



SITE CERTIFICATION SUMMARY

This Site Certification Summary provides information about the **Madison, Illinois, Site**. The U.S. Department of Energy Office of Legacy Management is responsible for long-term stewardship of the site under the **Formerly Utilized Sites Remedial Action Program**.

Site Description and History

The Madison, Illinois, Site is located at 1001 College Street at the intersection of College and Weaver Streets in Madison, Illinois. During the late 1950s and early 1960s, the Dow Metals Products Division of Dow Chemical Company machined and shaped uranium metal and straightened uranium rods for the U.S. Atomic Energy Commission (AEC). Dow Chemical conducted work in Building 6, a large multistory metal building with a concrete floor. The adjoining Building 4 was used for material transfers. There are no physical barriers between the two buildings. The AEC-funded operation resulted in residual radiological contamination in dust on overhead steel beams in the plant. About 60,000 square feet of horizontal surface area — consisting of ceiling trusses, pipes, window ledges, framing, and bracing — were contaminated. As of publication of the Closeout Report (2001), Spectrulite Consortium, Inc. owned the facility.



Aerial view of the Madison site.

Site Remediation Timeline

March 1989 — A preliminary radiological survey found elevated concentrations of uranium-238 in dust sampled from overhead beams in Building 6.

September 1992 — The site was designated for remedial action under the Formerly Utilized Remedial Action Program (FUSRAP).

1998 — The U.S. Army Corps of Engineers (USACE) performed a characterization survey to evaluate the interior and exterior of Buildings 4 and 6.

June and July 2000 — USACE remediated the Madison site.

September 2001 — USACE published the closeout report for the Madison FUSRAP site.

2002 — USACE transferred responsibility for the Madison site to the U.S. Department of Energy (DOE) Office of Legacy Management (LM).

Remedial Action

USACE remediated the Madison site in June and July 2000 by vacuuming, scraping, and sweeping approximately 60,000 pounds of dust and debris from Class 1 areas on overhead surfaces, including window ledges, utility conduits, trusses, and cross-member beams. Class 1 areas have radioactive contamination above the derived concentration guideline level (DCGL) prior to remediation. Class 2 areas have a potential for radioactive contamination above the DCGL due to proximity to Class 1 areas but are not expected to exceed the guideline. Class 3 areas contain residual radioactivity or those expected to contain levels of residual radioactivity at a small fraction of the DCGL.

See the [Fact Sheet](#) or the [Site Closeout Report](#) for remediation details.

The Record of Decision (ROD) for the Madison site established remedial action guidelines. Specifically, the ROD established guidelines for satisfying the 25 millirem per year (mrem/yr) dose limit, as described in CFR Title 10 Part 20 Subpart E. Conservative dose calculations, using site-specific information, indicated that the surface contamination DCGL was 6,000 disintegrations per minute (dpm) per 100 cm² and the volumetric (dust) DCGL was 20 pCi/g of total uranium. The Madison ROD also established a volumetric limit of 300 pCi/g for the difficult-to-access overhead surfaces. These DCGLs satisfied the 25 mrem/yr dose criterion.

To assure that remedial and final status survey activities satisfied the 25 mrem/yr criterion, USACE evaluated radiological result data using the following six questions:

- Is the radiological contaminant of concern (COC) below the 6,000 dpm/100 cm² limit on Class 1 overhead surfaces and Class 2 and 3 building and equipment surfaces?
- Is the radiological COC below the 20 pCi/g limit in accumulated dust on Class 2 and Class 3 overhead surfaces?
- Is the radiological COC below the 300 pCi/g limit in accumulated dust on the difficult-to-access overhead surfaces?
- Do small areas of elevated radioactivity produce utility worker doses less than 25 mrem/yr?
- Is the residual dose to the modeled utility worker less than or equal to 25 mrem/yr?
- Do surface contamination sample/measurement results satisfy the Wilcoxon Rank Sum statistical test, as described in the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)?

If the answer to any one of these questions was “no” for any survey unit (SU), cleanup goals were not satisfied for that SU, and the remediation contractor would be required to remove additional building and/or equipment surface contamination and reevaluate the affected SU.

Post-Remediation Sampling

USACE divided Buildings 4 and 6 into SUs in accordance with MARSSIM classification. Some minor adjustments were made during the final status surveys when contamination above the volumetric DCGL was discovered in Class 2 areas.

USACE gathered five types of measurements during the final status survey to determine whether the remedial action had met the applicable DCGL. These were:

- Surface beta scans to identify potential locations of elevated activity.
- Fixed-point measurements of total beta surface activity.

- Fixed-point measurements of total gamma dose rate.
- Sampling of surface dust and residue.
- Discrete measurements of removable alpha and beta surface activity.

Of these, the fixed-point beta measurements and the dust/residue samples were used to compare against the 6,000 dpm/100 cm² and 20/300 pCi/g criteria, respectively. The other measurements were taken for completeness and to assess residual dose following completion of remedial activities, if necessary. Areas that contained residual contamination above the DGCLs were investigated and remediated, as appropriate.

The analytical results for the final status survey samples/measurements indicate that the residual radioactivity at the Madison site meets the requirements of the remedial design and are below the dose-based guidelines. No systematic or biased dust sample measurement for any SU exceeded the DCGL of 20 pCi/g above background. The maximum net result was 19.3 pCi/g. No measurement taken from dust-free surfaces exceeded the DCGL of 6,000 dpm/100 cm², including background. The maximum net result was 2,800 dpm/100 cm². No measurement taken from difficult-to-access areas exceeded 300 pCi/g, including background. The maximum gross result was 112 pCi/g. Final status survey data demonstrate, using MARSSIM guidance, that all ROD-specified criteria have been satisfied.

For more detailed results of the post-remediation sampling, see the [Site Certification Data Summary Worksheet](#) on pages 4-13. For a detailed map of the site and sampling locations, see the [Site Overview Map](#) on page 14.

Current Site Conditions

Radiological dose requirements were satisfied for all survey units, and the Madison site was released for unrestricted use. In 2002, USACE transferred responsibility for long-term stewardship of the Madison site to LM. The Madison ROD does not require monitoring, maintenance, or site inspections. The stewardship requirements and protocols are captured in the Long-Term Surveillance and Maintenance Plan for FUSRAP sites, which is available on the LM website (www.energy.gov/lm/madison-illinois-site).



ADDITIONAL INFORMATION

Documents related to FUSRAP activities at the Madison, Illinois, Site are available on the LM website at lmpublicsearch.lm.doe.gov/SitePages/default.aspx?sitename=Madison.

For other information on site history or current long-term stewardship activities, please contact us at:

U.S. Department of Energy
Office of Legacy Management
2597 Legacy Way
Grand Junction, CO 81503

Email:

FUSRAPinfo@lm.doe.gov
public.affairs@lm.doe.gov

DOE Office of Legacy Management
(970) 248-6070



www.energy.gov/lm



www.facebook.com/OfficeofLegacyManagement



www.linkedin.com/showcase/office-of-legacy-management

Madison, IL, Site Certification Data Summary Worksheet

Forty-three tables in the Madison Closeout Report provide evidence used to certify the site as clean.

When the tables refer to the "Closeout Report", that is the "Closeout Report for the Formerly Utilized Sites Remedial Action Program (FUSRAP) - Madison Site" (dated September 2001).

When the tables refer to the "Post-Remedial Action Report," that is the

"Post-Remedial Action Report for the Madison FUSRAP Site, Madison, Illinois" (dated September 2000).

Sample Types	Definition
Bias	samples collected to achieve a certain result
QC	quality control samples
Systematic	samples collected at a fixed periodic interval from a random starting point

Final Status Survey Data Summary										
Table 5 in the Closeout Report (page 24)										
Surface Measurement Data Summary (dpm/100 cm²)*										
Variable	SU-1	SU-2	SU-3	SU-4	SU-5	SU-6	SU-7	SU-8	SU-11	SU-12
Number of samples:	18	15	15	15	15	15	15	15	15	15
Average:	596	788	922	1030	863	1130	654	595	650	1120
Maximum:	1010	1230	1560	1440	1810	1760	860	722	844	1880
Standard Deviation:	250	202	214	305	333	283	95	66	91	352
	SU-13	SU-14	SU-15	SU-17	SU-18	SU-19	SU-20	SU-21	SU-22	SU-23
Number of samples:	18	15	15	10	10	10	10	10	10	10
Average:	1260	1070	750	788	571	931	847	746	552	780
Maximum:	2720	2060	1050	1440	1400	1520	1520	1440	1440	1440
Standard Deviation:	692	387	136	123	34	82	54	132	66	185
	SU-24	SU-25	SU-26	SU-27	SU-28	SU-29	SU-31	SU-32	SU-33	SU-34
Number of samples:	10	10	10	10	10	10	10	10	10	15
Average:	701	642	843	726	474	542	448	834	449	721
Maximum:	1440	1560	1440	1440	528	614	492	990	633	999
Standard Deviation:	139	54	121	77	51	57	37	79	124	149
	SU-35	SU-36	SU-37							
Number of samples:	15	15	15							
Average:	987	737	936							
Maximum:	1400	910	1280							
Standard Deviation:	307	99	241							
Volumetric Dust Sample Data Summary (pCi/g)										
Variable	SU-9**	SU-16**	SU-30**	Difficult-to-Access Areas***	Ref. Area					
Number of samples:	13	12	10	24	10					
Average:	8.0	6.0	4.0	28.0	1.3					
Maximum:	20.6	14.4	8.3	112	2.4					
Standard Deviation:	5.0	5.0	3.0	32.0	0.7					
*No surface measurement results for dust-free areas (remediated surfaces, walls, floors, and equipment) exceeded the DCGL of 6000 dpm/100 cm² including background.										
**No volumetric dust sample results (Class 2 and 3 overheads) exceeded the DCGL of 20 pCi/g above background. The average background was 1.3 pCi/g.										
***No dust sample data from the difficult-to-access areas (overhead surfaces at 45-ft to 65-ft) exceeded 300 pCi/g including background.										

