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DEPARTMENT OF THE ARMY US ARMY CHEMICAL AND MILITARY POLICE CENTERS & FORT MCCLELLAN FORT MCCLELLAN, ALABAMA 36205

TTENTION OF

Health Physics Office

2 MAR 1984

US Nuclear Regulatory Commission Document Control Desk Washington, D.C. 20555

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PDA

This letter is a thirty-day report submitted as required by 10 CFR Part 20.405(a)(1)(v) and in the format specified. It addresses low levels of previously undetected Cesium-137 contamination outside of a restricted area licensed by BML No. 01-02861-04.

EXPOSURES: There have been no known personnel exposures.

LEVELS: The levels of contamination are outlined in a Radiation Protection Study, Hot Cell Contamination, Fort McClellan, Alabama, August 1, 1983, US Army Environmental Hygiene Agency (AEHA), dated February 6, 1984 (attached). The study was received at Fort McClellan on February 15, 1984. Contamination was detected outside the restricted area only at points less than one foot beyond the fence.

CAUSE: The cause of the contamination is apparently a result of decontamination efforts while the facility was in use, prior to 1973.

CORRECTIVE ACTIONS: A temporary fence enclosing the contamination has been erected. The restricted area will be extended (see map) with a new fence as recommended by AEHA. A surface water monitoring program will be initiated to evaluate run off in all directions. An investigation will be conducted to evaluate the need for, and the possibility of, partial decontamination.

The Radiation Protection Study also identified extremely low levels of subsurface Cobalt-60 at a single location inside the restricted area. Another sample indicated that there has been no migration off-site. Additional core samples are planned, and the need for ground water monitoring will be investigated. A copy of this letter has been provided to the US Nuclear Regulatory Commission Region II Office in Atlanta, Georgia.

