CIMARRON CORPORATION LETTER OF TRANSMITTAL

DATE :12/21/01

TO: Mr. Ken Kalman
Enivronmental Scientist
United States Nuclear Regulatory Commission
Office of Nuclear Material Safety and Safeguards
Washington, , D.C. 20555-0001

FROM: LaVonna Smith, Quality Assurance Coordinator
Cimarron Corporation
P.O. BOX 315
Crescent, OK 73028

☐ First Class Mail ☐ Internal ☐ Overnight--UPS
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COPY NO.	DATE	DESCRIPTION
1	12/21/01	Cimarron Corporation Reply to Notice of Violation Docket No.: 70-925 License No.: SNM-928

These are transmitted as checked below:

☐ For Approval ☐ Approved as submitted ☐ For your use
☐ As requested ☐ Returned for corrections ☐ Return ____ corrected prints
☐ Disapproved ☐ For review and comment ☐ Controlled copy

REMARKS: The above item(s) is for your use. Please sign and return transmittal letter.

NOTE:

SIGNATURE: LaVonna Smith

ACKNOWLEDGMENT OF RECEIPT *PLEASE RETURN ONE SIGNED COPY TO SENDER*

I HAVE RECEIVED THE DOCUMENTS IDENTIFIED ABOVE AND THE PRIOR REVISIONS OF THESE HAVE BEEN DESTROYED N/A

PRINTED NAME OF RECIPIENT: Ken Kalman

SIGNATURE OF RECIPIENT: Ken Kalman

DATE RECEIVED: 12/27/01

If enclosures are not noted, kindly notify Cimarron Corporation at once.

CIMARRON CORPORATION

P.O. BOX 25861 • OKLAHOMA CITY, OKLAHOMA 73125

December 19, 2001

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Re: Reply to a Notice of Violation
Docket No. 70-925; License No. SNM-928

This letter responds to the notice of violation transmitted to Cimarron Corporation by letter from Mr. Dwight D. Chamberlain dated November 26, 2001. As requested, please find attached the following: (1) the reason for the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved.

1. Reason for the Violation
The NRC notice of violation states that Cimarron Corporation implemented a program change by eliminating the use of thermoluminescent dosimeters (TLDs) to monitor ambient radiation without NRC or ALARA Committee approval. Discussions regarding the discontinuance of TLD monitoring are documented in Cimarron ALARA Committee meeting minutes beginning in June, 2000. Documentation for the change to the Cimarron Radiation Protection Plan in accordance with License Condition 27(e) was not in our files at the time of the NRC inspection.

2. Corrective Steps that have been taken and the Results Achieved
Cimarron Corporation initiated a Nonconformance Report under its quality assurance program to identify the NRC identified item immediately after it was brought to the attention of Cimarron personnel during the NRC inspection. The Nonconformance Report, initiated July 31, 2001, is provided as Attachment 1 to this letter. The Nonconformance Report provides details concerning the violation, including a License Condition 27(e) evaluation. The Cimarron ALARA Committee discussed the Nonconformance Report during its September 20, 2001 meeting. Full compliance with this issue was achieved on August 13, 2001 as documented by the close out section of the Nonconformance Report.

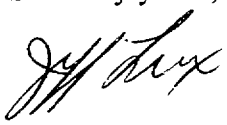
3. Corrective Steps that will be taken to Avoid Further Violations
The NRC Notice of Violation will be placed on the next agenda of the Cimarron ALARA Committee. Discussion will include the Notice of Violation, this letter of response, and any additional actions that the ALARA Committee deems are

warranted to assure that full compliance with license conditions is achieved at all times.

4. Date when Full Compliance will be Achieved
   The attached Nonconformance Report documents that full compliance regarding this violation was achieved on August 13, 2001.

Please feel free to contact me if there are any questions or concerns.

Sincerely yours,



Jeff Lux
Manager, Planning and Regulatory Compliance
Kerr-McGee Corporation

Attachment

cc: Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV;
Kenneth L. Kalman, U.S. Nuclear Regulatory Commission

NONCONFORMANCE REPORT

NCR/ROR NO. 21003	INITIATOR K. Morgan
BUILDING/AREA: N/A	SWP OR PROCEDURE INVOLVED: KM-CI-RP-43, *Environmental Monitoring* RPP (Annex A)
SUBCONTRACTOR NAME/ADDRESS N/A	NONCONFORMANCE TYPE: ■ RADIOLOGICAL OCCURANCE REPORT □ INSPECTION □ OTHER

DESCRIPTION OF NONCONFORMANCE/ RADIOLOGICAL OCCURANCE

Site TLD monitoring discontinued 3-31-01 upon closure of On-Site Disposal Cell. LC 27(e) Change Evaluation was not finalized prior to discontinuance of monitoring and revision of KM-CI-RP-43 and Annex A.

10 CFR Part 21 Reportable □ Yes ■ No

RSO Karen Morgan Date 7/31/01

Note: If yes, 10CFR Part 21 Evaluation Report (QA/QC-072) is required.

DISPOSITION, JUSTIFICATION & INSTRUCTIONS

1) ALARA Committee approved the discontinuance of site-wide TLD monitoring upon closure of On-Site Disposal Cell. Action Item #13, ALARA Committee Meeting of June 22, 2000, Meeting Minutes attached.
2)On-Site Disposal Cell closure & de-posting memo dated March 30 attached.
3)Letter to U.S. Dosimetry cancelling TLD order dated April 4, 2001 attached.
4) L.C. 27(e) change evaluation performed. Annex A and Procedure KM-CI-RP-43 revisions attached.