Dust Data Summary Table for Survey Unit 9 (Class 2 Overheads) ¹								
Attachment B-2 in the Post-Remedial Action Report (page 1)								
Station	Survey Unit	Date Collected	Sample ID	Sample Type	U-234 (pCi/g)	U-235 (pCi/g)	U-238 (pCi/g)	Total U (pCi/g) ²
W-51	9	04/15/00	MAD00237	Bias	5.6	0.2	6.3	12.1
W-52	9	04/15/00	MAD00238	Bias	10.3	0.5	9.8	20.6
PP-43	9	04/16/00	MAD00243	Bias	0.8	0.2	1.0	1.9
JJ-44	9	04/16/00	MAD00257	Bias	3.3	0.1	3.2	6.6
W-50	9	04/15/00	MAD00074-1	QC	6.8	0.4	7.0	14.2
X-54	9	04/15/00	MAD00076-1	QC	12.5	0.4	12.0	24.9
NN-44	9	04/16/00	MAD00239-1	QC	1.3	0.1	0.6	1.9
FF-43	9	04/08/00	MAD00070	Removed ³	16.1	0.7	15.3	32.1
X-54	9	04/15/00	MAD00076	Removed ³	8.1	0.3	10.1	18.6
X-55	9	04/15/00	MAD00236	Removed ³	5.2	0.5	4.7	10.3
U-44	9	04/08/00	MAD00071	Systematic	6.8	0.1	6.5	13.4
S-42	9	04/08/00	MAD00072	Systematic	8.2	0.7	8.7	17.6
T-46	9	04/08/00	MAD00073	Systematic	4.9	0.3	5.8	11.0
W-50	9	04/15/00	MAD00074	Systematic	4.1	0.1	4.0	8.1
T-53	9	04/08/00	MAD00075	Systematic	1.7	0.1	1.1	3.0
X-57	9	04/08/00	MAD00077	Systematic	6.4	0.6	6.3	13.3
Z-59	9	04/08/00	MAD00078	Systematic	3.4	0.1	3.8	7.4
DD-60	9	04/08/00	MAD00079	Systematic	2.0		1.6	3.6
NN-44	9	04/16/00	MAD00239	Systematic	0.6	0.0	0.7	1.3
KK-44	9	04/16/00	MAD00245	Systematic	0.6	0.0	0.7	1.3
II-42	9	04/16/00	MAD00246	Systematic	4.8	0.1	5.7	10.6
U-56	9	07/04/00	MAD00730	Systematic	2.7	0.0	0.0	2.7
Number of systematic samples:								12
Average of systematic results:								7.8
Maximum systematic and biased result:								20.6
Standard deviation of systematic results:								5.5
¹ All reported values are gross pCi/g. Reference area background average values have not been subtracted to obtain net values above background (1.3 pCi/g). ² U-Total = U-234 + U-235 + U-238. Values rounded to show no more than 1 digit to the right of the decimal. ³ Elevated sample results caused area to be reclassified as a Class 1 SU and therefore the data is removed from the Class 2 sample set.								

Madison, IL, Site Certification Data Summary Worksheet

Dust Data Summary Table for Survey Unit 16 (Class 2 Overheads) ¹								
Attachment B-2 in the Post-Remedial Action Report (page 2)								
Station	Survey Unit	Date Collected	Sample ID	Sample Type	U-234 (pCi/g)	U-235 (pCi/g)	U-238 (pCi/g)	Total U (pCi/g) ²
W-54	16	04/15/00	MAD00086-1	QC (Removed)	6.9	0.1	7.8	14.8
GG-43	16	04/08/00	MAD00080	Removed ³	10.1	0.1	9.3	19.5
EE-41	16	04/08/00	MAD00081	Removed ³	8.9	0.7	10.1	19.7
W-54	16	04/15/00	MAD00086	Removed ³	10.5	0.4	10.8	21.6
EE-43	16	04/08/00	MAD00230	Removed ³	8.2	0.3	7.0	15.5
Y-54	16	04/15/00	MAD00233	Removed ³	3.8	0.2	4.3	8.3
Z-54	16	04/15/00	MAD00234	Removed ³	4.4		4.8	9.2
Z-55	16	04/15/00	MAD00235	Removed ³	8.7	0.3	9.1	18.1
FF-43	16	04/16/00	MAD00241	Removed ³	20.2	0.9	21.4	42.4
T-43	16	04/08/00	MAD00082	Systematic	2.0	0.1	2.3	4.4
U-49	16	04/08/00	MAD00083	Systematic	1.5	0.1	1.1	2.6
T-52	16	04/08/00	MAD00084	Systematic	2.7	0.1	2.4	5.3
U-55	16	04/08/00	MAD00085	Systematic	0.4	0.0	0.6	0.9
Z-57	16	04/08/00	MAD00087	Systematic	6.4	0.3	7.2	13.9
Z-59	16	04/08/00	MAD00088	Systematic	7.3	0.1	7.0	14.4
CC-60	16	04/08/00	MAD00089	Systematic	4.1	0.2	3.7	8.0
PP-42	16	04/16/00	MAD00240	Systematic	1.7	0.1	2.0	3.7
JJ-44	16	04/16/00	MAD00242	Systematic	3.5	0.1	3.0	6.6
MM-45	16	04/16/00	MAD00244	Systematic	0.7	0.0	0.8	1.5
U-57	16	07/04/00	MAD00731	Systematic	4.3	0.0	4.4	8.7
Number of systematic samples:								11
Average of systematic samples:								6.4
Maximum systematic and biased result:								14.4
Standard deviation of systematic samples:								4.6
¹ All reported values are gross pCi/g. Reference area background average values have not been subtracted to obtain net values above background (1.3 pCi/g).								
² U-Total = U-234 + U-235 + U-238. Values rounded to show no more than 1 digit to the right of the decimal.								
³ Elevated sample results caused area to be reclassified as a Class 1 SU and therefore the data is removed from the Class 2 sample set.								

Dust Data Summary Table for Survey Unit 30 (Class 2 Overheads) ¹								
Attachment B-2 in the Post-Remedial Action Report (page 3)								
Station	Survey Unit	Date Collected	Sample ID	Sample Type	U-234 (pCi/g)	U-235 (pCi/g)	U-238 (pCi/g)	Total U (pCi/g) ²
PP41-45	30	04/08/00	MAD00370	Removed ³	0.9	0.1	1.1	2.1
JJ41-45	30	04/08/00	MAD00371	Removed ³	5.5	0.3	5.4	11.3
S41-45	30	04/08/00	MAD00372	Systematic	4.4		3.9	8.3
R41-45	30	04/08/00	MAD00373	Systematic	3.2		3.4	6.6
61DD-Z	30	04/08/00	MAD00374	Systematic	0.5	0.0	1.2	1.7
62Z-W	30	04/08/00	MAD00375	Systematic	3.1	0.1	2.0	5.3
64W-S	30	04/08/00	MAD00376	Systematic	0.7	0.0	1.0	1.6
68DD-Z	30	04/08/00	MAD00377	Systematic	2.1	0.1	1.8	4.0
82W-S	30	04/08/00	MAD00378	Systematic	1.1	0.1	0.8	1.9
87DD-Z	30	04/08/00	MAD00379	Systematic	0.5	0.0	0.5	1.0
ZW-65	30	7/4/2000 ³	MAD00732	Systematic	1.0	0.0	2.5	3.5
DDZ-79	30	7/4/2000 ³	MAD00733	Systematic	3.8	0.3	3.2	7.3
Number of systematic samples:								10
Average of systematic results:								4.1
Maximum systematic and biased result:								8.3
Standard deviation of systematic results:								2.6
¹ All reported values are gross pCi/g. Reference area background average values have not been subtracted to obtain net values above background (1.3 pCi/g).								
² U-Total = U-234 + U-235 + U-238. Values rounded to show no more than 1 digit to the right of the decimal.								
³ July samples collected due to loss of samples in reclassification of Class 3 overhead area. Samples collected in April (370 and 371) removed from final status sample set.								