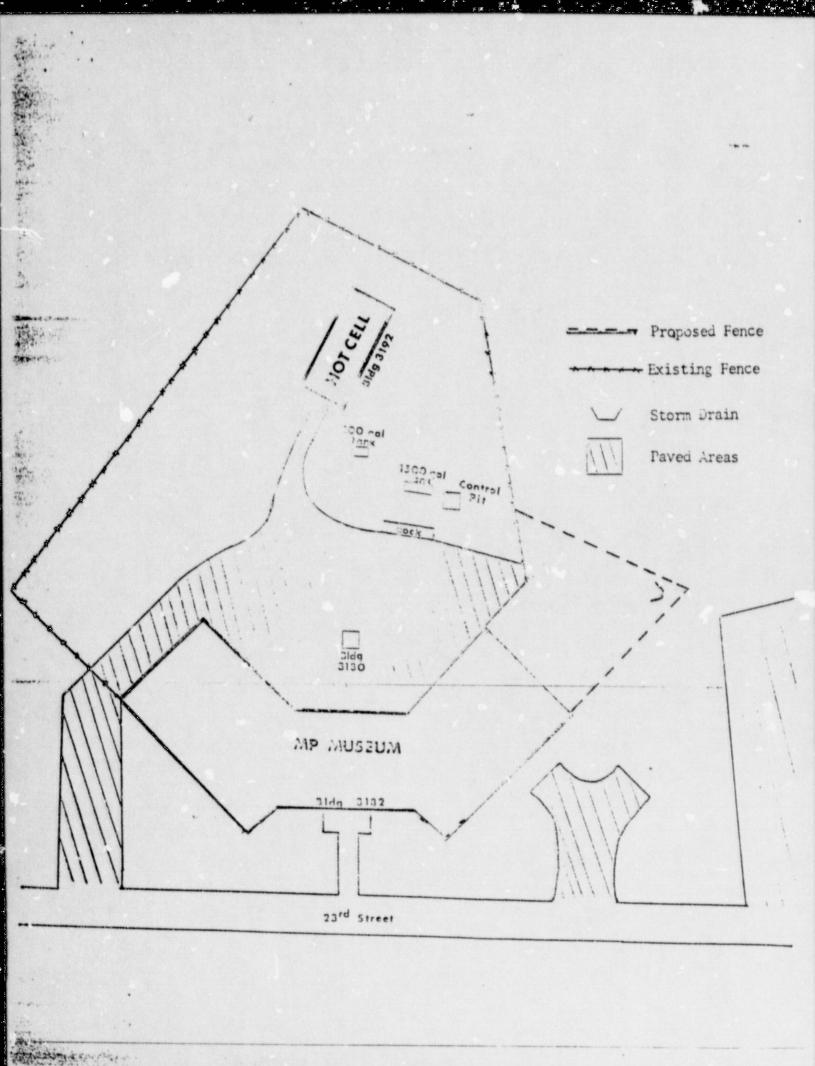
Sincerely,

alan 4. Sord

Alan A. Nord Major General, U.S. Army Commanding

Enclosures

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DEPARTMENT OF THE ARMY U.S. ARMY ENVIRONMENTAL HYGIENE AGENCY ABERDEEN PROVING GROUND, MARYLAND 21010

ILT Scherer/dlc/AUTOVON 584-3502

REPLY TO ATTENTION OF

HSHB-RH/WP

6 FEB 1984

SUBJECT: Radiation Protection Study No. 28-43-0012-84, Hot Cell Contamination, Fort McClellan, Alabama, 1 August 1983

Commander US Army Training and Doctrine Command ATTN: ATMD Fort Monroe, VA 23651

1. AUTHORITY. Letter, ATZN-CM-AH, US Army Chemical School, Fort McClellan, Alabama, undated, subject: Request for Radiation Protection Survey.

2. REFERENCES.

a. AR 385-11. Ionizing Radiation Protection (Licensing, Control, Transportation, Disposal and Radiation Safety), 1 May 1980.

b. Title 10, Code of Federal Regulations (CFR), 1983 rev, Part 20, Standards for Protection Against Radiation.

c. Title 10, Code of Federal Regulations (CFR), 1983 rev, Part 30, Rules of General Applicability to Domestic Licensing of Byproduct Material.

3. PURPOSE. This study was conducted to determine the presence and extent of any health hazards resulting from the ionizing radiation producing contamin. tion in and around Building 3192, Hot Cell, Fort McClellan, Alabama. Further, it was conducted to determine whether residual contamination has spread beyond the boundaries of the controlled area and whether contamination has been released to the water table.

4. GENERAL.

a. Building 3192 and the surrounding, controlled area are licensed under US Nuclear Regulatory Commission (NRC) Byproduct Material License No. 01-02861-04 for the storage of verified cobalt-60 and suspected cesium-137 contamination. The above license expired on 30 September 1983.

b. An entrance interview was held with 1LT Andrew F. Kingery, CmlC, Radiation Protection Officer. An exit briefing was held with COL John D. Spence, CmlC, Assistant Commandant, USA Chemical School. HSHB-RH/WP

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SUBJECT: Radiation Protection Study No. 28-43-0012-84, Hot Cell Contamination, Fort McClellan, Alabama, 1 August 1983

c. The presence and extent of contamination was evaluated by analysis of environmental soil samples taken from the area surrounding the hot cell facility. Radiochemical analysis of the soil samples was provided by the Radiological and Inorganic Chemistry Division (RICD), this Agency. A diagram showing the locations where the soil samples were taken and the results of the soil sample analysis are give in the Inclosure. . 4

d. This study was conducted by 1LT Van R. Scovill, MSC, and 1LT David J. Scherer, MSC, Health Physics Division, this Agency.

e. This study was conducted in conjunction with a Radiation Protection Survey of the US Army Chemical Center and School and Fort McClellan, Alabama, 27 July - 2 August 1983.

5. FINDINGS.

a. <u>Controlled Area</u>. Soil samples taken from the controlled area around Building 3192 were analyzed for cobalt-60 and cesium-137. A review of this analysis indicated the following:

(1) Cobalt-60 and cesium-137 contamination was present on the surface of the controlled area. Concentrations at the points sampled are indicated in the Inclosure. Concentrations ranged from 6.4 to 15 pico-curies per gram (pCi/g) of cobalt-60 and 0.41 to 1 7 pCi/g of cesium-137.

