80	89	98	98
	E8-Heat gun > 1100° *	1	30	30	30	30	30	30	30

* Indicates job is restricted

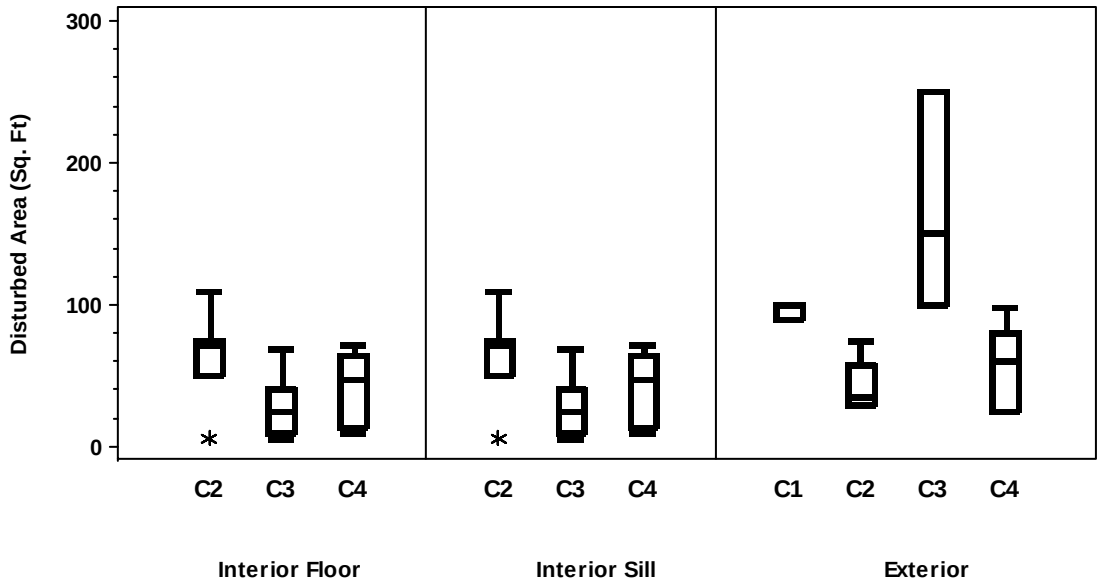


Figure G3.4a. Box Plots of Square Feet Disturbed by Analysis and Contractor

Table G3.4a. Descriptive Summary of Square Feet Disturbed (ft^2) by Analysis and Contractor

Analysis	Disturbed Area (Sq. Ft) by Contractor	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	C2	20	58	42	6	50	72	75	110
	C3	16	23	17	6	8	22	36	61
	C4	11	44	32	10	10	60	65	69
Interior Floor	C2	20	58	42	6	50	72	75	110
	C3	18	26	19	6	9	26	40	69
	C4	22	43	34	10	14	48	65	72
Interior Sill	C2	20	58	42	6	50	72	75	110
	C3	18	26	19	6	9	26	40	69
	C4	22	43	34	10	14	48	65	72
Exterior	C1	3	97	97	90	90	100	100	100
	C2	4	44	41	30	30	35	58	75
	C3	3	167	155	100	100	150	250	250
	C4	5	58	49	25	25	60	80	98

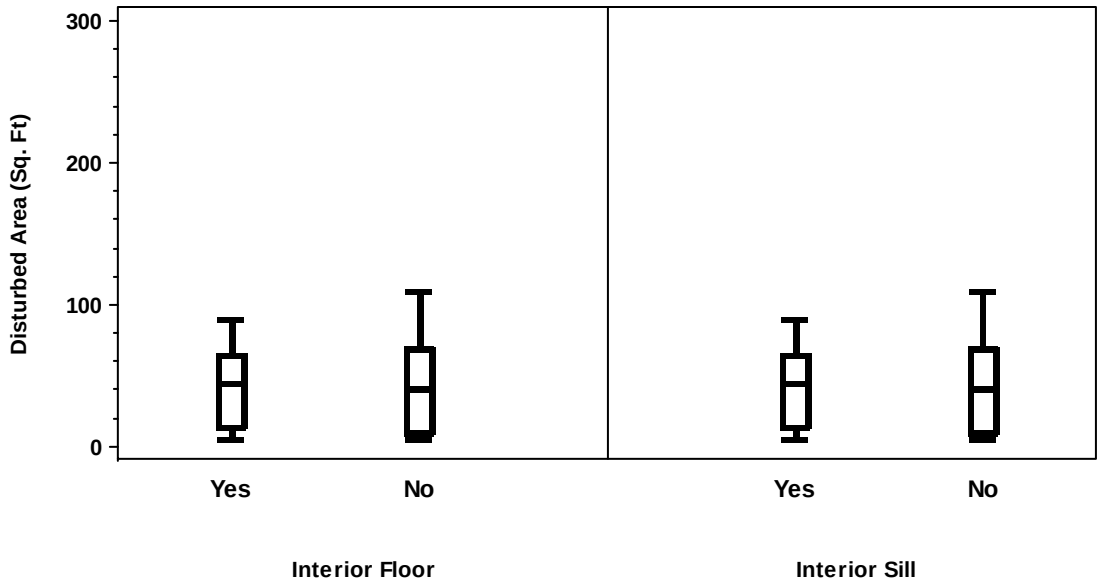


Figure G3.5a. Box Plots of Square Feet Disturbed by Analysis and Rule Plastic Use

Table G3.5a. Descriptive Summary of Square Feet Disturbed (ft^2) by Analysis and Rule Plastic Use

Analysis	Disturbed Area (Sq. Ft) by Plastic	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-yes	24	43	31	6	11	50	66	90
	2-no	23	42	28	6	9	40	70	110
Interior Floor	1-yes	30	42	31	6	14	45	65	90
	2-no	30	43	31	6	10	40	69	110
Interior Sill	1-yes	30	42	31	6	14	45	65	90
	2-no	30	43	31	6	10	40	69	110

[A] Note that this variable was not applied to exterior data

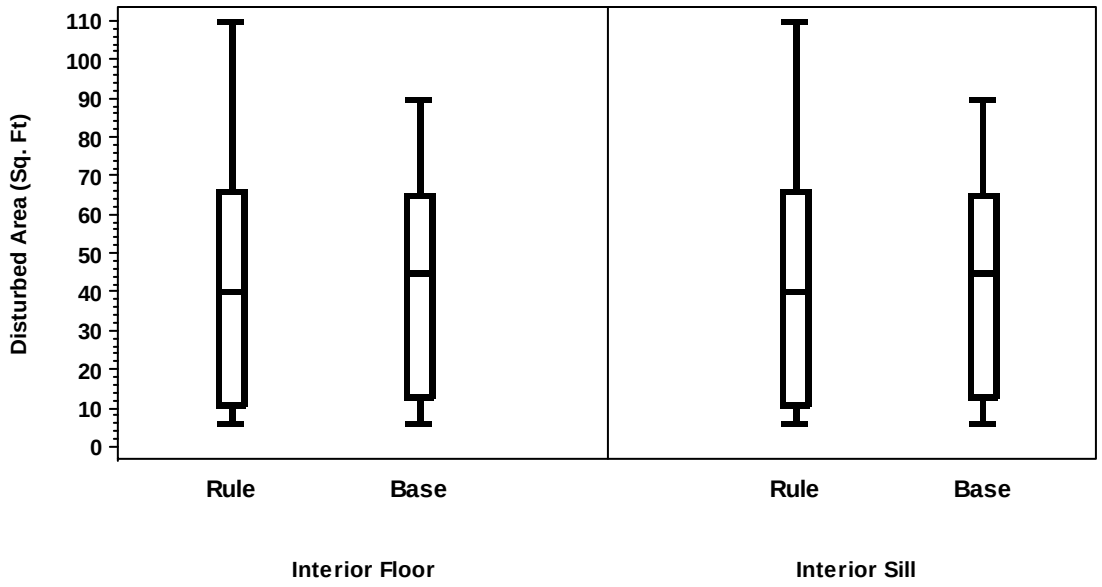


Figure G3.6a. Box Plots of Square Feet Disturbed by Analysis and Cleaning Type

Table G3.6a. Descriptive Summary of Square Feet Disturbed (ft^2) by Analysis and Cleaning Type

Analysis	Disturbed Area (Sq. Ft) by Cleaning	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-rule	24	44	30	6	10	45	72	110
	2-base	23	41	29	6	10	50	65	90
Interior Floor	1-rule	30	44	31	6	11	40	66	110
	2-base	30	42	30	6	13	45	65	90
Interior Sill	1-rule	30	44	31	6	11	40	66	110
	2-base	30	42	30	6	13	45	65	90

[A] Note that this variable was not applied to exterior data

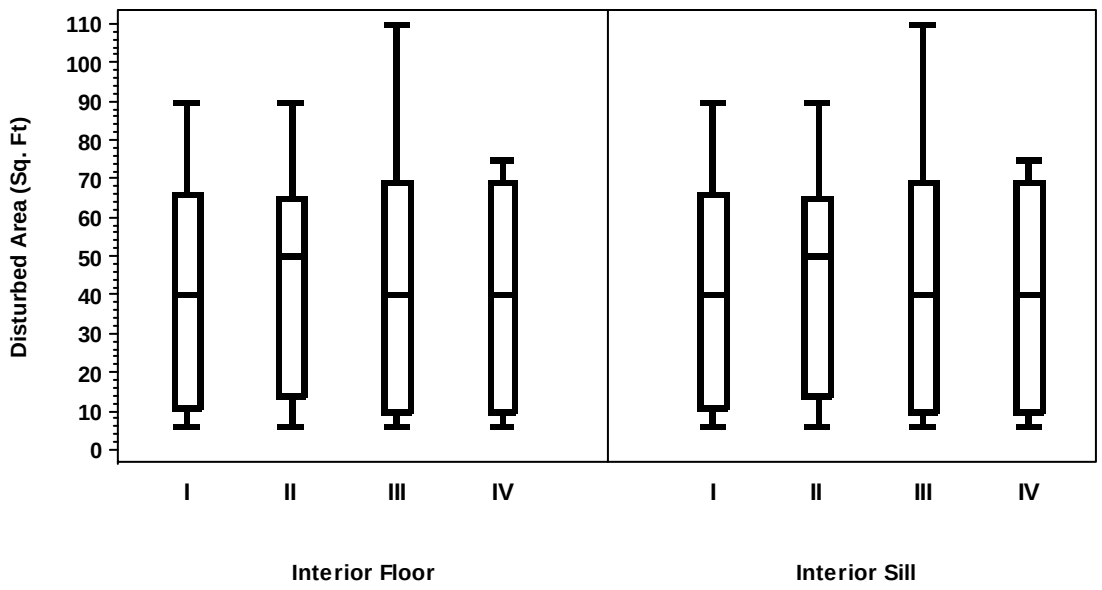


Figure G3.7a. Box Plots of Square Feet Disturbed by Analysis and Phase

Table G3.7a. Descriptive Summary of Square Feet Disturbed (ft^2) by Analysis and Phase