SIGNATURE: Karen Morgan
DATE: 7/31/01

DISPOSITION EFFECTED AS REQUIRED AND VERIFIED: ■ YES □ NO

SIGNATURE: LaVonna Smith
DATE: 8-2-01

CORRECTIVE ACTION REQUIRED?
□ YES, CAR NO. ■ NO, COMPLETE CLOSE-OUT SECTION.

CLOSE OUT:

LaVonna Smith 8/9/01
QUALITY ASSURANCE COORDINATOR DATE

Karen Morgan 8/10/01
HEALTH PHYSICS SUPERVISOR DATE

S Jess Jensen
SITE MANAGER

DATE: 8/13/01

DISTRIBUTION: ACTION: INFORMATION:

15.0 ENVIRONMENTAL MONITORING

15.1 Section Overview

Environmental monitoring shall be performed at the controlled area boundary and at various locations outside of the restricted areas to ensure that the conditions of Cimarron's radioactive materials license and all applicable regulations are complied with. This program will be modified as decommissioning activities reduce the potential for exposure to the general public. The following sections describe the environmental monitoring program that is currently in place.

15.2 Surface Water Monitoring

Surface water samples are collected annually and are analyzed for Fluoride, NO_3 (as N), gross alpha, gross beta. Additional analysis for isotopic uranium is performed if the gross alpha action level of 15 pCi/L or gross bets action level of 20 pCi/l is exceeded. Analysis for Tc-99 shall be performed if the gross beta to gross alpha ratio exceeds 3:1 and gross beta exceeds 30 pCi/L. Sampling locations and analyses are summarized in Table 15-1. Figure 15- 1 shows the sampling locations. The RSO notification action level (see Section 15.8) for surface water is 50 percent of the effluent concentration limit found in Appendix B to 10 CFR 20.

15.3 Ground Water Well Monitoring

Ground water well samples are collected annually and are analyzed for the same constituents as given above for surface water. Additional analysis for isotopic uranium is performed if the gross alpha action level of 15 pCi/L or gross beta action level of 20 pCi/l is exceeded. Analysis for Tc-99 shall be performed if the gross beta to gross alpha ratio exceeds 3:1 and gross beta exceeds 30 pCi/L. Sampling locations and analyses are summarized in Table 15-1. Figure 15-2 shows the ground water sampling locations. The RSO notification action level (see Section 15.8) for ground water is 50 percent of the effluent concentration limit found in Appendix B to 10 CFR 20.

~~15.4 Ambient Radiation Monitoring~~

~~Thermoluminescent Dosimeters (TLD's) are currently posted throughout the facility and at boundaries to monitor potential exposures to individuals in unrestricted areas. Badges are changed quarterly, with an action level of 20 mrem (above background) per quarter. Quarterly measurements exceeding the action level shall be evaluated and actions performed in accordance with Section 15.8. Locations and analyses are summarized in Table 15-1. Figure 15-3 shows the locations where badges are currently placed.~~

15.45 Samples Exceeding Action Levels

Immediate notification shall be made to the RSO of any samples or doses exceeding action levels. In the event that sample analytical results exceed action levels, the RSO shall perform an investigation consisting of one or more of the following actions, as appropriate.

- Verification of laboratory data and calculations;
- Analyze and review probable causes;
- Evaluate the need for sample re-analysis or additional analysis;
- Evaluate the need for re-sampling;
- Evaluate the need for sampling of other environmental pathways;
- Evaluate the need for notifications to regulatory agencies;
- Evaluate the need to perform dose assessment.

Notifications and reports shall be made to the NRC in accordance with 10 CFR §20.2202 and §20.2203 when necessary based upon the above evaluation.

15.56 Laboratory and Environmental Monitoring Program Quality Control Requirements

Laboratory counting performed for purposes of environmental or effluent stream monitoring should comply with the requirements of U.S. NRC Regulatory Guide 4.15. Laboratory minimum detectable limits shall be less than or equal to 50 percent of the action levels for all environmental media.

15.67 Records

Records of environmental monitoring data shall be kept indefinitely after license termination until they are determined to be of no further use by management. The minimum time period for record retention shall be ten years after termination of the licenses.

15.78 Quality Control in Sampling

Steps should be taken to ensure that samples collected are representative of the material sampled. Sample integrity should be maintained from the time of collection to time of analysis. Cimarron shall utilize sample chain of custody documentation to track environmental samples sent to off-site laboratories for analysis.

Quality control records for laboratory counting systems shall include the results of measurements of radioactive check sources, calibration sources, backgrounds, and blanks.

15.~~8~~9 Reference Standards

All standards used for calibration of laboratory equipment shall be NIST traceable when such standards are available.

15.~~9~~10 Performance Checks of Radiation Measurement Systems

Scheduled checks should be performed on laboratory equipment to determine background counting rate and response to check sources. Corrective actions shall be taken whenever measurement values fall outside of predetermined control values. Background counting should normally be performed daily or before each use. Check source measurements are usually measured daily or with each batch of samples counted on automated equipment.

15.~~10~~1 Calculations and Computations

Calculations and computations used in determining concentrations of radioactive materials shall be independently checked prior to implementation. The calculations shall be proceduralized and implemented in accordance with quality assurance requirements for procedure development.