Madison, IL, Site Certification Data Summary Worksheet

Dust Data Summary Table for Difficult-to-Access Areas ¹								
Attachment B-2 in the Post-Remedial Action Report (page 4)								
Station	Survey Unit	Date Collected	Sample ID	Sample Type	U-234 (pCi/g)	U-235 (pCi/g)	U-238 (pCi/g)	Total U (pCi/g) ²
Difficult Access	DA	04/08/00	MAD00220	Bias	9.6	0.3	11.6	21.5
Difficult Access	DA	04/08/00	MAD00221	Bias	20.5	1.2	18.6	40.3
Difficult Access	DA	04/08/00	MAD00222	Bias	54.1	2.9	55.3	112
Difficult Access	DA	04/08/00	MAD00223	Bias	23.5	0.7	24.9	49.1
Difficult Access	DA	04/08/00	MAD00224	Bias	23.0	1.2	22.3	46.5
Difficult Access	DA	04/08/00	MAD00225	Bias	5.9		5.3	11.2
Difficult Access	DA	04/08/00	MAD00226	Bias	39.4	1.9	40.3	81.6
Difficult Access	DA	04/08/00	MAD00227	Bias	1.6	0.0	2.0	3.6
XY-53	DA	04/15/00	MAD00228	Bias	9.0	0.5	10.6	20.0
XY-53	DA	04/15/00	MAD00229	Bias	2.9	0.2	2.8	5.9
XY-53	DA	04/15/00	MAD00231	Bias	4.1	0.3	3.8	8.1
XY-53	DA	04/15/00	MAD00232	Bias	11.6	0.5	13.4	25.5
Difficult Access	DA	04/16/00	MAD00247	Bias	1.7	0.1	1.3	3.1
Difficult Access	DA	04/16/00	MAD00248	Bias	0.8	0.0	1.1	2.0
Difficult Access	DA	04/16/00	MAD00249	Bias	5.8	0.5	5.9	12.2
Difficult Access	DA	04/16/00	MAD00250	Bias	6.0	0.4	6.0	12.4
Difficult Access	DA	04/16/00	MAD00251	Bias	5.8	0.3	7.0	13.1
Grid 59-1	DA/RI	02/08/00	MAD00006	Bias	5.8	0.1	5.9	11.8
Grid 59-2	DA/RI	02/08/00	MAD00007	Bias	2.2	0.3	2.8	5.3
Grid 53-1	DA/RI	02/08/00	MAD00008	Bias	45.7	1.8 (R)	46.2	91.9
Grid 53-2	DA/RI	02/08/00	MAD00009	Bias	5.7	0.4	5.8	11.8
Grid 53-3	DA/RI	02/08/00	MAD00010	Bias	1.5	0.1	1.8	3.4
Grid 48-1	DA/RI	02/08/00	MAD00011	Bias	42.1	2.2 (R)	43.2	85.3
Grid 48-2	DA/RI	02/08/00	MAD00012	Bias	3.0	0.1	4.0	7.1
Number of samples:								24
Average of results:								28.5
Maximum result:								112
Standard deviation of results:								32.4
¹ All reported values are gross pCi/g. Reference area background average values have not been subtracted to obtain net values above background (1.3 pCi/g). Difficult-to-access samples cannot exceed 300 pCi/g including background.								
² U-Total = U-234 + U-235 + U-238. Values rounded to show no more than 1 digit to the right of the decimal.								

Dust Data Summary Table for Reference Areas (July Samples Used in DQA) ¹								
Attachment B-2 in the Post-Remedial Action Report (page 5)								
Station	Survey Unit	Date Collected	Sample ID	Sample Type	U-234 (pCi/g)	U-235 (pCi/g)	U-238 (pCi/g)	Total U (pCi/g) ²
UNKNOWN	Ref	04/08/00	MAD00519-1	QC-Removed	0.8	0.1	1.8	2.7
UNKNOWN	Ref	04/16/00	MAD00252	Removed	1.6	0.1	1.7	3.3
UNKNOWN	Ref	04/16/00	MAD00253	Removed	1.6	0.1	1.5	3.2
UNKNOWN	Ref	04/16/00	MAD00254	Removed	1.1	0.1	1.6	2.7
UNKNOWN	Ref	04/16/00	MAD00255	Removed	1.9	0.1	1.4	3.4
UNKNOWN	Ref	04/16/00	MAD00256	Removed	1.6	0.1	1.6	3.3
UNKNOWN	Ref	04/08/00	MAD00510	Removed	1.2	0.1	1.9	3.2
UNKNOWN	Ref	04/08/00	MAD00511	Removed	1.7	0.0	1.9	3.6
UNKNOWN	Ref	04/08/00	MAD00512	Removed	1.7	0.1	1.9	3.7
UNKNOWN	Ref	04/08/00	MAD00513	Removed	1.7	0.0	1.8	3.6
UNKNOWN	Ref	04/08/00	MAD00514	Removed	1.3	0.2	1.5	3.0
UNKNOWN	Ref	04/08/00	MAD00515	Removed	1.6	0.0	1.6	3.2
UNKNOWN	Ref	04/08/00	MAD00516	Removed	2.2	0.1	1.5	3.8
UNKNOWN	Ref	04/08/00	MAD00517	Removed	1.1	0.0	1.0	2.1
UNKNOWN	Ref	04/08/00	MAD00518	Removed	1.2	0.1	1.1	2.4
UNKNOWN	Ref	04/08/00	MAD00519	Removed	1.8	0.1	1.6	3.6
UNKNOWN		07/07/00	MAD00716	Removed		1.0	17.0	35.0
UNKNOWN		07/07/00	MAD00717	Removed		0.4	5.0	10.3
UNKNOWN		07/07/00	MAD00718	Removed		0.3	5.0	10.3
UNKNOWN		07/08/00	MAD00719	Removed		0.3	3.9	8.0
TT85	Ref ³	07/04/00	MAD00720	Systematic	0.3	0.0	0.2	0.6
TT84	Ref ³	07/04/00	MAD00721	Systematic	0.4	0.2	0.6	1.1
TT83	Ref ³	07/04/00	MAD00722	Systematic	0.7	0.1	0.2	1.1
TT82	Ref ³	07/04/00	MAD00723	Systematic	0.3	0.0	0.1	0.4
TT81	Ref ³	07/04/00	MAD00724	Systematic	0.1	-0.1	1.2	1.2
TT80	Ref ³	07/04/00	MAD00725	Systematic	0.9	0.0	1.1	1.9
TT79	Ref ³	07/04/00	MAD00726	Systematic	0.5	0.0	0.7	1.2
TT78	Ref ³	07/04/00	MAD00727	Systematic	0.4	0.1	0.4	0.8
TT77	Ref ³	07/04/00	MAD00728	Systematic	1.3	0.1	0.6	2.1
TT76	Ref ³	07/04/00	MAD00729	Systematic	1.4	0.2	0.8	2.4
Number of samples:								10
Average of July 2000 results:								1.3
Maximum of July 2000 results:								2.4
Standard deviation of July 2000 results:								0.7
¹ All reported values are gross pCi/g. DQA = Data Quality Assessment.								
² U-Total = U-234 + U-235 + U-238. Values rounded to show no more than 1 digit to the right of the decimal.								
³ Data used to calculate overhead reference area background in dust.								