Analysis	Disturbed Area (Sq. Ft) by Phase	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	I-Rule w/ Plastic	12	44	30	6	11	45	71	90
	II-Base w/ Plastic	12	43	31	6	14	52	63	90
	III-Rule w/o Plastic	12	45	30	6	10	45	72	110
	IV-Base w/o Plastic	11	39	26	6	9	40	70	75
Interior Floor	I-Rule w/ Plastic	15	43	31	6	11	40	66	90
	II-Base w/ Plastic	15	42	31	6	14	50	65	90
	III-Rule w/o Plastic	15	45	32	6	10	40	69	110
	IV-Base w/o Plastic	15	41	29	6	10	40	69	75
Interior Sill	I-Rule w/ Plastic	15	43	31	6	11	40	66	90
	II-Base w/ Plastic	15	42	31	6	14	50	65	90
	III-Rule w/o Plastic	15	45	32	6	10	40	69	110
	IV-Base w/o Plastic	15	41	29	6	10	40	69	75

[A] Note that this variable was not applied to exterior data

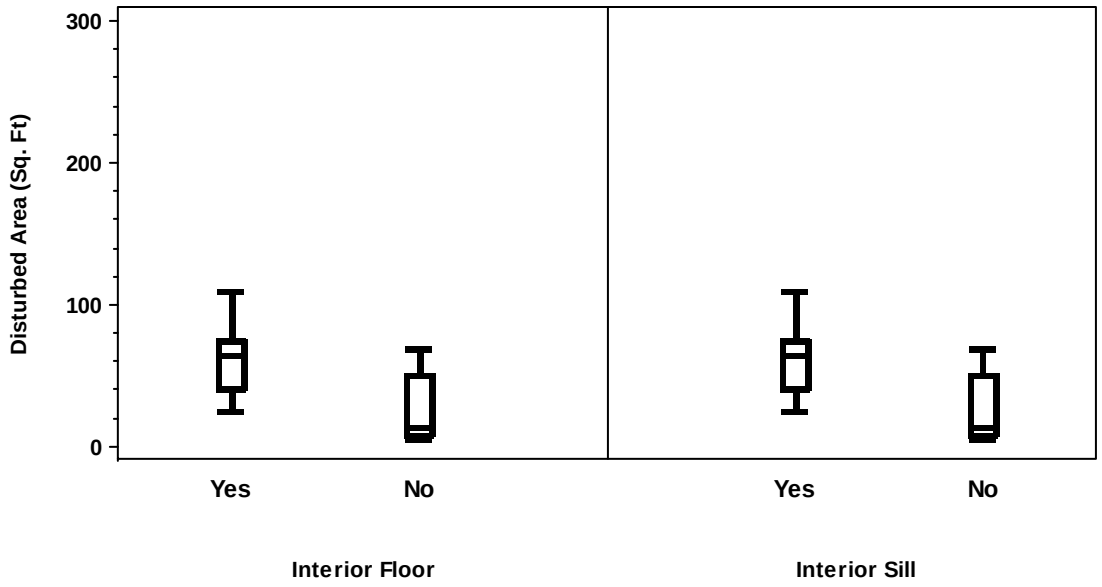


Figure G3.8a. Box Plots of Square Feet Disturbed by Analysis and Restricted Job

Table G3. 8a. Descriptive Summary of Square Feet Disturbed (ft^2) by Analysis and Restricted Job

Analysis	Disturbed Area (Sq. Ft) by Restricted Job	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	1-yes	23	62	58	25	40	69	75	110
	2-no	24	24	15	6	7	10	50	66
Interior Floor	1-yes	28	61	57	25	40	65	75	110
	2-no	32	26	18	6	8	14	50	69
Interior Sill	1-yes	28	61	57	25	40	65	75	110
	2-no	32	26	18	6	8	14	50	69

[A] Note that this variable was not applied to exterior data

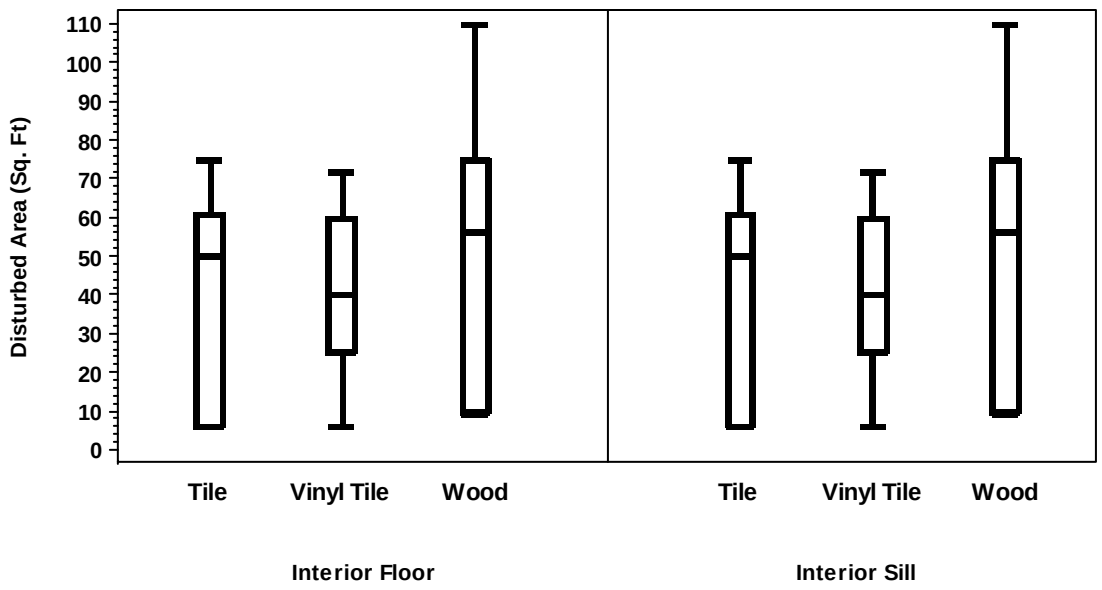


Figure G3.9a. Box Plots of Square Feet Disturbed by Analysis and Work Room Floor Type

Table G3. 9a. Descriptive Summary of Square Feet Disturbed (ft^2) by Analysis and Work Room Floor Type

Analysis	Disturbed Area (Sq. Ft) by Floor Type	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	Tile	17	38	25	6	6	50	61	75
	Vinyl Tile	8	37	28	6	16	40	58	66
	Wood	22	48	34	9	10	57	75	110
Interior Floor	Tile	17	38	25	6	6	50	61	75
	Vinyl Tile	21	40	33	6	25	40	60	72
	Wood	22	48	34	9	10	57	75	110
Interior Sill	Tile	17	38	25	6	6	50	61	75
	Vinyl Tile	21	40	33	6	25	40	60	72
	Wood	22	48	34	9	10	57	75	110

[A] Note that this variable was not applied to exterior data

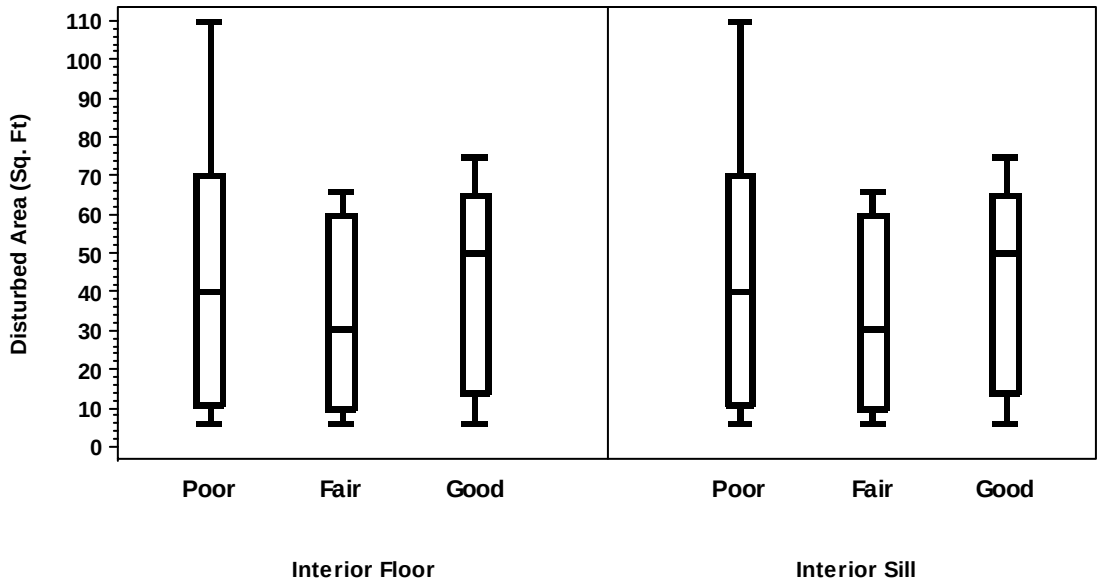
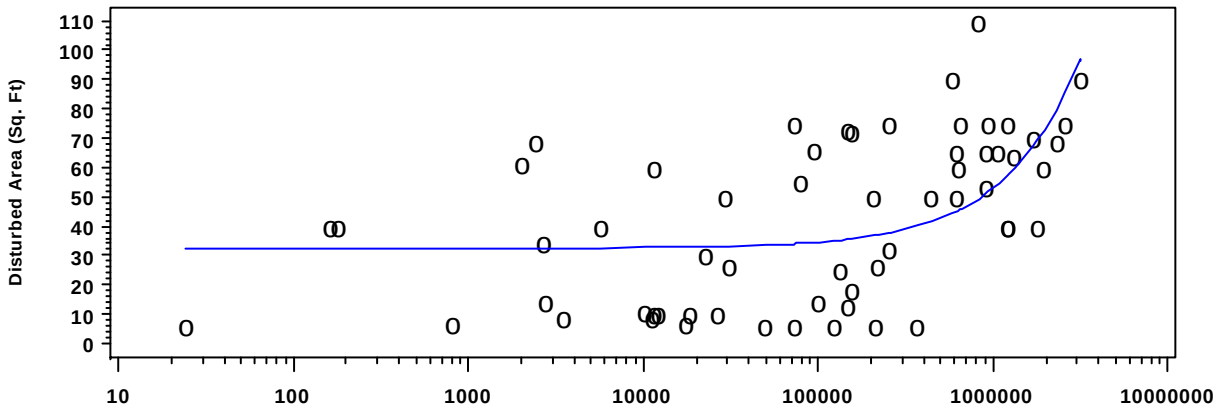


Figure G3.10a. Box Plots of Square Feet Disturbed by Analysis and Work Room Floor Condition

Table G3. 10a. Descriptive Summary of Square Feet Disturbed (ft^2) by Analysis and Work Room Floor Condition

Analysis	Disturbed Area (Sq. Ft) by Floor Condition	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Interior Exit	Fair	10	33	23	6	10	28	60	66
	Good	12	44	28	6	6	50	74	75
	Poor	25	46	33	6	11	40	70	110
Interior Floor	Fair	11	34	24	6	10	31	60	66
	Good	22	43	31	6	14	50	65	75
	Poor	27	46	34	6	11	40	70	110
Interior Sill	Fair	11	34	24	6	10	31	60	66
	Good	22	43	31	6	14	50	65	75
	Poor	27	46	34	6	11	40	70	110