15.~~11~~2 Audits

Periodic audits shall be made of the laboratory and environmental monitoring program to verify implementation of the quality assurance program. Audit results shall be documented and follow-up actions taken when required.

TABLE 15-1
CIMARRON FACILITY ENVIRONMENTAL SAMPLING SCHEDULE

Location	Description	Frequency	Analysis	Action Level
	SURFACE WATER			
1201	Cimarron River - Upstream	(Annually)	F	None
1202	Cimarron River - Downstream		NO_3	None
1204	Pond - West of Plant		Gross Alpha	15 pCi/l
1205	Kerr-McGee Lake - East		Gross Beta	20 pCi/l
1206	Slough - NW of Incinerator			
1208	Stream North of Uranium Pond #2			
1209	Kerr-McGee Lake - West			
	GROUNDWATER WELLS			
1311	Monitor Well - South of Landfill	(Annually)	F	None
1312	Monitor Well - West of Landfill		NO_3	None
1313	Monitor Well - North of Landfill		Gross Alpha	15 pCi/l
1314	Monitor Well - South of Burial Pit		Gross Beta	20 pCi/l
1315	Monitor Well - North of Burial Pit			
1317	Monitor Well - North of Burial Pit			
1319	Monitor Well - U Plant Yard East of Building			
1320	Monitor Well - North of Designated Area			
1321	Monitor Well - North of Designated Area (deep)			
1322	Monitor Well - By Flammable Liquid Storage Pad			
1323	Monitor Well - By Flammable Liquid Storage Pad (deep)			
1324	Monitor Well - East of Designated Area			
1325	Monitor Well - South of Designated Area			
1326	Monitor Well - East of U-Plant Yard			
1327B	Monitor Well - West of U-Plant Yard			
1328	Monitor Well - South of U-Plant Yard (deep)			
1329	Monitor Well - South of U-Plant Yard			
1330	Monitor Well - Southwest of U-Plant Yard			
1331	Monitor Well - Northeast of Pu-Plant Yard			
1332	Monitor Well - West of Sanitary Lagoons (deep)			
1333	Monitor Well - West of Sanitary Lagoons			
1334	Monitor Well - North of Sanitary Lagoons			
1335A	Monitor Well - West of Designated Area			
1336A	Monitor Well - North of U Pond #2			

* See applicable section of Radiation Protection Plan for specific requirements when action level is exceeded.