(2) Surfale leaching to a depth of 1 fost had taken place at sample point (SP) 2, near Building 3192, and at SP 6.

(3) Subsurface contamination to a depth of 8 feet was present at SP 6. No contamination was found at 2 feet, indicating that the deeper contamination was not due to surface leaching. A 1500-gallon underground tank is located near SP 6. This tank holds contaminated waler from the decontamination of Building 3192. Leakage from this holding tank is the probable source of subsurface contamination at SP 6. It was noted, however, that SP 5, also in the vicinity of the holding tank, showed no subsurface contamination.

b. <u>Outside Controlled Area</u>. Soil samples taken west of the controlled area around Building 3192 were also analyzed for cobalt-60 and cesium-137. A review of this analysis indicated the following:

(1) - Low-level concentrations were present on the surface of the gully running to the west of the controlled area, indicating that some spreading due to erosion has taken place.

(2) Surface contamination was present next to the concrete apron behind Building 3182, Military Police Corps Museum. Concentrations ranged up to 91 pCi/g of cobalt-60 and 55 pCi/g of cesium-137. HSHB-RH/WP

SUBJECT: Radiation Protection Study No. 28-43-0012-84, Hot Cell Contamination, Fort McClellan, Alabama, 1 August 1983

6. DISCUSSION. The contamination in and arc nd Building 3192 is currently licensed by the NRC. Concentrations of cobalt-60 less than those specified in 10 CFR 30.70 are exempt from requirements for a license; however, there are no exemptions for any concentrations of cesium-137.

7. CONCLUSION. A review of the findings indicated that a potential health hazard existed at Fort McClellan, Alabama, due to spreading of ionizing radiation producing contamination in and around Building 3192. It was specifically determined that contaminants had spread west of the controlled area and had been released below the surface. The following recommendations are provided to alleviate the potential hazards.

8. RECOMMENDATIONS.

a. <u>Controlled Area</u>. Prevent discharge of contaminated water from the 1500-gallon tank in the vicinity of Building 3192 in accordance with 10 CFR 20.301. This can be done in three ways:

(1) Relocate the water and hold it for decay.

(2) Dilute the contaminated water and dispose of it in accordance with 10 CFR 20.303. Concentration and solubility analysis may be requested from RICD, this Agency.

(3) Dispose of the water as radioactive waste in accordance with paragraph 5-81, AR 385-11.

b. Outside Controlled Area.

(1) Extend the fence around the controlled area to include the area west of the concrete apron adjacent to Building 3182 in accordance with paragraph 2-7a, AR 385-11. Consider covering this area with concrete to prevent further spreading due to erosion.

(2) Extend the fence around the controlled area to include the gully area which has verified cesium-137 contamination in accordance with paragraph 2-7a, AR 385-11.

FOR THE COMMANDER:

xest O. Whitlaw

JOSEPH T. WHITLAW, JR Colonel, MSC Director, Radiation and Environmental Sciences

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CF: HQDA (DASG-PSP) Cdr, HSC (HSPA-P) Comdt, AHS (HSHA-IPM) Cdr, DDEAMC (PVNTMED Actv) (2 cy) Cdr, MEDDAC, Ft McClellan (PVNTMED Actv) (2 cy) C, USAEHA-Rgn Div South

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HSHB-RH/WP SUBJECT: Radiation Frotection Study No. 28-43-0012-84. Hot Cell Contamination, Fort McClellan, Alabama, 1 August 1983