[A] Note that this variable was not applied to exterior data



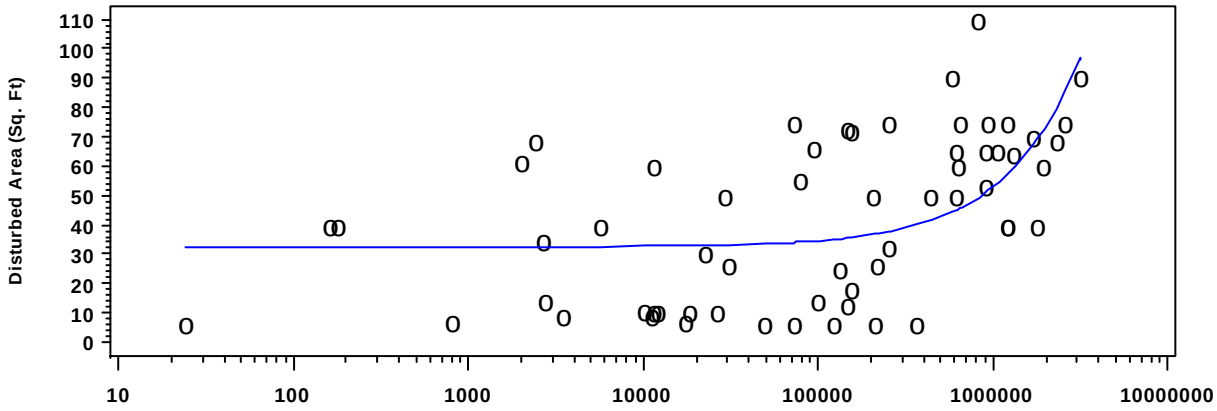


Figure G3.11. Scatter Plots of Square Feet Disturbed (ft^2) and Average Post-Work Work Room Floor Dust Lead Loading for Interior Floors and Sills

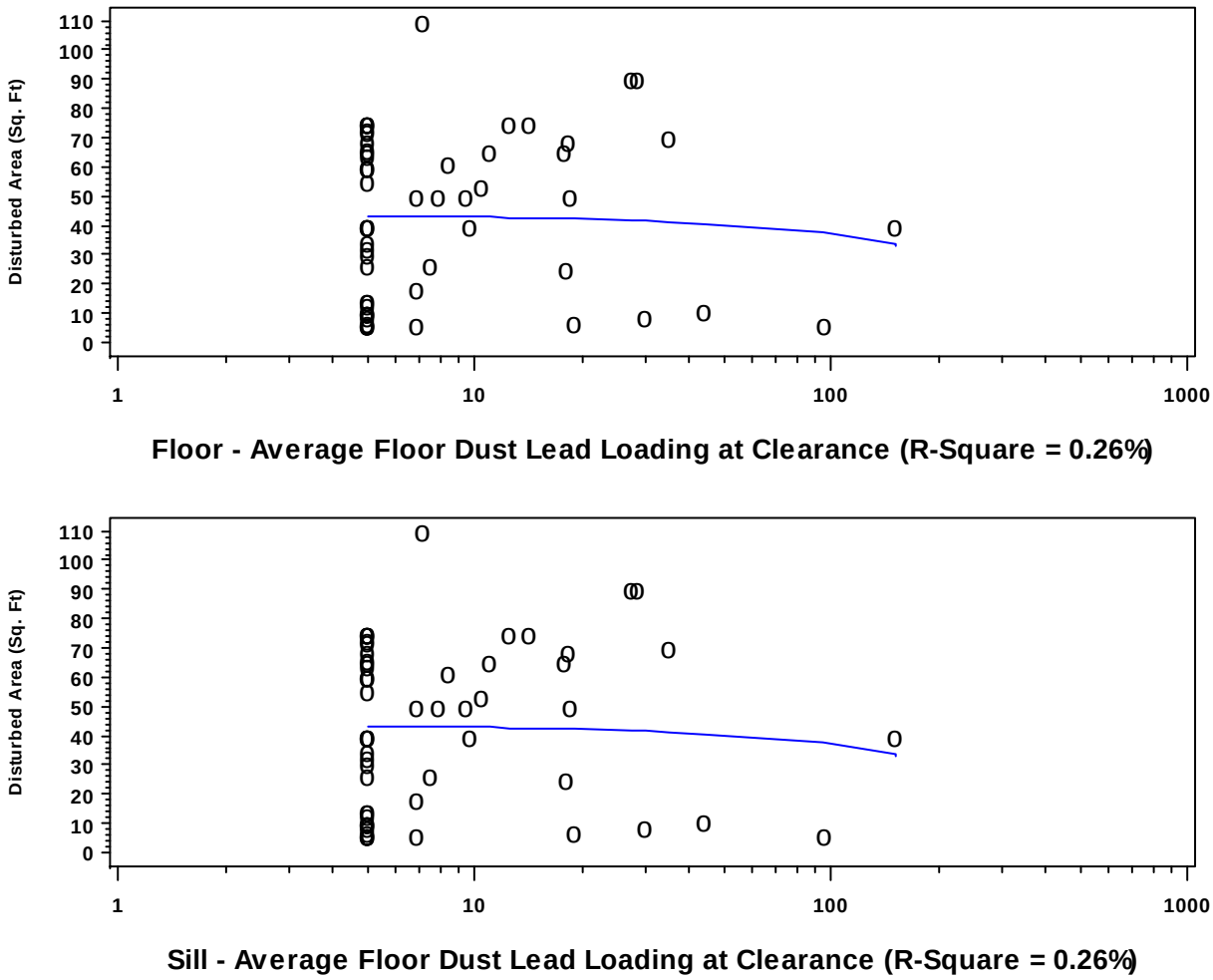
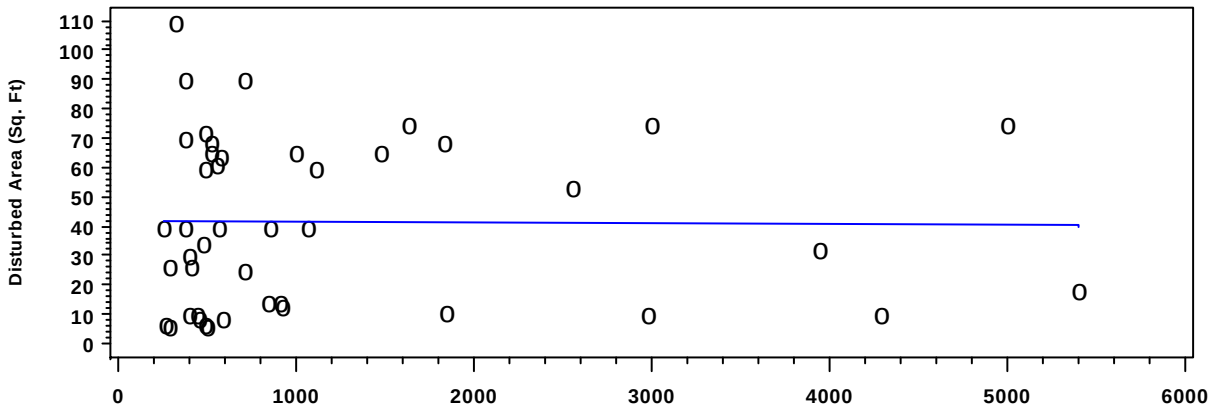
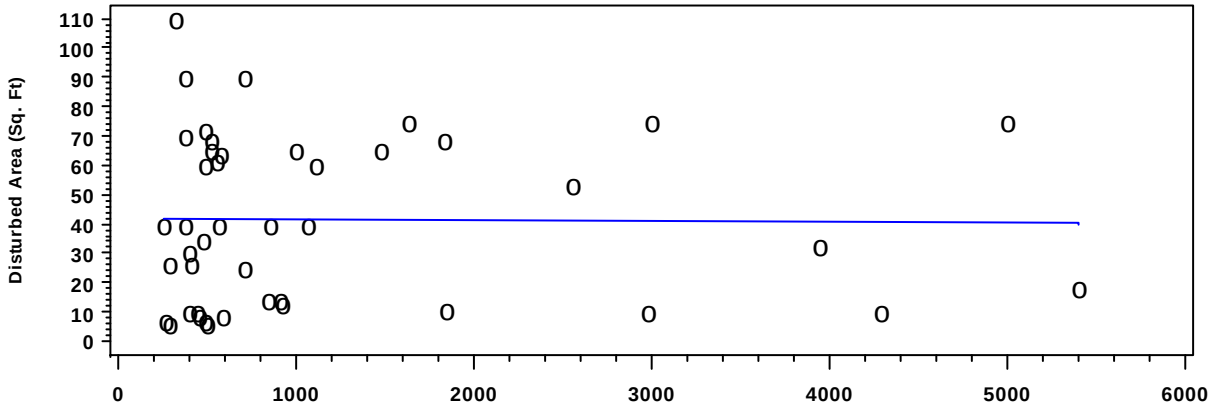


Figure G3.12. Scatter Plots of Square Feet Disturbed (ft^2) and Floor Dust Lead Loading ($\mu g/ft^2$) at Clearance by Analysis for Interior Floors and Sills





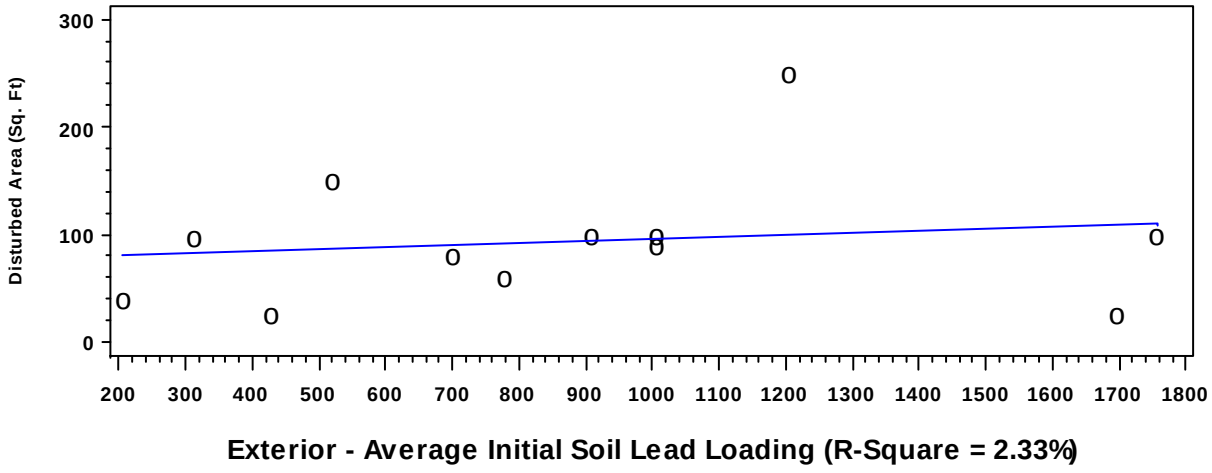
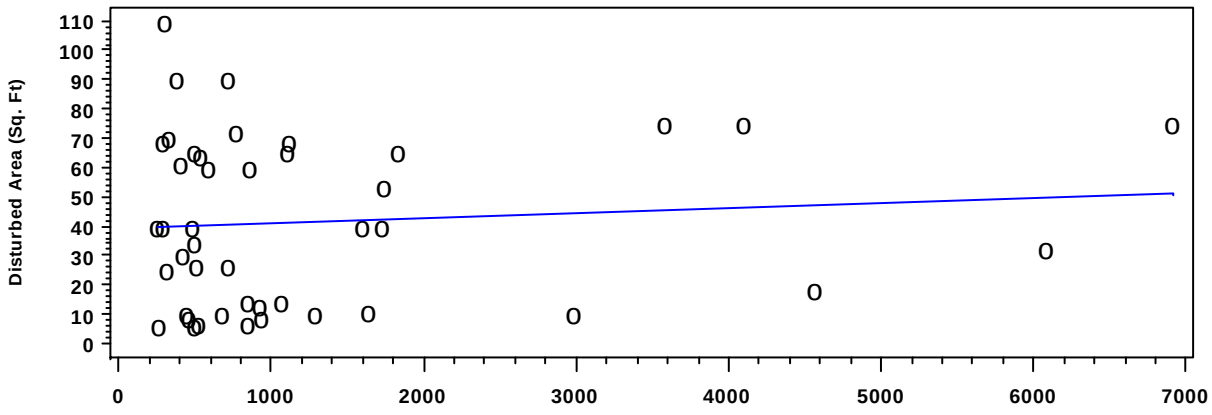
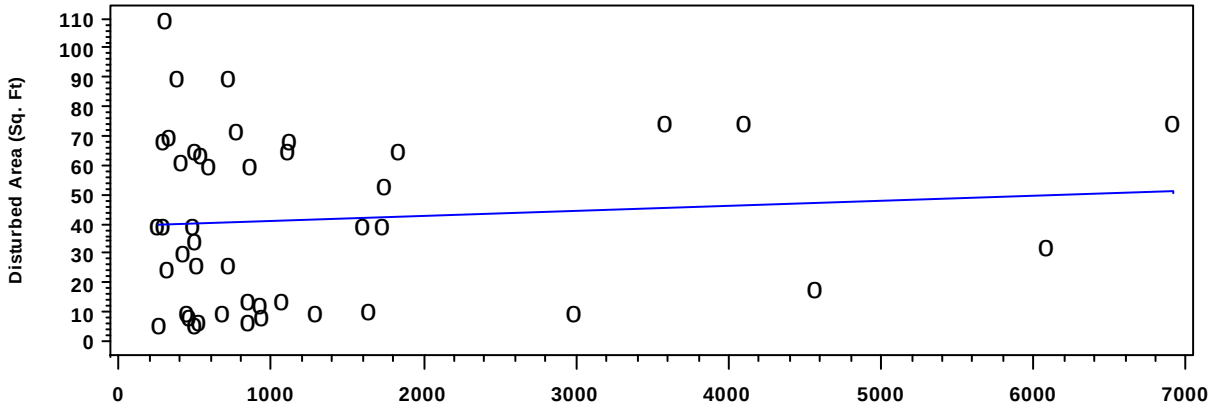


