

Department of Energy

Field Office, Oak Ridge P.O. Box 2001 Oak Ridge, Tennessee 37831—

Mr. John Katkish President First Management Group, Inc. 4801 Massachusetts Avenue, N.W. Suite 400 Washington, D. C. 20016

RADIOLOGICAL SURVEY INFORMATION FOR THE BUILDING AT 9150 LATTY AVENUE IN HAZELWOOD. MISSOURI

Dear Mr. Katkish:

The purpose of this letter is to transmit the results of a radiological survey that was conducted on the property at 9150 Latty Avenue, adjacent to the Department of Energy's (DOE) Hazelwood Interim Storage Site (HISS), in Hazelwood, Missouri.

The survey was undertaken after high winds (at times exceeding 70 miles per hour) resulted in a tear in the HISS storage pile cover. Personnel at the Stone Container building were notified of the incident and asked to close any open doors and windows so that dust would not blow inside the facility. All appropriate local, state, and federal officials were notified.

Three types of measurements were made during the survey. The first measurement was designed to detect transferable radioactive contamination which is easily removed by wiping with a cloth. If contamination from the HISS cover incident was present, it would be indicated by this type of measurement. The second measurement was designed to detect fixed radioactive material, which is not easily removed and generally requires some form of abrasive removal to be dislodged. This fixed radioactive material is not indicative of dust from the HISS cover failure, but could be due to naturally occurring radioactive material present in construction materials, or from the deposition and plate-out of contamination over a period of many years. The third type of measurement was a direct instrument reading of both transferable and fixed contamination.

Measurements were made along the base of the building, at other locations on the building's exterior, a parked tractor trailer, and on the roof. No transferable contamination at levels above DOE guidelines was observed in 137 of 138 transferable contamination measurements -- indicating no significant dust deposition from the HISS cover incident. This observation is further substantiated by air sampling shortly after the cover incident which did not indicate airborne releases of contamination in excess of DOE guidelines. Fixed radioactive material was found on some building surfaces at levels above DOE's cleanup guideline for alpha emitters of 100 disintegrations per minute

per 100 square centimeters (100 dpm/100cm²) above background. All beta-gamma survey results were well below the guideline of 5000 dpm/100 cm² above background for beta-gamma emitters. All of the survey results are provided in the attached tables.

Although some fixed radioactivity was detected on the outside surfaces of the building, there is no immediate health hazard to personnel working in or around the building. It is recommended that work involving the abrasion or cutting of these surfaces be performed under guidance provided by qualified health physics personnel. Should you so desire, DOE would be pleased to provide consultation as to the controls it would implement under similar circumstances.

If you have any questions or comments, please contact me at (615) 576-9634.

Sincerely,

David G. Adler, Site Manager Former Sites Restoration Division

Table 1

CONTAMINATION SURVEY RESULTS FOR PROPERTY AT 9150 LATTY AVENUE Roof at Stone Container

Location	Alpha (DPM/100	Beta-Gamma (DPM/100cm²)	
	transferable	fixed	direct
1A	<6	131	<751
2A	<9	121	717
3 A	<6	131	<561
4 A	<6	81	759
5 A	<6	260	548
6 A	<6	81	1012
6B	<6	32	843
6C	<6	250	<751
7C	<6	220	<656
8C	<6	91	675
9C	<6	101	843
10C	. <9	111	717
11C	<6	170	1181
12C	<6	190	548
13C	<6	210	<465
14C	<13	230	<846
15C	<13	81	590 ·
16C	<9	418	633
6D	<9	141	<417
16D 6E	<6 <6	131 61	< 513 717
7E	<6	81	717
8E	<6	161	<704
9E	<6	250	<846
10E	<6	121	759
16E	<9	220	<417
10F	<6	141	<656
16F	8	260	<417
10G	<6	279	506
16Ġ	<6 '	210	<465
10H	<6	180	<417
16H	<6	200	<417
101	<6	161	<751
16I	<13	240	<656
10J	*	161	<751
16 J	<6	240	<513
10K	<6	161	<799
16K	<6	151	<417
10L	<6	101	<656
16L	· <6	32	<465

continued

^{*} Smear not analyzed.