Sample Identification	Sample Point	Depth (ft)	Picocurie per Gram Cobalt-60	Standard Deviations Cesium-137
1	1	surface	$\begin{array}{c} (0.28\\ (0.05\\ (0.13\\ (0.09\\ (0.09\\ (0.09\\ (0.09\\ (0.09\\ (0.09\\ (0.18\\ 4.9 \pm 0.23\\ (0.09\\ (0.18\\ 4.9 \pm 0.4\\ (0.21\\ (0.03\\ (0.17\\ (0.05\\ (0.17\\ (0.05\\ (0.17\\ (0.05\\ (0.17\\ (0.05\\ (0.17\\ (0.05\\ (0.16\\ (0.22\\ 1.1 \pm 0.2\\ (0.35\\ (0.22\\ (0.23\\ (0.24\\ (0.17\\ (0.23\\ (0.22\\ 34 \pm 1\\ 1.5 \pm 0.3\\ (0.22\\ 34 \pm 1\\ 1.5 \pm 0.5\\ (0.22\\ 1.5 \pm 0.3\\ (0.22\\ 1.5 $	1.2 + 0.2
2		1 5	(0.05	<0.03
3	1	3	(0.13	<0.12
4	1	4.5	(0.03	<0.02
4	1	6	(0.09	<0.07
6	1	6.5	60.09	<0.09
7	2	surface	15 - 0.7	0.52 + 0.19
8	2	1	0.84 + 0.23	(0.13
9	2	2	(0.09	<0.02
10	2	3	<0.18	<0.09
11	3	surface	4.9 + 0.4	0.41 + 0.14
12	3	1	<0.21	<0.11
13	3	2	10.03	<0.1
14	4	surface	0.91 + 0.17	0.69 . 0.16
15	4	1	(0.19	<0.14
16	4	2	<0.05	<0.02
17	4	3	<0.17	<0.11
18	4	4	<0.05	<0.04
19	4	5	<0.18	<0.'2
20	4	6	<0.07	<0.04
21	4	7	<0.16	<0.15
22	4	8	<0.22	<0.15
23	5	surface	1.1 + 0.2	1.7 ± 0.2
24	5	1	<0.35	<0.16
25	5	2	<0.10	<0.03
26	5	3	<0.17	<0.10
27	5	4	<0.09	(0.09
28	5	5	<0.25	(0.13
29	5	6	<0.23	<0.15
30	5	7	<0.24	20.19
31	5	8	<0.08	(0.08
32	6	surface	0.4 ± 0.4	1.7 ± 0.2
33	6	1	0.54 0.24	10.06
34	0	2	0.07	<0.00
35	0	3	0.00 + 0.21	0 48 . 0 15
36	0	4	3.6 + 0.3	0.22 . 0.15
37	0	2	0.70 - 0.18	0.22 - 0.15
38	D	0	0.75 0.10	(0.20
39	0		0.90 1 0.29	(0.07
40	0	0	2.4 + 0.3	0.67 + 0.16
41	17	Surrace	2.0 + 0.5	0.07
42	7	2	(0.17	(0.13
43	7	5	(0.23	(0.12
45	7	4	<0.22	<0.15
46	â	surface	34 + 1	42 + 1
40	b	surface	35 - 1	42 ± 1 7.1 ± 0.5
48	C	surface surface	91 - 7	55 + 2
49	d	surface	51 7 2	55 ± 2 10 ± 1
50	0	surface	25.04	1.1 + 0.2
51	F	surface	$ \begin{array}{c} 34 \pm 1 \\ 35 \pm 1 \\ 91 \pm 3 \\ 51 \pm 2 \\ 25 \pm 0.4 \\ 3.2 \pm 0.5 \\ 0.10 \end{array} $	1.4 + 0.2
52	g	surface	<0.10	<0.10