Figure G3.13. Scatter Plots of Square Feet Disturbed (ft^2) by Analysis and Initial Average Soil Lead Concentration (ppm) for Interior Floors, Interior Sills, and Exterior





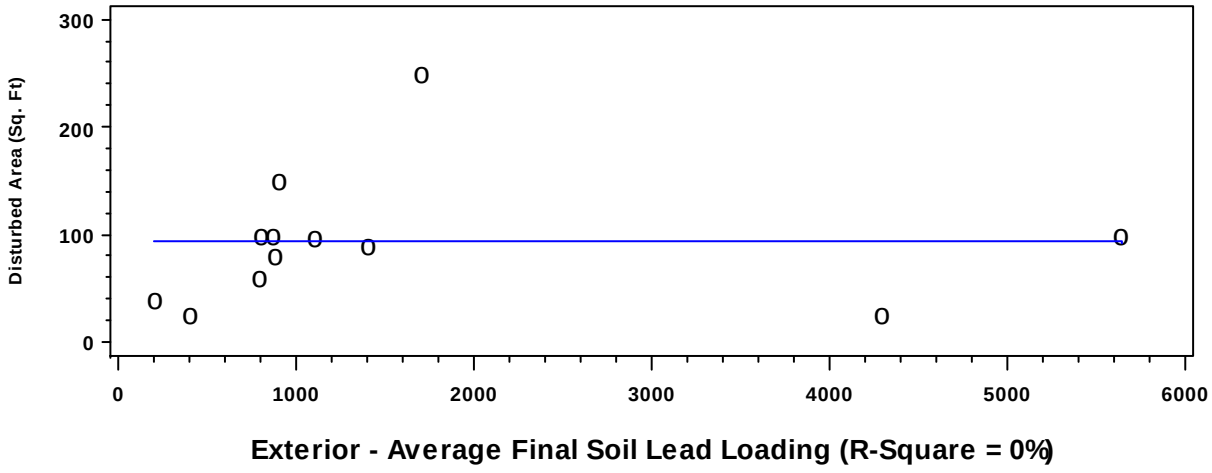
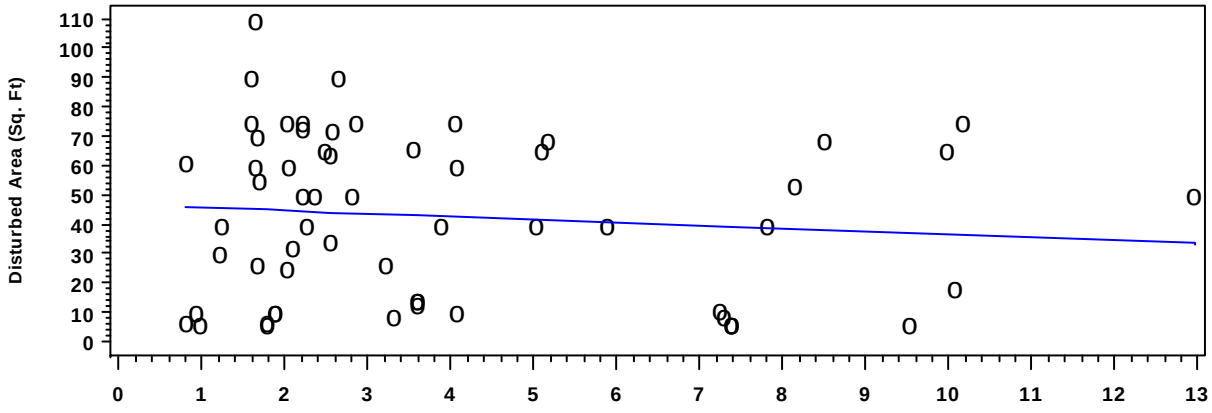
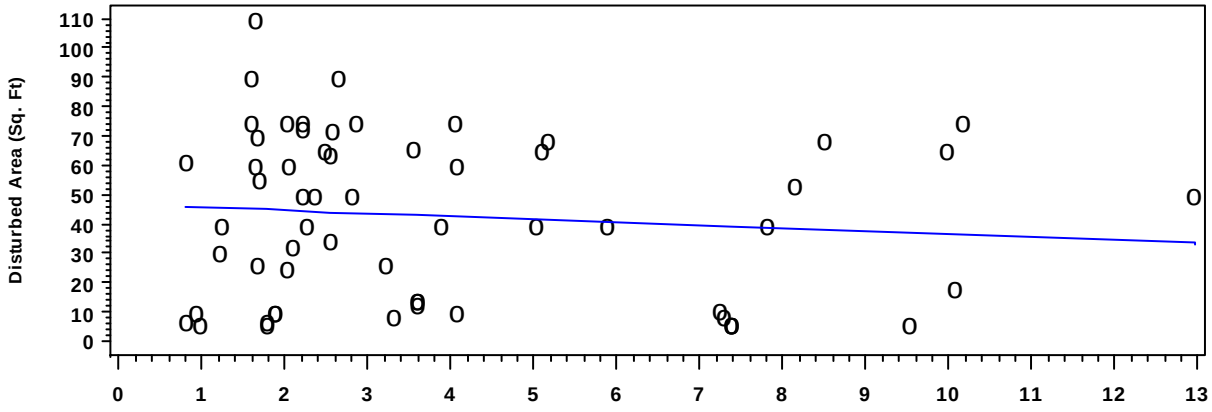


Figure G3.14. Scatter Plots of Square Feet Disturbed (ft^2) by Analysis and Final Average Soil Lead Concentration (ppm) for Interior Floors, Interior Sills, and Exterior





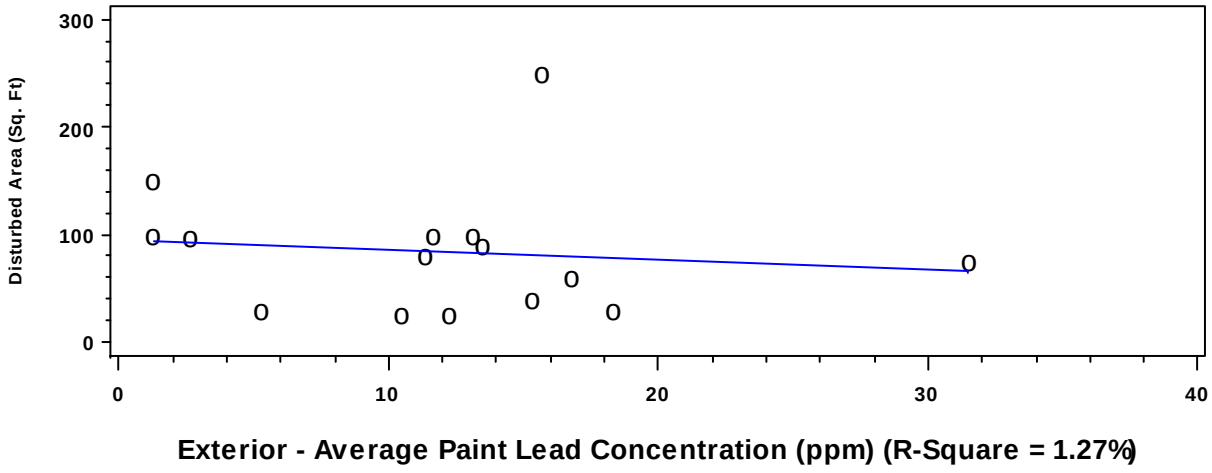


Figure G3.15. Scatter Plots of Square Feet Disturbed (ft^2) by Analysis and Average Paint Concentration (ppm) for Interior Floors, Interior Sills, and Exterior

APPENDIX H

DETAILED DESCRIPTIVE ANALYSES OF INTERIOR HALLWAY DUST LEAD LOADINGS

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H1. Distribution Check for Exit Dust Lead Loadings

Distribution of Non-Detectable Floor Lead Measurements

Measurements recorded at or below the detection limit were set to half that limit for this analysis. Table H1.1 summarizes the frequency for these measurements.

Table H1.1. Summary of Exit Dust Lead Loading Measurements below Detection Limit Measurements by Room and Stage

Stage	# (%) of Exit Samples below Detection Limit
Post-Verification	12 (8.9%)

Normality of the Exit Lead Measurement Distribution

Prior to any analysis of the lead dust loadings, the underlying distribution of the response data was examined for normality. Note that a Wilkes-Shapiro p-value < 0.001 indicates a significant departure from normality. With larger sample sizes, normality tests can indicate statistically significant but unimportant departures from normality. For the data collected for this study, the log-transformation of the data was accepted even when the Wilkes-Shapiro statistics indicated non-normality. With additional time, potential outliers and other influential points could be explored to determine if other data adjustments would be beneficial to the analyses.

Figures H1.1a and H1.1b summarize the distribution of the raw and natural log-transformed exit dust lead measurements from the work room.