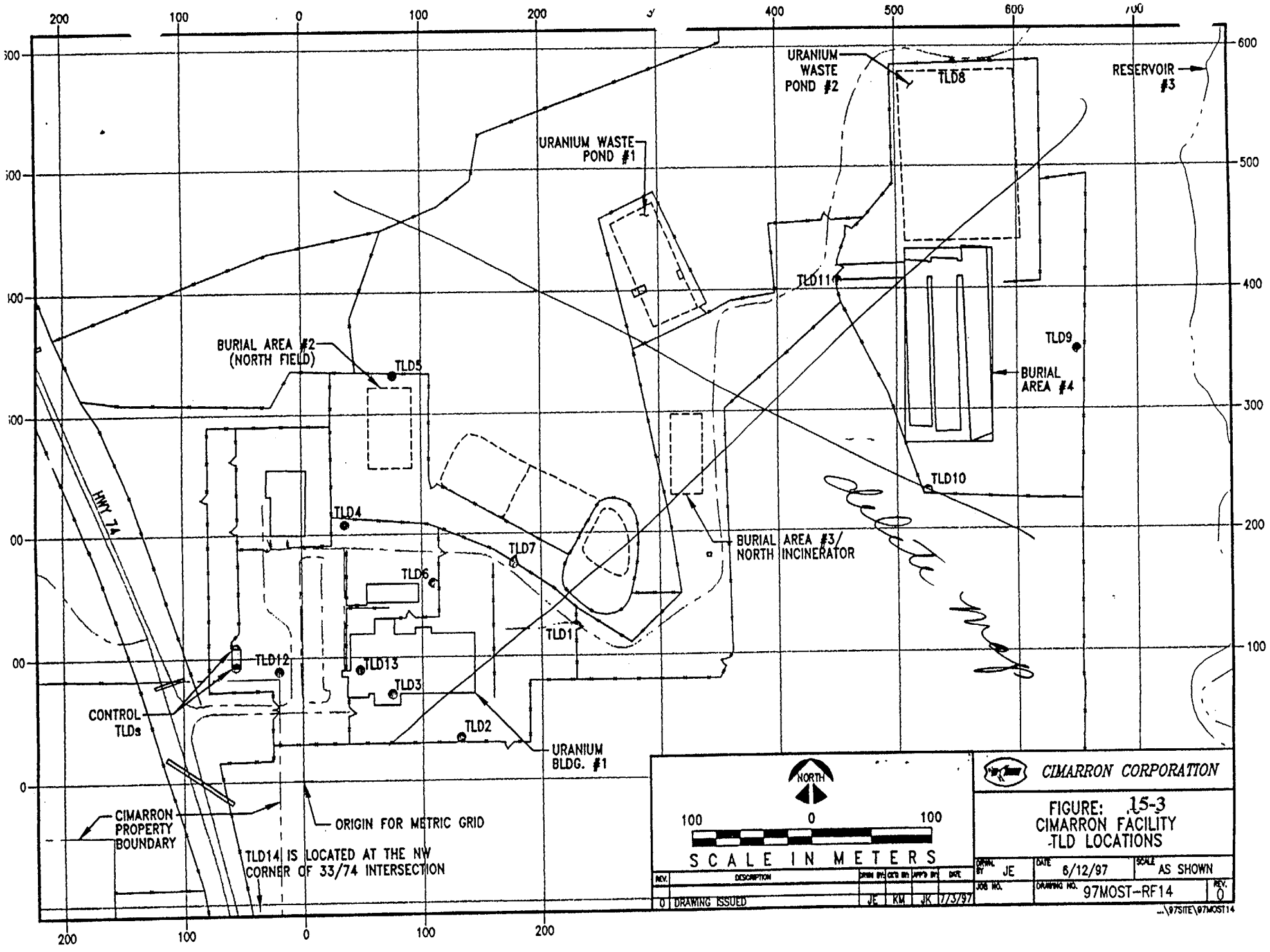
~~TABLE 15-1 (continued)~~

~~CIMARRON FACILITY ENVIRONMENTAL SAMPLING SCHEDULE~~

Location	Description	Frequency	Analysis	Action Level
	~~AMBIENT GAMMA~~			
~~TLD01~~	~~N.E. U Yard Fence~~	~~Quarterly~~		~~**20 mR/quarter above background~~
~~TLD02~~	~~South U Yard Fence~~			
~~TLD03~~	~~U Plant Bldg. South Side~~			
~~TLD04~~	~~East Pu Fence~~			
~~TLD05~~	~~North Pu Fence~~			
~~TLD06~~	~~West Pu Fence~~			
~~TLD07~~	~~N. U Yard Fence~~			
~~TLD08~~	~~N. Designated Area Burial Cell Fence~~			
~~TLD09~~	~~E. Designated Area Burial Cell Fence~~			
~~TLD10~~	~~S. Designated Area Burial Cell Fence~~			
~~TLD11~~	~~W. Designated Area Burial Cell Fence~~			
~~TLD12~~	~~Highway Marker #1~~			
~~TLD13~~	~~U Plant Count Room~~			
~~TLD14~~	~~Intersection Routes 33/74~~			

~~* See Applicable section of Radiation Protection Plan for specific requirements when action level is exceeded.~~

~~** Typical ambient Gamma background is approximately 15mR/quarter.~~


URANIUM WASTE POND #2
TLD8
RESERVOIR #3
URANIUM WASTE POND #1
TLD11
TLD9
BURIAL AREA #4
BURIAL AREA #2 (NORTH FIELD)
TLD5
TLD10
HWY 74
TLD4
TLD7
BURIAL AREA #3/ NORTH INCINERATOR
TLD6
TLD1
TLD12
TLD13
TLD3
CONTROL TLDs
TLD2
URANIUM BLDG. #1
CIMARRON PROPERTY BOUNDARY
ORIGIN FOR METRIC GRID
TLD14 IS LOCATED AT THE NW CORNER OF 33/74 INTERSECTION
NORTH
100 0 100
SCALE IN METERS
CIMARRON CORPORATION
FIGURE: 15-3
CIMARRON FACILITY
TLD LOCATIONS
DRWN BY JE
DATE 6/12/97
SCALE AS SHOWN
JOB NO.
DRAWING NO. 97MOST-RF14
REV. 0
REV. DESCRIPTION DRWN BY CK'D BY APP'D BY DATE
0 DRAWING ISSUED JE KM JK 7/3/97
...\97SITE\97MOST14

2

Morgan, Karen

From: Morgan, Karen
Sent: Friday, March 30, 2001 2:44 PM
To: Larsen, Jess
Cc: Smith, Lavonna
Subject: Deposting of On-Site Disposal Cell

Jess,

Harold said the first 6 1/2' of clay barrier has been installed and they are continuing on Lift 7. He performed surveys of the road and entrance area into the cell and all were at background levels. We will begin deposting the RMA Monday morning and this area will become an unrestricted area.

Karen

CIMARRON CORPORATION

P.O. BOX 25861 • OKLAHOMA CITY, OKLAHOMA 73125

P.O. Box 315, Crescent, OK 73028

April 4, 2001

David Mallory
United States Dosimetry Technology, Inc.
660A George Washington Way
Richland, WA 99352

Re: KEA

Dear Mr. Mallory:

Enclosed for processing are the first quarter TLDs, and the personnel and area film badges.

Cimaron is nearing the end of the decommissioning process. Due to closure of several radioactive material areas, we are canceling the order for TLD's and area film badges. We are returning unused those films and TLD's for the second quarter. We plan continued use of the personnel film badges and visitor film badges through the end of 2001 and possibly into 2002.

Attached is the order form for the next quarter. If you have any questions, please contact me.

Sincerely,

Karen Morgan

Karen Morgan
Radiation Safety Officer
(405)282-2935 **site**
(918)225-8624 **cell phone**

CIMARRON CORPORATION
CIMARRON FACILITY

September 11, 2000

COMPLIANCE WITH DOSE LIMITS FOR THE PUBLIC (20.1302)

Micro-R surveys are performed quarterly to establish levels at the restricted area boundaries. These along with the air monitoring results and TLD results shall determine doses to hypothetical individuals at the facility boundary. Current results for restricted area fenceline TLD's indicate that approximately 60 mrem per year, including background, will be received at the restricted perimeter TLD locations. Using the established site background of 7μR per hour, approximately 60 mR per year are due to background, leaving approximately 10 mR per year due to the facility.