Madison, IL, Site Certification Data Summary Worksheet

Data Summary Table for Survey Unit 1 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 1)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βγ Eff. (cpm/dpm)	Location ID	Fixed Point βγ Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
1	Class 1 Overhead SU #1	2360W/43-89	126	0.23	1-1	98	0
1	Class 1 Overhead SU #1	2360/43-89	126	0.13	1-10	118	283
1	Class 1 Overhead SU #1	2360W/43-89	126	0.23	1-11	86	0
1	Class 1 Overhead SU #1	2360W/43-89	126	0.23	1-12	77	0
1	Class 1 Overhead SU #1	2360W/43-89	126	0.26	1-13	157	0
1	Class 1 Overhead SU #1	2360W/43-89	126	0.26	1-14	181	74
1	Class 1 Overhead SU #1	2360W/43-89	126	0.26	1-15	172	39
1	Class 1 Overhead SU #1	2360/43-89	126	0.13	1-16	166	650
1	Class 1 Overhead SU #1	2360/43-89	126	0.13	1-17	140	451
1	Class 1 Overhead SU #1	2360/43-89	126	0.13	1-18	154	558
1	Class 1 Overhead SU #1	2360W/43-89	126	0.23	1-2	94	0
1	Class 1 Overhead SU #1	2360W/43-89	126	0.23	1-3	77	0
1	Class 1 Overhead SU #1	2360/43-89	126	0.11	1-4	72	32
1	Class 1 Overhead SU #1	2360/43-89	126	0.11	1-5	76	68
1	Class 1 Overhead SU #1	2360/43-89	126	0.13	1-6	146	497
1	Class 1 Overhead SU #1	2360/43-89	126	0.13	1-7	125	337
1	Class 1 Overhead SU #1	2360/43-89	126	0.13	1-8	148	512
1	Class 1 Overhead SU #1	2360W/43-89	126	0.26	1-9	172	39
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	18
						Average:	197
						Maximum:	650
						Standard Deviation:	237

Data Summary Table for Survey Unit 2 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 1)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βγ Eff. (cpm/dpm)	Location ID	Fixed Point βγ Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
2	Class 1 Overhead SU #2	2360/43-89	126	0.18	2-1	120	44
2	Class 1 Overhead SU #2	2360/43-89	126	0.23	2-10	212	297
2	Class 1 Overhead SU #2	2360/43-89	126	0.12	2-11	147	598
2	Class 1 Overhead SU #2	2360/43-89	126	0.23	2-12	181	164
2	Class 1 Overhead SU #2	2360/43-89	126	0.23	2-13	214	306
2	Class 1 Overhead SU #2	2360/43-89	126	0.12	2-14	168	772
2	Class 1 Overhead SU #2	2360/43-89	126	0.23	2-15	192	211
2	Class 1 Overhead SU #2	2360/43-89	126	0.18	2-2	126	77
2	Class 1 Overhead SU #2	2360/43-89	126	0.23	2-3	180	159
2	Class 1 Overhead SU #2	2360/43-89	126	0.12	2-4	186	921
2	Class 1 Overhead SU #2	2360/43-89	126	0.12	2-5	139	532
2	Class 1 Overhead SU #2	2360/43-89	126	0.13	2-6	150	528
2	Class 1 Overhead SU #2	2360/43-89	126	0.23	2-7	217	319
2	Class 1 Overhead SU #2	2360/43-89	126	0.23	2-8	206	272
2	Class 1 Overhead SU #2	2360/43-89	126	0.23	2-9	217	319
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	368
						Maximum:	921
						Standard Deviation:	253

Data Summary Table for Survey Unit 3 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 2)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βγ Eff. (cpm/dpm)	Location ID	Fixed Point βγ Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-1	136	507
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-10	155	664
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-11	236	1334
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-12	138	524
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-13	124	408
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-14	137	516
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-15	123	400
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-2	128	441
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-3	164	739
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-4	164	739
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-5	115	334
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-6	137	516
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-7	102	226
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-8	111	301
3	Class 1 Overhead SU #3	2360/43-89	126	0.12	3-9	120	375
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	535
						Maximum:	1334
						Standard Deviation:	267

Data Summary Table for Survey Unit 4 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 2)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βγ Eff. (cpm/dpm)	Location ID	Fixed Point βγ Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
4	SU 4	2360/43-89	126	0.12	4-1	136	507
4	SU 4	2360/43-89	126	0.12	4-10	217	1177
4	SU 4	2360/43-89	126	0.12	4-11	113	317
4	SU 4	2360/43-89	126	0.12	4-12	213	1144
4	SU 4	2360/43-89	126	0.12	4-13	184	904
4	SU 4	2360/43-89	126	0.12	4-14	189	946
4	SU 4	2360/43-89	126	0.12	4-15	163	731
4	SU 4	2360/43-89	126	0.12	4-2	217	1177
4	SU 4	2360/43-89	126	0.12	4-3	194	987
4	SU 4	2360/43-89	126	0.12	4-4	166	755
4	SU 4	2360/43-89	126	0.11	4-5	82	123
4	SU 4	2360/43-89	126	0.11	4-6	79	95
4	SU 4	2360/43-89	126	0.11	4-7	118	447
4	SU 4	2360/43-89	126	0.11	4-8	95	240
4	SU 4	2360/43-89	126	0.11	4-9	121	474
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	668
						Maximum:	1177
						Standard Deviation:	381

Data Summary Table for Survey Unit 5 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 3)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βγ Eff. (cpm/dpm)	Location ID	Fixed Point βγ Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
5	SU 5	2360/43-89	126	0.12	5-1	93	152
5	SU 5	2360/43-89	126	0.11	5-10	140	646
5	SU 5	2360/43-89	126	0.12	5-11	99	201
5	SU 5	2360/43-89	126	0.11	5-12	106	339
5	SU 5	2360/43-89	126	0.11	5-13	99	276
5	SU 5	2360/43-89	126	0.12	5-14	88	111
5	SU 5	2360/43-89	126	0.12	5-15	101	218
5	SU 5	2360/43-89	126	0.11	5-2	112	393
5	SU 5	2360/43-89	126	0.11	5-3	251	1647
5	SU 5	2360/43-89	126	0.12	5-4	87	102
5	SU 5	2360/43-89	126	0.11	5-5	103	312
5	SU 5	2360/43-89	126	0.12	5-6	94	160
5	SU 5	2360/43-89	126	0.11	5-7	163	853
5	SU 5	2360/43-89	126	0.11	5-8	143	673
5	SU 5	2360/43-89	126	0.11	5-9	161	835
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	461
						Maximum:	1647
						Standard Deviation:	416

Madison, IL, Site Certification Data Summary Worksheet

Data Summary Table for Survey Unit 6 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 3)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
6	SU 6	2360/43-89	126	0.12	6-1	266	1582
6	SU 6	2360/43-89	126	0.12	6-10	146	590
6	SU 6	2360/43-89	126	0.12	6-11	138	524
6	SU 6	2360/43-89	126	0.12	6-12	113	317
6	SU 6	2360/43-89	126	0.12	6-13	212	1136
6	SU 6	2360/43-89	126	0.12	6-14	155	664
6	SU 6	2360/43-89	126	0.12	6-15	181	879
6	SU 6	2360/43-89	126	0.12	6-2	254	1483
6	SU 6	2360/43-89	126	0.12	6-3	167	764
6	SU 6	2360/43-89	126	0.12	6-4	179	863
6	SU 6	2360/43-89	126	0.12	6-5	151	631
6	SU 6	2360/43-89	126	0.12	6-6	140	540
6	SU 6	2360/43-89	126	0.12	6-7	154	656
6	SU 6	2360/43-89	126	0.12	6-8	149	615
6	SU 6	2360/43-89	126	0.12	6-9	150	623
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	791
						Maximum:	1582
						Standard Deviation:	354

Data Summary Table for Survey Unit 11 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 5)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
11	SU 11	2360/43-89	126	0.11	11-1	94	231
11	SU 11	2360/43-89	126	0.11	11-10	69	5
11	SU 11	2360/43-89	126	0.11	11-11	81	114
11	SU 11	2360/43-89	126	0.11	11-12	86	159
11	SU 11	2360/43-89	126	0.11	11-13	94	231
11	SU 11	2360/43-89	126	0.11	11-14	98	267
11	SU 11	2360/43-89	126	0.11	11-15	77	77
11	SU 11	2360/43-89	126	0.11	11-2	81	114
11	SU 11	2360/43-89	126	0.11	11-3	89	186
11	SU 11	2360/43-89	126	0.11	11-4	102	303
11	SU 11	2360/43-89	126	0.11	11-5	85	150
11	SU 11	2360/43-89	126	0.11	11-6	99	276
11	SU 11	2360/43-89	126	0.11	11-7	103	312
11	SU 11	2360/43-89	126	0.11	11-8	117	438
11	SU 11	2360/43-89	126	0.11	11-9	76	68
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	195
						Maximum:	438
						Standard Deviation:	114

Data Summary Table for Survey Unit 7 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 4)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
7	SU 7	2360/43-89	126	0.12	7-1	93	152
7	SU 7	2360/43-89	126	0.12	7-10	88	111
7	SU 7	2360/43-89	126	0.12	7-11	114	325
7	SU 7	2360/43-89	126	0.11	7-12	91	204
7	SU 7	2360/43-89	126	0.11	7-13	74	50
7	SU 7	2360/43-89	126	0.11	7-14	80	105
7	SU 7	2360/43-89	126	0.11	7-15	94	231
7	SU 7	2360/43-89	126	0.12	7-2	130	458
7	SU 7	2360/43-89	126	0.12	7-3	109	284
7	SU 7	2360/43-89	126	0.12	7-4	107	268
7	SU 7	2360/43-89	126	0.11	7-5	96	249
7	SU 7	2360/43-89	126	0.11	7-6	101	294
7	SU 7	2360/43-89	126	0.12	7-7	81	53
7	SU 7	2360/43-89	126	0.12	7-8	97	185
7	SU 7	2360/43-89	126	0.12	7-9	79	36
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	200
						Maximum:	458
						Standard Deviation:	118