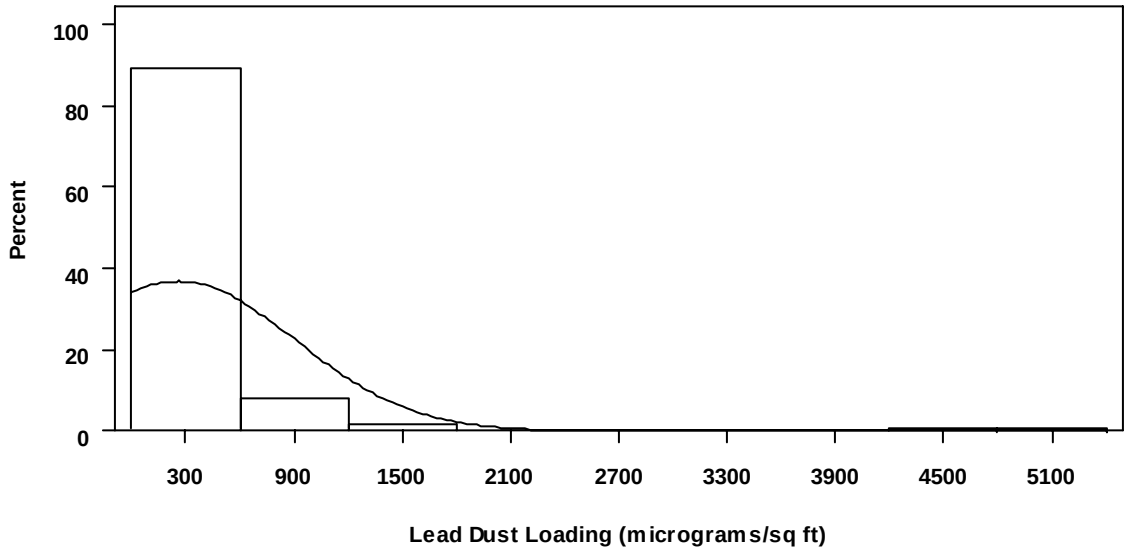

Figure H1.1a. Histogram of Exit Dust Lead Loading Measurements (μg/ft^2) (Wilkes-Shapiro p-value < 0.001)

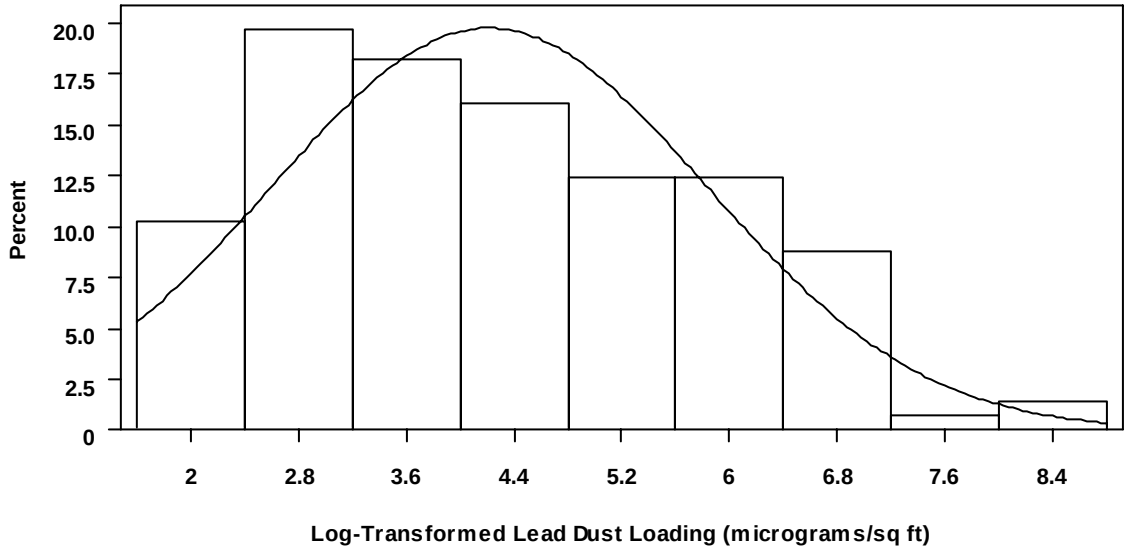

Figure H1.1b. Histogram of Log Transformed Exit Dust Lead Loading Measurements (μg/ft^2) (Wilkes-Shapiro p-value = 0.007)

H2. Exploratory Summaries of Exit Dust Lead Dust Loadings vs. Select Categorical Characteristics

Box plots of the exit dust lead loadings as well as descriptive statistical summary tables are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. Box plots are a technique for displaying one-dimensional data and their summary characteristics. A box plot displays the median (represented by the center horizontal line), the 25^{th} percentile (represented by the bottom of the box), and the 75^{th} percentile (represented by the top of the box). The vertical lines, or whiskers, are drawn from the box to the most extreme point within 1.5 * interquartile range. (An interquartile range is the distance between the 25^{th} and the 75^{th} percentiles.) Any value more extreme than this is identified individually with stars. The data are plotted using a log-base 10 scale. The summary statistics provided in the tables are sample size, arithmetic average, geometric average, minimum, 25^{th} percentile, median, 75^{th} percentile, and maximum.

The selected characteristics are as follows:

1. Job intensity
2. City
3. Job type
4. Contractor
5. Housing unit
6. Rule Plastic Use
7. Cleaning Type
8. Phase
9. Restricted vs. non-restricted jobs
10. Work room floor type
11. Work room floor condition

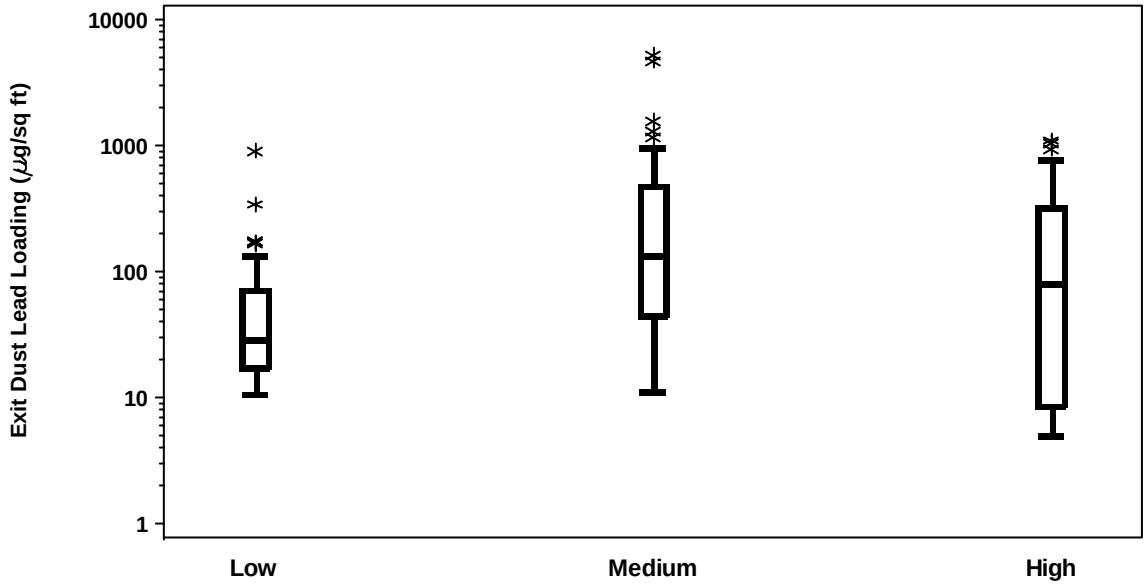

Figure H2.1a. Box Plots of Exit Dust Lead Loading During Post-Verification by Job Intensity Level

Table H2.1a. Descriptive Summary of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Job Intensity Level

Stage	Exit Room - Exit Dust (Intensity)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Verification	1-High	48	212	62	5	9	81	321	1101
	2-Medium	43	507	141	11	45	135	476	5287
	3-Low	44	73	36	11	17	28	71	914

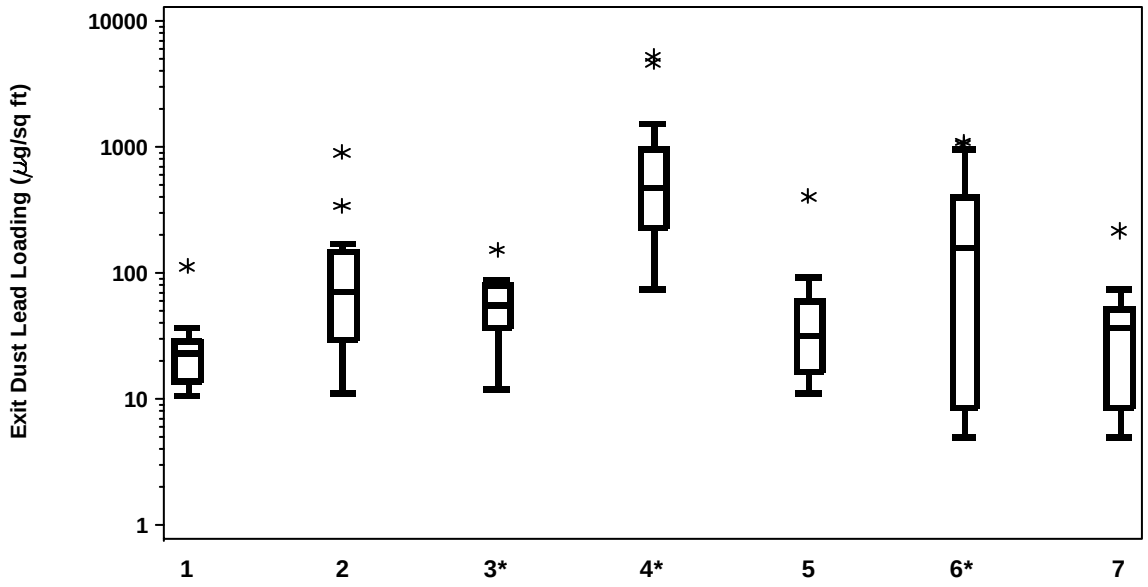

Figure H2.3a. Box Plots of Exit Dust Lead Loading During Post-Verification by Job Type

Table H2.3a. Descriptive Summary of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Job Type

Stage	Exit Room - Exit Dust (Job Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Verification	I1-Cut Outs	24	25	21	11	14	23	29	114
	I2-Replace Windows	20	131	68	11	30	71	150	914
	I3-Scrape Surface *	10	63	51	12	38	57	81	154
	I4-Scrape Door *	21	969	500	75	230	476	952	5287
	I5-Heat gun < 1100°	12	67	36	11	17	32	59	406
	I6-Heat gun > 1100° *	36	267	83	5	9	162	402	1101
	I7-Kitchen	12	47	26	5	9	37	52	217