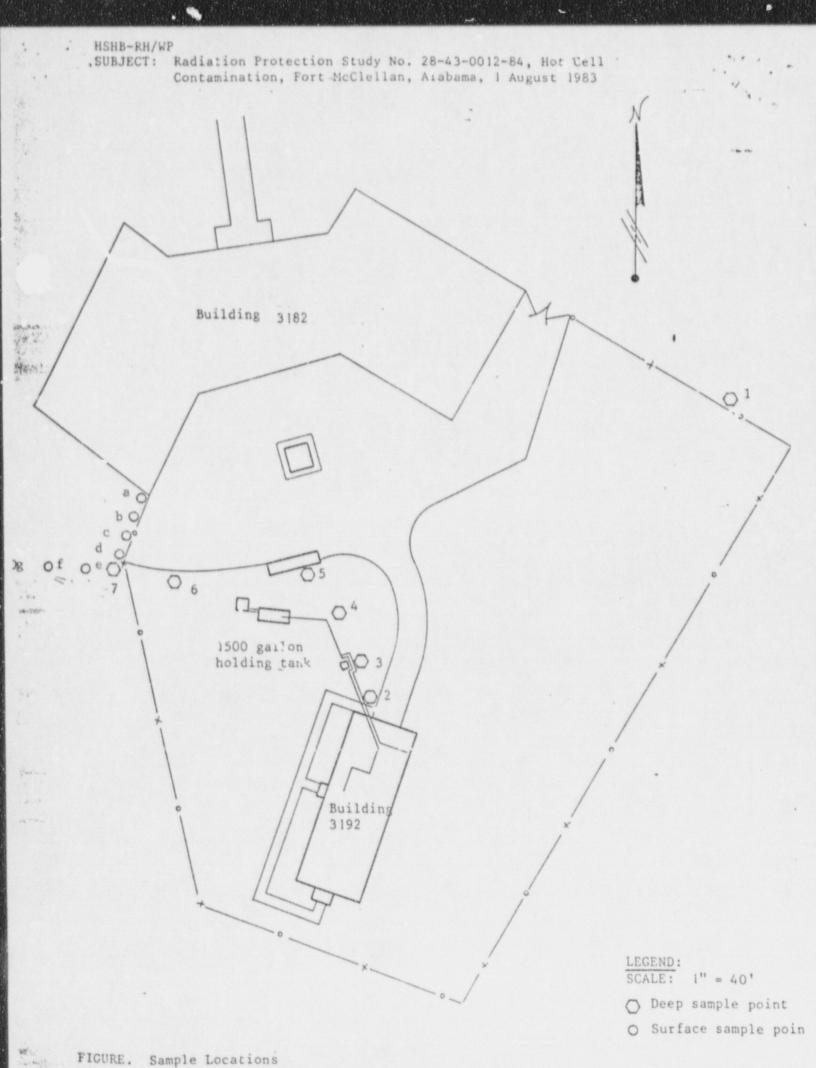
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SOIL SAMPLE AMALYSIS

Chief, Radiological and Inorganic Chief, Radiological and Inorganic

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DEPARTMENT OF THE ARMY

US ARMY CHEMICAL SCHOOL FORT MCCLELLAN, ALABAMA 36205

ATT ATION WI

ATZN-CM-AHP

2 MAR 19F.

SUBJECT: Minutes of the Installation Ionizing Radiation Control Committee

SEE DISTRIBUTION

1. General: The IRCC met at 1430, 23 February 1984, in Building 1060.

a. Members present.

LTC Foster, J.B., USACMLS, Chairperson COL Tipton, J.D., USACMLS LTC(P) Hood, J.P., USAMEDDAC LTC Phillip, J.P., USACMLS CPT Daniels, R.L., USAMEDDAC 1LT Kingery, A.F., USACMLS Dr Choppala, J.D., USACMLS Mr. Meyers, K., USAMEDDAC

b. Others present.

COL Spence, J.D., USACMLS LTC Donovan, C.f., USAMPS CPT Atterbury, J.E., USACMLS Mr. Clark, E.R., DEH

2. Old Business: None.

New Business:

a. LTC Foster opened the meeting by introducing LTC(P) Hood as a new member of the IRCC. The purpose of the meeting was to discuss actions to be taken in response to Radiation Protection Study No. 28-43-0012-84, Hot Cell Contamination, Fort McClellan, Alabama, 1 Aug 83, USA Environmental Hygiene Agency, dated 6 Feb 84 (Encl 1). Copies of the study had been distributed prior to the meeting.

b. ILT Kingery presented to the committee a briefing on US Nuclear Regulatory Commission (USNRC) By-product Material License No 01-02861-04 which licenses residual Cobalt-60 and suspected Cesium-137 contamination at Bldg 3192 (Hot Cell), Bldg 3180 (Storage Shed), and the surrounding area. The license has an expiration date of 30 Sep 83 and a timely renewal was submitted on 30 Jun 83. The license will remain current until USNRC takes action on the renewal.