As long as airborne concentrations average less than the effluent concentration limits of 10 CFR 20 Appendix B (6 E-14 μCi/mL for U-238), doses due to this pathway will be below 50 mrem per year (maximum). Thus the TEDE to the maximally exposed individual can be said to be below the sum, or 60 mrem per year, based on this projection.

Based on fenceline TLD's, quarterly micro-R surveys and established site background of 7 μR/hr, exposure to the public is maintained at less than 100 millirem per year.

1999 ANNUAL FENCELINE TLDS

TLD ID LOCATION	FIRST QTR mrem/wk	SECOND QTR mrem/wk	THIRD QTR mrem/wk	FOURTH QTR mrem/wk	AVERAGE mrem/wk
AM001	1.82	1.17	1.56	1.12	1.42
AM002	1.72	1.12	1.48	1.41	1.43
AM004	2.13	0.96	1.93	1.09	1.53
AM005	1.72	1.38	2.08	1.34	1.63
AM006	1.65	0.87	1.48	0.96	1.24
AM007	1.81	1.00	1.65	0.76	1.31
AM008	1.76	0.92	1.69	1.07	1.36
AM009	1.67	0.99	1.72	0.86	1.31
AM010	1.70	0.83	1.69	0.85	1.27
				TOTAL AVG	1.39

(1.39 average mrem/wk) (52 weeks)	=	72.28 mrem/year
Less site background average of 7μR/hr	=	- 61.32 mrem/year
Net average dose		10.96 mrem/year

Net average of 11 mrem/year at restricted area TLD locations for public exposure.

Karen Morgan

Karen Morgan

CC: ALARA Committee

2001 CIMARRON FACILITY AREA TLD RESULTS		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
TLD	LOCATION	mrem/wk	µR/hr	mrem/wk	µR/hr	mrem/wk	µR/hr	mrem/wk	µR/hr
AM001	U-YARD - NE FENCE	0.98	5.83	0.00	0.00	0.00	0.00	0.00	0.00
AM002	U-YARD - S FENCE	0.90	5.36	0.00	0.00	0.00	0.00	0.00	0.00
AM003	U-BLDG - S I-BEAM	0.70	4.17	0.00	0.00	0.00	0.00	0.00	0.00
AM004	PU - E FENCE	1.26	7.50	0.00	0.00	0.00	0.00	0.00	0.00
AM005	BG 2 - N FENCE	0.91	5.42	0.00	0.00	0.00	0.00	0.00	0.00
AM006	Ti02 - E FENCE	0.62	3.69	0.00	0.00	0.00	0.00	0.00	0.00
AM007	U-YARD - N FENCE	0.96	5.71	0.00	0.00	0.00	0.00	0.00	0.00
AM008	DAC - N FENCE	0.86	5.12	0.00	0.00	0.00	0.00	0.00	0.00
AM009	DAC - E FENCE	1.19	7.08	0.00	0.00	0.00	0.00	0.00	0.00
AM010	DAC - S FENCE	0.88	5.24	0.00	0.00	0.00	0.00	0.00	0.00
AM011	DAC ENTRANCE	1.11	6.61	0.00	0.00	0.00	0.00	0.00	0.00
AM012	HWY MARKER #1	2.04	12.14	0.00	0.00	0.00	0.00	0.00	0.00
AM013	COUNT ROOM AREA	0.45	2.68	0.00	0.00	0.00	0.00	0.00	0.00
AM014	SOUTH EAS POLE	1.02	6.07	0.00	0.00	0.00	0.00	0.00	0.00

TLD MONITORING DISCONTINUED AFTER 1ST QUARTER 2001.

2000 CIMARRON FACILITY AREA TLD RESULTS		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
TLD	LOCATION	mrem/wk	µR/hr	mrem/wk	µR/hr	mrem/wk	µR/hr	mrem/wk	µR/hr
AM001	U-YARD - NE FENCE	1.28	7.62	0.33	1.96	1.10	6.55	1.43	8.51
AM002	U-YARD - S FENCE	1.39	8.27	2.22	13.21	0.95	5.65	1.66	9.88
AM003	U-BLDG - S I-BEAM	1.22	7.26	0.22	1.31	0.66	3.93	0.78	4.64
AM004	PU - E FENCE	1.61	9.58	0.60	3.57	1.15	6.85	1.24	7.38
AM005	BG 2 - N FENCE	1.86	11.07	1.00	5.95	1.03	6.13	1.27	7.56
AM006	Ti02 - E FENCE	1.73	10.30	0.63	3.75	0.93	5.54	1.17	6.96
AM007	U-YARD - N FENCE	1.60	9.52	0.94	5.60	1.02	6.07	1.24	7.38
AM008	DAC - N FENCE	1.59	9.46	0.79	4.70	0.85	5.06	1.18	7.02
AM009	DAC - E FENCE	1.85	11.01	0.96	5.71	0.95	5.65	1.30	7.74
AM010	DAC - S FENCE	LOST	0.00	0.43	2.56	1.04	6.19	1.00	5.95
AM011	DAC ENTRANCE	1.71	10.18	0.96	5.71	1.09	6.49	1.28	7.62
AM012	HWY MARKER #1	1.67	9.94	0.70	4.17	2.85	16.96	2.17	12.92
AM013	COUNT ROOM AREA	1.21	7.20	0.16	0.95	0.54	3.21	0.73	4.35
AM014	SOUTH EAS POLE	1.82	10.83	0.44	2.62	1.14	6.79	1.15	6.85

→ See #13 For discontinuance of TLD monitoring - Action Item.