* Indicates job is restricted

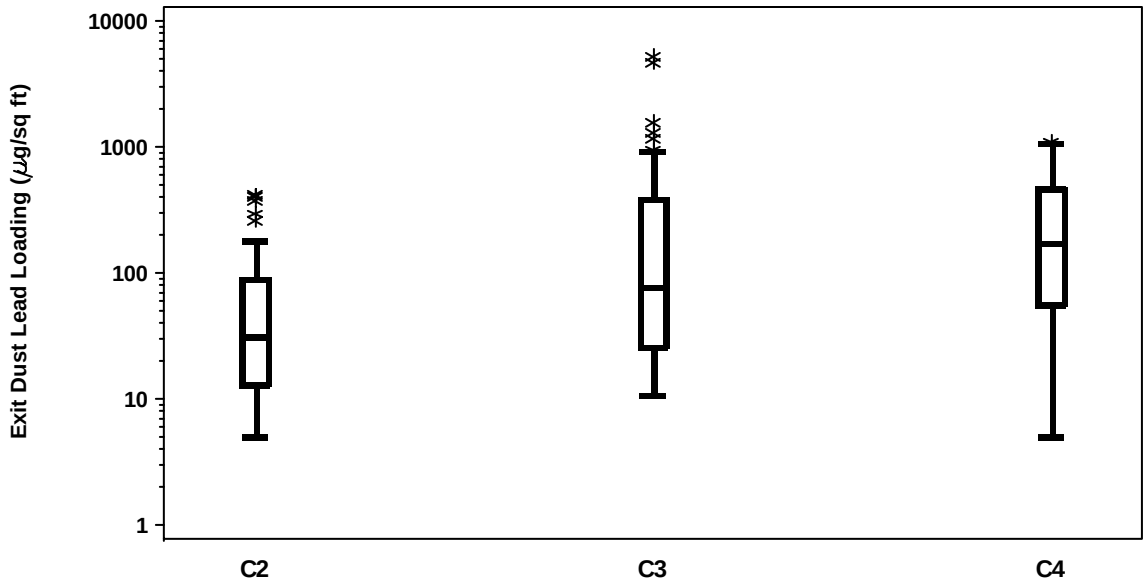

Figure H2.4a. Box Plots of Exit Dust Lead Loading During Post-Verification by Contractor

Table H2.4a. Descriptive Summary of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Contractor

Stage	Exit Room - Exit Dust (Contractor)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Verification	C2	58	72	34	5	13	31	89	415
	C3	48	464	107	11	26	77	394	5287
	C4	29	302	130	5	55	174	460	1101

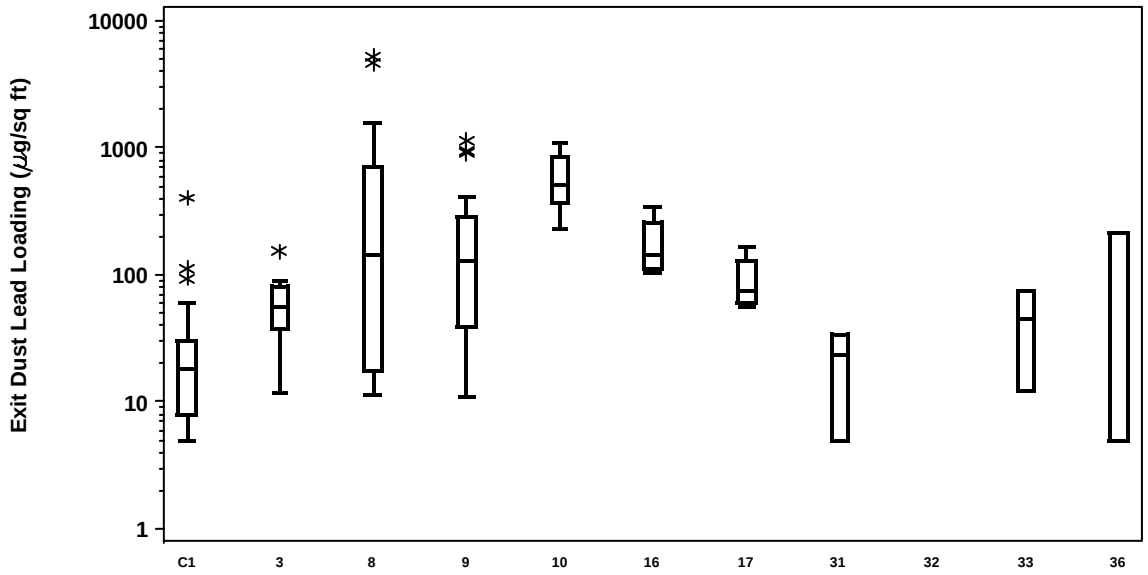

Figure H2.5a. Box Plots of Exit Dust Lead Loading During Post-Verification by Housing Unit

Table H2.5a. Descriptive Summary of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Housing Unit

Stage	Exit Room - Exit Dust (Housing Unit)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Verification	C01	36	35	18	5	8	18	31	406
	H03	10	63	51	12	38	57	81	154
	H08	15	929	158	11	18	145	701	5287
	H09	30	224	112	11	39	131	288	1156
	H10	12	602	536	227	368	503	857	1101
	H16	4	185	164	105	111	145	258	343
	H17	4	93	84	55	60	75	127	168
	H31	3	21	16	5	5	23	34	34
	H32	0							
	H33	3	45	35	12	12	46	76	76
	H35	15	260	90	11	27	42	310	1318
	H36	3	76	18	5	5	5	217	217

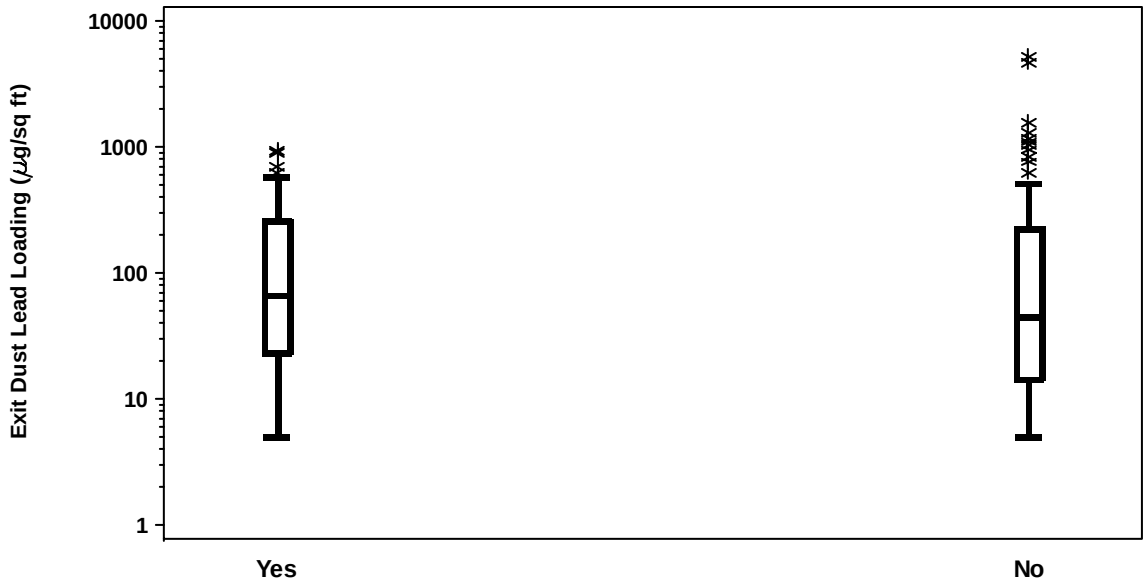

Figure H2.6a. Box Plots of Exit Dust Lead Loading During Post-Verification by Rule Plastic Use

Table H2.6a. Descriptive Summary of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Rule Plastic Use

Stage	Exit Room - Exit Dust (Plastic)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Verification	1-yes	68	163	67	5	23	68	259	947
	2-no	67	360	69	5	14	45	227	5287

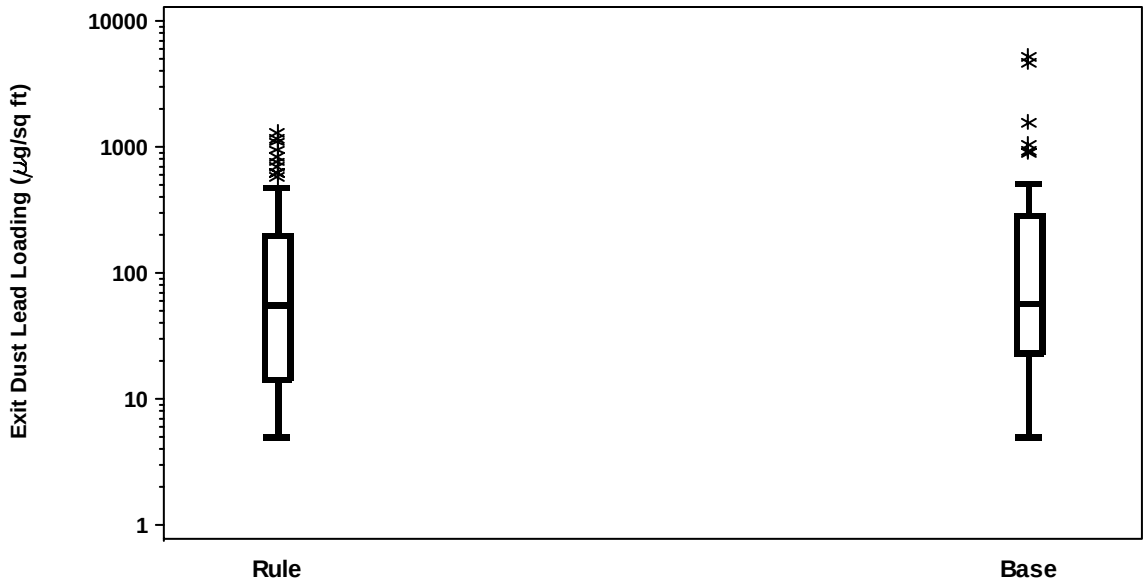

Figure H2.7a. Box Plots of Exit Dust Lead Loading During Post-Verification by Cleaning Type

Table H2.7a. Descriptive Summary of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Cleaning Type

Stage	Exit Room - Exit Dust (Cleaning)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Verification	1-rule	68	196	59	5	14	55	199	1318
	2-base	67	327	78	5	23	59	289	5287

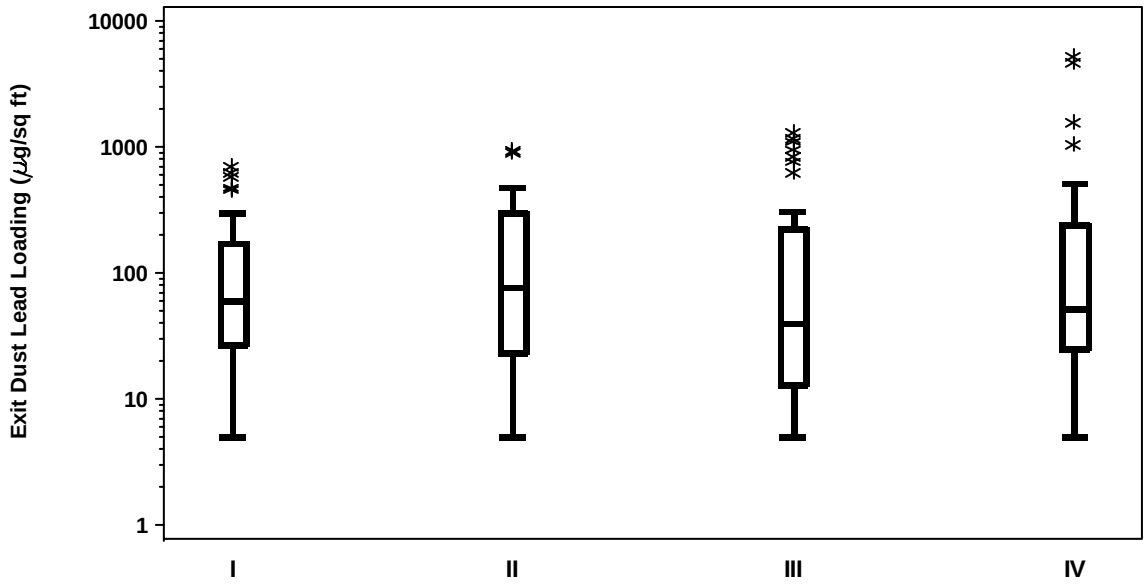

Figure H2.8a. Box Plots of Exit Dust Lead Loading During Post-Verification by Phase