ATZN-CM-AHP SUBJECT: Minutes of the Installation Ionizing Radiation Control Committee

c. ILT Kingery presented the surface sample results of the contamination study. The presence of Cesium-137 has been verified just outside the west fence of the limited access area (7-55 pCi/gm). There are no maximum limits established by USNRC for Cesium-137. A thirty-day report to USNRC is required by Title 10, Part 20.405(A)(1)(V), Code of Federal Regulations. The study was received on 15 Feb 84. The report to USNRC must contain four paragraphs:

- (1) Exposures to personnel.
- (2) Levels of exposure or contamination.
- (3) Cause
- (4) Corrective actions which have been planned or taken.

The report must be signed by MG Nord.

d. There have been no known personnel exposures as a result of the contamination. The levels of known contamination are in the study.

(1) COL Spence asked how far did the contamination extend beyond the fence. ILT Kingery said that instrument surveys showed that the surface contamination went only six inches or so beyond the limited access area. COL Spence said that a grid survey is required so that the possibility of other hot spots can be excluded.

(2) LTC Phillip asked about other studies that have been performed outside the licensed area. 1LT Kingery reported that Bldg 3182 (MP Museum) had been thoroughly surveyed in 1973. The runoff gullies have been sampled many times. Instrument surveys have been performed along the fence. None of the previous studies have shown contamination outside the licensed area.

e. The cause of the Cesium-137 contamination has not been established. A water runoff study of the paved area was performed in Jan 84. All of the water on the paved area flows to the east, away from the contamination a ong the fence. The most probable cause is that past decontamination efforts may have swept or washed radioactive material off the paved area.

(1) LTC Foster asked if the contamination along the fence was likely to spread. 1LT Kingery reported that there is no evidence of erosion and that there is no significant water runoff in that area. The drain pipes from the MP Museum exit onto the pavement and flow the other way.

(2) COL Spence suggested that it may be easier to dig up the contamination. The depth of the contamination will have to be established.

(3) LTC Donovan said that the MP Museum is planning to open the west wing to the public. He asked if any contamination could get inside the building. ILT Kingery said that Bldg 3182 was cleared by both USAEHA and USNRC in 1973. The possibility of recontamination is remote.

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SUBJECT: Minutes of the Installation Ionizing Radiation Control Committee

(2) The committee recommended establishment of a surface water monitoring program to be coordinated with the Environmental Office and the Health Physics Office.

(3) The committee did not recommend sealing.

(4) The committee did not recommend partial decontamination at this time. However, if the contamination is found to be limited to the surface, the option will be reconsidered.

(5) The committee did not recommend complete decontamination.

h. 1LT Kingery presented the core sampling results to the committee. Low levels of Cobalt-50 contamination (1-3 pCi/gm) were found in one core (No. 6) three to eight feet below the surface, approximately fifteen feet down slope from the underground storage tanks. No subsurface contamination was found at another core sample (No. 7) at the edge of the fence. The cause of the contamination has not been pinpointed, but it appears to be from the underground storage system since no contamination was found at two feet below the surface. No regulatory response is required, however, some type of corrective action should be considered.

i. The committee considered four possible options.

(1) No action is required since the contamination levels are very low. If it is assumed that the source of the contamination occurred in 1973, the flow rate is less than two feet per year. If it is assumed that the direction of flow is down slope, then the subsurface contamination has not migrated off-site.

(a) COL Spence said that additional samples are required to pinpoint the contamination limits and to identify the source.

(b) Mr. Clark stated that the geology in the immediate area of the Hot Cell is not accurately known. The US Geological Survey has been contacted and can provide assistance in siting core samples. The drilling would have to be contracted.

(2) A ground water monitoring program could be initiated to detect and assess any subsurface migration off-site.

(a) Mr. Clark said that the US Geological Survey could assist in siting ground water wells also. It would cost approximately \$1500 for siting and approximately \$800 per well.

(b) COL Tipton asked why no core samples had been drilled adjacent to the underground tanks. ILT Kingery reported that it had been tried, but the tanks were bedded with gravel and drilling is impossible.