MEMORANDUM June 23, 2000

To: ALARA Committee
From: Karen Morgan
Subject: 2nd Quarter ALARA Committee Meeting Minutes
cc: Distribution

The ALARA Committee meeting was called to order by Mrs. Morgan at 2:00 PM CST on June 22, 2000. Mr. Jess Larsen, Mr. Keith Bailey, Mrs. Karen Morgan, Mrs. Jo Johnson, Mrs. LaVonna Smith, Mr. Harold Gay, Mr. Will Rogers, Mr. Rick Callahan, Mr. Steve Marshall, Mr. Harry Newman and Mr. Richard Sauer were present. Mr. Harry Newman and Mr. Richard Sauer were present via telephone. Action items are summarized below:

1. **Discussion/Approval of Meeting Minutes for October 15, 1999**
   - Mrs. Morgan initiated the ALARA Committee meeting by reviewing the meeting minutes from the previous ALARA Committee Meeting. Mrs. Morgan motioned to accept the minutes. Mr. Larsen seconded the motion and the Committee accepted the minutes.

2. **Status of Action Items from the Previous ALARA Committee Meeting**
   - LC 27(e) Procedure – Notification made to NRC via submittal for Calendar Year 1999
   - RPP Revisions – Completed for Sections 1 through 5.

3. **Status Update on License / Decommissioning Issues**
   - Mr. Newman presented an update as follows:
     Subareas A, B, C, D, E – Released from license.
     Subarea F – Not an RMA. Ongoing work to characterize groundwater near Burial Area #1. FSSR for concrete submitted.
     Subarea G – Final Status Survey Report submitted for area in October, 1999. Subarea meets release criteria and therefore is NOT designated as an RMA.
     Subarea H – Final Status Survey Report submitted for area in November, 1998. Subarea meets release criteria and therefore is NOT designated as an RMA.
     Subarea I – Final Status Survey Report submitted for area in June, 1999. The FSSR recognizes that trailer areas will be surveyed prior to license release. The soil counting room will remain as an RMA. All other areas within the Subarea meet the release criteria and therefore RMA declassification for these areas is warranted. Certain areas within Subarea I are already NOT classified as RMAs (e.g., office areas and areas west of Subarea K and L).
     Subarea J – Subarea released from license.
     Subarea K - Final Status Survey Report submitted for area in February, 2000. Subarea meets release criteria and therefore RMA declassification is warranted.
     Subarea L - Final Status Survey Report submitted for area in July, 1998. Subarea meets release criteria and therefore RMA declassification is warranted.
     Subarea M - Final Status Survey Report submitted for area in December, 1998. Subarea meets release criteria and therefore RMA declassification is warranted.
     Subarea N – Proposed change will remove RMA classification from areas not associated with the Onsite Disposal Cell. Areas to remain as RMA bounded by the existing fences along the eastern and southern sides of Subarea N, Area bounded by Subarea O Waste Pond #2 to the North, and the "keyway" to the disposal area at approximately 450 East. Of 3318 surface and depth samples measured in Subarea N areas to be re-classified, the range was 1-45 pCi/g total

U, average 8 pCi/g. All hot-spots will meet the averaging criteria (<30 pCi/g total U). Exposure rates in areas to be reclassified range from 5-13 μR/h and average 9 μR/h. Roadway surfaces to be reclassified ranged from 1-46 pCi/g total U with an average of 7 pCi/g. Roadway surface exposure rates ranged from 7-10 μR/h and averaged 9 μR/h. The areas proposed for release meet the release criteria and therefore RMA declassification is warranted.
Subarea O – Final Status Survey Report submitted for area surfaces in February, 1999. Subarea O has been released from the license and therefore RMA classification is NOT warranted.

Mr. Larsen also described several questions received from Mr. Kalman during a recent conversation on closure of the On-site Disposal Cell. Mr. Kalman asked; 1) If Cimarron planned to sample to depth – Mr. Larsen stated that this would be performed; 2) How much asphalt material there was – Mr. Larsen stated that approximately 25% was soil and the other 75% was asphalt; 3) How will the material be placed – Mr. Larsen described that a 6" lift of compacted soils and a 6" lift of compacted asphalt would be placed side by side and not on top of each other, and that this should use up most of Lift #5. Mr. Larsen also described that he had contacted Mr. Kalman to inform him that Cimarron had recently determined that the groundwater plume extended from Sub-Area "F" into Sub-Area "C". Mr. Larsen stated that Mr. Kalman had no response to this notification.

4. **Personnel Exposures**
   - Mrs. Morgan stated that the exposures to date were zero for CY 2000 to date and that all ALARA goals had been met to date. Mr. Larsen recommended that the ALARA goals be lowered to 150 mrem/site and 50 mrem/person for CY 2000. All members of the ALARA Committee agreed to this change.

5. **Radiological Occurrence Reports**
   - ROR 20002 was issued to address missed daily floor smears in the RCA.
   - ROR 20003 was issued to address missed daily source checks. KM-CI-RP-35 was revised and training was performed.