Table H2.8a. Descriptive Summary of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Phase

Stage	Exit Room - Exit Dust (Phase)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Verification	I-Rule w/ Plastic	33	149	64	5	27	60	172	701
	II-Base w/ Plastic	35	176	69	5	23	79	297	947
	III-Rule w/o Plastic	35	239	55	5	13	39	227	1318
	IV-Base w/o Plastic	32	492	88	5	25	52	241	5287

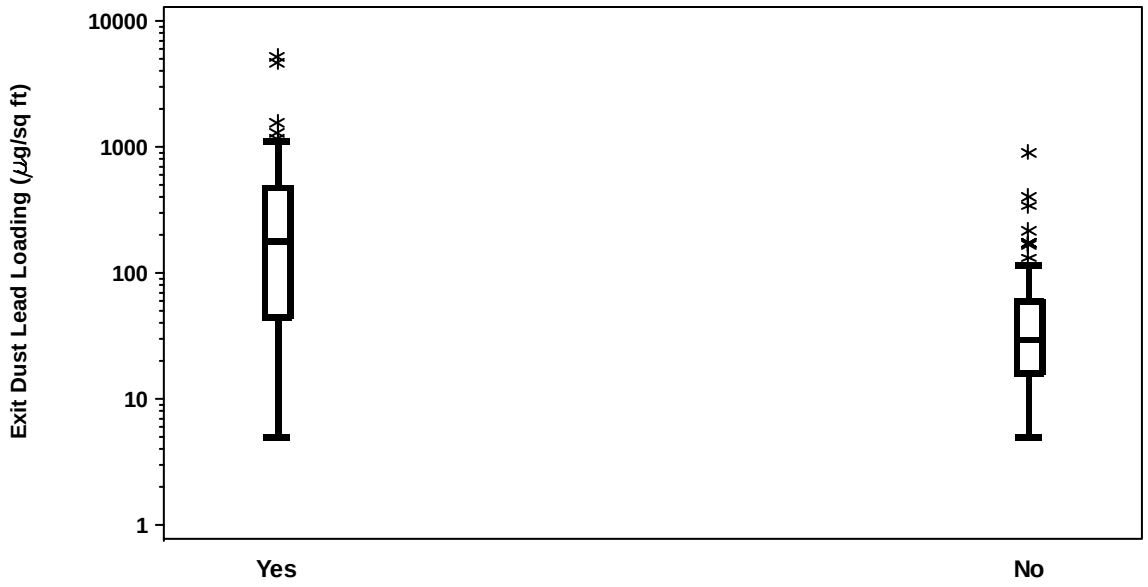

Figure H2.9a. Box Plots of Exit Dust Lead Loading During Post-Verification by Restricted Job

Table H2. 9a. Descriptive Summary of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Restricted Job

Stage	Exit Room - Exit Dust (Restricted Job)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Verification	1-yes	67	457	136	5	45	181	484	5287
	2-no	68	68	34	5	16	30	59	914

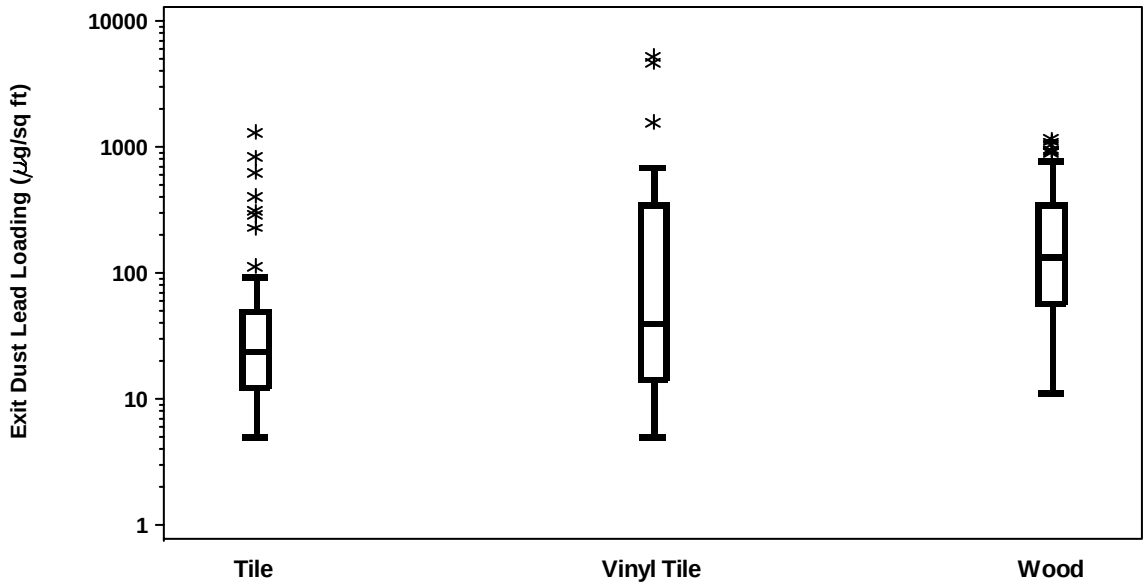

Figure H2.10a. Box Plots of Exit Dust Lead Loading During Post-Verification by Work Room Floor Type

Table H2. 10a. Descriptive Summary of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Work Room Floor Type

Stage	Exit Room - Exit Dust (Floor Type)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Verification	Tile	51	101	29	5	12	24	50	1318
	Vinyl Tile	24	598	75	5	14	40	349	5287
	Wood	60	261	135	11	57	134	344	1156

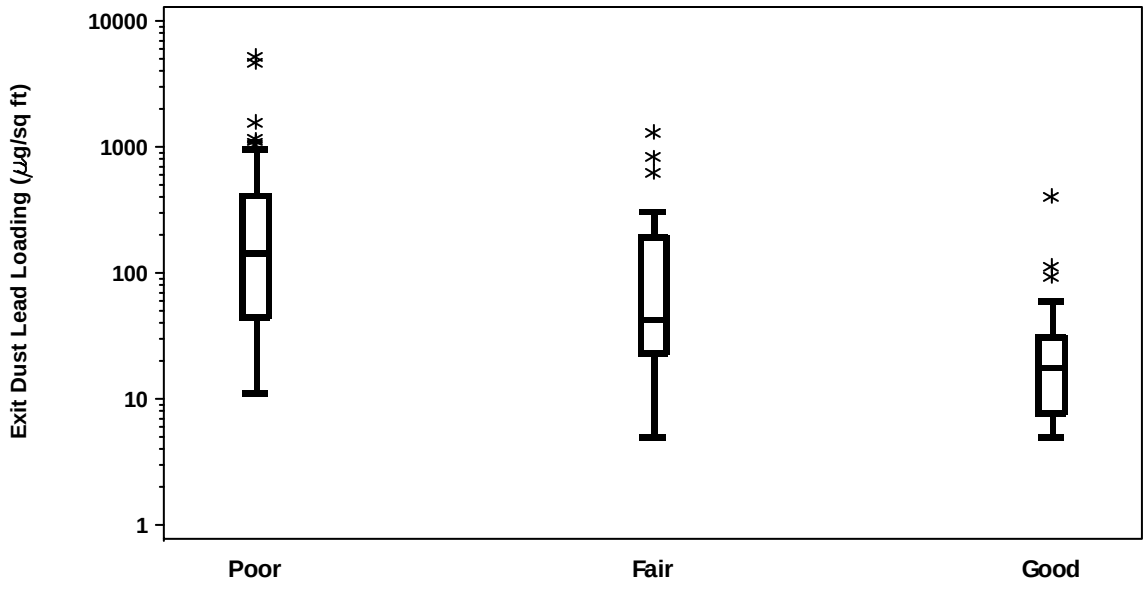

Figure H2.11a. Box Plots of Exit Dust Lead Loading During Post-Verification by Work Room Floor Condition

Table H2.11a. Descriptive Summary of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Work Room Floor Condition

Stage	Exit Room - Exit Dust (Floor Condition)	Sample Size	Arithmetic Average	Geometric Average	Minimum	25th Percentile	Median	75th Percentile	Maximum
Post-Verification	Poor	71	412	143	11	45	145	415	5287
	Fair	28	168	56	5	23	44	193	1318
	Good	36	35	18	5	8	18	31	406

H3. Exploratory Summaries of Exit Dust Lead Dust Loadings vs. Select Continuous Characteristics

Scatter plots of the exit dust lead loadings are presented in this section to illustrate and summarize the distribution of these factors as a function of select characteristics. The fitted linear regression line (using untransformed data) is displayed in each plot along with its associated r-square value.

The selected characteristics are as follows:

1. Paint Lead Concentration
2. Floor Dust Lead Loading at Clearance
3. Sill Dust Lead Loading at Clearance
4. Initial Average Soil Lead Concentration
5. Final Average Soil Lead Concentration
6. Disturbed Area
7. Avg. Floor Dust Lead (with Bulk) in Post-Work Work Room

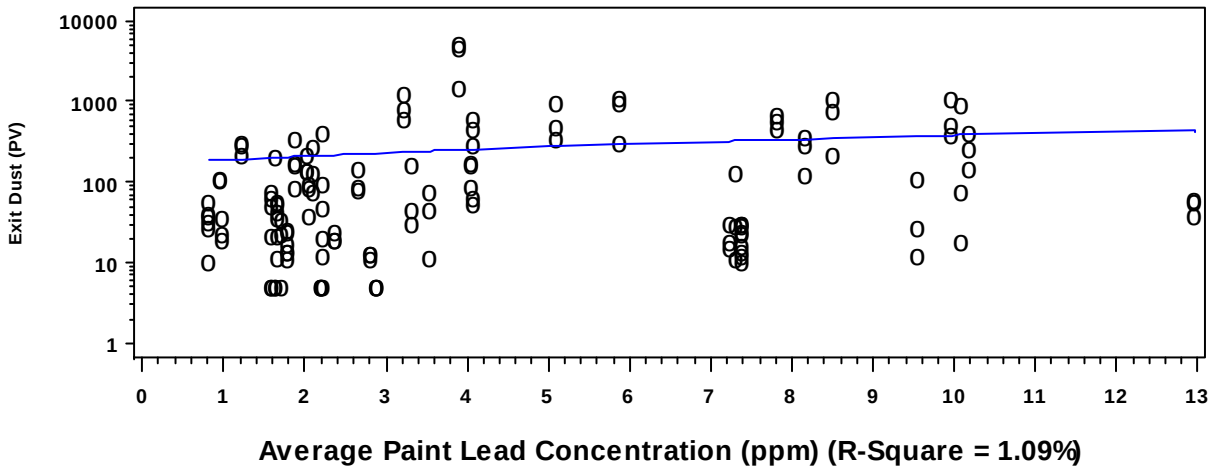

Figure H3.1. Scatter Plots of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Average Paint Lead Concentration (ppm)