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SUBJECT: Minutes of the Installation Ionizing Radiation Control Committee

f. 1LT Kingery presented five corrective actions to be considered by the committee.

(1) Fencing would be the minimum corrective action required. The fence could be built just around the contamination (75 ft.), or it could include the gully and the storm sewer drain (200 ft.).

(a) LTC Donovan said that the MP Museum could move the patrol boat which is at the corner to a new location.

(b) Mr. Clark said that the fencing would cost about \$17 per foot.

(2) Surface water sampling could be performed easily and cheaply. Surface waters on Fort McClellan were sampled in 1981 by USAEHA and no radioactive contamination was found. About eleven sampling locations would be required.

(3) Sealing the contamination in place with concrete would help minimize the possibility of migration.

(a) COL Spence said that his experience was that sealing did not work. The contamination can spread from under the seal, and any decontamination efforts are made more difficult. In addition, the seal doesn't last because any seal will eventually crack, especially when placed on soil.

(b) Dr. Choppala said that a seal would prevent investigation of subsurface spreading.

(4) Partial decontamination might remove the problem entirely. However, if the contamination extends below the surface, digging might compound the problem. Any soil removed would have to be stored and disposed of.

(5) Complete decontamination is an option for the future. An environmental study is being prepared by CPT Atterbury as a student study project for the Chemical Officer's Advanced Course.

(a) COL Spence said that USATHAMA would not place a high priority on this project since the contamination is limited to the installation.

(b) Mr. Clark said that no large scale operations could be considered until an environmental assessment is complete.

g. LTC Foster concluded discussion by calling for a vote on each option discussed.

(1) The committee recommended fencing to encompass the gully and storm sewer drain.

SUBJECT: Minutes of the Installation Ionizing Radiation Control Committee

(3) Removal of the waste water in the 1500 gallon storage tank was recommended by USAEHA.

(a) 1LT Kingery reported that the 100 gallon storage tank is dry and the sludge at the bottom is highly radioactive (3000 pCi/gm). The 1500 gallon storage tank was last sampled in 1977 and the concentrations were low enough for discharge to the sanitary sewage system. 1LT Kingery recommended pumping out the tank using a filter instead of using the existing system. The existing system has not been used in seven years and the piping and pumps are badly corroded.

(b) Mr. Clark said that a Discharge Permit may be needed from the City of Anniston. 1L1 Kingery said that under a Memorandum of Understanding between the Environmental Protection Agency and USNRC no permit is required. USNRC's office in Atlanta will provide a written interpretation if asked.

(c) COL Spence said that there is no evidence that the 1500 gallon tank is the source of the contamination.

(d) Temporary storage and disposal were discussed and discarded because of cost considerations.

(4) Decontaminating the entire underground system was discussed and discarded because that option would amount to decontaminating the entire area.

j. LTC Foster concluded discussion by calling for a vote on each option discussed.

(1) The committee did not recommend taking no action and agreed that some plan should be forwarded to USNRC.

(2) The committee recommended that the US Geological Survey be contacted to provide siting assistance for core sampling and ground water monitoring wells.

(3) The committee recommended that additional core samples be taken and that ground water monitering wells should be established.

(4) The committee did not recommend discharging the water from the 1500 gallon storage tank.

(5) The committee did not recommend decontamination.

k. LTC Foster directed lLT Kingery to write a decision paper and a thirty day report reflecting the committee recommendations for MG Nord's signature. The committee agreed that LTC Foster would represent the IRCC during coordination.

SUBJECT: Minutes of the Installation Ionizing Radiation Control Committee

4. There being no further business, the IRCC meeting was adjourned.

ANDREW F. KINGERY

1LT, Cm1C Committee Secretary

Recommend approval:

JOE B. FOSTER

LTC, CmlC Chairperson

APPROVED .

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ROBERT B. LANDER Colonel, GS Chief of Staff

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DEPARTMENT OF THE ARMY US ARMY CHEMICAL CENTER AND SCHOOL Fort McClellan, Alabama 36201

ATSCM-HP

18 May 1973

MINUTES OF RADIATION SAFETY COMMITTEE MEETING

GENERAL.

a. Date: 17 May 73

1300 hours b. Time:

Place: Main Conference Room, USACMLCS C.

d.