Data Summary Table for Survey Unit 12 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 5)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
12	SU 12	2360/43-89	126	0.13	12-1	179	749
12	SU 12	2360/43-89	126	0.13	12-10	128	360
12	SU 12	2360/43-89	126	0.13	12-11	118	283
12	SU 12	2360/43-89	126	0.13	12-12	126	345
12	SU 12	2360/43-89	126	0.13	12-13	111	230
12	SU 12	2360/43-89	126	0.13	12-14	171	688
12	SU 12	2360/43-89	126	0.13	12-15	149	520
12	SU 12	2360/43-89	126	0.13	12-2	187	810
12	SU 12	2360/43-89	126	0.13	12-3	308	1733
12	SU 12	2360/43-89	126	0.13	12-4	219	1054
12	SU 12	2360/43-89	126	0.13	12-5	267	1421
12	SU 12	2360/43-89	126	0.13	12-6	173	703
12	SU 12	2360/43-89	126	0.13	12-7	170	680
12	SU 12	2360/43-89	126	0.13	12-8	255	1329
12	SU 12	2360/43-89	126	0.13	12-9	194	863
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	785
						Maximum:	1733
						Standard Deviation:	440

Data Summary Table for Survey Unit 8 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 4)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
8	Class 1 Overhead SU 8	2389/43-89	126	0.11	8-1	100	285
8	SU 8	2360/43-89	126	0.13	8-10	100	146
8	SU 8	2360/43-89	126	0.13	8-11	104	177
8	SU 8	2360/43-89	126	0.13	8-12	82	9
8	SU 8	2360/43-89	126	0.13	8-13	107	200
8	SU 8	2360/43-89	126	0.13	8-14	95	108
8	SU 8	2360/43-89	126	0.13	8-15	95	108
8	Class 1 Overhead SU 8	2389/43-89	126	0.11	8-2	95	240
8	SU 8	2360/43-89	126	0.13	8-3	97	123
8	SU 8	2360/43-89	126	0.13	8-4	102	161
8	Class 1 Overhead SU 8	2389/43-89	126	0.11	8-5	82	123
8	SU 8	2360/43-89	126	0.13	8-6	95	108
8	SU 8	2360/43-89	126	0.13	8-7	82	9
8	SU 8	2360/43-89	126	0.13	8-8	79	0
8	SU 8	2360/43-89	126	0.13	8-9	97	123
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	128
						Maximum:	285
						Standard Deviation:	81

Data Summary Table for Survey Unit 13 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 6)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-1	111	301
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-10	134	491
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-11	208	1103
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-12	241	1375
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-13	158	689
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-14	172	805
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-15	150	623
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-16	406	2739
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-17	411	2781
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-18	398	2673
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-2	110	292
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-3	146	590
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-4	105	251
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-5	113	317
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-6	132	474
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-7	123	400
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-8	138	524
13	Class 1 Overhead SU 13	2360/43-89	126	0.12	13-9	178	855
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	18
						Average:	960
						Maximum:	2781
						Standard Deviation:	865

Madison, IL, Site Certification Data Summary Worksheet

Data Summary Table for Survey Unit 14 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 6)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
14	SU 14	2360/43-89	126	0.11	14-1	286	1962
14	SU 14	2360/43-89	126	0.11	14-10	173	943
14	SU 14	2360/43-89	126	0.11	14-11	98	267
14	SU 14	2360/43-89	126	0.11	14-12	210	1277
14	SU 14	2360/43-89	126	0.11	14-13	143	673
14	SU 14	2360/43-89	126	0.11	14-14	170	916
14	SU 14	2360/43-89	126	0.11	14-15	166	880
14	SU 14	2360/43-89	126	0.11	14-2	118	447
14	SU 14	2360/43-89	126	0.11	14-3	168	898
14	SU 14	2360/43-89	126	0.12	14-4	108	276
14	SU 14	2360/43-89	126	0.12	14-5	118	359
14	SU 14	2360/43-89	126	0.11	14-6	97	258
14	SU 14	2360/43-89	126	0.11	14-7	121	474
14	SU 14	2360/43-89	126	0.12	14-8	98	193
14	SU 14	2360/43-89	126	0.11	14-9	187	1070
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	726
						Maximum:	1962
						Standard Deviation:	484

Data Summary Table for Survey Unit 15 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 7)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
15	SU 15	2360/43-89	126	0.11	15-1	117	438
15	SU 15	2360/43-89	126	0.11	15-10	113	402
15	SU 15	2360/43-89	126	0.11	15-11	120	465
15	SU 15	2360/43-89	126	0.11	15-12	110	375
15	SU 15	2360/43-89	126	0.11	15-13	117	438
15	SU 15	2360/43-89	126	0.11	15-14	103	312
15	SU 15	2360/43-89	126	0.11	15-15	82	123
15	SU 15	2360/43-89	126	0.11	15-2	78	86
15	SU 15	2360/43-89	126	0.11	15-3	91	204
15	SU 15	2360/43-89	126	0.12	15-4	97	185
15	SU 15	2360/43-89	126	0.11	15-5	101	294
15	SU 15	2360/43-89	126	0.12	15-6	84	77
15	SU 15	2360/43-89	126	0.11	15-7	145	691
15	SU 15	2360/43-89	126	0.11	15-8	96	249
15	SU 15	2360/43-89	126	0.11	15-9	120	465
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n):	15
						Average:	320
						Maximum:	691
						Standard Deviation:	171

Data Summary Table for Survey Unit 17 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 7)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
17	SU17	2224/4389	126	0.26	17-1	173	0
17	SU17	2224/4389	126	0.26	17-10	261	52
17	SU17	2224/4389	126	0.26	17-2	310	550
17	SU17	2224/4389	126	0.26	17-3	304	489
17	SU17	2224/4389	126	0.26	17-4	242	0
17	SU17	2224/4389	126	0.26	17-5	237	0
17	SU17	2224/4389	126	0.26	17-6	291	357
17	SU17	2224/4389	126	0.26	17-7	274	184
17	SU17	2224/4389	126	0.26	17-8	238	0
17	SU17	2224/4389	126	0.26	17-9	252	0
17	Floor Scan Maximum Result	2350-1/43-37	545	0.23	SU 17	1800	2183
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	163
						Maximum:	550
						Standard Deviation for fixed points only:	221

Data Summary Table for Survey Unit 18 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 8)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
18	SU18	2224/4389	126	0.23	18-1	169	0
18	SU18	2224/4389	126	0.23	18-10	159	0
18	SU18	2224/4389	126	0.23	18-2	177	0
18	SU18	2224/4389	126	0.23	18-3	155	0
18	SU18	2224/4389	126	0.23	18-4	157	0
18	SU18	2224/4389	126	0.23	18-5	182	0
18	SU18	2224/4389	126	0.23	18-6	174	0
18	SU18	2224/4389	126	0.23	18-7	163	0
18	SU18	2224/4389	126	0.23	18-8	153	0
18	SU18	2224/4389	126	0.23	18-9	165	0
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	0
						Maximum:	0
						Standard Deviation for fixed points only:	0

Data Summary Table for Survey Unit 19 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 8)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
19	SU19	2224/4389	126	0.26	19-1	314	591
19	SU19	2224/4389	126	0.26	19-10	312	571
19	SU19	2224/4389	126	0.26	19-2	332	774
19	SU19	2224/4389	126	0.26	19-3	268	123
19	SU19	2224/4389	126	0.26	19-4	349	947
19	SU19	2224/4389	126	0.26	19-5	316	611
19	SU19	2224/4389	126	0.26	19-6	264	82
19	SU19	2224/4389	126	0.26	19-7	314	591
19	SU19	2224/4389	126	0.26	19-8	294	387
19	SU19	2224/4389	126	0.26	19-9	286	306
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	498
						Maximum:	947
						Standard Deviation for fixed points only:	274

Data Summary Table for Survey Unit 20 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 9)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
20	SU20	2224/4389	126	0.26	20-1	248	0
20	SU20	2224/4389	126	0.26	20-10	269	133
20	SU20	2224/4389	126	0.26	20-2	259	31
20	SU20	2224/4389	126	0.26	20-3	274	184
20	SU20	2224/4389	126	0.26	20-4	298	428
20	SU20	2224/4389	126	0.26	20-5	288	326
20	SU20	2224/4389	126	0.26	20-6	280	245
20	SU20	2224/4389	126	0.26	20-7	305	499
20	SU20	2224/4389	126	0.26	20-8	266	103
20	SU20	2224/4389	126	0.26	20-9	286	306
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	226
						Maximum:	499
						Standard Deviation for fixed points only:	166