6. **Special Work Permits**
   - No new SWPs issued.
   - SWP development for the KMCLLC Technical Center will be occurring in the future.

7. **License Condition 27(e) Evaluation/Approval Process**
   - Access Control – Mr. Newman discussed how this evaluation was intended to remove as many areas as possible from RMA status due to the fact that such controls were no longer warranted. After discussion, the ALARA Committee members agreed that the only RMA's that should remain are approximately half of Sub-Area "N" (On-site Disposal Cell) and all of Sub-Area "O". This evaluation was approved by the ALARA Committee.
   - Vehicle Survey Requirements – Addressed by Mr. Newman in evaluation described above.
   - Delete Requirement for Annual Soil & Vegetation Sampling – Mr. Marshall discussed how sample analysis results since 1977 continue to show no impact and that all decommissioning activities were complete. This evaluation was approved by the ALARA Committee.
   - Change Source Inventory Requirement from Monthly to Quarterly Frequency – Mrs. Morgan discussed how this was no longer required to be performed monthly and should be changed to quarterly. This evaluation was approved by the ALARA Committee.

8. **Groundwater Issues**
   - Brief discussion was held regarding BG #1 and the field activities to characterize the plume. Mr. Bailey described that the drilling was complete and that the plume is larger than previously thought. Mr. Bailey described that samples are to be sent to an off-site laboratory for testing by the end of the week of June 26, with results expected within 30 to 45 days thereafter. Mr. Bailey also described how remediation options were still be evaluated, especially in light of the fact that the plume size and corresponding volume of affected material was larger than originally thought.

9. **Review of Annex A – Sections 1 through 5**
   - Mr. Newman discussed how he had reviewed Sections 1 through 5 of Annex A and that he had noted several changes to these sections that needed to be made. Mr. Larsen described how Section 4.3 needed to be revised to allow for making changes in accordance with License Condition 27(e). The ALARA Committee also agreed that minor changes (i.e. typos, word changes, etc.) could be grouped together under one description and that only major changes would require individual descriptions.

10. **KMCLLC Technical Center**
   - Mr. Larsen described the presentation recently made to KMC Management. Mr. Larsen also stated that he provided another summary to Mr. Woodward and that he hoped to be set up a meeting with NRC Region IV in the near future to hand-deliver the D-Plan. Mr. Larsen also described how it was advantageous for KMC to work with NRC Region IV instead of the State of Oklahoma under the NRC Agreement State Program.

11. **ALARA Suggestions**
   - None.

12. **Other Business**
   - The next ALARA Committee meeting was tentatively scheduled for mid-September.

13. **Action Items**
   - **Delete Ambient Gamma requirement from Table 15-1 of Annex A and KM-CI-RP-43 after the On-site Disposal Cell is closed.**
   - **Mr. Sauer and Mr. Rogers will review groundwater sampling wells and develop list of wells to be removed from Annual Sampling (i.e. 8 quarters of results < 180 pCi/l) to present to NRC staff during their visit to the Cimarron site during July.**
   - **Mr. Rogers and Mr. Callahan to perform detailed review of all of Annex A and recommend revisions.**
   - **The ALARA Committee agreed that Annex A would be revised and re-issued with all corrections noted.**

The meeting was adjourned at 3:00 PM CST.

Distribution

Mr. Keith Bailey	Mr. Harold Gay	Mr. Harry Newman
Mr. Jess Larsen	Mrs. Steve Marshall	Mrs. Jo Johnson
Mr. Will Rogers	Mrs. LaVonna Smith	Mr. Richard Sauer

Retention Time T+20
ACE # 20016

QAQC-167
REV. 1

LICENSE SNM-928, CONDITION #27(e) CHANGE EVALUATION FORM

1.0 Description of Proposed Revision, Test, and/or Experiment:

Delete Ambient Gamma monitoring requirement from Annex A (RPP) Section 15 and Procedure KM-CI-RP-43, *Environmental Monitoring.*

2.0 Does the proposed revision, test, and/or experiment change the NRC-approved DP and/or RPP?

X Yes — If "yes", proceed to section 3.0 for evaluation of proposed revision, test, and/or experiment.

____ No — If "no", complete section 6.0. Provide basis for determination of non-applicability in section 5.0, as appropriate.

3.0 Evaluation:

LICENSE REQUIREMENT	YES	NO	N/A
3.1 Does the proposed change, test, or experiment conflict with the ALARA principle or the decommissioning process?		X	
3.2 Does the proposed change, test, or experiment conflict with requirements specifically stated in the license, or impair Cimarron's ability to meet all applicable NRC regulations?		X	
3.3 Will the proposed change, test, or experiment cause degradation in safety or environmental commitments addressed in the NRC-approved RPP and/or DP, or have a significant adverse effect on the quality of the work, the remediation objectives, or health and safety?		X	
3.4 Does the proposed change, test, or experiment conflict with the conclusions of actions analyzed in the Environmental Assessment, dated July 29, 1999 and Safety Evaluation Report dated August 20, 1999?		X	

NOTE: If "YES" was answered in any of the section 3.0 evaluation questions, the proposed item cannot be performed without NRC approval. Provide any basis for determination of each answer in section 5.0, as appropriate.