Members Present: COL Simonson, Asst Comdt, Chairman LTC Roark, DOI & Res Instr Dept LTC Hodges, Dir, Ofc of Log LTC Foster, Tech Gp MAJ Wickstrom, C, HPD, Secretary MAJ Hall, Rad Con LTJG Adler, NAVTRAU Mr. Daniel, Centor Safety Manager

e. Members Absent: MAJ Wagner, Radiologist, NAH

f. Visitors: None

Regular Quarterly Meeting g. Purpose:

USACMLCS Memo 385-2 h. Authority:

2. OLD BUSINESS.

a. Minutes of the Radiation Safety Committee Meeting of 20 March 1973 were approved as written.

b. Secretary's Report:

(1) Work on decontamination is now 99% complete. There are a few spots that still need cleaning up. The Hot Cell is complete. There is still some documentation to be done, which will be passed on to Mr. Daniel. The Engineers are working on the remaining 1%. This is waste that is being placed in the last of the 75 waste drums. They will be sealed tomorrow, with possibly one or two left open for any last-minute decontamination waste.

(2) After the inspectors were here and the inspection report was disseminated to DA level, Mr. Fagan of DALO-MAS-I stated that we should submit a license to cover the residual contamination. This was about

10 millicuries. The residual waste is located in the Hot Cell, the waste disposa? tanks, and in the storage well that is filled with concrete. The request was submitted on 4 May 1973, with Mr. Daniel as project officer in the name of the Post Commander.

(3) We have requested that our three existing licenses be cancelled 24 June 1973. However, a TWX from DA indicates that they will not consider cancelling them until we tell them that no radioactive material remains; which will be approximately 25 May 73, after all radioactive items are shipped. We will TNX DA at that time and ask them to reconsider our termination of licenses.

3. NEW BUSINESS. a ENS William Wright was unanimously approved as a CAT II RSP.

b. The Naval Training Unit, Center Safety Manager, and Technical Group, members of the Committee, stated they felt that the Secretary of the Committee and SSG Truffa have done an outstanding job in the radiological decontamination and other Health Physics actions in preparation for the disestablishment of the USACMLCS.

c. The Committee voted to disestablish itself as presently constituted effective with the closing of the USACMLCS, 24 June 1973.

4. Meeting was adjourned at 1315 hours, 17 May 1973.

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KATHY J. HEATH Recorder

CHARLES J. WICKSTROM MAJ, Cm1C Secretary

RECOMMEND APPROVAL:

APPROVED:

EUGENE M. SIMONSON COL, CmlC Chairman

JACK VANDERBLEEK COL, Cm1C Commandant

Asst Comdt; DOI; DRI; C, HPD_(3); C, Tech Gp; C, Rad Com; Dir, Ofc of Log; Radiologist, NAH; Cdr, Nav Tng U; Cen Saf Mgr.

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DEPARTMENT OF THE ARMY U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE 5158 BLACKHAWK ROAD ABERDEEN PHOVING GROUND, MARYLAND 21010-5422

REPLY TO ATTENTION OF

MCHB-DC-OIP (40)

2 8 MAR 1997

MEMORANDUM FOR Commander, U.S. Army Environmental Center, ATTN: SFIM-AEC-ETD (Mr. Hutchins), Aberdeen Proving Ground, MD 21010-5401

SUBJECT: Industrial Radiation Study No. 27-MH-0987-R1-96, Iron Mountain & Rattlesnake Gulch Sites, Fort McClellan, AL, 27 February - 15 March 1995

1. Copies of subject report with Executive Summary are enclosed. Findings and a recommendation for release of the Iron Mountain and Rattlesnake Gulch areas for unrestricted use are provided.

2. A copy of the Executive Summary only is being furnished to the U.S. Army Medical Command, ATTN: MCHO-CL-W.

FOR THE COMMANDER:

Encl

HARRIS EDGE

Program Manager Industrial Health Physics

CF:

CDR, MEDCOM, ATTN: MCHO-CL-W (EXSUM Only)

Readiness thru Health