Madison, IL, Site Certification Data Summary Worksheet

Data Summary Table for Survey Unit 21 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 9)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
21	SU21	2224/4389	126	0.18	21-1	188	159
21	SU21	2224/4389	126	0.18	21-1	144	0
21	SU21	2224/4389	126	0.18	21-10	123	0
21	SU21	2224/4389	126	0.18	21-2	212	512
21	SU21	2224/4389	126	0.18	21-3	159	0
21	SU21	2224/4389	126	0.18	21-4	152	0
21	SU21	2224/4389	126	0.18	21-5	170	0
21	SU21	2224/4389	126	0.18	21-6	182	71
21	SU21	2224/4389	126	0.18	21-7	213	527
21	SU21	2224/4389	126	0.18	21-8	191	203
21	SU21	2224/4389	126	0.18	21-9	146	0
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	131
						Maximum:	527
						Standard Deviation for fixed points only:	214

Data Summary Table for Survey Unit 22 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 10)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
22	SU22	2224/4389	126	0.26	22-1	129	0
22	SU22	2224/4389	126	0.26	22-10	187	0
22	SU22	2224/4389	126	0.26	22-2	186	0
22	SU22	2224/4389	126	0.26	22-3	159	0
22	SU22	2224/4389	126	0.26	22-4	185	0
22	SU22	2224/4389	126	0.26	22-5	198	0
22	SU22	2224/4389	126	0.26	22-6	184	0
22	SU22	2224/4389	126	0.26	22-7	203	0
22	SU22	2224/4389	126	0.26	22-8	183	0
22	SU22	2224/4389	126	0.26	22-9	194	0
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	0
						Maximum:	0
						Standard Deviation for fixed points only:	0

Data Summary Table for Survey Unit 23 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 10)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
23	SU23	2224/4389	126	0.26	23-1	247	0
23	SU23	2224/4389	126	0.26	23-10	280	245
23	SU23	2224/4389	126	0.26	23-2	287	316
23	SU23	2224/4389	126	0.26	23-3	181	0
23	SU23	2224/4389	126	0.26	23-4	144	0
23	SU23	2224/4389	126	0.26	23-5	274	184
23	SU23	2224/4389	126	0.26	23-6	342	876
23	SU23	2224/4389	126	0.26	23-7	303	479
23	SU23	2224/4389	126	0.26	23-8	290	347
23	SU23	2224/4389	126	0.26	23-9	208	0
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	245
						Maximum:	876
						Standard Deviation for fixed points only:	281

Data Summary Table for Survey Unit 24 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 11)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
24	SU24	2224/4389	126	0.18	24-1	188	159
24	SU24	2224/4389	126	0.18	24-10	154	0
24	SU24	2224/4389	126	0.18	24-2	144	0
24	SU24	2224/4389	126	0.18	24-3	166	0
24	SU24	2224/4389	126	0.18	24-4	154	0
24	SU24	2224/4389	126	0.18	24-5	194	247
24	SU24	2224/4389	126	0.18	24-6	87	0
24	SU24	2224/4389	126	0.18	24-7	157	0
24	SU24	2224/4389	126	0.18	24-8	195	262
24	SU24	2224/4389	126	0.18	24-9	150	0
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	67
						Maximum:	262
						Standard Deviation for fixed points only:	111

Data Summary Table for Survey Unit 25 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 11)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
25	SU25	2224/4389	126	0.23	25-1	187	0
25	SU25	2224/4389	126	0.23	25-10	200	0
25	SU25	2224/4389	126	0.23	25-2	189	0
25	SU25	2224/4389	126	0.23	25-3	179	0
25	SU25	2224/4389	126	0.23	25-4	198	0
25	SU25	2224/4389	126	0.23	25-5	190	0
25	SU25	2224/4389	126	0.23	25-6	152	0
25	SU25	2224/4389	126	0.23	25-7	208	0
25	SU25	2224/4389	126	0.23	25-8	178	0
25	SU25	2224/4389	126	0.23	25-9	180	0
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	0
						Maximum:	0
						Standard Deviation for fixed points only:	0

Data Summary Table for Survey Unit 26 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 12)							
SU	Unit ID	Instrument	Detector Area (cm ²)	By Eff. (cpm/dpm)	Location ID	Fixed Point By Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
26	SU26	2224/4389	126	0.26	26-1	225	0
26	SU26	2224/4389	126	0.26	26-10	299	438
26	SU26	2224/4389	126	0.26	26-2	204	0
26	SU26	2224/4389	126	0.26	26-3	235	0
26	SU26	2224/4389	126	0.26	26-4	304	489
26	SU26	2224/4389	126	0.26	26-5	299	438
26	SU26	2224/4389	126	0.26	26-6	318	632
26	SU26	2224/4389	126	0.26	26-7	286	306
26	SU26	2224/4389	126	0.26	26-8	286	306
26	SU26	2224/4389	126	0.26	26-9	306	510
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	312
						Maximum:	632
						Standard Deviation for fixed points only:	235

Madison, IL, Site Certification Data Summary Worksheet

Data Summary Table for Survey Unit 27 (Class 2 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 12)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
27	SU27	2224/4389	126	0.18	27-1	151	0
27	SU27	2224/4389	126	0.18	27-10	159	0
27	SU27	2224/4389	126	0.18	27-2	143	0
27	SU27	2224/4389	126	0.18	27-3	156	0
27	SU27	2224/4389	126	0.18	27-4	168	0
27	SU27	2224/4389	126	0.18	27-5	144	0
27	SU27	2224/4389	126	0.18	27-6	165	0
27	SU27	2224/4389	126	0.18	27-7	187	144
27	SU27	2224/4389	126	0.18	27-8	184	100
27	SU27	2224/4389	126	0.18	27-9	190	188
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	43
						Maximum:	188
						Standard Deviation for fixed points only:	73

Data Summary Table for Survey Unit 28 (Class 2 Equipment)							
Appendix B-4 in the Post-Remedial Action Report (page 13)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
28	SU28	2224/4389	126	0.26	28-1	122	0
28	SU28	2224/4389	126	0.26	28-10	159	50
28	SU28	2224/4389	126	0.26	28-2	137	0
28	SU28	2224/4389	126	0.26	28-3	161	57
28	SU28	2224/4389	126	0.26	28-4	140	0
28	SU28	2224/4389	126	0.26	28-5	173	103
28	SU28	2224/4389	126	0.26	28-6	166	76
28	SU28	2224/4389	126	0.26	28-7	172	99
28	SU28	2224/4389	126	0.26	28-8	162	61
28	SU28	2224/4389	126	0.26	28-9	160	54
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	50
						Maximum:	103
						Standard Deviation for fixed points only:	39

Data Summary Table for Survey Unit 29 (Class 2 Equipment)							
Appendix B-4 in the Post-Remedial Action Report (page 13)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
29	SU29	2224/4389	126	0.26	29-1	185	149
29	SU29	2224/4389	126	0.26	29-10	201	210
29	SU29	2224/4389	126	0.26	29-2	197	195
29	SU29	2224/4389	126	0.26	29-3	151	19
29	SU29	2224/4389	126	0.26	29-4	158	46
29	SU29	2224/4389	126	0.26	29-5	167	80
29	SU29	2224/4389	126	0.26	29-6	155	34
29	SU29	2224/4389	126	0.26	29-7	188	160
29	SU29	2224/4389	126	0.26	29-8	195	187
29	SU29	2224/4389	126	0.26	29-9	178	122
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	120
						Maximum:	210
						Standard Deviation for fixed points only:	71

Data Summary Table for Survey Unit 31 (Class 3 Walls)							
Appendix B-4 in the Post-Remedial Action Report (page 14)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
31	Class 3 Walls	2350-1/43-106	126	0.36	MAD00380	208	60
31	Class 3 Walls	2350-1/43-106	126	0.36	MAD00381	220	148
31	Class 3 Walls	2350-1/43-106	126	0.36	MAD00382	179	0
31	Class 3 Walls	2350-1/43-106	126	0.36	MAD00383	198	0
31	Class 3 Walls	2350-1/43-106	126	0.36	MAD00384	181	0
31	Class 3 Walls	2350-1/43-106	126	0.36	MAD00385	192	0
31	Class 3 Walls	2350-1/43-106	126	0.36	MAD00386	221	155
31	Class 3 Walls	2350-1/43-106	126	0.36	MAD00387	223	170
31	Class 3 Walls	2350-1/43-106	126	0.36	MAD00388	193	0
31	Class 3 Walls	2350-1/43-106	126	0.36	MAD00389	215	111
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	64
						Maximum:	170
						Standard Deviation for fixed points only:	74