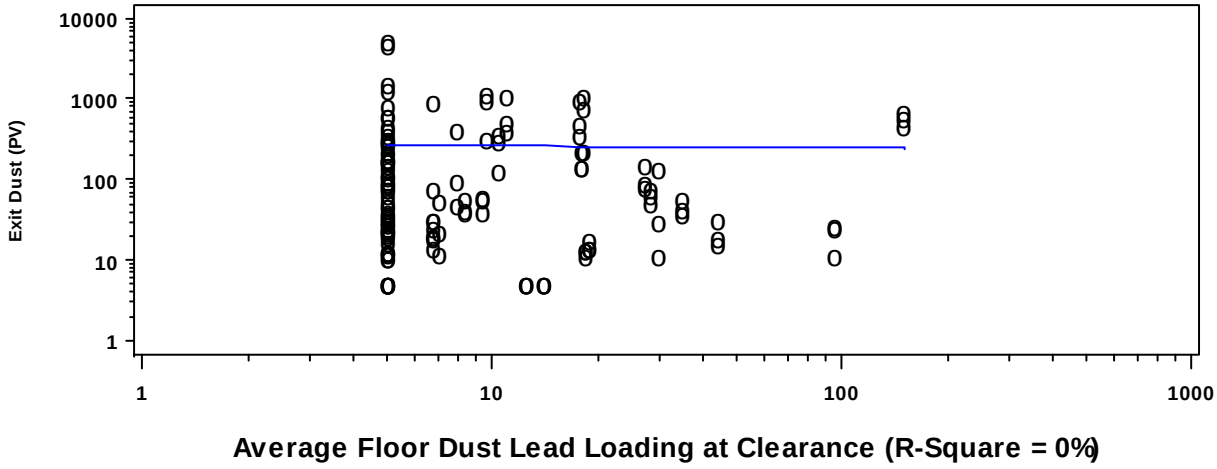

Figure H3.2. Scatter Plots of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Floor Dust Lead Loading (µg/ft^2) at Clearance

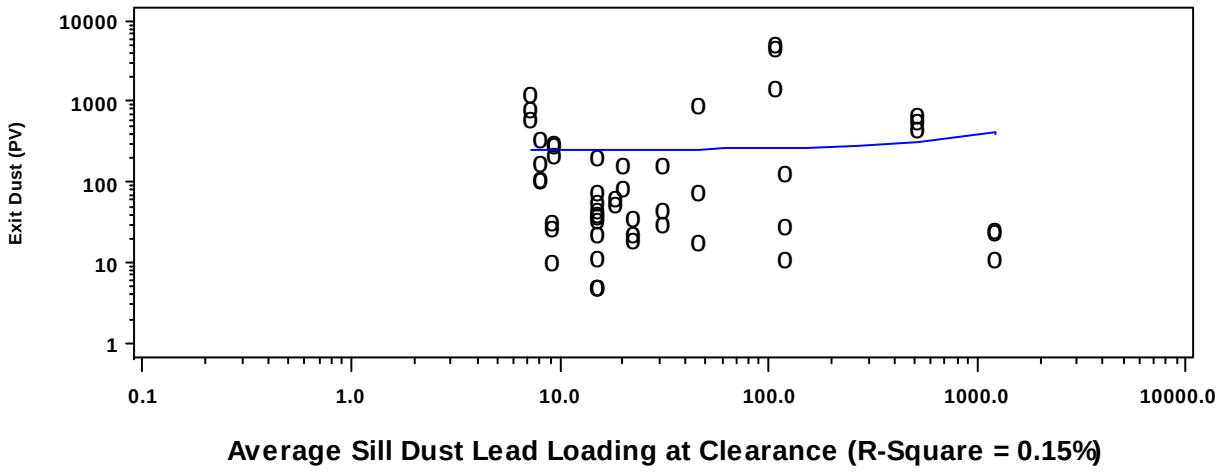

Figure H3.3. Scatter Plots of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Sill Dust Lead Loading (µg/ft^2) at Clearance

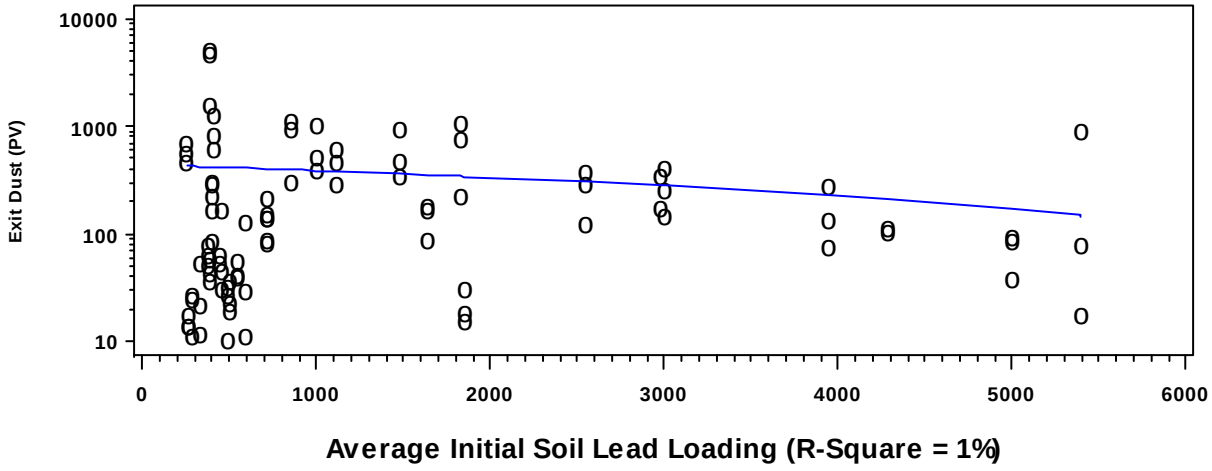

Figure H3.4. Scatter Plots of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Initial Average Soil Lead Concentration (ppm)

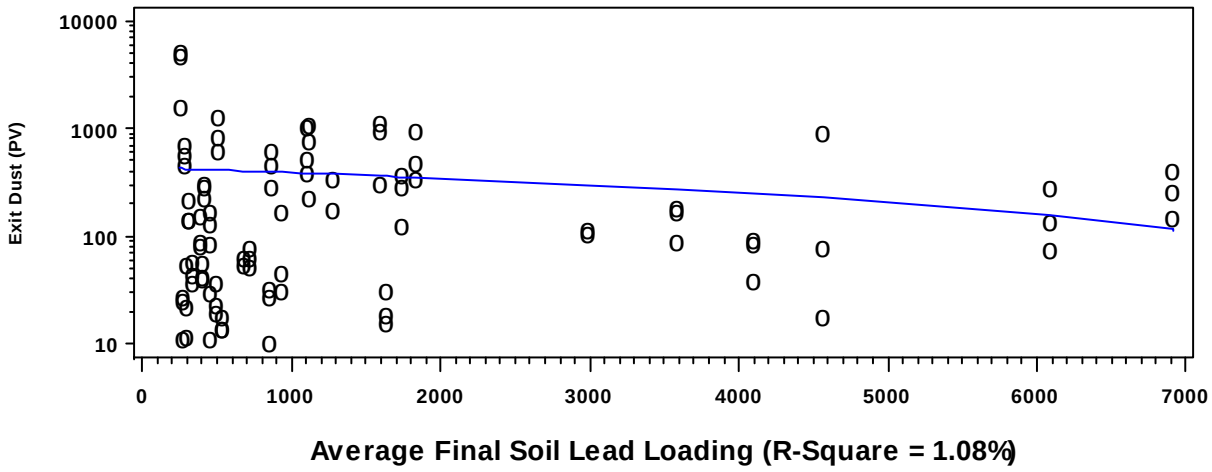

Figure H3.5. Scatter Plots of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Final Average Soil Lead Concentration (ppm)

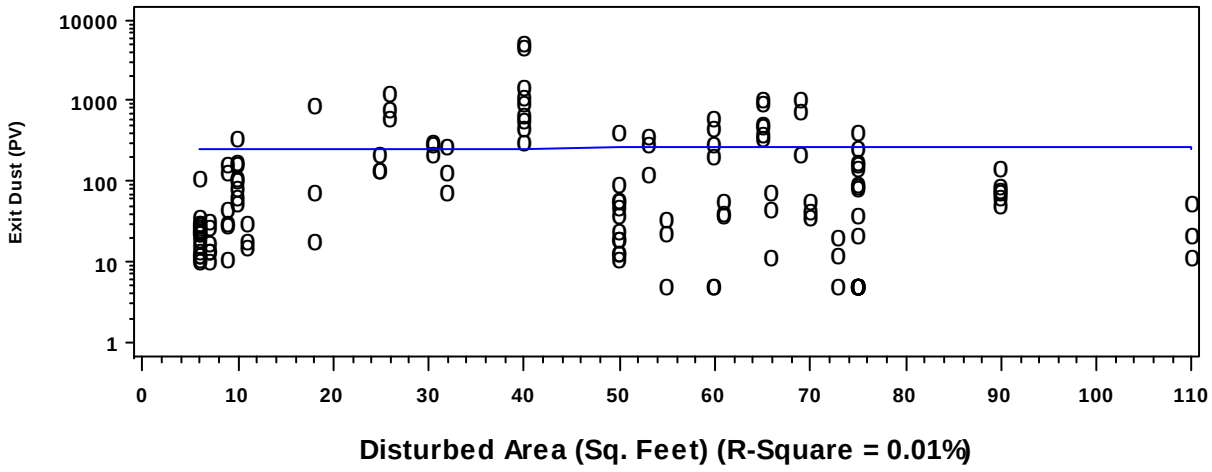

Figure H3.6. Scatter Plots of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Disturbed Area (ft^2)

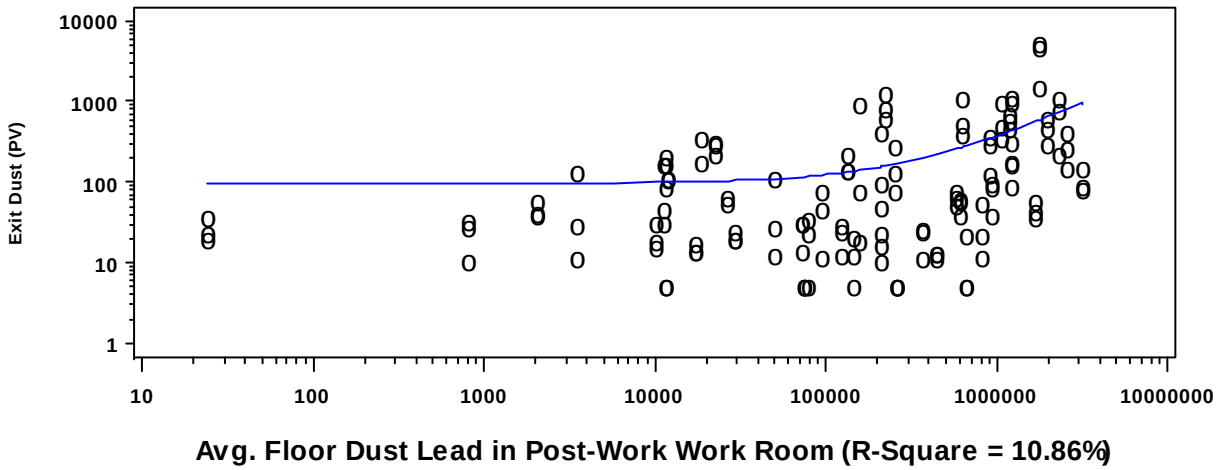

Figure H3.7. Scatter Plots of Exit Dust Lead Loading (µg/ft^2) During Post-Verification by Avg. Floor Dust Lead (with Bulk) (µg/ft^2) in Post-Work Work Room