4.0 Results:

Revision, Test, or Experiment Approved: Yes X No ____

5.0 Comments:

6.0 Performed By (Signature/Date):

Site Manager / Vice President: Jess Larsen 8/02/01

Director – Safety, Quality, and Engineering Technology: Keith Bailey 8/6/01

RSO: Karen Morgan 8/1/01

ACE # 2016

Change Evaluation
ALARA Committee Approval of Revision to
Cimarron Annex A (Radiation Protection Plan)
Environmental Monitoring Requirements

Description of Action/Change
The change does not conflict with the requirements stated in the license (including those aspects addressed in License Condition 27(e)), or impair the licensee's ability to meet all applicable NRC regulations.

- Table 15-1 was revised and Section 15.4 was deleted to remove the ambient gamma monitoring requirements.

Is this a change that the ALARA Committee Can Approve Under License Condition 27(e)?
The ALARA Committee is allowed to approve changes to the Decommissioning Plan / Radiation Protection Plan (Annex A) in accordance with license condition 27(e) if the following conditions are all satisfied. A listing of the considerations stipulated by the license condition follows, with the discussion of the impact of the proposed change in italics.

1) Does the proposed change, test or experiment conflict with the ALARA principle or the decommissioning process? *NO IT DOES NOT.*
   a) The action must provide for measurement prior to removal – *IT DOES.*
   b) The action must provide for off site disposal of all material exceeding the decommissioning criteria – *not applicable.*
   c) Final surveys must demonstrate compliance with decommissioning criteria as stipulated in the decommissioning plan – *not applicable.*
   d) The action must not result in an increase in anticipated exposures or otherwise violate the ALARA principle – *This action will not result in an increase in exposures or otherwise violate the ALARA principle.*

2) Does the proposed change, test, or experiment conflict with requirements specifically stated in the license, or impair Cimarron's ability to meet all applicable NRC regulations? ***NO IT DOES NOT.***

   a) The action must involve only material authorized by the license – *not applicable.*
   b) Both the use and the place must be authorized – *not applicable.*
   c) The action must not violate training requirements – *not applicable.*
   d) Revisions to the RPP must be approved by the ALARA Committee – *The ALARA Committee shall approve this revision.*
   e) All work with licensed material shall be in accordance with radiation protection procedures– *not applicable.*
   f) Option #2 on-site disposal must be in accordance with License Condition #23 – *not applicable.*

g) Liquid and airborne effluents will not exceed 10 CFR 20, Appendix B limits – *not applicable.*

3) Will the proposed change, test, or experiment cause degradation in safety or environmental commitments addressed in the NRC-approved RPP and/or DP, or have a significant adverse effect on the quality of the work, the remediation objectives, or health and safety? ***NO IT WILL NOT.***
   a) The action must comply with dose limits for workers and members of the public – *Since 1984, based upon fenceline TLD's, quarterly micro-R surveys and established background of 7 micro-R/hr, exposure to the public ensures compliance with 10 CFR 20.1302 (exposure maintained at less than 100 mrem/year).*
   b) Liquid and airborne effluents will not exceed 10 CFR 20, Appendix B limits – *This action does not affect compliance with 10 CFR 20, Appendix B limits.*
   c) The action must comply with approved decommissioning criteria – *This does not affect compliance with decommissioning criteria.*
   d) The action must not violate requirements for surveys and monitoring, control of internal and external exposure, and storage of licensed material – *This action does not violate requirements for surveys and monitoring, control of internal and/or external exposure and storage of licensed material.*
   e) The action must include precautionary procedures (posting, labeling, etc.) – *not applicable.*
   f) The action must not violate waste disposal or record keeping requirements – *not applicable.*
   g) The action must not result in the loss of control over licensed material – *not applicable.*
   h) The action must not result in greater release of licensed material to air or liquid effluents than planned actions – *not applicable.*
   i) The action must not result in the spread of licensed material to uncontaminated areas more than planned actions – *not applicable.*
   j) The action must not modify the intent to release the site for unrestricted use, result in significant increase in the volume of material contaminated above the criteria, or contaminate restricted areas to the extent they will require decommissioning – *It does not.*
   k) The action must not result in non-compliance with the Cimarron Quality Assurance Plan – *It does not.*

4) Does the proposed change, test, or experiment conflict with the conclusions of actions analyzed in the Environmental Assessment, dated July 29, 1999 and Safety Evaluation Report dated August 20, 1999? ***NO IT DOES NOT***
   a) The action must not increase the release of licensed material to groundwater, surface water, or air – *It does not.*
   l) The action must not impact the environment as evidenced by the environmental monitoring program – *Since 1984, based upon fenceline TLD's, quarterly micro-R surveys and established background of 7 micro-R/hr, exposure to the public ensures compliance with 10 CFR 20.1302 (exposure maintained at less than 100 mrem/year).*
   b) The action must not create the potential for an accident worse than that assumed in the dose assessment – *It does not.*

c) The action must not result in an adverse socioeconomic impact to Cimarron and the surrounding community. – *It does not.*
d) The action must not create other than short duration and minor impacts to air – *It does not.*
e) The action must not change potential future land use – *It does not.*
f) The action must not adversely impact transportation plans for shipments to a licensed disposal site – *It does not.*
g) The action must not adversely impact endangered species – *It does not.*
h) The action must not impact historic or archeological sites – *Not applicable.*

Conclusions and Recommendation

The ALARA Committee is authorized under condition 27(e) to approve this change to the Radiation Protection Plan (Annex A) without regulatory approval.