Data Summary Table for Survey Unit 32 (Class 3 Floors)							
Appendix B-4 in the Post-Remedial Action Report (page 14)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
32	Class 3 Floor	2350-1/43-106	126	0.36	MAD00390	363	64
32	Class 3 Floor	2350-1/43-106	126	0.36	MAD00391	374	144
32	Class 3 Floor	2350-1/43-106	126	0.36	MAD00392	414	438
32	Class 3 Floor	2350-1/43-106	126	0.36	MAD00393	449	696
32	Class 3 Floor	2350-1/43-106	126	0.36	MAD00394	384	218
32	Class 3 Floor	2350-1/43-106	126	0.36	MAD00395	350	0
32	Class 3 Floor	2350-1/43-106	126	0.36	MAD00396	356	12
32	Class 3 Floor	2350-1/43-106	126	0.36	MAD00397	373	137
32	Class 3 Floor	2350-1/43-106	126	0.36	MAD00398	399	328
32	Class 3 Floor	2350-1/43-106	126	0.36	MAD00399	321	0
0.3 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	204
						Maximum:	696
						Standard Deviation for fixed points only:	226

Data Summary Table for Survey Unit 33 (Class 3 Equipment)							
Appendix B-4 in the Post-Remedial Action Report (page 15)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
33	Class 3 Equipment	2350-1/43-106	126	0.36	MAD00400	153	0
33	Class 3 Equipment	2350-1/43-106	126	0.36	MAD00401	253	140
33	Class 3 Equipment	2350-1/43-106	126	0.36	MAD00402	287	234
33	Class 3 Equipment	2350-1/43-106	126	0.36	MAD00403	227	69
33	Class 3 Equipment	2350-1/43-106	126	0.36	MAD00404	254	143
33	Class 3 Equipment	2350-1/43-106	126	0.36	MAD00405	231	80
33	Class 3 Equipment	2350-1/43-106	126	0.36	MAD00406	212	27
33	Class 3 Equipment	2350-1/43-106	126	0.36	MAD00407	139	0
33	Class 3 Equipment	2350-1/43-106	126	0.36	MAD00408	127	0
33	Class 3 Equipment	2350-1/43-106	126	0.36	MAD00409	154	0
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *(cpm / (Eff x Efs x Area/100)) - Ref						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	69
						Maximum:	234
						Standard Deviation for fixed points only:	81

Madison, IL, Site Certification Data Summary Worksheet

Data Summary Table for Survey Unit 34 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 15)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
34	SU 34	2360/43-89	126	0.12	34-1	83	69
34	SU 34	2360/43-89	126	0.12	34-10	103	235
34	SU 34	2360/43-89	126	0.12	34-11	99	201
34	SU 34	2360/43-89	126	0.12	34-12	113	317
34	SU 34	2360/43-89	126	0.12	34-13	99	201
34	SU 34	2360/43-89	126	0.12	34-14	99	201
34	SU 34	2360/43-89	126	0.12	34-15	114	325
34	SU 34	2360/43-89	126	0.12	34-2	151	631
34	SU 34	2360/43-89	126	0.12	34-3	138	524
34	SU 34	2360/43-89	126	0.12	34-4	123	400
34	SU 34	2360/43-89	126	0.12	34-5	150	623
34	SU 34	2360/43-89	126	0.12	34-6	82	61
34	SU 34	2360/43-89	126	0.12	34-7	97	185
34	SU 34	2360/43-89	126	0.12	34-8	85	86
34	SU 34	2360/43-89	126	0.12	34-9	100	210
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n) for fixed points only:	15
						Average of fixed points only:	285
						Maximum:	631
						Standard Deviation for fixed points only:	186

Data Summary Table for Survey Unit 35 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 16)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
35	SU 35	2360/43-89	126	0.12	35-1	187	929
35	SU 35	2360/43-89	126	0.12	35-10	79	36
35	SU 35	2360/43-89	126	0.12	35-11	120	375
35	SU 35	2360/43-89	126	0.12	35-12	92	144
35	SU 35	2360/43-89	126	0.12	35-13	211	1127
35	SU 35	2360/43-89	126	0.12	35-14	105	251
35	SU 35	2360/43-89	126	0.12	35-15	138	524
35	SU 35	2360/43-89	126	0.12	35-2	188	937
35	SU 35	2360/43-89	126	0.12	35-3	167	764
35	SU 35	2360/43-89	126	0.12	35-4	176	838
35	SU 35	2360/43-89	126	0.12	35-5	209	1111
35	SU 35	2360/43-89	126	0.12	35-6	77	20
35	SU 35	2360/43-89	126	0.12	35-7	129	449
35	SU 35	2360/43-89	126	0.12	35-8	172	805
35	SU 35	2360/43-89	126	0.12	35-9	189	946
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n) for fixed points only:	15
						Average of fixed points only:	617
						Maximum:	1127
						Standard Deviation for fixed points only:	384

Data Summary Table for Survey Unit 36 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 16)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated gross dpm/100 cm ²
36	SU 36	2360/43-89	126	0.11	36-1	95	240
36	SU 36	2360/43-89	126	0.11	36-10	107	348
36	SU 36	2360/43-89	126	0.11	36-11	92	213
36	SU 36	2360/43-89	126	0.11	36-12	100	285
36	SU 36	2360/43-89	126	0.11	36-13	110	375
36	SU 36	2360/43-89	126	0.11	36-14	105	330
36	SU 36	2360/43-89	126	0.11	36-15	109	366
36	SU 36	2360/43-89	126	0.11	36-2	84	141
36	SU 36	2360/43-89	126	0.11	36-3	113	402
36	SU 36	2360/43-89	126	0.13	36-4	134	406
36	SU 36	2360/43-89	126	0.13	36-5	149	520
36	SU 36	2360/43-89	126	0.11	36-6	103	312
36	SU 36	2360/43-89	126	0.11	36-7	68	0
36	SU 36	2360/43-89	126	0.11	36-8	103	312
36	SU 36	2360/43-89	126	0.11	36-9	104	321
0.8 Efs = surface efficiency *cpm / (Eff x Area/100)						Number of Samples (n) for fixed points only:	15
						Average of fixed points only:	305
						Maximum:	520
						Standard Deviation for fixed points only:	123

Data Summary Table for Survey Unit 37 (Class 1 Overheads)							
Appendix B-4 in the Post-Remedial Action Report (page 17)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated net dpm/100 cm ²
37	SU 37	2360/43-89	126	0.12	37-1	189	946
37	SU 37	2360/43-89	126	0.12	37-10	156	673
37	SU 37	2360/43-89	126	0.12	37-11	130	458
37	SU 37	2360/43-89	126	0.12	37-12	97	185
37	SU 37	2360/43-89	126	0.12	37-13	157	681
37	SU 37	2360/43-89	126	0.12	37-14	159	697
37	SU 37	2360/43-89	126	0.12	37-15	159	697
37	SU 37	2360/43-89	126	0.12	37-2	194	987
37	SU 37	2360/43-89	126	0.12	37-3	99	201
37	SU 37	2360/43-89	126	0.12	37-4	79	36
37	SU 37	2360/43-89	126	0.12	37-5	127	433
37	SU 37	2360/43-89	126	0.12	37-6	159	697
37	SU 37	2360/43-89	126	0.12	37-7	184	904
37	SU 37	2360/43-89	126	0.12	37-8	93	152
37	SU 37	2360/43-89	126	0.12	37-9	141	549
0.8 Efs = surface efficiency Ref: Appropriate reference area background (medium-specific) *[cpm / (Eff x Efs x Area/100)] - Ref						Number of Samples (n) for fixed points only:	15
						Average of fixed points only:	553
						Maximum:	987
						Standard Deviation for fixed points only:	301

Data Summary Table for Reference Area Equipment (43-106)							
Appendix B-4 in the Post-Remedial Action Report (page 17)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated gross dpm/100 cm ²
Ref.	Reference Equipment	2350-1/43-106	126	0.36	MAD00450	271	747
Ref.	Reference Equipment	2350-1/43-106	126	0.36	MAD00451	247	681
Ref.	Reference Equipment	2350-1/43-106	126	0.36	MAD00452	152	419
Ref.	Reference Equipment	2350-1/43-106	126	0.36	MAD00453	193	532
Ref.	Reference Equipment	2350-1/43-106	126	0.36	MAD00454	172	474
Ref.	Reference Equipment	2350-1/43-106	126	0.36	MAD00455	177	488
Ref.	Reference Equipment	2350-1/43-106	126	0.36	MAD00456	172	474
Ref.	Reference Equipment	2350-1/43-106	126	0.36	MAD00457	238	656
Ref.	Reference Equipment	2350-1/43-106	126	0.36	MAD00458	234	645
Ref.	Reference Equipment	2350-1/43-106	126	0.36	MAD00459	164	452
0.8 Efs = surface efficiency *[cpm / (Eff x Efs x Area/100)]						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	557
						Maximum:	747
						Standard Deviation for fixed points only:	115