Table 1, continued CONTAMINATION SURVEY RESULTS FOR PROPERTY AT 9150 LA. Roof at Stone Container

Location	Alpha (DPM/1000 transferable	Beta-Gam. (DPM/100cm, direct	
10M	<.6	71	<417
16M	<6	230	<417
10N	<6	141	<609
16N	<6	161	<417
100	<6	170	422
110	· <6	180	<417
120	<6	240	<465
130	<6	131	<417
140	<6	61	<513
150	<6	161	<561
160	<6	250	464

STONE CONTAINER ROOF

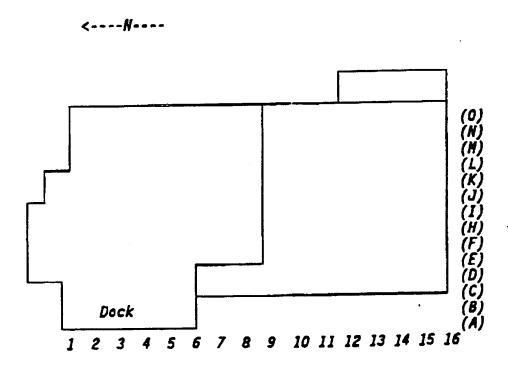


Table 2

CONTANINATION SURVEY RESULTS FOR PROPERTY AT 9150 LATTY AVENUE Stone Container Base

Location	Alpha (DPM/100		Beta-Gamma (DPM/100cm²)	
	transferable	fixed	direct	
1. concrete footing	<1	60	1940	
2. concrete footing	<1	60	590	
3. concrete step	3	180	<561	
4. concrete footing	<1	40	1645	
5. Wall	<1	. 40	1392	
6. concrete footing	3	30	1223	
7. wall	<1	130	675	
8. concrete footing	<1	50	<609	
9. concrete footing	<1	110	1096	
10. door	3	<26	<417	
11. concrete pad	3	50	<799	
12. door	<1	40	801	
13. shed roof	6	281	928	
14. shed roof	9	261	1265	
15. gas reg. (wh. box	() <1	<26	675	
l6. gas reg	<1	180	675	
17. wood door	<1	40	<465	
18. concrete footing	<1	50	633	
19. metal elec. box	6	321	590	
20. metal shed roof	б	231	1307	
21. metal shed roof	6	180	1012	
22. wood step pad	<1	<26	· 759	
3. concrete pad	<1	40	<704	
24. concrete driveway	6	80	<417	
25. sidewalk	<1	<26	843	
6. metal window ftg.	<1	40	<704	
27. sidewalk	<1	· 40	801	
8. concrete & frtdoc	er 9	30	717	
9. concrete footing	<1	<26	590	
0. sidewalk	3	110	548	
1. windowledge	9	401	1307	
2. windowledge	3	581	2193	
33. brick wall	<1	40	1265	
34. wall	3	170	<513	
5. wall	<1	<26	<417	

EXPANDED SURVEY OF THE BASE OF STONE CONTAINER

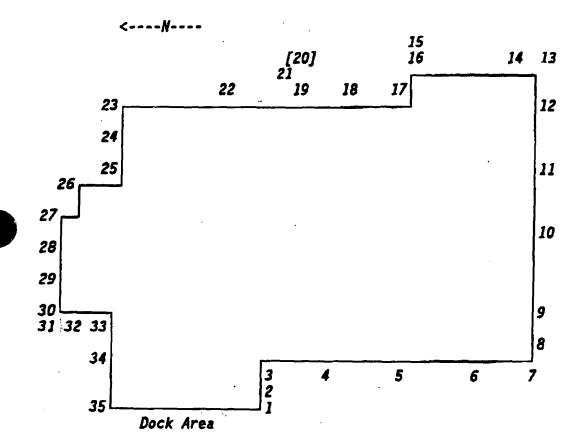


Table 3

CONTAMINATION SURVEY RESULTS FOR PROPERTY AT 9150 LATTY AVENUE Stone Container Dock

Location	Alpha (DPM/100c	m²)	Beta-Gamma ¹ (DPM/100cm ²)			
	transferable	fixed	transferable		direct	
1	<1	89	<98	675	*	
2	6	168	<90	675	*	
2 3	3	119	<60	1054	*	
. 4	6	159	65	928	*	
5	3	248	<60	590	*	
6	<1	228	<90	843	*	
7	<1	119	<120	1434	*	
8	<1	149	118	1476	, *	
9	<1	168	98	1223	*	
10	3	166	*	*	<758	
11	<2	106	*	*	759	
12	<2	176	*	*	801	
13	<2	146	*	*	717	
14	<2	206	*	*	1265	
15		196	*	*	1181	
16	3 3	196	*	*	<710	
17	<2	146	*	*	970	
18	9	86	*	*	717	
19	3	206	•	*	1096	
20	3	106	*	*	548	
21	<2	156	*	*	548	
22	18	277	*	*	<900	
22 23	41	708	*	*	<852	
24	15	267	*	*	843	
25	3	166	*	*	<520	
26	6	247	* .	*	590	
27	9	297	• .	" ★	1096	
28	12 :	156	•	*	843	

First nine locations were analyzed for both fixed and transferable beta-gamma. Based on field measurements of these smears, transferable beta-gamma was discontinued.