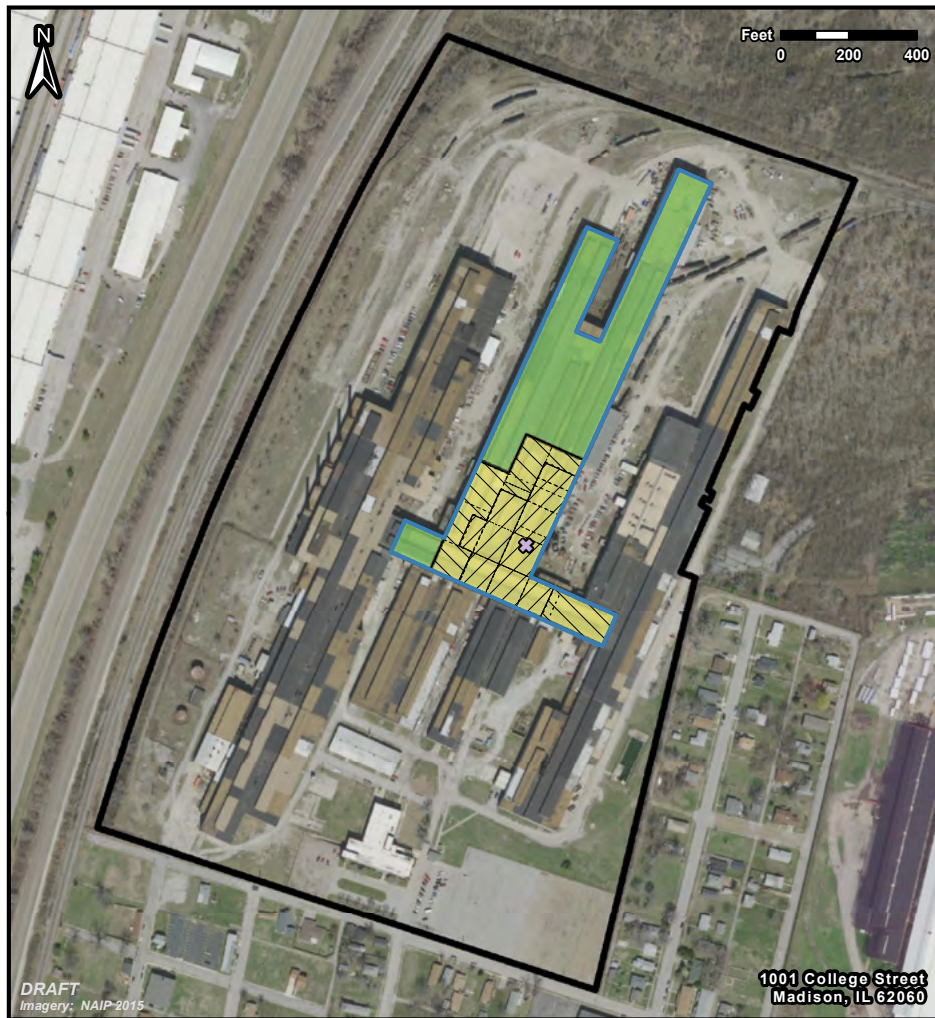
Madison, IL, Site Certification Data Summary Worksheet

Data Summary Table for Reference Area Walls (43-106)							
Appendix B-4 in the Post-Remedial Action Report (page 18)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated gross dpm/100 cm ²
Ref.	Reference Area Walls	2350-1/43-106	126	0.36	MAD00460	194	1426
Ref.	Reference Area Walls	2350-1/43-106	126	0.36	MAD00461	196	1440
Ref.	Reference Area Walls	2350-1/43-106	126	0.36	MAD00462	186	1367
Ref.	Reference Area Walls	2350-1/43-106	126	0.36	MAD00463	200	1470
Ref.	Reference Area Walls	2350-1/43-106	126	0.36	MAD00464	199	1462
Ref.	Reference Area Walls	2350-1/43-106	126	0.36	MAD00465	190	1396
Ref.	Reference Area Walls	2350-1/43-106	126	0.36	MAD00466	200	1470
Ref.	Reference Area Walls	2350-1/43-106	126	0.36	MAD00467	205	1506
Ref.	Reference Area Walls	2350-1/43-106	126	0.36	MAD00468	210	1543
Ref.	Reference Area Walls	2350-1/43-106	126	0.36	MAD00469	219	1609
0.3 Efs = surface efficiency *[cpm/ (Eff x Efs x Area/100)]						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	1469
						Maximum:	1609
						Standard Deviation for fixed points only:	71

Data Summary Table for Reference Area Concrete (43-106)							
Appendix B-4 in the Post-Remedial Action Report (page 18)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated gross dpm/100 cm ²
Ref.	Reference Area - Concrete	2350-1/43-106	126	0.36	MAD00480	331	2432
Ref.	Reference Area - Concrete	2350-1/43-106	126	0.36	MAD00481	389	2859
Ref.	Reference Area - Concrete	2350-1/43-106	126	0.36	MAD00482	364	2675
Ref.	Reference Area - Concrete	2350-1/43-106	126	0.36	MAD00483	382	2807
Ref.	Reference Area - Concrete	2350-1/43-106	126	0.36	MAD00484	352	2587
Ref.	Reference Area - Concrete	2350-1/43-106	126	0.36	MAD00485	353	2594
Ref.	Reference Area - Concrete	2350-1/43-106	126	0.36	MAD00486	330	2425
Ref.	Reference Area - Concrete	2350-1/43-106	126	0.36	MAD00487	356	2616
Ref.	Reference Area - Concrete	2350-1/43-106	126	0.36	MAD00488	345	2535
Ref.	Reference Area - Concrete	2350-1/43-106	126	0.36	MAD00489	342	2513
0.3 Efs = surface efficiency *[cpm/ (Eff x Efs x Area/100)]						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	2604
						Maximum:	2859
						Standard Deviation for fixed points only:	144

Data Summary Table for Reference Area Overheads (43-106)							
Appendix B-4 in the Post-Remedial Action Report (page 19)							
SU	Unit ID	Instrument	Detector Area (cm ²)	βy Eff. (cpm/dpm)	Location ID	Fixed Point βy Gross Count per Minute (cpm)	*Estimated gross dpm/100 cm ²
Ref.	Reference Area Overhead	2350-1/43-106	126	0.36	MAD00500	234	645
Ref.	Reference Area Overhead	2350-1/43-106	126	0.36	MAD00501	223	615
Ref.	Reference Area Overhead	2350-1/43-106	126	0.36	MAD00502	228	628
Ref.	Reference Area Overhead	2350-1/43-106	126	0.36	MAD00503	208	573
Ref.	Reference Area Overhead	2350-1/43-106	126	0.36	MAD00504	234	645
Ref.	Reference Area Overhead	2350-1/43-106	126	0.36	MAD00505	243	670
Ref.	Reference Area Overhead	2350-1/43-106	126	0.36	MAD00506	230	634
Ref.	Reference Area Overhead	2350-1/43-106	126	0.36	MAD00507	226	623
Ref.	Reference Area Overhead	2350-1/43-106	126	0.36	MAD00508	212	584
Ref.	Reference Area Overhead	2350-1/43-106	126	0.36	MAD00509	202	557
0.8 Efs = surface efficiency *[cpm/ (Eff x Efs x Area/100)]						Number of Samples (n) for fixed points only:	10
						Average of fixed points only:	617
						Maximum:	670
						Standard Deviation for fixed points only:	36

Madison, Illinois, Site Map



U.S. DEPARTMENT OF ENERGY
OFFICE OF LEGACY MANAGEMENT

Work Performed by
Navarro Research & Engineering, Inc.
Under DOE Contract Number DE-LM0000421

Madison, IL, Site

- FUSRAP Site Pin
- Extrusion Press
- Survey Units
- Class 1 Survey Units at 25 & 36 Feet Levels
- Class 2 Survey Units at 25 & 36 Feet Levels
- Class 2 Survey Units at Floor Level
- Class 3 Survey Units at Floor Level
- FUSRAP Certified Site Boundary
- Original Site Boundary

DATE PREPARED:
June 12, 2017

FILE NAME:
MAD_DELIVERABLE

\\imgis\ProjectWorkArea\Sites\IL\Madison\ProjectWorkArea\spinet\IMAD_DELIVERABLE.mxd 6/12/2017 Source: Certification Summary and Docket