^{*} Smears not analyzed.

THE DOCK & STONE CONTAINER

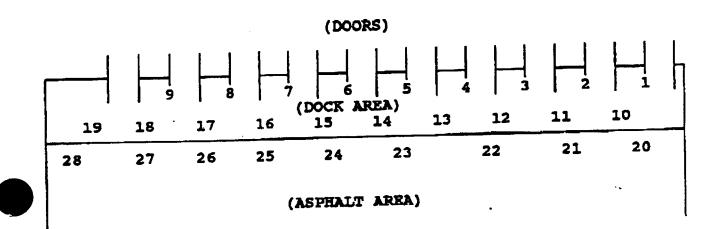


Table 4

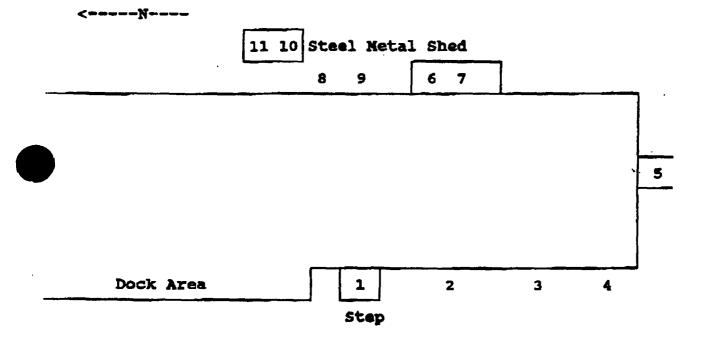
CONTAMINATION SURVEY RESULTS FOR PROPERTY AT 9150 LATTY AVENUE Stone Container Trailer 43

Location	Alpha (DPM/100cm²)		Beta-Gamma (DPM/100cm ¹)	
	transferable	fixed	transferable	fixed
1	3	30	72	970
2	3	30	<90	801
3	<1	<34	<98	<623
4	<1	20	<68	1012
5	<1	40	<98	548
6	6	<34	<83	970
7	6	<18	<75	<530
8	<1	<18	<75	<530

STONE CONTAINER TRAILER #43

	8	7	
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			1
	e		
	5	4	
}			
	3		
	2 (Rear	1 Doors)	

SURVEY AROUND THE EXTERIOR Of STONE CONTAINER



Airborne Sampling Data

SAMPLE LOCATION	#	DATE	Sample Time	ACTIVITY uCI/ml (GROSS ALPHA)
HISS Perimeter,	1	3/27/91	370 min.	< 1.5X10 ⁻¹⁴
Downwind of Torn	2	3/30/91	240 min.	3.0X10 ⁻¹⁴
Cover Near Stone	3	3/31/91	240 min.	< 4.0X10 ⁻¹⁴
Container.	4	4/01/91	240 min.	< 2.0X10 ⁻¹⁴
(All Samples)	5	4/02/91	895 min.	$< 4.0 \times 10^{-15}$
(5.11.2 5.11.2)	6	4/03/91	1440 min.	< 6.0X10 ⁻¹⁵
	7	4/04/91	1440 min.	< 5.0X10 ⁻¹⁵
	8	4/05/91	300 min.	< 1.0X10 ⁻¹⁴

* Samples were counted by gross alpha techniques. Sample # 1 Was during the actual event during and after wetting of the pile.

The applicable DACs for 230Th are:

INHALED AIR - LUNG RETENTION CLASS

WEEKLY	YEARLY
3X10 ⁻¹²	7X10 ⁻¹²

Based on the DACs as listed above, & DAC is:

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Sample #1 = < 1.0 *
Sample #2 = 1.5 *
Sample #3 = < 1.0 *
Sample #4 = < 1.0 *
Sample #5 = < 1.0 *
Sample #6 = < 1.0 *
Sample #7 = < 1.0 *
Sample #8 = < 1.0 *
```

^{*} Based on the weekly lung retention class DAC.